APPENDIX G

Duties of Care and Loyalty and Treasury's Five-Step Process

I. Care

Pertinent Background Material

Prudent Person Rule as originally articulated by the Massachusetts Supreme Judicial Court in Harvard College v. Amory in 1830.

All that can be required of a trustee to invest, is, that he shall conduct himself faithfully and exercise a sound discretion. He is to observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital.

Employment Retirement Income Security Act of 1974 (ERISA): Standard of care imposed on fiduciaries of funds covered by that act. Sometimes referred to as the "Prudent Expert Rule."

The fiduciary must act in all matters regarding the pension plan (not just its investments) with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character with like aims. The fiduciary must diversify the investments of the plan so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.

Pertinent Provision of the Restatement (Third) of Trusts.

§227. General Standards of Prudent Investment.

(1) The trustee is under a duty to the beneficiaries to invest and manage the funds of the trust as a prudent investor would, in light of the purposes, terms, distribution requirements, and other circumstances of the trust.

(a) This standard requires the exercise of reasonable care, skill, and caution, and is to be applied to investments not in isolation but in the context of the trust portfolio and as a part of an overall investment strategy which should incorporate risk and return objectives reasonably suitable to the trust.

(b) In making and implementing investment decisions, the trustee has a duty to diversify the investments of the trust unless, under the circumstances, it is prudent not to do so.

(c) In addition, the trustee must:
(1) conform to fundamental fiduciary duties of loyalty (§170) and impartiality(§183);
(2) act with prudence in deciding whether and how to delegate authority and in the selection and supervision of agents (§171);and
(3) incur only costs that are reasonable in amount and appropriate to the investment responsibilities of the trusteeship (§188).

(d) The trustee's duties under this Section are subject to the rule of §228, dealing primarily with contrary investment provisions of a trust or statute.

§228. Investment Provisions of Statute or Trust

In investing the funds of the trust, the trustee

(a) has a duty to the beneficiaries to conform to any applicable statutory provisions governing investment by trustees; and

(b) has the powers expressly or implicitly granted by the terms of the trust and, except as provided in §§165 through 168, has a duty to the beneficiaries to conform to the terms of the trust directing or restricting investment by the trustee.

***§170. Duty of Loyalty**.*

(1) The trustee is under a duty to administer the trust solely in the interest of the beneficiaries.

(2) The trustee in dealing with a beneficiary on the trustee's own account is under a duty to deal fairly and to communicate to the beneficiary all material facts the trustee knows or should know in connection with the transaction.

§171. Duty with Respect to Delegation.

A trustee has a duty personally to perform the responsibilities of the trusteeship except as a prudent person might delegate those responsibilities to others. In deciding whether, to whom and in what manner to delegate fiduciary authority in the administration of a trust, and thereafter in supervising agents, the trustee is under a duty to the beneficiaries to exercise fiduciary discretion and to act as a prudent person would act in similar circumstances.

§183. Duty to Deal Impartially with Beneficiaries

When there are two or more beneficiaries of a trust, the trustee is under a duty to deal impartially with them.

§188. Power to Incur Expenses

The trustee can properly incur expenses which are necessary or appropriate to carry out the purposes of the trust and are not forbidden by the terms of the trust, and such other expenses as are authorized by the terms of the trust.

Duty of Care as Articulated in Pertinent Alaska Statutes

Prudent Person Rule applicable to private trustees under Alaska law.

Section 13.36.200. Prudent Investor Rule. (a) Except as otherwise provided in (b) of this section, a trustee who invests and manages trust assets owes a duty to the beneficiaries of the trust to comply with the prudent investor rule set out in AS 136.36.205 - 13.36.275.

(b) The prudent investor rule, a default rule, may be expanded, restricted, eliminated, or otherwise altered by the direction of the settlor to the provisions of a trust. A trustee is not liable to a beneficiary to the extent that the trustee acted in reasonable reliance on the provisions of the trust.

Section 13.36.205. Standard of Care; Portfolio Strategy; Risk and Return Objectives. (a) A trustee shall invest and manage trust assets as a prudent investor would by considering the purposes, terms, distribution requirements, and other circumstances of the trust. In satisfying this standard, the trustee shall exercise reasonable care, skill, and caution.

(b) A trustee's investment and management decisions respecting individual assets shall be evaluated not in isolation but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the trust.

(c) Among circumstances that a trustee shall consider in investing and managing trust assets are those of the following that are relevant to the trust or its beneficiaries:

(1) the general economic conditions;
(2) the possible effect of inflation or deflation;
(3) the expected tax consequences of investment decisions or strategies;
(4) the role that each investment or course of action plays within the overall trust portfolio, which may include financial assets, interests in closely held enterprises, tangible and intangible personal property, and real property;
(5) the expected total return from income and the appreciation of capital;
(6) other resources of the beneficiaries;
(7) needs for liquidity, regularity of income, and preservation or appreciation of capital; and
(8) an asset's special relationship or special value, if any, to the purposes of the trust or to one or more of the beneficiaries.

(d) A trustee shall make a reasonable effort to verify facts relevant to the investment and management of trust assets.

(e) A trustee may invest in any kind of property or type of investment consistent with the standards of AS 13.36.200-13.36.275.

(f) A trustee who has special skills or expertise, or is named trustee in reliance on the trustee's representation that the trustee has special skills or expertise, has a duty to use those special skills or expertise.

Section 13.36.210. Diversification. A trustee shall diversify the investments of the trust unless the trustee reasonably determines that, because of special circumstances, the purposes of the trust are better served without diversifying.

Section 13.36.215. Duties at Inception of Trusteeship. Within a reasonable time after accepting a trusteeship or receiving trust assets, a trustee shall review the trust assets and make and implement decisions concerning the retention and disposition of assets in order to bring the trust portfolio into compliance with the purposes, terms, distribution requirements, and other circumstances of the trust and with the requirements of AS 13.36.200-13.36.275.

Prudent Investor Rule applicable to the Alaska Permanent Fund (for reference).

Section 37.13.120. Investment responsibilities of the board. (a) The prudent-investor rule shall be applied by the board in the management and investment of fund assets. The prudent-investor rule as applied to investments of the fund means that in making investments the board shall exercise the judgment and care under the circumstances then prevailing that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income.

Prudent Investor Rule applicable to the following:

- *State Retirement Funds (including SBS)*
- *Public School Trust Fund*
- *Alaska Children's Trust Fund*
- *University of Alaska Trust Fund*

as a result of:

- AS 14.25.180(c)
- AS 14.40.400(b)
- AS 14.40.400(b)
- AS 39.30.175(a)
- AS 26.05.228(c)
- AS 39.35.080
- AS 37.14.160(1)
- AS 37.10.071(c)
- AS 37.14.210(4)

In exercising investment, custodial, or depository powers or duties..., the fiduciary shall apply the Prudent Investor Rule as that rule would apply to large trust investments.

Prudent Investor Rule applicable to the General Investment Fund and to other funds specifically subject to AS 37.10.071. *Note: Before 1992, these provisions clearly imposed a prudent expert standard (the care of an institutional investor of ordinary professional prudence, discretion and intelligence). § 12 ch 31 SLA 1992. The "would apply to large investments" language was also deleted by the 1992 legislation. However, the express reference to this standard in AS 14.25.180(c) leaves the language there by implication. Same provision applies to the Investment Loss Trust Fund and Mortgage Insurance Fund.*

In exercising investment, custodial, or depository powers or duties..., the fiduciary shall apply the Prudent Investor Rule as that rule would apply to large investments.

Section 14.40.809. Powers and duties of the University of Alaska.

(a) The Board of Regents of the University of Alaska may contract with a purchaser for the advance payment of tuition by the purchaser for a beneficiary of any age to attend a branch of the university to which the beneficiary is admitted. A purchaser and a beneficiary may be the same person.

(b) The board shall:

Board of Regents of the University of Alaska governed by Prudent Institutional Investor Rule with respect to Alaska Advance College Tuition Payment fund.

(1) make appropriate arrangements as necessary to fulfill the board's obligations under an advance tuition payment contract;
(2) establish and adopt a formal plan for administration of the advance college tuition payment program and prepaid tuition scholarship program;
(3) establish investment objectives, criteria, and asset allocation guidelines for the fund based on prudent institutional investor guidelines and actuarial analysis of the earnings requirements for the advance college tuition payment plan;
(4) enter into a reciprocal agreement with Sheldon Jackson College and Alaska Pacific University; and
(5) make the obligation under an advance college tuition payment program a general obligation of the university.

Prudent Investor Rule not made specifically applicable to Constitutional Budget Reserve Fund.

There is no specific statute making this rule applicable to the Constitutional Budget Reserve Fund. AS 37.05.540 specifically subjects the unfunded Statutory Budget Reserve Fund (SBRF) to AS 37.10.070 and AS 37.10.071. Given the legislative history of the SBRF, one could argue that AS 37.10.070 and AS 37.10.071 apply to the CBRF as well.

II. Loyalty

Pertinent Background Material

Duty of loyalty generally.

The duty of loyalty requires the trustee to act solely in the interest of the trust's beneficiaries. The trust's assets must be invested for the exclusive purpose of providing benefits to the trust's beneficiaries.

Social investing and the duty of loyalty under the Employment Retirement Income Security Act of 1974 (ERISA): Is it permitted?

Social investment is the investment of trust assets not only to benefit the named beneficiaries of the trust, but also to promote socially desirable goals such as helping to develop local housing or local businesses. It may also mean withholding trust assets from ventures deemed socially irresponsible such as tobacco companies. It is unsettled to what extent ERISA regulated retirement plans can engage in this kind of social investing; many strongly argue it violates both the duty of loyalty imposed by that statute and the general duty of loyalty.

§170. Duty of Loyalty in Restatement (Third) of Trusts.

§170. Duty of Loyalty.

The trustee is under a duty to administer the trust solely in the interest of the beneficiaries.

(2) The trustee in dealing with a beneficiary on the trustee's own account is under a duty to deal fairly and to communicate to the beneficiary all material facts the trustee knows or should know in connection with the transaction.

Standard of loyalty applicable to private trusts under Alaska law.

Duty of Loyalty as Articulated in Pertinent Alaska Statutes

Section 13.36.220. Loyalty. A trustee shall invest and manage he trust assets solely in the interest of the beneficiaries.

Standard of loyalty applicable to the Alaska Permanent Fund.

No specific standard of loyalty spelled out in the constitution or governing statutes for the Alaska Permanent Fund. The statutes do specify several Alaska investment programs under:

- AS 37.13.120(g)(4)
- AS 37.13.120(g)(5)
- AS 37.13.120(g)(6)

There is also a specific provision mandating Permanent Fund investments in Alaska under certain circumstances:

Section 37.13.120. Investment responsibilities of the board.
(l) The board shall invest the assets of the fund in in-state investments to the extent in-state investments are available if the in-state investments;

(1) have a risk level and expected yield comparable to alternate investment opportunities; and
(2) are included in the list of permissible investments in (g) of this section.

Standard of loyalty applicable to the Retirement Funds.

Section 14.25.180. Management and investment of fund. (a) The Alaska State Pension Investment Board is the fiduciary of the fund. In managing the fund, the Alaska State Pension Investment Board shall:

(1) consider the status of the fund's investments and the system's liabilities on both a current and a probable future basis;
(2) determine the appropriate investment objectives for the fund;
(3) establish investment policies aimed at achieving the objectives; and
(4) act only in regard to the best financial interests of the system's plan and beneficiaries.

(b) The Alaska State Pension Investment Board may invest the fund on the basis of probable total rate of return without regard to the distinction between principal and income or to the generation of income.

(c) In carrying out investment duties under this chapter, the Alaska State Pension Investment Board has the same powers and duties in regard to the teacher's retirement trust fund as are provided in AS 37.10.071, except that the standard of prudence that the board must obey under AS 37.10.071(c) shall be in regard to the management of large trust investments rather than large investments.

All investments must be made in the <u>sole financial best interest</u> of funds. Would seem to preclude programs like Alaska emerging managers' program.

Section 37.10.071. Investment powers and duties.

(c) In exercising investment, custodial, or depository powers or duties under this section, the fiduciary of a state fund, the… *(Commissioner)* shall exercise the fiduciary duty in the sole financial best interest of the fund...

Standard of Loyalty applicable to:

- *Public School Trust Fund*
- *AK Children's Trust Fund*
- *University of AK Trust Fund*

Again, the <u>sole financial best interest</u> of the fund is the standard.

Section 37.14.170. Investments. In managing the trust fund, the commissioner shall:

(4) act only in regard to the financial interests of the fund's beneficiaries.

Standard of loyalty applicable to:

- *Constitutional Budget Reserve Fund.*

There is no specific statute that spells out the duty of loyalty applicable to the investment of the Constitutional Budget Reserve Fund. AS 34.05.540 specifically subjects the unfunded <u>Statutory Budget Reserve Fund</u> to AS 37.10.070 and AS 37.10.071. Given the legislative history of the SBRF, one could argue that AS 37.10.070 and AS 37.10.071 apply to the CBRF as well.

Standard of loyalty applicable to:

- *AK Advance College Tuition Payment Fund*
- *International Airport Funds*

No specific duty of loyalty spelled out in the statutes.

III. Treasury's Five Step Process

Step 1: Analyze the Current Situation

Each year Treasury conducts a fiduciary audit for each separately invested fund it manages based upon the following considerations:

The legal and administrative constraints pertinent to the fund.

- Review the pertinent statutes, regulations, and other governing documents.
- Investigate changes in pertinent statutes, regulations, contracts and agreements.

The assumptions on contributions and disbursements.

- Investigate changes in assumptions on contributions and disbursements due to either external economic forces or internal changes.

The current investment strategies and policies. Have any fundamental factors changed, such as:

- The broad asset classes in which the Commissioner has identified as appropriate for the Fund.
- Key underlying economic variables.
- Attitude toward risk.
- Time horizon.
- Expected returns of broad asset classes.

The current asset allocation.

- Examine how the current assets are allocated between the broad asset classes: stocks, bonds, cash, and others.
- Examine how the assets are allocated to different styles within each broad asset class (i.e., review the investment manager structure).
- Verify that the asset allocation complies with the Investment Policy Statement.

The costs of managing the portfolio, including where applicable:

- Custody costs, including transaction fees and annual expenses of money market accounts used for cash sweeps.
- Brokerage costs, including commission costs and "soft dollar" requirements.

- Fees of investment managers and/or annual expenses of mutual funds.
- Consulting fees.

Step 2: Design the Optimal Portfolio

Evaluate the projected financial characteristics of the fund and *determine an appropriate investment policy that best meets the needs of the fund and its beneficiaries*. Simply stated, the goal is to design a portfolio that involves an acceptable level of risk and that produces investment returns that meet the needs of the fund.

In many cases a fund fiduciary will turn to an investment consultant to assist with the design of the optimal portfolio, because that design results from a highly technical, quantitative exercise. Quantitative modeling of possible investment portfolios *assists* the decision-making process. However, the final choice by the Commissioner of an optimal portfolio involves both qualitative and quantitative analysis.

The quantitative modeling used in assisting with the design of the optimal portfolio generally follows a two step process:

1. Model a set of alternative optimal portfolios tailored to the fund's general needs and constraints; and
2. Identify alternative portfolios (with different return/risk characteristics) that are appropriate for the fund.

Portfolio Modeling

Although there are several alternative methodologies for quantitatively analyzing and identifying the set of optimal portfolios, most asset allocation models rely heavily on Modern Portfolio Theory and the Capital Asset Pricing Model. It is not appropriate in this publication to go into detail concerning the specifics of the basic model. Rather, the general nature of the model is described. Simply put, based upon historical information on various asset classes and future projections concerning capital markets, the model produces a set of alternative investment portfolios that produce the greatest possible expected return for different levels of risk.

a. **The fund's general constraints.** First, identify the asset classes in which the Commissioner wishes to invest, and any limits on the allocation to any asset class. These decisions are independent of the asset allocation modeling process since an infinite number of different optimal portfolios can be constructed. Choosing asset classes and the limits on each asset class involves non-economic considerations including legal and political constraints, staff availability and budget.

However, the choice of asset classes, and limits on the amount invested in each class, is often determined by the modeling exercise, since the asset allocation modeling demonstrates the benefits (and risks) of various asset allocations. For example, many fiduciaries have recently decided to increase the size of their investment in the international equity asset class (relative to their previous investment or a preconceived target) after examining the diversification and risk/return benefits of international equity investments. Additionally, the asset allocation modeling process clearly identifies the economic implications of alternative asset allocations. Also, this modeling pinpoints the investment implications of introducing "non-economic" considerations into the asset allocation process such as investing in economically targeted investments or avoiding international equity investments.

b. **Collection of data on the specified asset classes.** Once the Commissioner has specified the asset classes to be modeled, historical data must be collected on these assets, including:

- average return for each asset class.
- standard deviation (i.e. statistical variation) of the returns for each asset class, which is the most commonly used quantitative measure of risk.
- statistical correlation of the returns for the chosen asset classes.

c. **Capital market projections.** Using a variety of methods, projections must be made for the future values for the returns, standard deviations and correlations between the respective asset classes over some future time period - usually five years. In this step, careful attention must be paid to the current and expected values for several economic and non-economic variables, including:

- overall market valuations of each asset class
- interest rates
- economic growth
- economic trends
- politics
- demographics

d. Results. The optimization process identifies a number of different *optimal portfolios*. An optimal portfolio is a portfolio that produces the highest expected return for any particular level of risk (or, alternatively, minimum risk for a particular level of expected return). The set of optimal portfolios constitute an *efficient frontier* of asset mix alternatives. This set of portfolios can be compared to the current asset mix. Although taking on greater risk does not always guarantee greater return, using the asset allocation model insures that riskier portfolios are identified only where those portfolios would have greater expected returns.

It is not possible to identify the single "best" portfolio among the set of optimal portfolios, as each has a different risk/return profile. The ultimate choice of a portfolio depends upon the fiduciary's risk tolerance and preferences for investing in different asset classes.

The process of constructing the set of optimal portfolios illustrates a number of important points:

- Once the set of optimal portfolios is identified, greater expected return requires assuming greater risk.
- Risk is reduced by diversifying a portfolio among a number of asset classes.
- Allocating a portion of the portfolio to a "high return, high risk" asset class (e.g., international equity) often increases the overall return and reduces the overall risk of the portfolio.
- By looking at alternative proposals, it is possible to precisely examine the return/risk implications of adding or deleting a particular asset class from the portfolio.

- Modeling the optimal portfolios cannot answer a critical question that the fiduciary must confront: *recognizing that greater expected return requires greater risk, how much risk should be taken*?

Step 3: Formalization of the Investment Policy -- The Investment Policy Statement

The most important function the Commissioner performs is to set investment policy and implementation guidelines in a written Investment Policy Statement (IPS). The current Investment Policy Statements are contained in Sections XI and XII. By having specific policies and guidelines, the Commissioner will: (1) have a well-developed investment strategy that is consistently applied; (2) concentrate resources to meet specific goals and objectives of the strategy; and (3) provide continuity to the strategy throughout market cycles.

Any time that the Commissioner is contemplating allocating assets to an asset class not specified in the IPS, an analysis of the asset class must be carried out similar to the one performed for the assets currently in the portfolio. If the Commissioner decides to invest in the new asset class, the IPS must be rewritten.

The Employee Retirement Income Security Act (ERISA) dictates that a strategy and guidelines are required, but does not specifically call for a written IPS: "Every employee benefit plan shall provide a procedure for establishing and carrying out a funding policy..." (Sec. 402(2)(1)). However, subsequent case law and industry practices clearly mandate the need for a written IPS as part of a procedurally prudent process. Moreover, the Third Restatement has reinforced the importance of a written IPS: "The Trustee must give reasonably careful consideration to both the formulation and the implementation of an appropriate investment strategy, with investments to be selected and reviewed in a manner reasonably appropriate to the strategy," (Restatement Third, Trusts (Prudent Investor Rule), pg. 14).

The material just cited strongly suggests the need for the formulation and adoption of a written IPS. In addition to the legal requirements for an IPS, *there are five main reasons why an IPS is a necessary part of a procedurally prudent process*:

- The IPS provides a "paper trail" of policies and procedures concerning the investment decisions pertinent to the fund. The IPS can be important evidence in disputes about imprudence, and serves as an excellent testimony of compliance to auditors.
- The IPS mitigates second guessing by interested parties, and it provides continuity of the investment strategy during turnover of Commissioners.
- The IPS reassures interests affected by the investment performance that the Commissioner is following a prudent investment process.
- The IPS keeps the investment process intact during periods of market upheaval. The Commissioner may feel pressure to take action during periods of market decline, and the IPS serves to remind her or him why the investment strategy was structured as it was and the risks inherent in the portfolio.
- The IPS provides a baseline from which to monitor investment performance of the overall portfolio, as well as the performance of individual investment managers. It also permits the evaluation of proposed changes to the investment process against a stated strategic investment policy.

The IPS for each fund consists of six main parts:

1. Description, including
    - An explanation of the purpose of the portfolio.
    - The size of the portfolio, the likelihood and amount of future contributions and a schedule of pending disbursements.

2. Statement of objectives. Objectives should be set in conjunction with a comprehensive review and assessment of the goals, expectations, investment time horizon, level of risk tolerance, present investment allocation and current projected financial requirements. Standard investment objectives include:
    - Maximizing return within reasonable and prudent levels of risk.
    - Prudent diversification by providing exposure to a wide range of investment opportunities in various markets.
    - Establishing policies based on long-term total return, current income, safety of principal or other objectives as applicable.

- Controlling the costs of administering and managing the portfolio.

3. Investment guidelines. Guidelines must be established to clearly identify the parameters of the investment strategy. The guidelines must be specific enough to identify the parameters of the desired investment process, yet still not "micro-manage" the investment process. If properly written, the guidelines will make it easy for a reviewer to reconstruct the process which was used in putting together the portfolio. The following guidelines should be identified:

- risk tolerance
- time horizon
- asset class preferences
- rebalancing limits
- expected or desired rate of return

4. Securities guidelines. Like the investment guidelines, the securities guidelines must be specific enough to define the boundaries for investment managers, but not so specific that the Commissioner is in effect making detailed investment decisions.

5. Selection of investment managers. The IPS should clearly define the way in which investment managers are to be selected. By establishing a very specific asset allocation (number 3 above) and precise guidelines for selecting investment managers, a consistent framework is put into place in order to meet the goals and objectives of the plan.

6. Control procedures. This section delineates the specific duties and responsibilities of all parties involved in the investment management process, as well as the required periodic reviews.

Step 4: Implementation of the Investment Policy -- Structure and Selection of Investment Managers.

The fourth step mainly involves determining an investment manager structure and selecting individual investment managers, as well as arranging for low-cost administration of the ultimate investment.

Fiduciary Responsibility

In the implementation step, fiduciary responsibility is fulfilled by (1) choosing a manager structure based upon sound investment principles, as dictated by ERISA Sec. 404(a)(1)(B); and (2) making sure that "prudent experts" are hired to make the investment decisions; this part of the fiduciary responsibility is referred to as the "safe harbor rule."

The "safe harbor rule" spelled out in ERISA comes close to providing fiduciaries with protection from liability concerning actual investment results:

"If an investment manager or managers have been appointed....no Trustee shall be liable for the acts or commissions of such investment manager or managers, or be under an obligation to invest or otherwise manage any asset of the plan which is subject to the management of such investment manager." (ERISA Sec. 405(d)(1)

The "safe harbor rule" underscores the importance which ERISA has placed on having investment decisions made by experienced investment professionals. However, merely hiring investment managers does not relieve fiduciaries from responsibility. The fiduciary must act in a prudent manner in selecting and supervising investment managers. In general, fiduciaries will fulfill their responsibility in identifying investment professionals by fulfilling the following safe harbor rules:

- The selected investment manager must be a bank, an insurance company or a registered investment advisor as defined by the Investment Advisors Act of 1940.
- Due diligence must be undertaken in selecting investment managers, i.e., they must be "prudently selected."
- Investment managers must be given the power to manage, acquire and dispose of plan assets.

- Investment managers must acknowledge co-fiduciary status in writing.
- Activities of investment managers must be carefully monitored.

Traditional financial asset classes: stocks, bonds, and cash

Implementation of the investment policy for traditional financial asset classes follows a two-step process: first, a manager structure is developed, then individual managers are selected. In general, the first step follows the same basic investment principles which are used in determining the asset allocation in the Investment Policy Statement, "Design the Optimal Portfolio." In the second step, the Commissioner must determine the performance benchmarks, gather and evaluate information on relevant managers, and make a final selection of managers. Basic guidelines for carrying out each step follow.

Manager Structure (Investment Style Groups)

The IPS should spell out the portfolio's allocation to broad capital market asset classes (e.g., domestic equities, domestic bonds, international). However, within each of these classes there are a number of more specific allocations which are available. In the implementation step, the Commissioner usually decides how he or she would like to invest within each of the broad asset classes by drawing up a "manager structure," which identifies the number and types of managers to which they want to allocate assets. This process is referred to as identifying "investment manager styles" or "investment manager strategies" within each broad asset category. Note that this step focuses on types of investment managers, not individual managers themselves. Individual investment managers are chosen only after the manager structure is determined.

The development of a sound investment manager structure is part of a fiduciary's obligations and is an outgrowth of the asset allocation decision which is determined in drawing up the IPS. Many of the factors considered in the asset allocation step are also brought into the manager structure, such as expected returns, risk tolerances, and diversification benefits of various manager styles. Similar to the asset allocation, the Commissioner must decide on what manager styles will be employed as well as the amount of assets which will be allocated to each style.

In order to minimize investment and administrative costs, the manager structure should be as simple as possible in light of the investment goals of the plan.

In designing a manager structure, i.e., in determining the number and types of investment managers, the following factors should be considered:

1. Choice of style groups.
   - The first decision which must be made is the choice between active or passive management.
   - Style groups must be defined, and appropriate benchmarks constructed.
   - Expected returns and risk of style groups must be calculated.
   - The impact of diversification within a broad asset class must be assessed.
   - The overall benefits of style group diversification should be assessed, paying particular attention to whether chosen manager styles are complementary.
2. Cost and administrative concerns.
   - A choice must be made between commingled and separate accounts.
   - Complex structures are difficult to control and are expensive.
   - The active versus passive management decision must be evaluated in light of costs, as in some instances (e.g. international), active management may not be feasible or is too expensive.
   - The custodian banks and plan staff must be able to effectively monitor the chosen manager styles.
3. Common style groups.

   There are a very large number of style groups which have been defined by firms tracking investment managers. The following general list illustrates the nature of the exercise, but it is not exhaustive:

   Equity
   - Core
   - Yield
   - Value
   - Growth
   - Small Capitalization

- International
- Many of the above can be combined, e.g. small cap growth, international value.

Fixed Income

- Defensive (short maturity)
- Core
- Active Duration
- Mortgage-backed
- High yield
- Municipal
- International

Balanced

- A combination of equities and bonds
- A decision must be made between strategic and tactical

Cash

- High quality
- High yield
- Tax Free

Selection of Individual Investment Managers

Once a manager structure is chosen, i.e., specific manager styles have been identified, individual investment managers must be chosen to invest the assets committed to each style. When fiduciaries of institutional-size portfolios conduct a search for a new investment manager, they should undertake a formal search process.

Once the necessary information on investment managers is obtained, the "safe harbor rules" indicate that managers must be "prudently selected." In analyzing the large universe of investment managers, a number of specific factors should be examined and evaluated.

1. Performance numbers. These should be based upon quarterly results, as too much attention to annual results may hide the volatility of short-term performance. The performance evaluation should examine whether an investment manager's results are:

- A composite of all portfolios managed, and not just those chosen for evaluation by the investment manager.
- The result of actual management, and not simply historically-tested hypothetical performance.
- Reported gross and net of fees and commissions.
- Reported on a time-weighted basis versus a dollar-weighted basis. Time-weighted results more accurately reflect the manager's ability to manage the total portfolio as the assets under management change due to contributions and withdrawals.

2. Performance relative to assumed risk.
    - An investment manager's performance should not be evaluated in isolation, but must be examined in light of the amount of risk assumed.
    - Risk is generally measured by statistics such as standard deviation, alpha, beta and the Sharpe ratio.
    - The results of the investment manager's poorest quarters should be examined.
    - The frequency and amount that an investment manager underperforms the appropriate market indices should be examined.
    - Performance should be examined in both rising and falling markets.

3. Investment manager's adherence to the stated investment style.
    - Investment managers should have a clearly articulated investment style.
    - Investment managers should have a demonstrated discipline to maintain the strategy over time.
    - It is important to independently assess whether the investment manager does indeed fall into the desired manager style, i.e., it cannot be assumed that an investment manager's self-described style accurately reflects that which the plan has selected.

4. Performance among peers.
    - An investment manager's performance should be compared to managers of like style or strategy by use of an appropriate benchmark. A common mistake is to

compare performance of several managers without taking their styles into consideration.

- The peer style group and benchmark should be chosen by the fiduciary , not the investment manager.
- The choice of the peer style group and benchmark is "objective" in the sense that it comes directly from the manager structure decision. For example, if it is decided to allocate assets to a "small cap value" manager, then for this part of the manager search, the peer group and benchmark should be "small cap value."

5. Performance of key decision makers and their organization.
   - Examine whether the key decision makers that produced their performance record are still with the firm.
   - It should be determined whether any changes in the organization may impact the firm's abilities.
   - Examine whether the firm has experienced a rapid growth in assets, and how this has affected the performance.

6. Subjective factors. All potential investment managers should be interviewed to allow the Commissioner to evaluate the manager's subjective qualities.

Non-Routine Investments

From time to time, the Department of Revenue is presented with investment opportunities that fall outside the scope of its existing investment opportunity set. In those instances, the Department of Revenue will employ the following process at the Treasury Division:

- Document the investment opportunity to include: date, person presenting opportunity, nature and detail of the investment, funds that will invest.
- Determine if the investment opportunity is similar to existing investments and seek guidance from appropriate investment officer and/or others with knowledge of offered investment opportunity or similar existing investments.
- Determine whether the opportunity merits further scrutiny based on information presented, or on hand.
- Determine whether the opportunity is better suited for other funding sources.

- Seek a legal opinion to verify the opportunity is eligible for consideration by the Department of Revenue.
- Seek guidance from external auditors regarding potential concerns and disclosures.
- Identify and engage an impartial external expert to evaluate the opportunity.
- Seek guidance from the Investment Advisory Council
- If the investment opportunity is judged by the Department of Revenue to have merit for State of Alaska investments, the Department of Revenue will notify Office of Management and Budget and Legislative Audit of its intent to invest prior to making an investment.
- For investment opportunities that will be made, determine size of investment, date of funding, requirements at custodial bank, basis for valuation, notify compliance, update investment guidelines, determine investment pool and asset class, if applicable, and ensure accounting in the state accounting system is accurate, if required.
- Inform the Chairs of the Senate and House Finance Committees of any decision to move forward with an investment
- Document process steps above. For investments made, update Blue Book or other documentation, such as financial statement disclosures.

Step 5: Monitoring and Supervising the Portfolio

Fiduciary Requirements to Monitor and Supervise

A common fiduciary breach is the failure to supervise the activities of an investment manager once the manager has been hired. Both ERISA and the Third Restatement make specific references to this oversight duty of a fiduciary:

"...in addition to any liability which he may have under any other provision of this part, a fiduciary with respect to a plan shall be liable for a breach of fiduciary responsibility of another fiduciary with respect to the same plan..." (ERISA Sec. 405(a)); and

"The Trustee is under a duty to deal fairly and to communicate to the beneficiary all material facts the Trustee knows or should know in connection with the transaction." (Restatement Third, Trusts, (Prudent Investor Rule) Sec. 170).

Main Aspects to be Monitored

There are four broad aspects of the plan which must be monitored:

1. Determine whether the plan achieved its expected return and investment objectives.
   - If the plan has underperformed, what was the cause of the shortfall: underexposure to asset classes offering a greater return, market upheaval, manager performance, high administrative and/or investment expenses, or a combination of factors?

2. Determine whether investment managers are abiding by the plan's Investment Policy Statement.
   - Are restrictions and constraints for various asset classes being followed?
   - Is the overall asset allocation being adhered to? If not, rebalancing is probably required.

3. Determine through performance attribution analysis what contributed to the total return of the portfolio. Performance attribution analysis, discussed more extensively below, provides insight into questions such as:
   - What part of performance is due to asset allocation?
   - What part of the performance is due to manager structure?
   - What was the value of choosing active versus passive management strategies?
   - What performance can be attributed to the selection of individual investment managers?
   - How does the performance of the fund's investment managers compare to their peers?

4. Investment expenses must be monitored and controlled, and the services provided by custodian banks and consultants must be monitored. By their very nature, investment expenses have a direct impact on performance, and an important duty of the fiduciary is to control these expenses.

Steps in Monitoring and Supervision

Measuring Investment Manager Performance

In measuring the performance of investment managers, it is necessary to apply consistent standards of measurement so that accurate evaluations and comparisons can be made. On January 1, 1993, a standardized reporting format was instituted by the Association for Investment Management and Research (AIMR). Additional reporting standards have been adopted by the Investment Management Consultants Association (IMCA). In addition, the SEC has issued guidelines on advertising and reporting performance results.

Treasury requires all managers to comply with AIMR reporting standards.

Performance Calculations

The investment management community has adopted certain measurements which should be made when examining and evaluating portfolio performance. Only short explanations of each measurement are provided here; more complete definitions are contained in the Glossary of Investment Terms.

- standard deviation -- the most common statistical measure of risk.
- alpha -- measures the performance of the manager assuming the benchmark had neither gains nor losses.
- beta -- measures performance volatility against the market
- Sharpe ratio -- measures return per unit of risk (standard deviation)
- geometric returns -- calculates returns by linking time periods rather than simply taking a mathematical average.
- total return -- performance results are calculated on all realized and unrealized gains and losses, including accrued income.
- time-weighted -- performance results are calculated on a time-weighted basis (quarterly is required and daily is recommended) rather than dollar-weighted.

AIMR Standards

The following is a summary of the principal AIMR standards.

- A composite return figure must be calculated that included all fee-paying discretionary portfolios that represent a specific asset class or similar strategy or investment objective.
- Firm composites must include only the actual assets under management.
- Performance results for accounts are to be asset weighted and not equal-weighted. Equal-weighted results are recommended as an additional measurement, but not required.
- Performance results should be presented by asset class and include cash equivalents or any other securities held by the manager in place of assets of the particular asset class.
- The composite return results should be calculated for the investment management firm, not the individual manager that produced the return.
- Results should be presented before fees; performance net of fees is permitted as well. In either case, an appropriate fee schedule should be presented.
- Total return is to include both accrued income and capital appreciation.
- Portfolios should be valued at least quarterly.
- External risk measurements are strongly recommended but not mandatory for compliance. Reporting of the dispersion of portfolio returns and standard deviation is strongly recommended, and other measures such as beta and the Sharpe ratio are often useful.
- Composite results and performance figures should be verified.

Performance Attribution Analysis

Performance attribution analysis consists of two parts: performance measurement and performance evaluation. The performance attribution analysis should be undertaken by an independent third party and verified against and compared to measurements provided by the investment managers. General guidelines follow for each part of the performance attribution analysis.

Performance measurement consists of calculating various statistics concerning the portfolio. For equity portfolios, the following averages should be calculated: price/earnings ratio; price/book ratio; yield; market capitalization weighting (small, mid, or large cap companies); industry, sector and country concentrations; trading costs; and turnover.

For fixed income portfolios, the following averages should be calculated: bond duration; bond maturity; quality ratings; sector weights and country weights (for international portfolios).

Performance evaluation consists of analyzing the factors that may have affected the performance of each portfolio. The first step is to analyze the capital market and overall economic factors, such as interest rates, economic growth, and market sentiment. Second, factors are examined which provide insights into how the investment decisions, and ultimate performance, of the investment manager compares to other managers following a similar style. This allows the fiduciary to determine whether the manager is deviating from the stated investment strategy. Also, if a manager's performance has significantly deviated (either positively or negatively) from the peer group, an examination of the portfolio's characteristics should reveal the source of the outlying performance.

Finally, the performance of the investment manager must be compared to the benchmarks and security guidelines agreed upon in the IPS or in the written agreement between Treasury and the manager. It is important to emphasize that the benchmarks and guidelines should be put in writing at the time the IPS is written and when individual investment managers are hired, not after the fact. A common mistake is to evaluate (either positively or negatively) a manager against other hired managers, rather than against the pre-determined benchmarks.

Rebalancing the Portfolio

The third step in monitoring is rebalancing the portfolio to the strategic asset allocation formalized in the IPS. As the asset mix changes as result of price fluctuations in the portfolio, there will be times when the asset mix falls outside the limits established in the IPS. Once the asset mix has fallen outside of the established limits, the portfolio must be rebalanced.

Some important general guidelines concerning rebalancing include the following:

- Rebalancing limits in the IPS have to be set realistically wide enough so that frequent readjustments of the portfolio do not occur.

- There are various methodologies which can be employed to rebalance, but a common method is to utilize a sweep account, into which new contributions, stock dividend income and bond interest income can be placed.
- When rebalancing takes place, the asset allocation should go back to the exact allocation stipulated in the IPS, not the upper or lower limit.
- Do not forego rebalancing due to its "counter-intuitive" nature, i.e., selling strong performing assets and purchasing weaker assets. It is precisely by selling high and buying low in order to maintain the chosen asset allocation that the portfolio continues to possess the preferred risk/return characteristics.
- Periodic rebalancing of the portfolio creates additional transaction expenses. However, the benefits of rebalancing (maintaining the strategic asset allocation) outweigh these transactions costs.

Controlling Investment Expenses

The control of investment expenses is an important duty of the fiduciary, since investment costs have a direct impact on performance. Investment expenses must be reviewed and evaluated on an annual basis. This is particularly important as fund assets increase in size, since larger assets increase the negotiating power of the fund. Many expenses remain hidden, and it is the duty of the fiduciary to ask probing questions so that all costs are made transparent. There is a significant disparity in fees charged by service providers and investment managers, and through the insistence of full disclosure and the proper management of cost will the fiduciaries be assured of paying reasonable expenses (and therefore fulfilling the fiduciary duty).

A related topic is the monitoring of the services provided by vendors. The fiduciary must ensure accountability on the part of the outside service providers. Clearly defined authority, duties, expectations and forms of compensation must be expressed in writing. Service providers that provide investment advice on a non-discretionary basis must be required to acknowledge fiduciary responsibility in writing.

Portfolio management costs and expenses can be broken down into four categories:

a. brokerage costs, including commissions, execution expenses and soft dollars;

b. custodial charges, including transaction fees and annual expenses of money market funds used for cash sweeps;
c. investment manager fees; and
d. investment consulting fees.

a. brokerage costs. Brokerage costs, also referred to as trading costs, are comprised of commissions, and the related concept of soft dollars, and execution costs. Fiduciaries are charged with seeking *best execution*, which means minimizing brokerage costs. Regarding commission costs and soft dollar accounts, choose a commission cost structure and negotiate commissions so that low, "competitive" commissions are paid.

Execution costs are somewhat more complex. The execution cost is the difference between the price actually paid or received and the "fair market price." If the market price changes "immediately" after the trade is executed, the trade was not undertaken at the "fair market price," and therefore, an execution cost was incurred. Best execution is a more important issue in bond trading and thinly-traded securities.

Soft dollars is an arrangement where a particular broker applies part of the commission it receives to an activity which benefits the fund. The broker retains the balance of the commission cost to cover the cost of the trade. A close corollary to soft dollars is the practice of *commission recapture*, where a portion of the commissions are rebated or applied to custodial fees or consulting services.

When the Department makes a soft dollar or commission recapture arrangement, the following factors bear on the question of "best execution:"

- Would we procure these services if a soft dollar or commission recapture arrangement did not exist?
- How much would it cost to purchase the services directly, and how does this cost compare to the commissions returned under the soft dollar or commission recapture arrangement?
- Valuing the services received through soft dollar and commission recapture arrangements is sometimes difficult.

- It is important to account for all dollars spent for services, whether paid directly from the account or through soft dollar/commission recapture arrangements because soft dollar and commission recapture arrangements are ultimately paid for by the pertinent fund.

b. bank custodial charges. A bank custodian serves as an independent third-party intermediary between the investment manager and the fiduciary and provides the following services: (1) takes custody of securities; (2) provides reports on holdings and transactions; (3) collects interest and dividends; and (4) effectuates trades. Bank custodians may be paid either directly or through soft dollar/commission recapture arrangements.

In evaluating whether a custodian provides the necessary services in a cost effective manner, a number of factors are important.

- The annual charge should be stated in basis points and negotiated to a competitive level.
- Available cash and interest payment should be swept daily into a money market or cash management account. A reasonable annual expense for a money market account used for cash sweeps is less than 10 basis points.
- Dividends should be posted as accrued income on the ex-dividend date.

c. investment manager fees. Investment manager fees, stated in basis points, vary widely depending upon the asset class and the size of the account. Treasury should negotiate the fees, and make sure that they are competitive and in line with the average pattern of fees in the industry.

- Fees generally decrease as the size of the account increases.
- For a given portfolio size, fees for international portfolios generally exceed those for domestic portfolios.
- Fees for active management always exceed those for passive management.
- Fees are generally less if multiple portfolios are managed by the same organization.

d. investment consulting fees. Treasury pays its investment consultants directly on a project basis. In evaluating the costs (and benefits) of investment consulting firm services, Treasury considers the following:

- Does the investment consulting firm maintain a large support staff, maintain its own databases and service its own software? Investment consultants which do not rely on third-party vendors for services will generally charge higher fees, but provide more comprehensive and customized services.
- A good investment consultant should have a positive impact on the total fees paid by assisting with the negotiation of brokerage, custodial and investment manager fees.
- Fees paid to an investment consultant should be evaluated against the assistance the investment consultant is providing in the management of investment decisions, most importantly contributing to both a procedurally prudent process and better risk control of the portfolio.