Review of the Colorado Department of the Treasury Investment Program
November 2007

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Members of the Legislative Audit Committee:

This report contains the results of a review of the Colorado Department of the Treasury's investment program. The review was conducted pursuant to Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits of all departments, institutions, and agencies of state government. The State Auditor contracted with Callan Associates to conduct the review. This report presents our findings, conclusions, and recommendations, and the responses of the Department of the Treasury.

Sincerely,

Michael J. O'Leary, CFA
Executive Vice President

c: William C. Howard, CFA

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I. REPORT SUMMARY

Purpose and Scope of the Review of the Investment Program

The Colorado State Auditor retained Callan Associates Inc. (Callan) in June 2007 to review the Investment Program of the Colorado Department of the Treasury (the "Treasury"). The review covers the following six tasks:

1) An analysis of the investment performance of the five funds managed by the Treasury as of December 31, 2006 for the eight year period January 1, 1999 to December 31, 2006.

2) A review of the investment objectives, policies and practices for the five funds managed by the Treasury as of December 31, 2006.

3) A review of the asset mix in relationship to stated objectives, including implied risk, diversification, and return and conclusions on the appropriateness of the asset mix.

4) A review of internal controls.

5) A review of reporting systems and procedures for investments held, performance, and earnings.

6) A review of the implementation status of prior audit recommendations contained in the 1999 report.

The Colorado Department of the Treasury is part of the executive branch of the Colorado state government. The State Treasurer, which is an elected position, is authorized by statutes (Section 24-36-101, et seq., C.R.S.) to maintain custody of and invest state monies. Statutes (Section 24-36-113, C.R.S.) also direct the Treasurer to formulate investment policies regarding liquidity, maturity, and diversification appropriate to each fund or pool of funds in the State Treasurer's custody available for investment.

As of December 31, 2006, the Treasury had over $5 billion in investments in five funds; these funds are covered in this review and are listed in the table on the following page.

Colorado Department of the Treasury
Funds as of December 31, 2006

Pool/Fund	T-Pool/Fund Balance ($M)	Balance in T-Pool ($M)	Total Fund Balance ($M)
Treasury Pool:			
T-Pool Cash	$ 1,939		
T-Pool 1-5	$ 2,772		
*Total Treasury Pool**	*$ 4,711*		
Public School Permanent Fund	$ 465	$ 8	$ 473
Major Medical Insurance Fund	$ 59	$ 13	$ 72
Unclaimed Property Tourism Promotion Trust Fund	$ 57	$ 7	$ 64
State Education Fund	$ 56	$ 267	$ 323
Total	**$ 5,348**	**$ 295**	**$ 932**

Source: Colorado Department of the Treasury Holdings Spreadsheet
*Some of the monies in each of the individual funds are actually held in the Treasury Pool. In this table, assets associated with the Treasury Pool represent its total assets, and to avoid double counting, the assets associated with the individual funds exclude the balances in the Treasury Pool in the column labeled "T-Pool/Fund Balance."

During the period covered by this review, the Treasury managed three additional funds that are not listed above. The first of these funds was the Compensation Insurance Authority Fund, whose balance of $1,553 million was transferred to Pinnacol Assurance in November 2004 in accordance with statutory requirements (Section 8-45-117, C.R.S.). The second fund was the Controlled Maintenance Fund, which was reduced to provide assets for the State's General Fund; the remaining balance of $241 million was moved to the Treasury Pool (T-Pool) in July 2001. The third fund was the Tobacco Settlement Trust Fund, which was funded in 2000, but its assets of $135 million were transferred to T-Pool in 2002 to cover General Fund shortfalls.

During the performance review, Callan relied upon performance data provided by the Treasury. Callan reviewed all policy documents and conducted interviews with the Treasury's investment staff and accounting staff. Furthermore, Callan contacted the Treasury's custodian, JP Morgan Chase.

Summary of Performance Review

Callan reviewed the performance of the Treasury's investments in two ways. First, Callan used book yield as a performance measure. Book yield, which is one of two performance objectives specified in the Treasury's investment policy, measures a portfolio's income as a percentage of book value (or the carrying cost of the portfolio). Second, Callan used total rate of return, which is an additional performance objective specified in the investment policy. Total rate of return captures the percentage change in market value for a given time period, as well as any income accrued during the period.

The review found that the performance results of all funds over the 8-year period are generally in line with expectations and are competitive.

Book Yield: The book yield for all the funds compares favorably to the yield benchmarks for most periods examined. Overall, out-performance results from the following factors: the use of sectors other than Treasuries that have higher yields than Treasuries, such as corporate bonds; a longer maturity portfolio; and the net decline in interest rates over the examination period. The book yields also benefited from the sale of securities in Fiscal Year 2003, which resulted in realized capital gains.

The review determined that T-Pool 1-5 produces higher yields than T-Pool Cash during most time periods (the exception being 2006 when the yield curve was inverted and short-term rates were higher than long-term rates, a relatively rare phenomenon), suggesting that the Treasury should maximize the amount of funds held in T-Pool 1-5 and minimize assets held in T-Pool Cash.

Total Return: The total return analysis compares the returns on each fund to various market benchmarks and a peer group of active managers with a similar risk posture. The analysis covers portfolio characteristics as well as returns. The analysis is most insightful for T-Pool 1-5 and the Public School Permanent Fund (PSPF), both of which have performance data for the full evaluation period. Over this period, the returns for these funds (T-Pool 1-5 and PSPF) were generally in line with expectations. Performance results for the Major Medical Insurance Fund (MMIF) and the State Education Fund (SEF) are more difficult to evaluate due to the discontinuity in investment strategy caused by the liquidations in Fiscal Year 2003; since this time, however, both funds have exceeded their respective total return benchmarks on a cumulative basis. The Unclaimed Property Tourism Promotion Trust Fund (UPTPTF), which was first funded in May 2005, has a very short history; the fund has performed in line with expectations since inception.

Summary of Review of Investment Policy and Asset Allocation

Investment of the Public School Permanent Fund: To limit the risk of losses to the Public School Permanent Fund, which by statute and State constitution must be invested safely and profitably, the Treasury has established an investment policy for the PSPF that only allows monies in the fund to be invested in fixed income securities. This approach reduces the downside risk of losses but also sacrifices the growth of assets and does not provide protection of purchasing power of the corpus. The Treasury has consulted with the Attorney General about the legality of investing in securities other than fixed income. We encourage further discussions with the Attorney General on the feasibility of broadening the fund's investment flexibility to include equity investments. The desired outcome of the discussions should be further clarification of permitted investments and eventual diversification of fund assets.

The Investment Policy: The policies for the Treasury Pool, the Major Medical Insurance Fund, and the Unclaimed Property Tourism Promotion Trust Fund are deemed appropriate for each fund's purpose. The investment policy for the State Education Fund, however, does not include diversification guidelines or performance benchmarks. Given the cash flow characteristics of this fund, the majority of assets are held in the T-Pool, and the remaining longer-dated securities are simply being held to maturity. While this strategy is reasonable, it is not adequately documented in the investment policy. Finally, the investment policy as a whole lacks written stipulation that the Treasurer has sole authority to amend the policy, the frequency with which the policy will be reviewed, or the dates that record when changes are made to the policy.

Use of Total Return for Investment Management: Under most conditions, the Treasury exercises a buy-and-hold investment strategy, in which trading is not frequent and securities are held to maturity. Under this strategy, as long as the security is redeemed at par upon maturity, the Treasury focuses on book value over market value. The book yield calculation does not mark-to-market the securities, and thus does not reveal any unrealized gains or losses. Book yield masks volatility and may inhibit early detection of problems. By increasing the emphasis on market value based returns, we believe that the Treasury would improve risk management of the funds and conform to best practices in the investment industry.

Summary of Review of Internal Controls and Reporting

Compliance Oversight: Per the investment policy, the purpose of internal controls is to prevent the loss of public funds due to "fraud, employee error, misrepresentation by third parties, or by imprudent actions by employees and officers of the Treasury." The Treasury's structure and procedures support this objective, in regard to fraud, error, or misrepresentation. The objective of avoiding imprudent actions is more difficult to assess. A compliance officer making an independent determination that the funds are in compliance with the policy would improve the ability to achieve this objective. Thus, this review recommends the designation of a compliance officer for the Treasury.

Maintaining Electronic Historical Data: The current custodian, JP Morgan Chase, generates a performance report based on total return that is available electronically. Maintaining historical electronic data facilitates efficient and reliable verification of historical returns. Accordingly, a recommendation is provided for the Treasury to ensure that key historical performance data is maintained both internally and electronically, and if custodians are changed in the future, the Treasury should seek to load the prior custodian's return data into the new service provider's system.

Improved Investment Analytics: Most fixed income managers use multiple analytical applications to monitor changes in portfolio characteristics arising from changes in market conditions. The Treasury Investment division does not have access to such a system. Accordingly, this review recommends the acquisition of additional tools to be utilized in managing the funds.

II. RECOMMENDATION LOCATOR

Below is a brief description of each recommendation Callan has made and a reference to the page number where the recommendation is described in more detail. The Treasury's response and, if appropriate, the date or expected date of implementation is also set forth below.

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
1	16	The Department of the Treasury should continue to seek to maximize investment returns on the T-Pool by reviewing the balances in T-Pool Cash and T-Pool 1-5 on a daily basis, along with projected cash flow needs, to ensure it maintains an appropriate balance in the two portfolios.	Agree	Ongoing
2	39	The Department of the Treasury should consider broadening the investment policy of the Public School Permanent Fund to make it consistent with the Prudent Investor Standard. This change would include allowing investments in equities and cash equivalents, if the opinion from the Attorney General indicated that such investments are permissible.	Partially Agree	November 2007
3	40	The Department of the Treasury should evaluate the use of Treasury Inflation Protected Securities (TIPS), particularly for the PSPF, MMIF, and UPTPTF.	Agree	Ongoing
4	41	The Department of the Treasury should incorporate market values as well as total return and peer group benchmarks in the management of the funds. If market values are actively utilized to manage the funds, the investment policy guidelines for each fund should be based on market values instead of book values.	Disagree	
5	42	The Department of the Treasury should amend the investment policy for the State Education Fund to include a more comprehensive description of the guidelines and investment strategy.	Agree	March 2008
6	42	The Department of the Treasury should modify the investment policy to indicate: (1) timing for a regular review of each fund's policy, perhaps annually; (2) who has authority to amend the policy; and (3) when the policy was last amended.	Agree	December 2007
7	45	The Department of the Treasury should appoint a compliance officer who will prepare a quarterly compliance report for each fund, which certifies that the fund complies with the investment policy, or if a violation has occurred, the report would describe the steps to correct it.	Agree	March 2008
8	46	The Department of the Treasury should ensure that key historical performance data is maintained electronically, and if custodians are changed in the future, it should seek to load the prior custodian's return data into the new service provider's system.	Agree	Ongoing
9	47	The Department of the Treasury should seek to obtain a portfolio analytical application in order to improve the analytical tools utilized in managing the funds.	Agree	July 2008 (dependent on legislative approval)

III. DESCRIPTION OF THE DEPARTMENT OF THE TREASURY

The Colorado Department of the Treasury (the "Treasury") is part of the executive branch of the Colorado state government. The State Treasurer, which is an elected position, is authorized by statute (Section 24-36-113, C.R.S.) to maintain custody of and invest state monies. The statute (Section 24-36-113, C.R.S.) directs the Treasurer to develop policies regarding liquidity, maturity, and diversification appropriate to each fund or pool of funds in the State Treasurer's custody available for investment. The Treasury does not have any taxation authority, but does have the authority to issue certain types of debt instruments.

This review covers the five funds managed by the Treasury as of December 31, 2006. The funds and their market values are provided in the table below:

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Pool/Fund	**T-Pool/Fund Balance ($M)**	**Balance in T-Pool ($M)**	**Total Fund Balance ($M)**
Treasury Pool:			
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Source: Colorado Department of the Treasury Holdings Spreadsheet
*Some of the monies in each of the individual funds are actually held in the Treasury Pool. In this table, assets associated with the Treasury Pool represent its total assets, and to avoid double counting, the assets associated with the individual funds exclude the balances in the Treasury Pool in the column labeled "T-Pool/Fund Balance."

During the period covered by this review, the Treasury managed three additional funds that are not listed above. The first of these funds was the Compensation Insurance Authority Fund, whose balance of $1,553 million was transferred to Pinnacol Assurance in November 2004 in accordance with statutory requirements (Section 8-45-117, C.R.S.). The second fund was the Controlled Maintenance Fund, which was reduced to provide assets for the State's General Fund; the remaining balance of $241 million was moved to the Treasury Pool (T-Pool) in July 2001. The third fund was the Tobacco Settlement Trust Fund, which was funded in 2000, but its assets of $135 million were transferred to the T-Pool in 2002 to cover General Fund shortfalls.

Description of the Funds

With the exception of assets that are required to be separately invested or managed by other state entities (e.g., College Invest and University of Colorado), the Treasury Pool invests the remaining financial assets of the state, including the General Fund and State agency monies deposited with the Treasury. Thus, only funds that are permitted to be commingled are in the Treasury Pool. The pooling of a large proportion of the State's assets in a single investment fund (the Treasury Pool) creates economies of scale that result in administrative efficiency and increased diversification opportunities, which in turn should result in higher earnings.

A large portion of the activity of the Treasury concerns short term transactions, or cash management. The Treasury collects tax receipts and dispenses cash to State agencies to cover operating expenses. The Treasurer requires significant liquid assets to cover these activities, and yet seeks to earn income on these liquid assets at market rates. The most liquid assets are analogous to an interest-bearing checking account. The Treasury Pool is managed from an investment perspective as two separate portfolios:

- *T-Pool Cash* represents the shorter maturity, more liquid portion of the Treasury Pool.

- *T-Pool 1-5* represents the remainder of the Treasury Pool, and is invested in securities with maturity of 1-5 years. While these securities are highly liquid, the Treasury does not anticipate that the assets in this portfolio will be expended in the near term.

The other four funds covered in this review are dedicated to more specific purposes, and thus are segregated from the T-Pool and are governed by their own policies. The other four funds routinely make use of the T-Pool for some assets to satisfy liquidity needs.

The Public School Permanent Fund (PSPF) was established in the State Constitution (Section 3 of Article IX) to hold assets from the sale or use of lands that have been granted by the federal government to the State for educational purposes. Interest earned on the fund is credited to the Public School Income Fund and then transferred to the Colorado Department of Education. Beginning in Fiscal Year 2004, the General Assembly (through the passage of Senate Bill 03-248) limited the amount of interest expended from the fund to $19 million annually and requires that any interest in excess of $19 million be added to the principal of the fund.

The State Education Fund (SEF) was created as a result of the passage of Amendment 23 to the State Constitution (Section 17 of Article IX). A portion of state income tax revenues collected after December 28, 2000, are credited to this fund and may be appropriated only for specified education-related purposes. The investment performance of this fund begins in July 2001. In Fiscal Year 2003, a significant proportion of the assets in this fund were liquidated to provide funding for K-12 school finance. Since that time, new allocations to the fund are invested in the Treasury Pool due to the fact that annual contributions to the fund are spent within the following year.

The Major Medical Insurance Fund (MMIF) is invested by the Treasury under the authority of Section 8-46-210, C.R.S. This fund contains assets for the Division of Worker's Compensation of the Colorado Department of Labor and Employment (DOLE). DOLE uses the assets from the Major Medical Insurance Fund to pay injury related benefits to workers who meet specific criteria. Assets in excess of current needs are invested by the Treasury. Investment performance began in the third quarter of 1997. During Fiscal Year 2003, the assets of the fund were liquidated to cover General Fund shortfalls, and the investment performance for the fund comes to an end; the investment performance resumes, however, after the fund was reconstituted in November 2004.

The Unclaimed Property Tourism Promotion Trust Fund (UPTPTF) was created in statute (Section 38-13-116.7, C.R.S.) in 2004 and initially funded in May 2005. The principal represents unclaimed property, and is not to be expended except to pay claims. The interest derived from the investment of the principal is credited to the Travel and Tourism Promotion Fund, and since Fiscal Year 2006 the UPTPTF has been subject to appropriation by the General Assembly.

IV. PERFORMANCE REVIEW

This section provides a review of the performance of the five funds invested by the Treasury.

Colorado Department of the Treasury
Funds as of December 31, 2006

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In subsection (A) below, the performance measure is book yield, which is one of two performance objectives specified in the Treasury's investment policy. Book yield measures a portfolio's income as a percentage of book value (or the carrying cost of the portfolio); income is defined as interest income as well as realized gains and losses. In subsection (B) below, the performance measure is total rate of return, which is the additional performance objective specified in the investment policy. Total rate of return captures the percentage change in market value for a given time period, as well as any income accrued during the period. For the review of investment performance against both types of measures, Callan uses performance data provided by the Treasury.

In each section, the results are presented for each fund and compared to the funds' respective benchmarks. The benchmarks, both book yield and total rate of return, are those specified in the investment policy for each fund. For an additional total return performance comparison, Callan selected a market benchmark for each fund that active managers with similar investment styles commonly use to gauge performance.

For purposes of analyzing investment strategy and performance, Callan found it useful to treat T-Pool Cash and T-Pool 1-5 separately, even though participants in the Treasury Pool may not be aware of the sub-components nor have an interest in the disparate performance. Callan found this approach necessary for several reasons:

- The primary objective of T-Pool Cash is stability of principal. Because T-Pool 1-5 has a longer time horizon than T-Pool Cash, the two pools (T-Pool 1-5 and T-Pool Cash) utilize different investment styles. Thus, T-Pool Cash and T-Pool 1-5 should be compared to benchmarks that reflect their respective investment styles.

- Due to the volatility of balances within T-Pool Cash, benchmarks (both yield and total return) combining T-Pool 1-5 and T-Pool Cash would not capture the shifting allocations between the two portfolios.

Fiscal Year 2003

In order to evaluate the investment performance for book yield, the reader should be aware of the unusual occurrence in Fiscal Year 2003 that led to unusually high book yields. Due to budget needs, the Treasury was required to liquidate longer-dated securities held in funds outside the T-Pool and transfer proceeds to the State's General Fund. As a result, the sale of securities whose market values exceeded book values resulted in realized gains, because interest rates had fallen from the time that the securities were purchased. The capital gain was treated as income for that period (June 2003) and resulted in a very high book yield distribution.

A. Book Yield Comparisons

The following table lists the book yield performance benchmarks for each fund as listed in the 2006 investment policy statement.

Colorado Department of the Treasury
Book Yield Performance Benchmarks

Book Yield Performance Benchmark	**T-Pool**		**Public School Permanent Fund**	**Major Medical Insurance Fund**	**Unclaimed Property Tourism Promotion Trust Fund**	**State Education Fund**
	T-Pool Cash	*T-Pool 1-5*				
12 month average yield of the following U.S. Treasury security:	30-day treasury bill	2-year Constant Maturity Index	5-year Constant Maturity Index	7-year Constant Maturity Index	7-year Constant Maturity Index	*See footnote below

Source: Colorado Department of the Treasury Investment Policy, 2006
*The investment policy does not include a book yield benchmark for the State Education Fund. This issue is discussed later in the report.

Treasury Pool

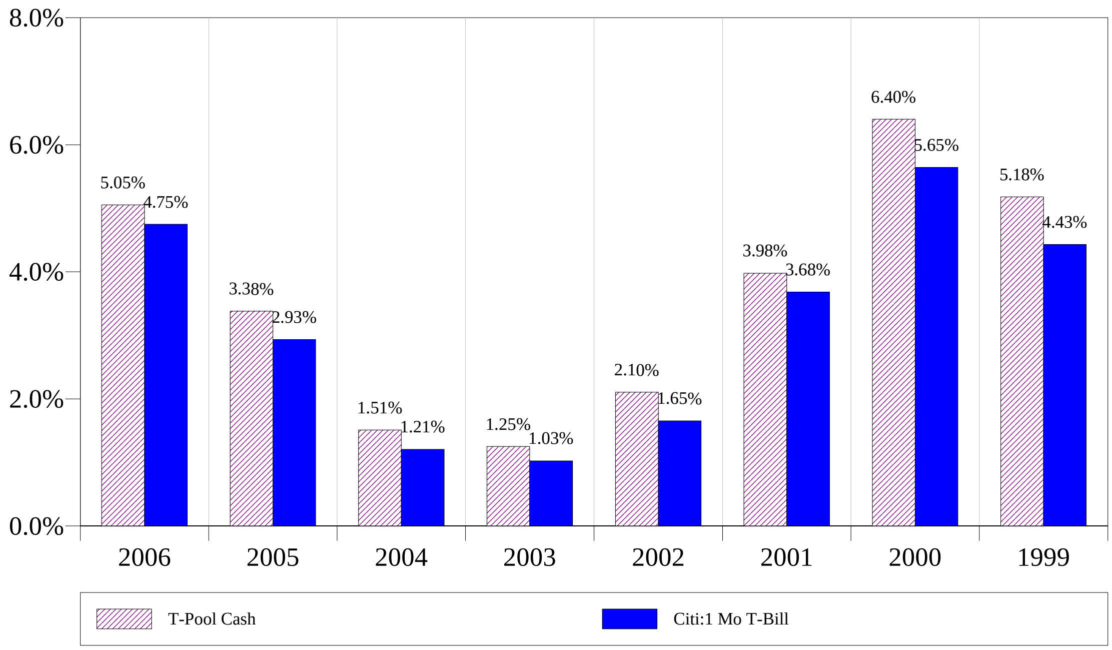
Yield on T-Pool Cash Versus T-Pool 1-5

<u>T-Pool Cash</u>

The book yield benchmark for T-Pool Cash is the yield on the 30-day Treasury bill, as specified in the investment policy.

T-Pool Cash produced a higher book yield than the yield on the 30-day Treasury bill (as measured by the Citigroup 1-Month T-bill Index) in each of the past eight calendar years as seen in the chart below.

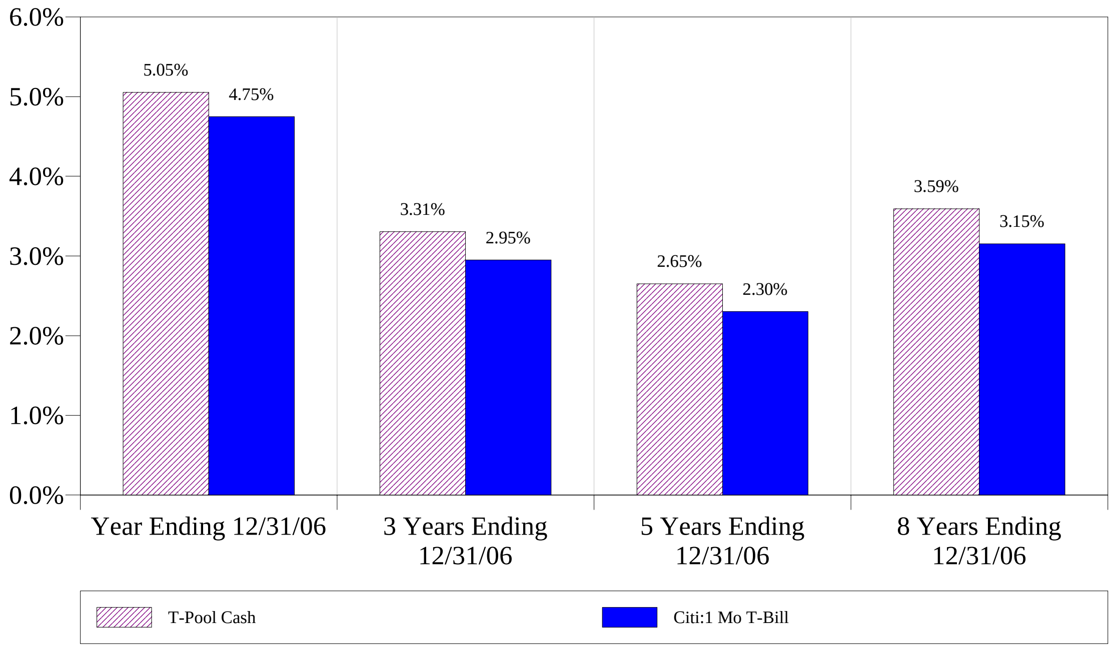
Colorado Department of the Treasury
T-Pool Cash Book Yields
For 8 Calendar Years Ended December 31, 2006



Source: Colorado Department of the Treasury Earnings and Yield Statement

Consequently, T-Pool Cash has out-performed its yield benchmark over the past 3-, 5-, and 8-year time periods as shown in the chart below.

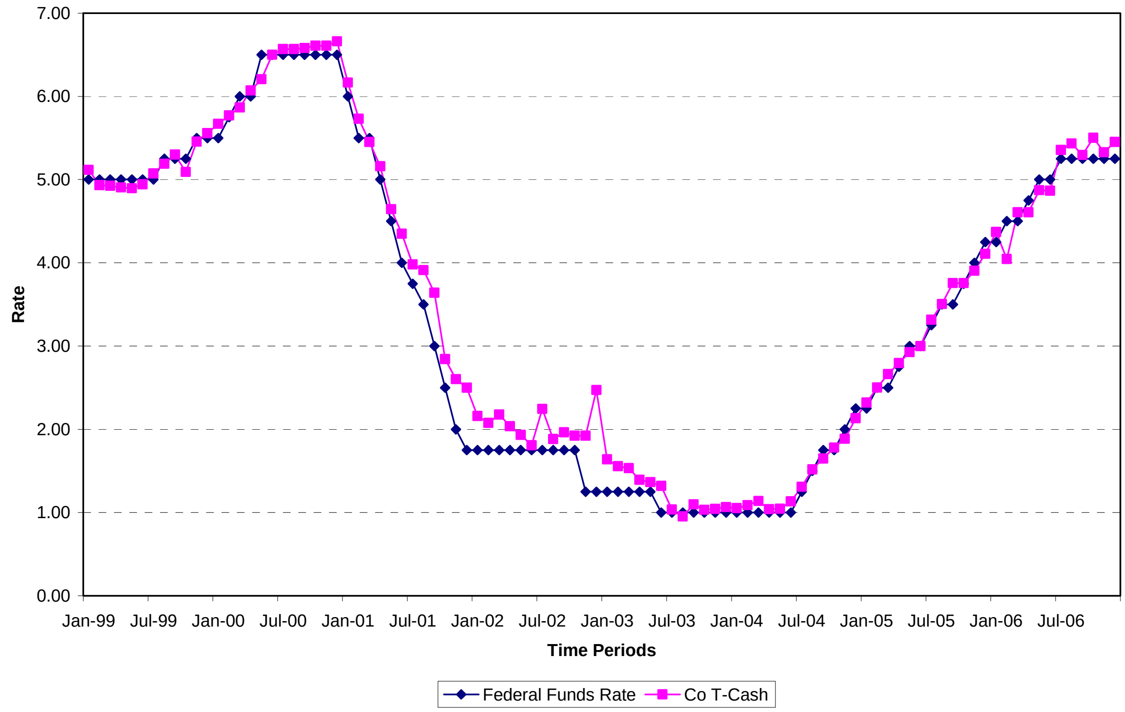
Colorado Department of the Treasury
T-Pool Cash Book Yields
For Cumulative Time Periods



Source: Colorado Department of the Treasury Earnings and Yield Statement

The chart on the following page compares the book yield for T-Pool Cash with short-term interest rates during the time period being reviewed; short-term interest rates are measured by the federal funds rate, which is the interest rate that banks lend balances at the U.S. Federal Reserve to other banks on an overnight basis. The book yield history for T-Pool Cash closely mirrors the short-term interest rates for the time period examined; this performance pattern is reasonable and consistent with the investment mandate for T-Pool Cash. In December 2002, book yields spiked for T-Pool Cash due to realized gains from longer-maturity securities to cover General Fund shortfalls (the July 2002 spike was caused by a data entry error that was corrected the following month).

Colorado Department of the Treasury
Federal Funds Rate and Book Yields for T-Pool Cash
For 8 Years Ended December 31, 2006



Source: Federal Reserve Bank of New York and Colorado Department of the Treasury Earnings and Yield Statement

T-Pool 1-5

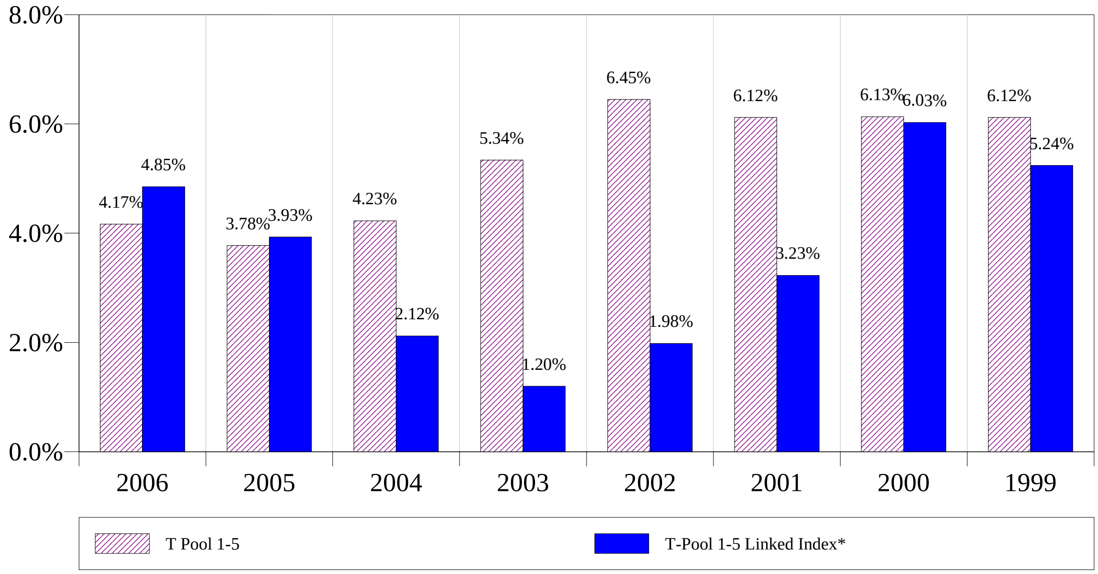
The current book yield benchmark for T-Pool 1-5 is the yield on the constant 2-year maturity Treasury, as specified in the investment policy. Prior to December 2004, the Treasury used a single benchmark—the constant 1-year maturity Treasury—for the combined T-Pool (T-Pool Cash and T-Pool 1-5).

As evident from the chart on the following page, T-Pool 1-5 generated a higher book yield than the yield on its benchmark for six of the past eight calendar years. The fund's yield narrowly edged the benchmark during the first two calendar periods (1999-2000), easily out-performed the benchmark during the next four years (2001-2004), and lagged the benchmark during the last two calendar years (2005-2006) when the fund's book yield could not keep pace with rising Treasury yields during this time period. The significant out-performance from 2001-2004, primarily stems from two events during this time period:

- On July 1, 2001, all securities from the Controlled Maintenance Fund (CMF), which consisted of $241 million, were transferred to the T-Pool to cover General Fund shortfalls. Around this time, yields began to fall on the book yield benchmark (which was the constant one-year maturity Treasury at the time). The yield on T-Pool 1-5 remained high due to the influx of the longer maturity securities from the CMF.

- On July 5, 2002, $76 million (out of a total of $166 million) of securities from the MMIF and all securities from the Tobacco Settlement Trust Fund, which consisted of $135 million, were transferred to the T-Pool to cover General Fund shortfalls. As a result, the average maturity increased from approximately 30 months to 40 months in T-Pool 1-5.

Colorado Department of the Treasury
T-Pool 1-5 Book Yields
For 8 Calendar Years Ended December 31, 2006

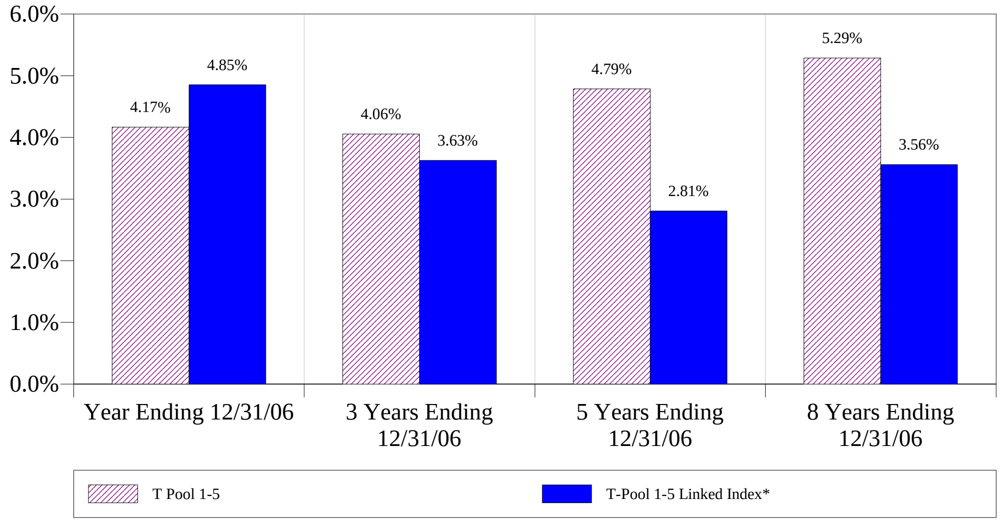


Source: Colorado Department of the Treasury Earnings and Yield Statement

* Jan. 1998- Nov. 2004, One Year Constant Maturity Index
Dec. 2004- Present, Two Year Constant Maturity Index

Boosted by its strong relative performance from 2001-2004, T-Pool 1-5 generated higher yields than the benchmark during the past 3-, 5-, and 8-year time periods. The fund, however, underperformed the yield benchmark in the most recent 1-year period by 68 basis points as shown in the chart on the following page. The term “basis points” is often used to describe the relative performance of each fund to its respective benchmarks. One basis point is equal to 0.01%, and therefore 100 basis points is equivalent to 1.00%.

Colorado Department of the Treasury
T-Pool 1-5 Book Yields
For Cumulative Time Periods

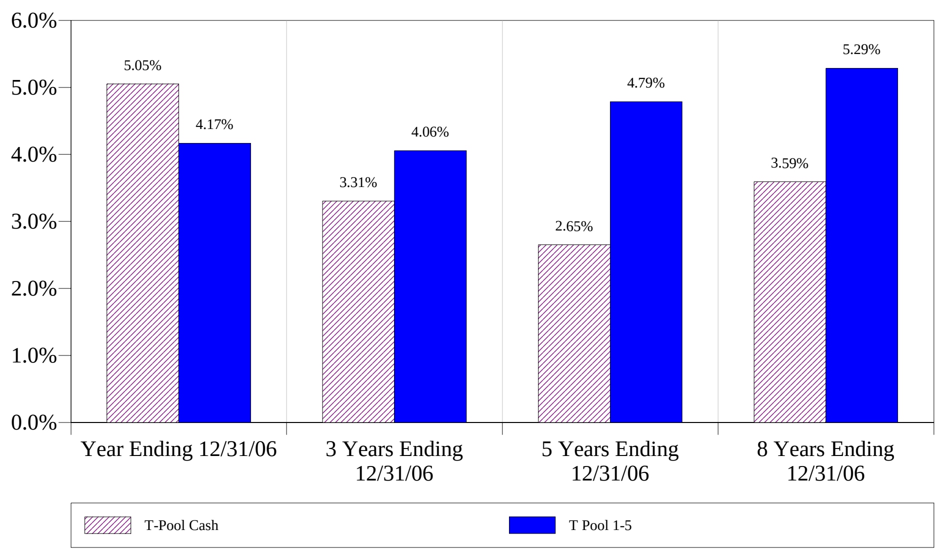


Source: Colorado Department of the Treasury Earnings and Yield Statement

* Jan. 1998- Nov. 2004, One Year Constant Maturity Index
Dec. 2004- Present, Two Year Constant Maturity Index

The following chart illustrates the higher yields earned on T-Pool 1-5 than on T-Pool Cash for the last 3-, 5- and 8-year time periods, due to the higher yields on longer maturity securities.

Colorado Department of the Treasury
T-Pool Cash and T-Pool 1-5 Book Yields
For Cumulative Time Periods



Source: Colorado Department of the Treasury Earnings and Yield Statement

As the chart above illustrates, T-Pool 1-5 produces higher yields than T-Pool Cash during most time periods (the exception being 2006 when the yield curve was inverted and short-term rates were higher than long-term rates, a relatively rare phenomenon), suggesting that the Treasury should maximize the amount of funds held in T-Pool 1-5 and minimize assets held in T-Pool Cash. The Treasury, however, must maintain adequate funds in T-Pool Cash to provide sufficient liquidity to accommodate the spending needs of the State. In addition, the investment policy specifies the Treasury Pool must have at least $300 million in maturities of less than one year. Thus, the Treasury must balance liquidity needs and policy guidelines with the higher yielding returns of T-Pool 1-5. To help balance these conflicting needs, the Treasury should continue to seek to maximize returns on the T-Pool by reviewing the balances in T-Pool Cash and T-Pool 1-5 on a daily basis, while incorporating projected cash flow needs in order to maintain an appropriate balance in the two portfolios.

Recommendation Number 1
The Department of the Treasury should continue to seek to maximize investment returns on the T-Pool by reviewing the balances in T-Pool Cash and T-Pool 1-5 on a daily basis, along with projected cash flow needs, to ensure it maintains an appropriate balance in the two portfolios.

Department of the Treasury Response
Agree. ***Implementation Date:*** **Ongoing.**

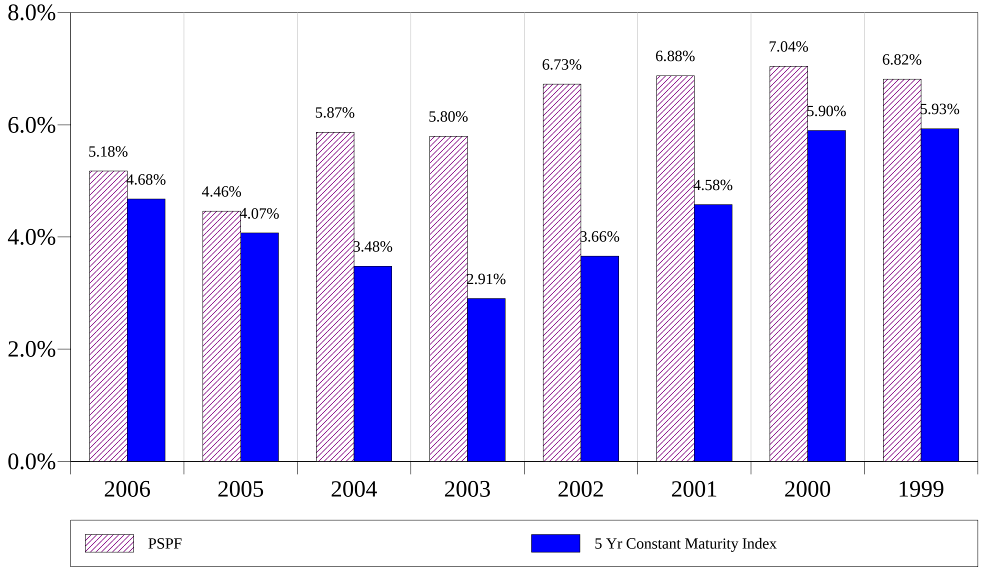
In a normal yield curve environment long-term investments yield more than short-term investments. Treasury endeavors to maintain adequate liquidity in T-Cash to meet all current and future expected cash outlays. Any excess cash not needed for immediate liquidity is invested opportunistically in the T-Pool 1-5 portfolio.

Public School Permanent Fund

The yield benchmark for the Public School Permanent Fund is the yield on the constant 5-year maturity Treasury, as specified in the investment policy.

The chart on the following page illustrates that the PSPF produced a higher book yield than the yield on the constant 5-year maturity Treasury for each of the past eight calendar years. Out performance during the examination period resulted from: the use of sectors other than Treasuries that have higher yields than Treasuries, such as corporate bonds; a longer maturity portfolio; and the overall net decline in interest rates during this period. The book yields also benefited from the sale of securities in Fiscal Year 2003, which resulted in realized capital gains.

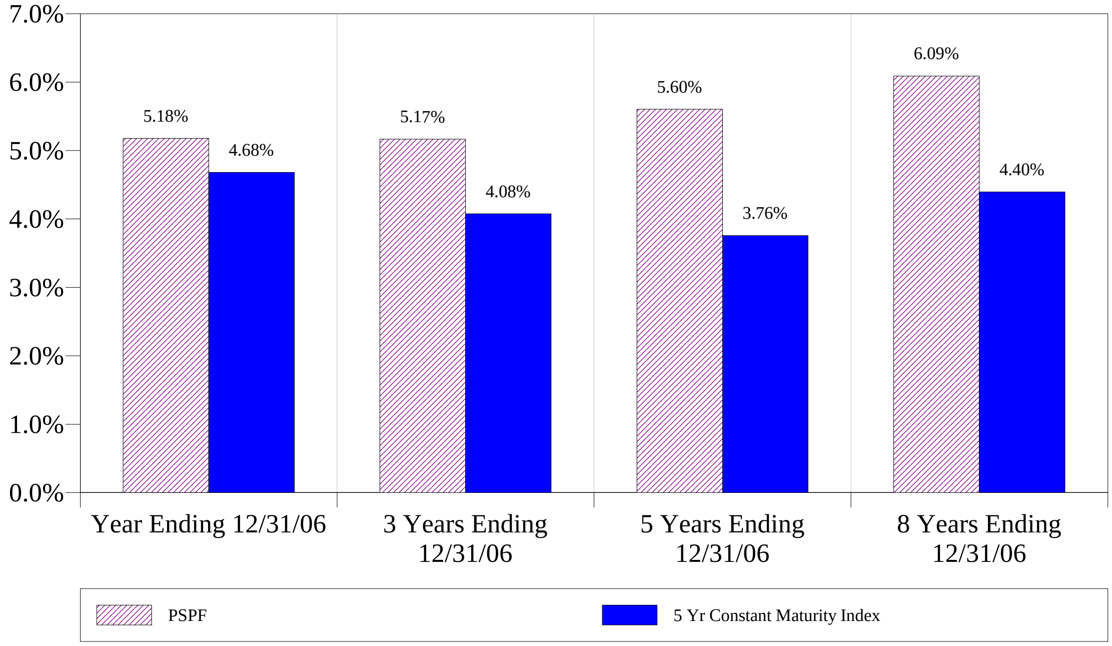
Colorado Department of the Treasury
PSPF Book Yields
For 8 Calendar Years Ended December 31, 2006



Source: Colorado Department of the Treasury Earnings and Yield Statement

With yields that were consistently higher than the benchmark in the calendar year periods, the PSPF generated higher yields than the benchmark during cumulative time periods as well. For the eight-year period ending December 31, 2006, the PSPF's book yield was 169 basis points higher than the yield on the constant 5-year maturity Treasury as seen in the chart on the following page.

Colorado Department of the Treasury
PSPF Book Yields
For Cumulative Time Periods



Source: Colorado Department of the Treasury Earnings and Yield Statement

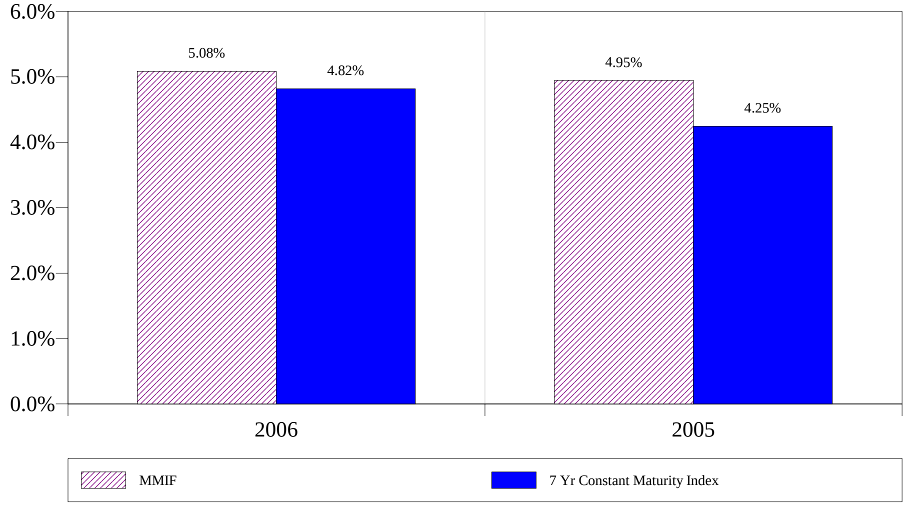
Major Medical Insurance Fund

Due to budget needs during the State's Fiscal Year 2003, the Treasury was required to transfer a portion of the securities held in the Major Medical Insurance Fund to the T-Pool as well as liquidate the remaining securities held in the MMIF and transfer the proceeds to the General Fund. The MMIF was re-funded in November of 2004. Accordingly, two separate time periods are shown for the performance history of the MMIF: January 1, 1999 to June 30, 2003 and January 1, 2005 to December 31, 2006.

The yield benchmark for the MMIF is the yield on the constant 7-year maturity Treasury, as specified in the investment policy. Prior to the fund's liquidation in June 2003, the fund's benchmark was the constant 20-year maturity Treasury. The State's budget crunch in Fiscal Year 2003 led to a change in the fund's investment policy; the current policy reflects a shorter investment time horizon and a more conservative investment approach than the original policy.

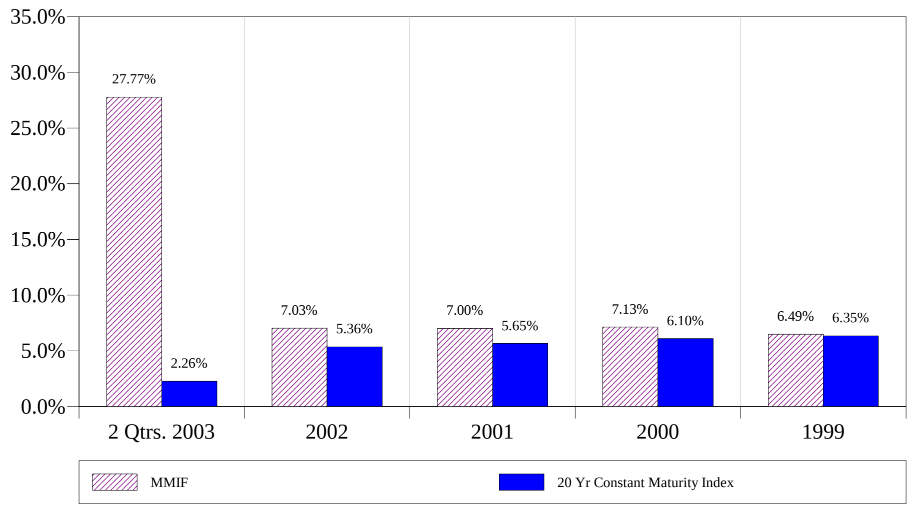
For all time periods shown in the two charts on the following page, the MMIF generated a higher book yield than the yield on its benchmark. It should be noted that the liquidation of the MMIF led to unusually high book yields in June of 2003. Because the sale of securities whose market values exceeded book values resulted in realized gains (due to the decline in interest rates from the time that the securities were purchased), the capital gains were treated as income for that period (June 2003) and the book yields increased significantly.

Colorado Department of the Treasury
MMIF Book Yields
For 2 Calendar Years Ended December 31, 2006



Source: Colorado Department of the Treasury Earnings and Yield Statement

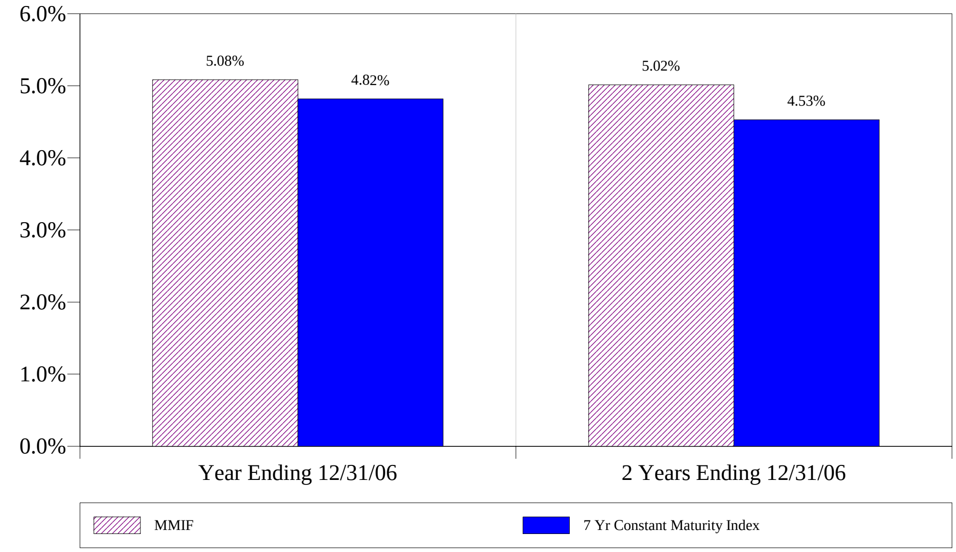
Colorado Department of the Treasury
MMIF Book Yields
For 4 1/2 Calendar Years Ended June 30, 2003



Source: Colorado Department of the Treasury Earnings and Yield Statement

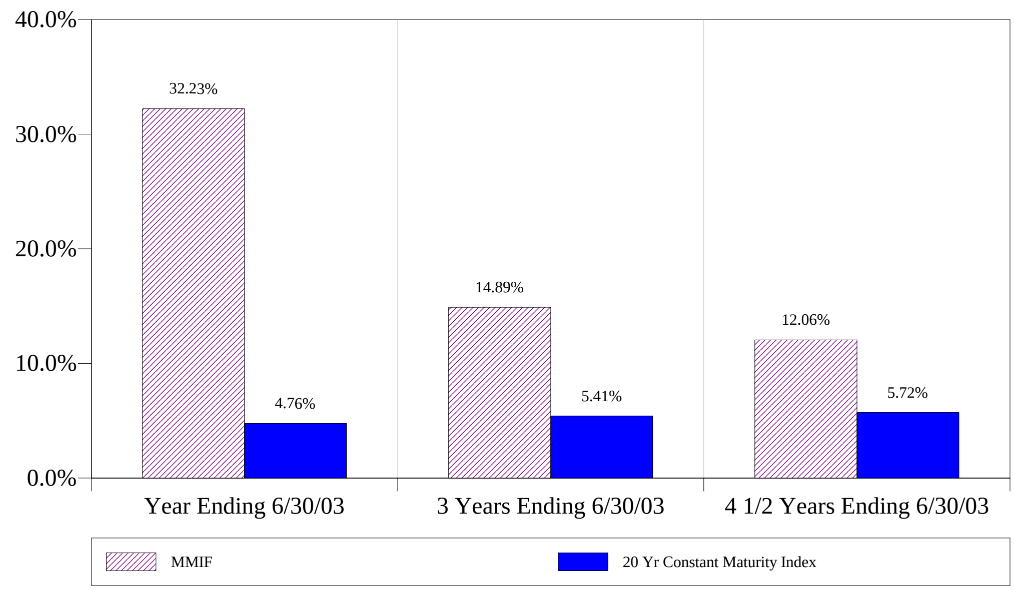
On a cumulative basis for both time periods shown in the two charts on the following page, the yields for the MMIF are again higher than the benchmark yields. For the 2-year period ending December 31, 2006, the MMIF's book yield was 49 basis points higher than the yield on the constant 7-year maturity Treasury, while the book yield for the 4 ½-year period ending June 30, 2003 was 634 basis points higher than the yield on the constant 20-year maturity Treasury.

Colorado Department of the Treasury
MMIF Book Yields
For Cumulative Time Periods



Source: Colorado Department of the Treasury Earnings and Yield Statement

Colorado Department of the Treasury
MMIF Book Yields
For Cumulative Time Periods



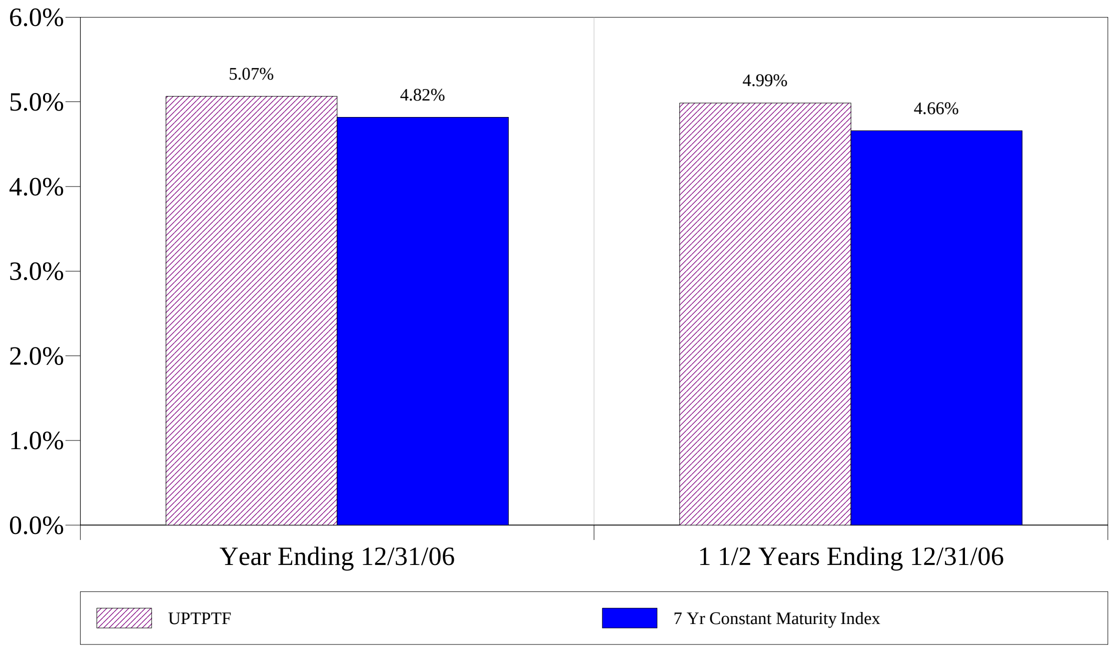
Source: Colorado Department of the Treasury Earnings and Yield Statement

Unclaimed Property Tourism Promotion Trust Fund

The yield benchmark for the Unclaimed Property Tourism Promotion Trust Fund is the yield on the constant 7-year maturity Treasury, as specified in the investment policy.

Because it was not funded until May 2005, the UPTPTF only has 1 ½ years of performance history. In examining the last 1 and 1 ½-year time periods in the chart below, the UPTPTF's book yield was, respectively, 25 and 33 basis points higher than the yield on the constant 7-year maturity.

Colorado Department of the Treasury
UPTPTF Book Yields
For Cumulative Time Periods

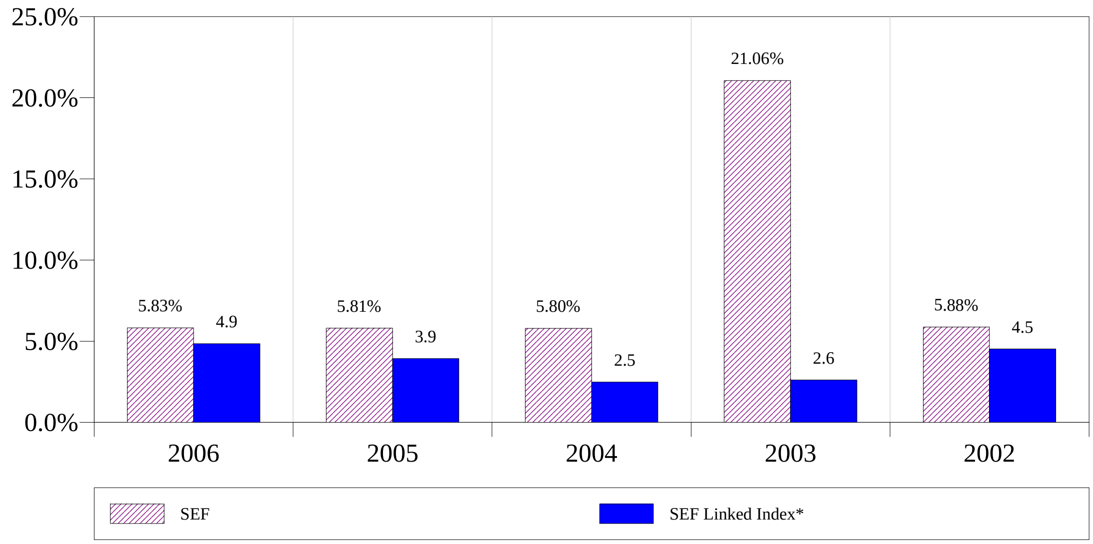


Source: Colorado Department of the Treasury Earnings and Yield Statement

State Education Fund

The State Education Fund does not have a yield benchmark specified in the investment policy; this matter is discussed further in Section V, Review of Investment Policy and Asset Allocation. In practice, the Treasury managed the fund against the 10-year constant maturity Treasury until July 2003, at which point the effective benchmark was changed to the 2-year constant maturity Treasury. The Treasury changed benchmarks because a significant proportion of the assets in this fund were liquidated in Fiscal Year 2003 to provide funding for K-12 school finance, and the fund's remaining assets will likely be transferred to the T-Pool once the securities mature. The two charts on the next page detail the SEF's book yields for calendar and cumulative periods. The spike for 2003, with a yield of 21.06% for the SEF, is the result of liquidations that generated capital gains as discussed above.

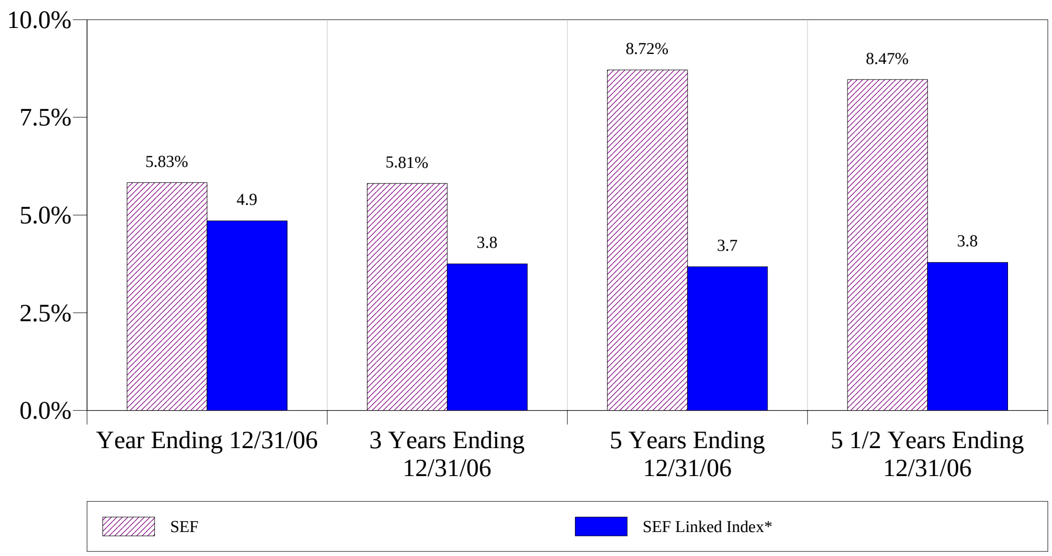
Colorado Department of the Treasury
SEF Book Yield
For 5 1/2 Calendar Years Ended December 31, 2006



Source: Colorado Department of the Treasury Earnings and Yield Statement

* Sept. 2001- June. 2003, Ten Year Constant Maturity Index
July 2003- Present, Two Year Constant Maturity Index

Colorado Department of the Treasury
SEF Book Yield
For Cumulative Time Periods



Source: Colorado Department of the Treasury Earnings and Yield Statement

* Sept. 2001- June. 2003, Ten Year Constant Maturity Index
July 2003- Present, Two Year Constant Maturity Index

B. TOTAL RATE OF RETURN PERFORMANCE COMPARISONS

In the pages that follow, Callan provides a review of the total rate of return achieved for each fund. Total rate of return reflects both earned income and changes in the market value of fund principal. Unlike book yield, total rate of return provides an updated value of the portfolio and captures both unrealized gains and losses. Book yield ignores the market value fluctuations, and therefore understates the risk in a bond portfolio. Total rate of return is the standard methodology for measuring investment performance and endorsed by the CFA Institute's Global Investment Performance Standards (GIPS). CFA Institute is a global, not-for-profit association of investment professionals that awards the Chartered Financial Analyst (CFA) designation, offers educational programs, and sets standards for the investment industry. The GIPS standards establish a globally standardized, industry-wide approach to creating performance presentations that communicate investment results.

The total rates of return used in the following pages were provided, and calculated, by the Treasury. For the primary performance comparison, each fund is shown relative to its respective total return policy benchmark (see table on following page); these benchmarks were added to the investment policies in December 1999 and January 2000, and they did not change during the time periods examined in this review. For secondary performance comparisons, Callan selected a market benchmark for each fund that active managers with similar investment styles commonly use to gauge performance; comparisons are also made against a peer group of active managers with similar investment styles.

Although no total return benchmark for T-Pool Cash is specified in the policy, its book yield benchmark (30-day Treasury bill) is a reasonable total return benchmark as well. Thus, T-Pool Cash performance is included only once in the book yield section above. The table on the following page lists the current total return policy benchmark for each fund.

Colorado Department of the Treasury
2006 Total Return Policy Benchmarks

Fund	***Benchmark***
T-Pool 1-5	20% US Corporates A-AAA rated, 1-5 Years Index 70% Treasuries/Agencies, 1-5 Years Index 10% Asset-Backed Securities, 0-3 Years, Fixed-Rate Index
Public School Permanent Fund	37% Merrill Lynch US Treasury, 1-10 Years Index 34% Merrill Lynch Mortgages, 0-10 Years WAL Index 19% Merrill Lynch AAA US Agencies, 1-10 Years Index 10% Merrill Lynch US Corporates, A-AAA Rated, 1-10 Years Index
State Education Fund*	Not stated in policy
Major Medical Insurance	65% Merrill Lynch US Domestic Master 1-10 Years, A-rated and above 35% Merrill Lynch US Corporate & Government, 10+ years, A-rated and above
Unclaimed Property Tourism Promotion Trust Fund	65% Merrill Lynch US Domestic Master 1-10 Years, A-rated and above 35% Merrill Lynch US Corporate & Government, 10+ years, A-rated and above

Source: Colorado Department of the Treasury Investment Policy, 2006
*The absence of a policy benchmark for the SEF is discussed later in the report.

The Appendix provides a comprehensive review of the performance of each fund using the policy benchmark, a market index, and a peer group of active manager portfolios (also known as a style group). In addition to returns and risk, the Appendix also examines portfolio characteristics for each fund and a comparable market index as of December 31, 2006.

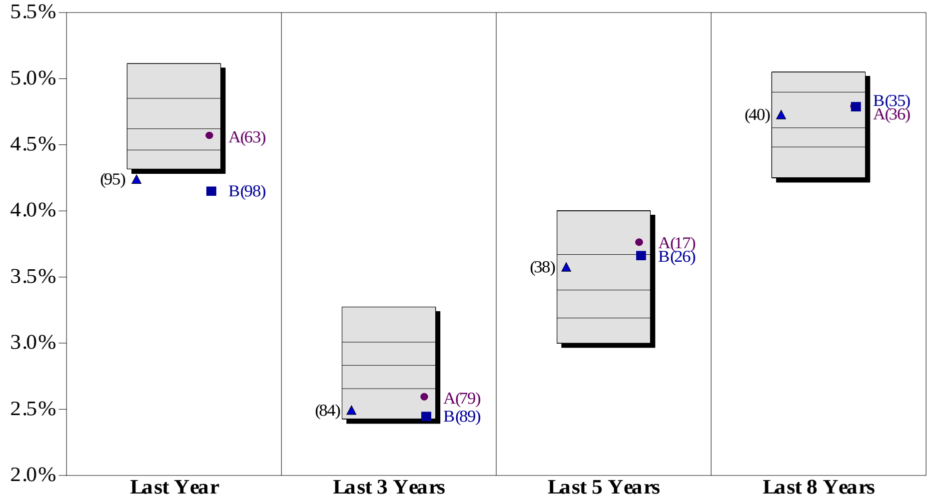
A summary of observations for each fund is provided in the pages that follow using selected exhibits from the Appendix.

Treasury Pool

<u>T-Pool 1-5</u>

Returns for the T-Pool 1-5 are compared to the policy benchmark, the Lehman Government/Credit 1-5 Year Index, and Callan's Defensive Fixed Income Style Group. The chart below details cumulative time periods. For the past 1- and 3-year periods, the fund's return exceeds both the benchmark and the index but ranks below median in the peer group. Over longer periods (5 and 8 years), however, the fund ranks above median in the peer group; the fund's returns are above the benchmark and slightly below the index for these periods. This is illustrated in the chart on the following page.

Colorado Department of the Treasury
T-Pool 1-5
Cumulative Periods Ending December 31, 2006

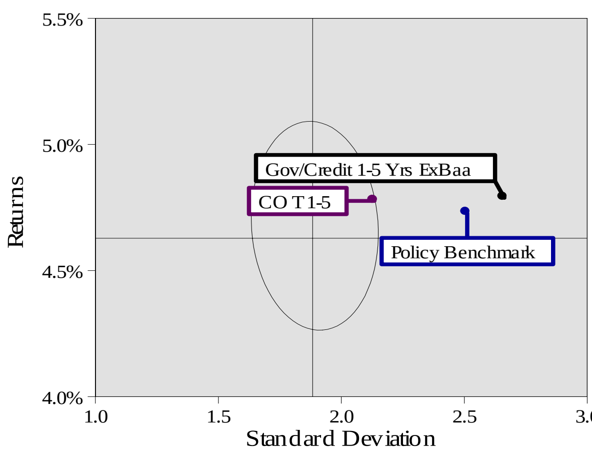


		Last Year	Last 3 Years	Last 5 Years	Last 8 Years
10th Percentile		5.11	3.27	4.00	5.05
25th Percentile		4.85	3.01	3.67	4.90
Median		4.62	2.83	3.40	4.63
75th Percentile		4.46	2.66	3.19	4.48
90th Percentile		4.32	2.43	3.00	4.25
CO T 1-5	● A	4.56	2.58	3.75	4.78
Gov/Credit 1-5 Yrs Ex Baa	■ B	4.15	2.45	3.66	4.79
Policy Benchmark	▲	4.24	2.49	3.58	4.73

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

The chart below shows that the fund has exhibited less volatility than both the benchmark and index with similar returns over the past eight years, thus producing attractive risk-adjusted returns. The crosshairs in all of these types of charts represent the median manager in the peer group and the ellipse contains 80% of the peer group's data points.

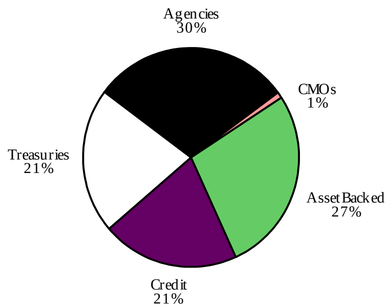
Colorado Department of the Treasury
T-Pool 1-5
CAI Defensive Fixed-Inc Style
Annualized Eight Year Risk vs Return



Source: Colorado Department of the Treasury Investment Portfolio Performance Report

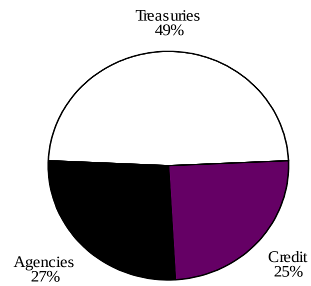
As evident by the two pie charts below, the fund is well diversified by sector with a large allocation to asset-backed securities, which are not included in the index. The Appendix includes brief definitions of the various fixed income sectors.

Colorado Department of the Treasury
T-Pool 1-5 Sector Allocation



Source: Colorado Department of the Treasury Holdings Spreadsheet

Colorado Department of the Treasury
LB Gov/Credit 1-5yr Ex Baa Idx Sec. Alloc.



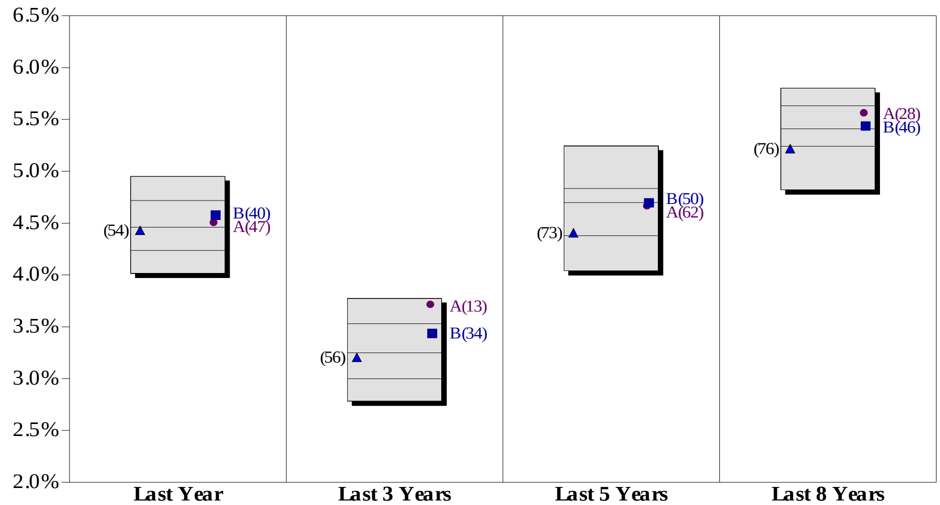
Source: Callan Associates, Inc.

Finally, T-Pool 1-5 had a shorter duration (1.82) than the index (2.34) as of December 31, 2006. Duration is a measure for interest rate sensitivity; in general, longer duration portfolios are more volatile than shorter duration portfolios. For example, a 1% increase in interest rates would lead to a 1.82% decline in the market value of the fund while the index would decline 2.34% (assuming all other factors held constant). Thus, the fund's interest rate sensitivity was less than that of the index at this point in time.

Public School Permanent Fund

Returns for the PSPF are compared to the policy benchmark, the Lehman Aggregate Intermediate Index, and Callan's Intermediate Fixed Income Style Group. The chart below details cumulative time periods. With the exception of the 5-year period, the fund has generated above median returns for all time periods shown. In addition, the fund has consistently out-performed the benchmark while its returns versus the index have been mixed (above the index for the 3- and 8-year periods, below the index for the 1- and 5-year periods). These points are illustrated in the chart on the following page.

Colorado Department of the Treasury
Public School Permanent Fund
Cumulative Periods Ending December 31, 2006

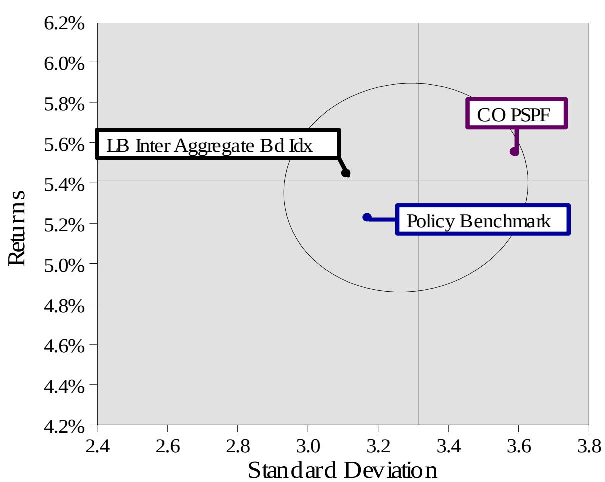


		Last Year	Last 3 Years	Last 5 Years	Last 8 Years
10th Percentile		4.95	3.77	5.24	5.80
25th Percentile		4.72	3.53	4.83	5.63
Median		4.46	3.25	4.70	5.41
75th Percentile		4.24	3.00	4.38	5.24
90th Percentile		4.02	2.78	4.04	4.82
CO PSPF	● A	4.49	3.70	4.65	5.54
LB Inter Aggregate Bd Idx	■ B	4.58	3.44	4.70	5.44
Policy Benchmark	▲	4.43	3.20	4.41	5.22

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

The following chart shows that in terms of risk, the fund's volatility has been higher than the benchmark, index, and median manager in the peer group over the past eight years.

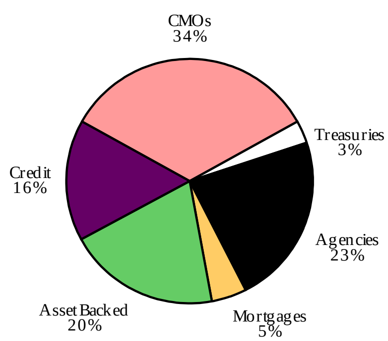
Colorado Department of the Treasury
Public School Permanent Fund
CAI Intermediate Fixed-Inc Style
Annualized Eight Year Risk vs Return



Source: Colorado Department of the Treasury Investment Portfolio Performance Report

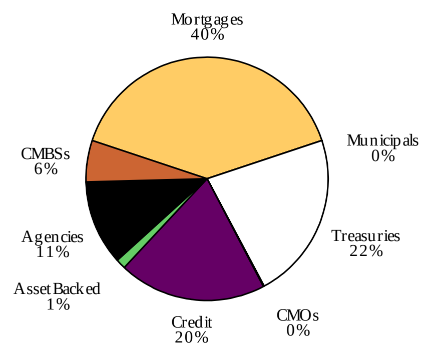
The two pie charts below show that significant differences exist between the fund and the index in terms of sector allocation, yet the fund is well diversified.

Colorado Department of the Treasury
PSPF Sector Allocation



Source: Colorado Department of the Treasury Holdings Spreadsheet

Colorado Department of the Treasury
LB Agg Intermed Idx Sector Allocation



Source: Callan Associates, Inc.

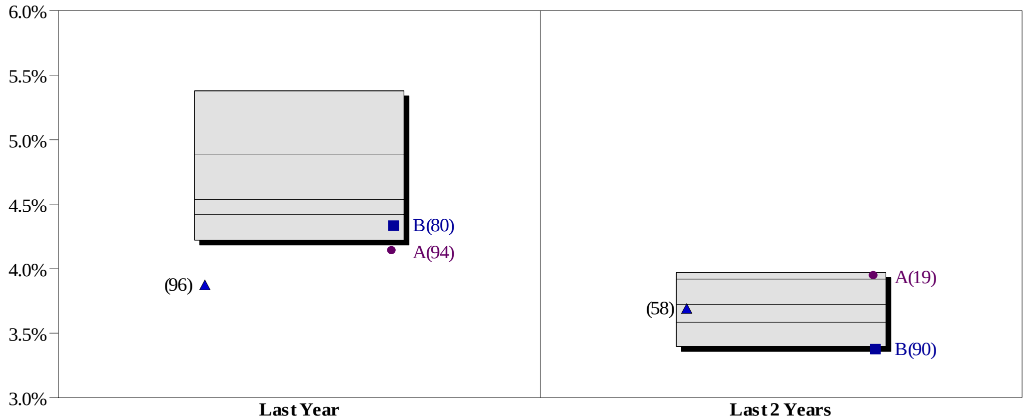
Finally, the PSPF had a longer duration (4.51) than the index (4.00) as of December 31, 2006. Thus, the fund's interest rate sensitivity was greater than that of the index at this point in time.

Major Medical Insurance Fund

Due to budget needs during the State's Fiscal Year 2003, the Treasury was required to liquidate the securities held in the MMIF and transfer proceeds to the General Fund. The MMIF was re-funded in November of 2004. Accordingly, two separate time periods are shown for the performance history of the MMIF: January 1, 1999 to June 30, 2003 and January 1, 2005 to December 31, 2006. Prior to the fund's liquidation, the MMIF was primarily comprised of long-term fixed income securities. Accordingly, the returns for the period ending June 30, 2003 are compared to the policy benchmark, the Lehman Government/Credit Long Index, and Callan's Extended Maturity Fixed Income Style Group. Once re-funding occurred in late 2004, the MMIF's investment policy called for an investment approach similar to a "core" fixed income mandate (i.e., one that seeks to gain exposure to the broad investment-grade fixed income market); this is the rationale behind comparing the returns for the period ending June 30, 2006 to the policy benchmark, Lehman Aggregate Index, and Callan's Core Fixed Income Style Group.

The two charts on the following page detail cumulative time periods (the first ending June 30, 2006 and the next ending June 30, 2003). In the first chart, the fund out-performed both the policy benchmark and index over the 2-year time period, and ranked in the top quartile in the peer group. Despite ranking below median in the peer group, the fund out-performed its policy benchmark for all time periods shown in the second chart. The fund's returns were much higher for the period ending in 2003 because of the declining interest rate environment and longer duration of the portfolio compared to 2006.

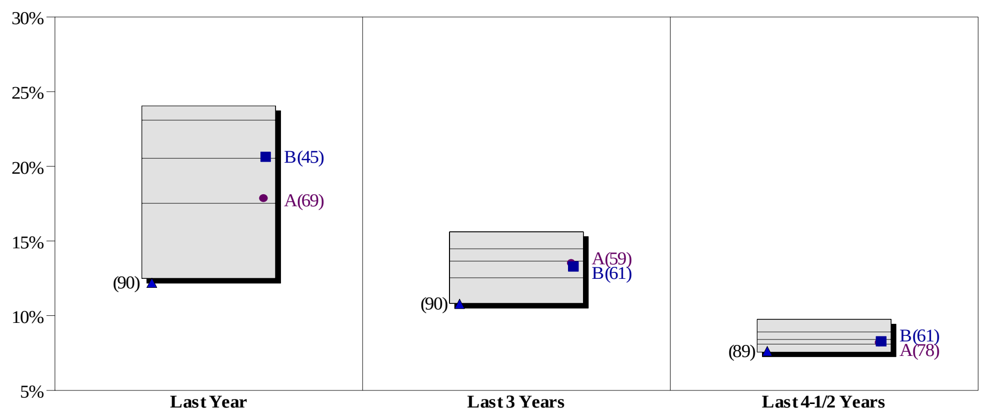
Colorado Department of the Treasury
Major Medical Insurance Fund
Performance vs CAI Core Bond Fixed-Inc Style
Cumulative Periods Ending December 30, 2006



	Last Year	Last 2 Years
10th Percentile	5.38	3.97
25th Percentile	4.89	3.92
Median	4.54	3.72
75th Percentile	4.42	3.58
90th Percentile	4.22	3.40
CO MMIF ● A	4.13	3.93
L/B Agg ■ B	4.33	3.38
Policy Benchmark ▲	3.87	3.69

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

Colorado Department of the Treasury
Major Medical Insurance Fund
Performance vs CAI Extended Maturity Fixed-Inc Style
Cumulative Periods Ending June 30, 2003

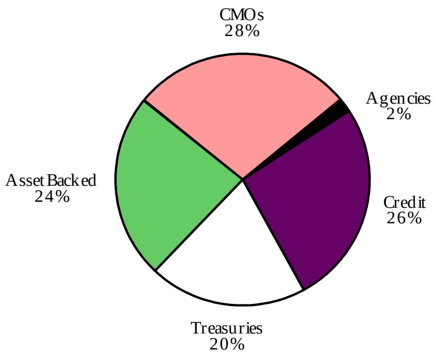


	Last Year	Last 3 Years	Last 4-1/2 Years
10th Percentile	24.04	15.62	9.77
25th Percentile	23.09	14.48	8.91
Median	20.54	13.65	8.41
75th Percentile	17.52	12.54	8.09
90th Percentile	12.49	10.82	7.57
CO MMIF ● A	17.72	13.39	8.06
LB Govt/Credit Long ■ B	20.64	13.29	8.29
Policy Benchmark ▲	12.20	10.79	7.62

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

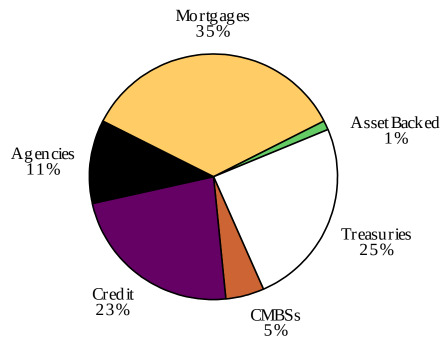
As of December 31, 2006, the MMIF was well diversified in terms of sectors and had a large allocation to asset-backed securities as illustrated in the two pie charts below.

Colorado Department of the Treasury
MMIF Sector Allocation [33]



Source: Colorado Department of the Treasury Holdings Spreadsheet

Colorado Department of the Treasury
LB Aggregate Idx Sector Allocation [34]



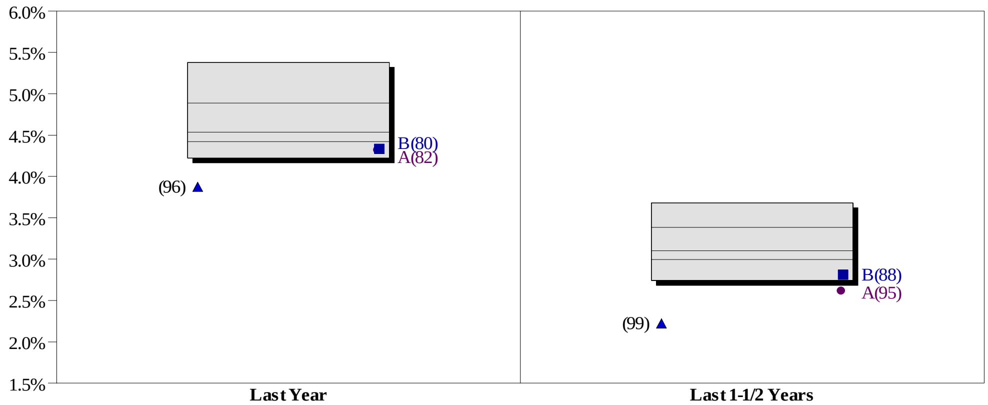
Source: Callan Associates, Inc.

Finally, the MMIF had a longer duration (5.14) than the index (4.82) as of December 31, 2006. Thus, the fund's interest rate sensitivity was greater than that of the index at this point in time.

Unclaimed Property Tourism Promotion Trust Fund

Returns for the UPTPTF are compared to the policy benchmark, the Lehman Aggregate Index, and Callan's Core Fixed Income Style Group. The chart on the following page details cumulative time periods, although only two periods are shown due to the short history of this fund. In both periods, the fund has out-performed the policy benchmark, lagged the index, and ranked below median in the peer group.

Colorado Department of the Treasury
Unclaimed Property Tourism Promotion Trust Fund
Performance vs CAI Core Bond Fixed-Inc Style
Cumulative Periods Ending December 31, 2006

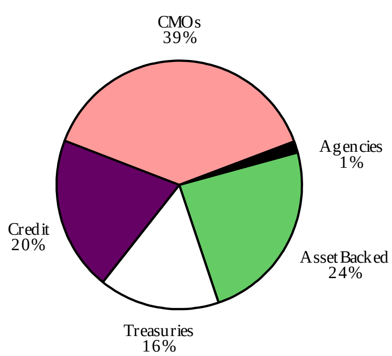


	Last Year	Last 1-1/2 Years
10th Percentile	5.38	3.68
25th Percentile	4.89	3.38
Median	4.54	3.10
75th Percentile	4.42	3.00
90th Percentile	4.22	2.74
CO UPTPTF ● A	4.30	2.59
L/B Agg ■ B	4.33	2.81
Policy Benchmark ▲	3.87	2.22

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

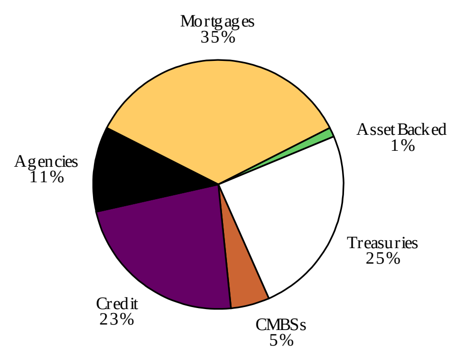
As illustrated below, the UPTPTF had significant exposure to multiple sectors as of December 31, 2006, several of which were quite different than the index's allocations.

Colorado Department of the Treasury
UPTPTF Sector Allocation



Source: Colorado Department of the Treasury Holdings Spreadsheet

Colorado Department of the Treasury
LB Aggregate Idx Sector Allocation



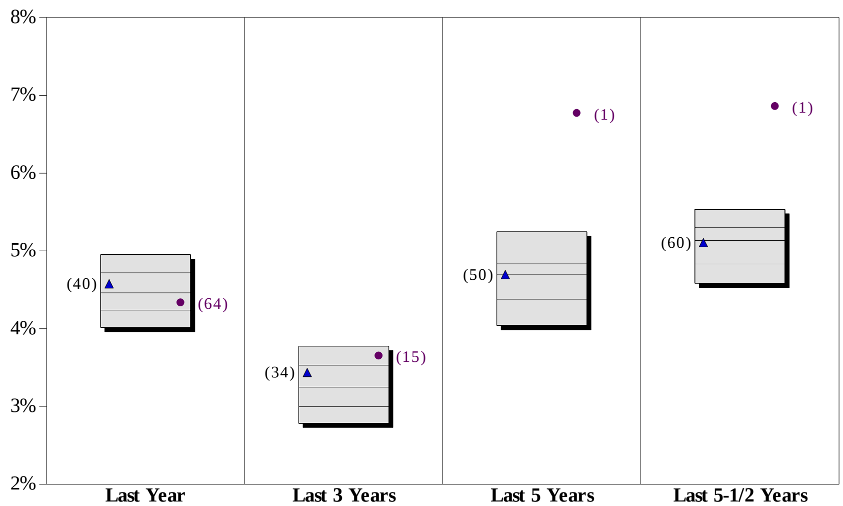
Source: Callan Associates, Inc.

Finally, the UPTPTF had a longer duration (4.99) than the index (4.82) as of December 31, 2006. Thus, the fund's interest rate sensitivity was greater than that of the index at this point in time.

State Education Fund

Returns for the SEF are compared to the Lehman Aggregate Intermediate Index and Callan's Intermediate Fixed Income Style Group. In the investment policy, the SEF does not specify a total rate of return benchmark; this matter is discussed further in Section V, Review of Investment Policy and Asset Allocation. The charts below and on the following pages demonstrate that the fund's long-term history (last 5 plus years) is significantly impacted by its unusually strong performance in calendar years 2002-2004. During this time, the significant decline in interest rates led to very large unrealized capital gains in the fund.

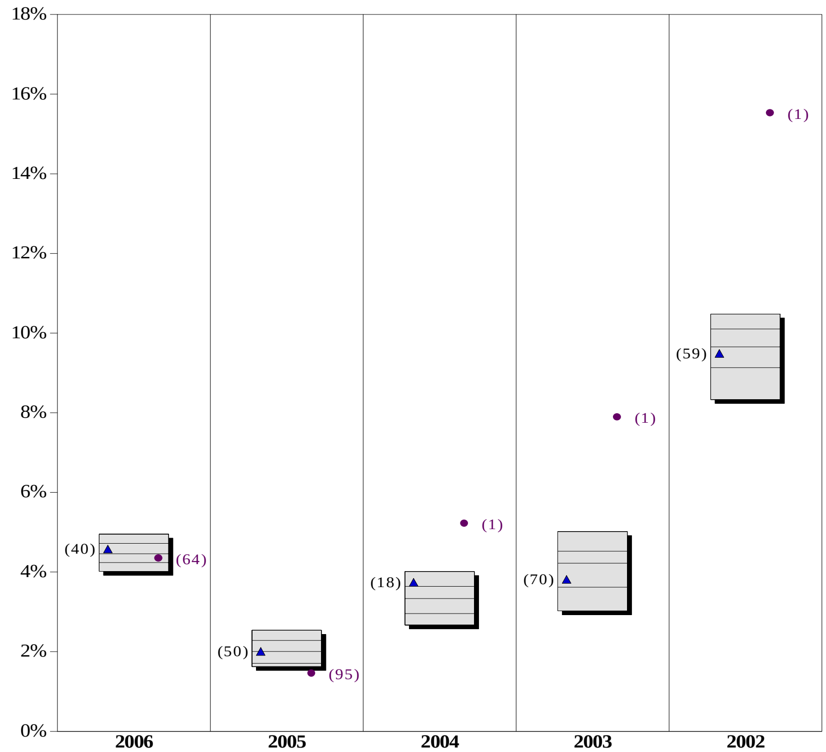
Colorado Department of the Treasury
State Education Fund
Performance vs CAI Intermediate Fixed-Inc Style
Cumulative Periods Ending December 31, 2006



	Last Year	Last 3 Years	Last 5 Years	Last 5-1/2 Years
10th Percentile	4.95	3.77	5.24	5.53
25th Percentile	4.72	3.53	4.83	5.30
Median	4.46	3.25	4.70	5.13
75th Percentile	4.24	3.00	4.38	4.83
90th Percentile	4.02	2.78	4.04	4.58
CO SEF ●	4.32	3.63	6.76	6.84
LB Inter Aggregate Bd Idx ▲	4.58	3.44	4.70	5.11

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

Colorado Department of the Treasury
State Education Fund
Performance vs CAI Intermediate Fixed-Inc Style
For 5 Calendar Years Ended December 31, 2006

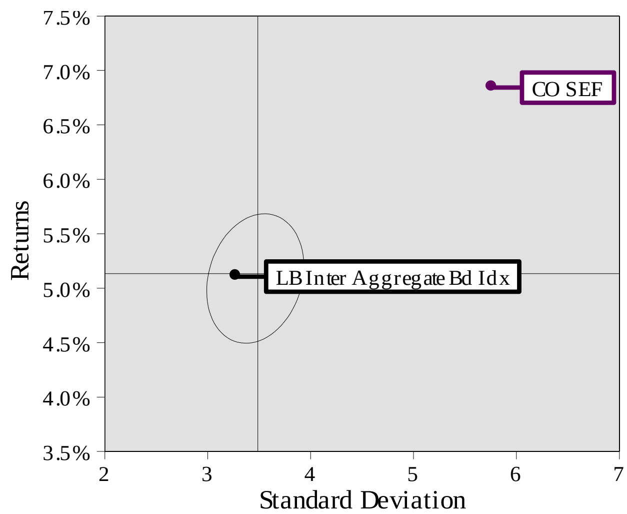


	2006	2005	2004	2003	2002
10th Percentile	4.95	2.54	4.01	5.02	10.48
25th Percentile	4.72	2.28	3.64	4.52	10.10
Median	4.46	2.01	3.33	4.22	9.65
75th Percentile	4.24	1.71	2.96	3.62	9.13
90th Percentile	4.02	1.63	2.67	3.03	8.33
CO SEF ●	4.32	1.43	5.19	7.86	15.50
LB Inter Aggregate Bd Idx ▲	4.58	2.01	3.74	3.81	9.49

Source: Colorado Department of the Treasury Investment Portfolio Performance Report

Standard deviation captures both upside and downside volatility. Given the fund's extreme out-performance in the period from 2002 to 2004, it is not surprising that the fund's risk compared to the index and peer group over the past 5 ½ years has been very high. This point is illustrated in the chart on the following page.

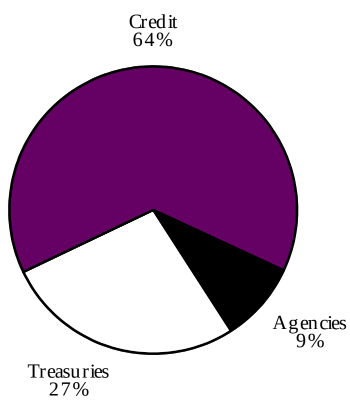
Colorado Department of the Treasury
State Education Fund
CAI Intermediate Fixed-Inc Style
Annualized Five and One-Half Year Risk vs Return



Source: Colorado Department of the Treasury Investment Portfolio Performance Report

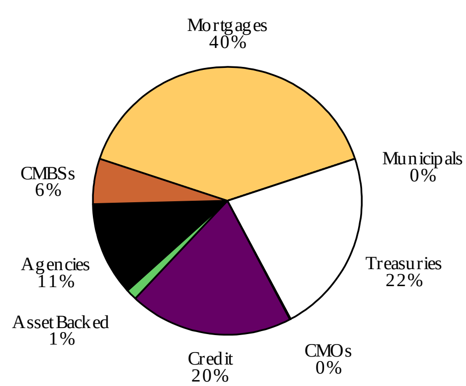
The two pie charts below show that the fund had allocations to all of the major sectors in the index with the exception of Mortgages, as of December 31, 2006.

Colorado Department of the Treasury
SEF Sector Allocation



Source: Colorado Department of the Treasury Holdings Spreadsheet

Colorado Department of the Treasury
LB Agg Intermed Idx Sector Allocation



Source: Callan Associates, Inc.

Finally, the SEF had a longer duration (4.20) than the index (4.00) as of December 31, 2006. Thus, the fund's interest rate sensitivity was greater than that of the index at this point in time.

V. REVIEW OF INVESTMENT POLICY AND ASSET ALLOCATION

This section of the report covers the second and third tasks of the review:

- A review of the investment objectives, policies, and practices for the five major funds.

- A review of the asset mix in relationship to stated objectives, including implied risk and return, diversification, and conclusions on the appropriateness of the asset mix.

Investment Policy

The Treasury's primary investment objectives are legality, safety, liquidity, and yield. These objectives are not always compatible, and judgment is required to balance these objectives. The challenge is to determine how much yield one is willing to sacrifice to achieve how much safety and liquidity. In practice, Treasury maintains a conservative strategy that protects the assets from downside risk. An example of this conservative strategy is that Treasury only buys corporate securities rated 'A' or better, even though the investment policy would allow securities rated 'Baa'.

The investment policy provides a list of eligible securities for each fund, and diversification guidelines by sector. The diversification guidelines serve to control risk by limiting the concentration in any given sector, except for securities issued by the United States Treasury. The diversification guidelines are summarized in the table on the following page; these guidelines do not exist for the State Education Fund.

The diversification guidelines also provide for quality constraints, to reduce the credit risk. For example, T-Pool 1-5 may purchase corporate securities of companies that have a credit rating of 'A' or better from two nationally recognized rating organizations. For the Public School Permanent Fund, the security must be rated 'AA' if the maturity is 5 years or longer, and only 'A' if the maturity is less than 5 years.

After reviewing the investment policies for the five funds, we found that the policies for all of the funds, with the exception of the Public School Permanent Fund and State Education Fund, appear reasonable for the stated objectives. Our recommendations for changes to the Public School Permanent Fund and State Education Fund are provided later in this report.

Colorado Department of the Treasury
Diversification Guidelines Fiscal Year 2006
Minimum/Maximum Weights, Expressed as a % of Assets

Security Type	**T-Pool Cash**	**T-Pool 1-5**	**Public School Permanent Fund**	**Major Medical Insurance Fund**	**Unclaimed Property Tourism Promotion Trust Fund**
	Min/Max	**Min/Max**	**Min/Max**	**Min/Max**	**Min/Max**
U.S. Treasury Securities	0/100	10/100		20/100	20/100
U.S. Agency Securities	0/75*	0/75*		0/75	0/75
Treasury/Agency Combined			20/100		
Misc. Government Guaranteed	0/50	0/50	0/50	0/50	0/50
Mortgage Backed Securities			0/50	0/50	0/50
Domestic Corporate Notes/Bonds			0/20	0/35	0/50
Asset-Backed Securities	0/25	0/25	0/30	0/30	0/30
Repurchase Agreements	0/50	0/50	0/50	0/50	0/50
Taxable Municipal Bonds			0/15		
T-Pool			0/20	0/30	0/30
Bankers Acceptances, Commercial Paper, Bank and Corporate Notes	0/65**	0/65**	0/20	0/20	0/20
Agency Collateralized Mortgage Obligations (CMOs), with avg. life < 3 years	0/15	0/15			
Certificates of Deposit		0/5			
Money Market Funds	0/35***	0/35***			

Source: Colorado Department of the Treasury Investment Policy, 2006
*No more than 75% in combined T-Pool.
**No more than 65% in combined T-Pool, and no more than 30% of the portfolio will be held in any one of these categories (e.g., Commercial Paper).
***No more than 35% in combined T-Pool, and no more than 10% of T-Pool 1-5 will be held in any one fund.

Public School Permanent Fund

Current Investment Policy

Both the Colorado Constitution and state statutes require the principal of the Public School Permanent Fund to remain intact and emphasize the importance of investing the fund in a safe and profitable manner. Specifically, Article IX, Section 3 of the Constitution states, in part:

> The public school fund of the state shall … forever remain inviolate and intact and the interest and other income thereon, only, shall be expended …. No part of this fund, principal, interest, or other income shall ever be … used or appropriated except as provided in this article IX. The state treasurer shall be the custodian of this fund, and the same shall be securely and profitably invested as may be by law directed. The state shall supply all losses thereof that may in any manner occur.

Section 22-41-102, C.R.S., echoes this constitutional language. Sections 22-41-104 and 24-36-113, C.R.S., describe the types of investments the Treasury is permitted to purchase, which include fixed income, corporate bonds, and other types of securities.

To limit the risk of losses to the fund, the Treasury has established an investment policy for the PSPF that only allows monies in the fund to be invested in fixed income securities. As of December 31, 2006, the Treasury had invested 100 percent of the PSPF in domestic fixed income securities. This approach reduces the downside risk of losses. However, the tradeoff of such an approach is the sacrifice of the growth of assets and the reduction of the purchasing power of the corpus due to inflation.

The approach to investing funds that have a long time horizon has evolved since this statute was enacted. Prevailing best practices in regards to investment policy are based on the Prudent Investor Standard, which states that individual investments should not be considered in isolation but rather in the context of the total portfolio according to the fund's risk and return objectives; in addition, the investments comprising the total portfolio should be diversified. It is also widely recognized by industry professionals that "protection of principal" should be more broadly defined to embrace a "protection of purchasing power" concept.

A permanent fund that is 100% invested in domestic fixed income securities does not provide protection of purchasing power of the corpus. This is particularly true if the income generated from such fixed income investments is distributed; interest earned on the PSPF is distributed to the Colorado Department of Education. The table on the following page illustrates the potential benefit of diversification among asset classes. Based on Callan's Capital Market Projections, the risk (as measured by standard deviation) and return associated with the current policy is contrasted with alternative asset allocation mixes. Due to the fact that stocks and bonds are not perfectly correlated, a small allocation to the riskier asset class (equity) in conjunction with an allocation to the lower risk asset class (T-bills) can result in equal or higher returns at a lower level of risk (see Mix 3, which has the same return projection as the PSPF but a lower standard deviation, and Mix 4, which has a higher return projection as the PSPF but a lower standard deviation).

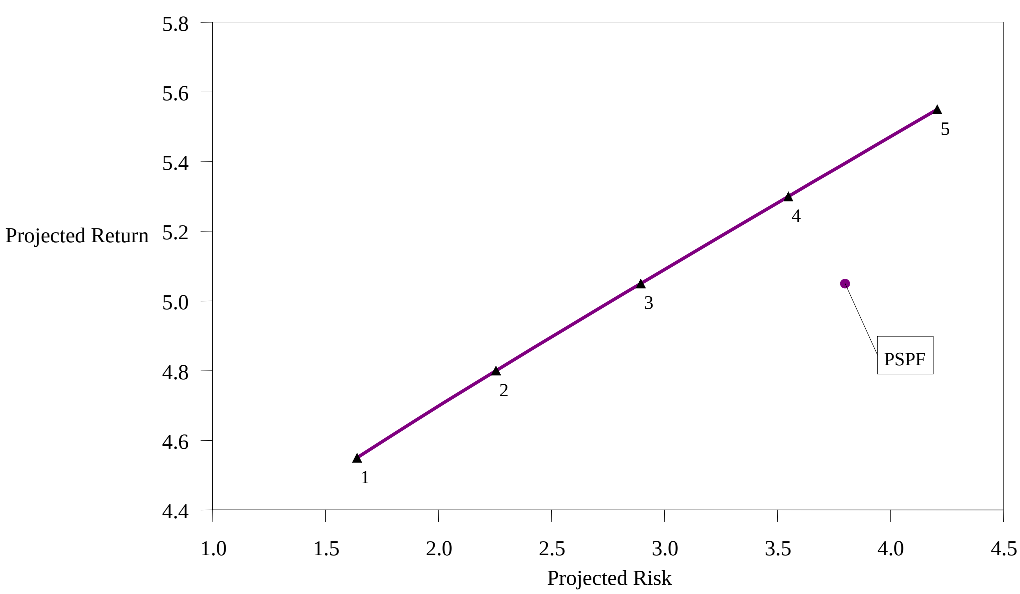
Colorado Department of the Treasury
Asset Mix Alternatives for the PSPF

Portfolio Component	PSPF	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Broad Domestic Equity	0%	6%	9%	12%	14%	17%
Intermed Fixed	100%	22%	33%	45%	57%	68%
Cash Equivalents	0%	72%	58%	43%	29%	15%
Totals	100%	100%	100%	100%	100%	100%
Expected Return	5.05%	4.55%	4.80%	5.05%	5.30%	5.55%
Standard Deviation	3.80%	1.64%	2.25%	2.90%	3.55%	4.21%

Source: Callan Associates, Inc.

The line in the chart below is referred to as the "efficient frontier" because all asset mixes on the line are deemed efficient. In other words, the line represents the highest return possible for the given risk level of each asset mix (or alternatively, the lowest level of risk for the given return of each asset mix). Asset mixes above the line are not attainable while mixes below the line are inefficient.

Colorado Department of the Treasury
PSPF Efficient Frontier



Source: Callan Associates, Inc.

We recognize that it is not within the Treasury's authority to alter the constitutional requirements for this fund. The Treasury has consulted with the Attorney General regarding the legality of investing the PSPF's assets in securities other than fixed income. If the Attorney General's opinion provides for greater investment flexibility, we believe the Treasury should consider broadening its investment policy, consistent with the Prudent Investor Standard, to allow a portion of the fund to be invested in equities and cash equivalents. Such enhanced flexibility would enable the fund to be more broadly diversified and, over time, increase the likelihood of achieving goals of growing distributions and maintaining purchasing power of fund assets.

Recommendation Number 2
The Department of the Treasury should consider broadening the investment policy of the Public School Permanent Fund to make it consistent with the Prudent Investor Standard. This change would include allowing investments in equities and cash equivalents, if the opinion from the Attorney General indicated that such investments are permissible.

Department of the Treasury Response
Partially Agree. ***Implementation Date*****: November 2007.**

An informal opinion from the Attorney General's Office received in November 2007 finds that it is "likely that the courts would find that art. XI, § 2 of the state constitution precludes investment of the Public School Permanent Fund in corporate stocks." Further, the opinion states that the constitutional language is based on "preventing government entanglement with private corporations, irrespective of the economic consequences." The opinion finds that investments "which make the State a shareholder or subscriber in a private company are prohibited, even if the investment is secure and profitable."

The Treasurer remains open to the concept of increasing investment flexibility, but believes it must be done in a manner that protects the corpus of the fund, and is constitutional. The opinion from the Attorney General's Office indicates that the state constitution appears to preclude an investment in equity investments.

Use of Treasury Inflation Protected Securities (TIPS)

Another approach to help maintain the purchasing power of the PSPF by protecting it from inflation is the use of inflation linked securities. Fixed income securities in general do not protect the investor from unexpected inflation, because the value of the interest earned and the principal are determined at purchase. In 1997, the United States Department of the Treasury began to sell inflation-protected securities whose principal is adjusted by inflation. The primary advantage of investing in TIPS is higher earnings in the event of unanticipated inflation. TIPS are appropriate for portfolios with intermediate- to long-term time horizons, which are vulnerable to the loss of purchasing power. The PSPF certainly fits this description, and therefore TIPS may be particularly suited for this fund. In addition, the MMIF and UPTPTF are other funds with investment time horizons in which TIPS could play a useful role in their respective portfolios. TIPS are permitted under current statutes for all of these funds because they are securities issued by the U.S. Treasury.

Recommendation Number 3
The Department of the Treasury should evaluate the use of Treasury Inflation Protected Securities (TIPS), particularly for the PSPF, MMIF, and UPTPTF.

Department of the Treasury Response
Agree. *Implementation Date*: Ongoing.

Treasury agrees that a thorough evaluation of this asset class should be performed.

Use of Total Return for Investment Management

Although Treasury has good reasons for the calculation and dissemination of the book yield results, book yield alone is not sufficient. The book yield calculation does not mark-to-market the securities, and thus does not reveal any unrealized gains or losses. Book yield masks volatility and may inhibit early detection of problems. As a result, the CFA Institute endorses time-weighted total rate of return calculations. Accounting standards also require that investments be marked to market on an annual basis. This process of marking to market is not difficult for the securities owned by the Treasury because the investment strategy focuses on the more liquid, less complex, portion of the fixed income market. This service (marking to market) is already provided by the custodian bank for the Treasury. The market price is the best estimate of the value of the security.

Under most conditions, the Treasury exercises a buy-and-hold investment strategy, in which trading is not frequent and securities are held to maturity. Under this strategy, as long as the security is redeemed at par upon maturity, the Treasury focuses on book value over market value. During the period under review, a significant budget shortfall occurred in Fiscal Year 2003 that required the Treasury to liquidate longer dated securities held in funds outside the T-Pool, and transfer proceeds to the State's General Fund. These transactions represented a deviation from the usual strategy of buy-and-hold employed by the investment staff.

For the securities sold, the market values and book values differed from each other. Consequently, the sale of securities whose market values exceeded book values resulted in realized gains due to the fact that interest rates had fallen from the time that the securities were purchased. The capital gain was treated as income for that period (June 2003) and resulted in a very high book yield distribution. A focus on duration, (which is the market value implication of changes in interest rates) would have recognized that capital changes were taking place over time, and not just in the month when the sales occurred.

We understand that the Treasury regularly monitors market conditions. If the Treasury, however, had been required to sell securities at a time when market values were below their respective book values, the State would have faced significant losses. For example, the market value was less than the book value for the following funds as of December 31, 2006:

- T-Pool 1-5: Market value was $2,772.2 million, or $29.3 million less than the book value of $2,801.5 million.
- Major Medical Insurance Fund: Market value was $58.7 million, or $0.6 million less than the book value of $59.3 million.
- Public School Permanent Fund: Market value was $465.2 million, or $6.2 million less than the book value of $471.4 million.

By increasing the emphasis on market value based returns, we believe that the Treasury would improve risk management of the funds and conform to best practices in the investment industry. Furthermore, adding a relevant peer group benchmark for each fund would provide an additional tool to evaluate the Treasury's performance in managing the funds. Finally, if market values are actively utilized to manage the funds, the investment policy guidelines for each fund should be based on market values instead of book values.

Recommendation Number 4
The Department of the Treasury should incorporate market values as well as total return and peer group benchmarks in the management of the funds. If market values are actively utilized to manage the funds, the investment policy guidelines for each fund should be based on market values instead of book values.

Department of the Treasury Response
Disagree.

Treasury, in conjunction with its Investment Advisory Committee, developed customized total return benchmarks for all funds under management in 2000. All benchmarks were created using the Merrill Lynch Index system, reviewed for historical tracking, and created within the guidelines of the Association for Investment Management and Research (which became Global Investment Performance Standards or GIPS). Total returns are currently calculated monthly by JP Morgan and monitored by investment officers. The total return benchmarks are defined in Investment Policy.

Treasury's primary measure of performance is yield. Treasury's yield benchmarks are based on each portfolio's average life or duration, and are defined as the yield of the 12-month moving average of the Constant Maturity Treasury (CMT) index. The CMT provides a market rate of return. Unlike total return, which often spikes widely, the CMT smoothes out the extreme ups and downs caused by short-term market moves. This is consistent with the goal of providing the best yield and producing a predictable, stable cash flow for the budget process. Total return is viewed as an additional, albeit secondary, measure of performance.

Treasury is unaware of any peer group investment benchmarks for state or municipal Treasuries.

Investment Policy for the State Education Fund

The State Education Fund does not have a comprehensive investment policy. It lacks diversification guidelines and performance benchmarks. Given the cash flow characteristics of this fund, the majority of assets are held in the Treasury Pool, and the remaining longer-dated securities are simply being held to maturity. While this strategy is reasonable, it is not adequately documented in the investment policy. This lack of documentation could give the impression that the investment strategy is being adopted on an ad hoc basis. Furthermore, the risk of making inappropriate investments is heightened without a comprehensive policy.

Recommendation Number 5
The Department of the Treasury should amend the investment policy for the State Education Fund to include specific descriptions of the guidelines and investment strategy.

Department of the Treasury Response
Agree. *Implementation Date*: March 2008.

Treasury will amend the investment policy for the State Education Fund to include information about guidelines and investment strategy. A preliminary modification is underway which will be presented to the Treasurer's Investment Advisory Committee for review at its next meeting.

Periodic Investment Policy Review

The investment policy as a whole covers all the assets under supervision by the Treasurer. It is efficient to have a single comprehensive document. The State Treasurer is a fiduciary with regard to each fund managed by the Treasury and has sole authority to amend the investment policies. We recommend that the policy for each fund state that: (1) the State Treasurer is authorized to amend the policy; (2) the policy will be reviewed as needed, but no less frequently than annually; and (3) the date of the last review, or change, to the policy is to be included. Investment staff and accounting staff would be in a position to suggest changes or additions to policy.

Recommendation Number 6
The Department of the Treasury should modify the investment policy to indicate: (1) timing for a regular review of each fund's policy, perhaps annually; (2) who has authority to amend the policy; and (3) when the policy was last amended.

Department of the Treasury Response
Agree. ***Implementation Date*****:** **December 2007.**

Treasury will amend the Investment Policy to include this information.

VI. REVIEW OF INTERNAL CONTROLS AND REPORTING

This section of the report covers the fourth and fifth tasks of the review:

- A review of internal controls.
- A review of reporting systems and procedures for investments held, performance, earnings, and internal allocations.

The Treasury has two divisions: the Treasury Investment division and the Accounting/Reporting division. The separation of responsibilities between the two divisions, in combination with the external custodian, provides the internal controls.

We found the Treasurer has established a system of internal controls that includes clear delegation of authority that properly separates the duties of investment decision making, accounting, recordkeeping, and safekeeping of assets.

The Treasury Investment division's staff consists of a chief investment officer and two investment officers. Day-to-day administration of the investment policy has been delegated by the State Treasurer to the officers of the Treasury Investment division. All three professionals have responsibility to evaluate securities for purchase/sale and to authorize trades. All three professionals are responsible for ensuring that the funds are in compliance with their respective investment policies.

The Accounting/Reporting division consists of nine professionals. This division is important to the investment function in the following ways:

- The Cashier in this division works closely with the investment staff to coordinate cash flows.
- Three staff members are authorized to confirm trades executed by the investment staff.
- This division calculates the income on the funds and distributes it to state agencies based on average daily balances.
- This division calculates/distributes performance on the funds, both the book yield and the total return.
- This division determines whether the funds are in compliance with the policies.

Compliance Oversight

Although the Treasury maintains separation of investment management from accounting, the responsibility for assuring that each fund is in compliance with policy is not assigned clearly to any one individual. Although certain reports regarding compliance issues can be generated by the custodian (described below in the Reporting Systems section), the custodian serves a reporting function, not a compliance function. A designated compliance officer would be responsible for detecting when investments were not in-line with the policy and ensuring that appropriate actions were taken to resolve the matter. The custodian's reports could be used by a compliance officer to ensure the funds are in compliance with their respective investment policies.

The tenure of the investment staff is a major contributor to the effectiveness of the control process. Their personal knowledge of the policies and guidelines and the spreadsheets that they create for their own use combined with the low volume of transactions and the reliance on book value (rather than market value which changes frequently) contribute to a low probability of violations. Turnover among the investment staff could put this system at risk, and is a reason for the recommendation to appoint a compliance officer. The Treasury Investment division's staff of three experienced professionals is the minimum number required to manage the investment function, given the size and complexity of the funds under management. A compliance officer's primary duty would be to prepare a quarterly compliance report for each fund, which certifies that the fund complies with the investment policy, or if a violation has occurred, the report would describe the steps to correct it.

A compliance officer does not have to serve in this capacity on a full-time basis; it is important, however, for verification purposes that the individual is not a member of the Treasury Investment division. In general, a compliance officer's duties represent a more formal fulfillment of the current responsibilities of the Controller.

Recommendation Number 7
The Department of the Treasury should appoint a compliance officer who will prepare a quarterly compliance report for each fund, which certifies that the fund complies with the investment policy, or if a violation has occurred, the report would describe the steps to correct it.

Department of the Treasury Response
Agree. *Implementation Date*: March 2008.

Treasury concurs that compliance with investment policy is a critical goal to be achieved. As the recommendation notes, a compliance officer need not serve in this capacity on a full-time basis. Therefore, Treasury will seek to amend the job tasks for a position that is currently open, and add compliance responsibilities to the position by March 2008.

Maintaining Historical Electronic Data

The reports provided to the Treasury by the custodian bank, JP Morgan Chase, enable the Treasury's controller to determine the book yield distributions. In addition, JP Morgan Chase generates reports that test for certain programmed compliance issues. For example, JP Morgan Chase notes when a "possible violation" of the investment policies may have occurred. This report may prompt action by the Treasury, such as when the report indicates a downgrade in the credit rating of a security.

JP Morgan Chase also generates a performance report based on total return. This report details cash inflows and outflows, realized gains/losses, unrealized gains/losses, and market values on a monthly basis for each fund. Unfortunately, the custodian's electronic performance reports extend back only to September 2005 due to the change in custodians at that time. In September 2005, Treasury hired JP Morgan Chase as the custodian. When JP Morgan Chase replaced Union Bank and QED, Treasury did not have JP Morgan Chase load return history from the old custodians (Union Bank and QED) into its system due to budget constraints. Consequently, total return reports are only available in hard copy format prior to September 2005. Compared to electronic reports, hard copy reports are more likely to be misplaced, subject to data input error, and require significantly more time to independently calculate returns. Despite lacking electronic reports for part of the period examined, the Treasury did supply Callan with all of the data required to conduct this review.

Currently, the Treasury maintains total return and market value data in electronic spreadsheets. Maintaining historical electronic data facilitates efficient and reliable verification of historical returns. If the custodian is changed again in the future, we recommend that the new service provider input the return data from the prior custodian into its system so that the electronic reports continue uninterrupted.

Recommendation Number 8
The Department of the Treasury should ensure that key historical performance data is maintained electronically, and if custodians are changed in the future, it should seek to load the prior custodian's return data into the new service provider's system.

Department of the Treasury Response
Agree. *Implementation Date*: Ongoing.

Treasury will always seek to retain historical performance data electronically, budget permitting.

Improved Investment Analytics

The investment staff relies heavily on the Bloomberg system for investment analysis. Bloomberg is widely utilized in the investment industry. It is commonly regarded as an accurate and timely source of critical information, such as price and yield. It also is recognized as an excellent analytical tool when one is assessing the merits of an individual security. It, however, is not used as a tool for comprehensive total portfolio analysis. Most fixed income managers use multiple analytical applications to monitor changes in portfolio characteristics arising from changes in market conditions. The

Treasury’s investment staff does not have access to such a system. For statistics on the entire portfolio, the Treasury’s investment staff relies upon the custodian, or upon spreadsheets that they maintain internally instead of Bloomberg. For example, investment staff relies upon the custodian to report duration, which is done for each month end. Given that the custodian provides one duration statistic a month, and with a lag to real time, this service is not useful in evaluating the impact of buying/selling any individual security on a specific date.

The absence of a portfolio analytical system is a significant disadvantage to the Treasury in the identification and implementation of appropriate portfolio changes. For example, by having other analytical tools that provide daily portfolio information such as sector allocations and duration, the Treasury would be able to readily analyze the potential impacts of various changes to the overall portfolio including the addition of specific securities being considered by staff. Furthermore, most portfolio analytical applications can load portfolio holdings electronically so that staff can routinely evaluate the impact of market changes on return and risk characteristics of current holdings.

Recommendation Number 9

The Department of the Treasury should seek to obtain a portfolio analytical application in order to improve the analytical tools utilized in managing the funds.

Department of the Treasury Response

Agree. ***Implementation Date*****: July 2008 (dependent on legislative approval).**

In November 2007, as part of its budget request to the Joint Budget Committee, Treasury has asked for additional funds to purchase the BondEdge portfolio analysis system.

VII. DISPOSITION OF PRIOR AUDIT RECOMMENDATIONS

The prior audit of the Treasury's investment program was performed by Callan in 1999, covering the four year period January 1995 through December 1998. The 2007 review evaluated the implementation status of the 1999 recommendations.

Prior Recommendation Number 1: The Department of the Treasury should recognize total rate of return as a primary performance benchmark for the CCIA Fund, the Public School Permanent Fund, the Controlled Maintenance Trust Fund, and the Major Medical Insurance Fund because: (a) total rate of return is industry practice; and (b) total rate of return provides a better comparative framework for interpreting results; and (c) total rate of return is likely to provide an earlier indication of any problems in the portfolio.

Department of the Treasury Response: Disagree.

Callan Verification of Current Status: The recommendation was not implemented as written because Treasury disagreed. Although the total rate of return earned on each fund (other than T-Pool Cash) is calculated, the Treasury does not use that statistic in developing the investment strategy for each fund. (See Recommendation No. 4 of the November 2007 audit.)

Prior Recommendation Number 2: The Department of the Treasury should maintain records that would enable the verification of investment performance on a time-weighted, total rate of return basis.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. The Treasury maintains custodial reports with data in the specified format to allow for independent verification in the future.

Prior Recommendation Number 3: The investment policy for each fund should contain a duration guideline.

Department of the Treasury Response: Partially Agree. The Treasury agreed to incorporate an explicit duration guideline into the policy for the Major Medical Insurance Fund and the Compensation Insurance Authority Fund. For the other funds, the Treasury believes that average life (maturity) of the portfolio is a better measure.

Callan Verification of Current Status: Recommendation partially implemented. The Treasury added a duration guideline of 5 to 8 years for the Major Medical Insurance Fund, which did not have a duration guideline at the time of the last review. The Treasury no longer manages the Compensation Insurance Authority Fund. The Treasury continues to use average life in the investment policies for the T-Pool 1-5, PSPF, and UPTPTF. The policy for T-Pool Cash specifies a maximum maturity of one year while the SEF policy contains no duration or average life guideline. (See Recommendation No. 5 of the November 2007 audit.)

Prior Recommendation Number 4: The Department of the Treasury should pursue simplification of total rate of return benchmarks, wherever possible.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. The Treasury has simplified the total return benchmarks; it now uses combinations of two to four Merrill Lynch indexes per fund, compared with three to six indexes per fund in 1998.

Prior Recommendation Number 5: The Department of the Treasury should simplify the Diversification and Security Standards constraints in the investment policies and standardize these criteria across funds wherever possible.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. The diversification and security-level guidelines have been simplified and standardized across most funds.

Prior Recommendation Number 6: The Department of the Treasury should apply constraints on the percent of each fund that can be invested in various sectors to market values, rather than book values.

Department of the Treasury Response: Disagree.

Callan Verification of Current Status: Recommendation not implemented because the Treasury disagreed. The Treasury's objection was based on the fact that market values vary and could require a trade. As long as the Treasury continues to manage the funds with an emphasis on book yield rather than total return, using book values and not market values in determining portfolio constraints is reasonable. (See Recommendation No. 4 of the November 2007 audit.)

Prior Recommendation Number 7: The Department of the Treasury should work with the General Assembly to amend the statutes and investment policy for the Public School Permanent Fund with the objective of protecting the purchasing power, or real value, of the fund.

Department of the Treasury Response: Statutory Change – Requires Legislative, not Treasury Action.

Callan Verification of Current Status: Recommendation not implemented. No statutory change was initiated. (See Recommendation No. 2 of the November 2007 audit.)

Prior Recommendation Number 8: The Department of the Treasury should work with the General Assembly for the constitutional and statutory changes that would enable the Public School Permanent Fund to adopt a balanced asset allocation mix that is diversified across asset classes, including equity securities.

Department of the Treasury Response: Statutory/Constitutional Change – Requires Legislative, not Treasury Action.

Callan Verification of Current Status: Recommendation not implemented. No statutory change was initiated. (See Recommendation No. 2 of the November 2007 audit.)

Prior Recommendation Number 9: The Department of the Treasury should utilize additional systems, especially if it continues to manage all fixed income portfolios internally.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation not implemented, due to lack of budget approval. Analytical tools available to the investment staff have not improved over the last eight years. (See Recommendation No. 9 of the November 2007 audit.)

Prior Recommendation Number 10: The Department of the Treasury should investigate further services available from its custodian.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. The Treasury makes use of a wider variety of resources provided by the custodian than at the time of the last audit. For example, the custodian generates reports that test for certain programmed compliance issues; Treasury did not receive these reports at the time of the last audit.

Prior Recommendation Number 11: The Department of the Treasury should make fuller use of all securities permitted by statutes, including: (1) in the corporate sector, bonds rated Baa, and (2) in maturity categories, corporate bonds that mature between three and five years.

Department of the Treasury Response: Regarding Baa, Disagree; Regarding Short-Term Corporate Bonds, Agree.

Callan Verification of Current Status: Recommendation partially implemented. The Treasury does make use of high quality Corporate Bonds with maturities between three and five years in the Treasury Pool. The Treasury, however, does not purchase securities rated Baa because a downgrade from that rating would force an immediate sale, or cause the fund to be in violation of the policy. As a result, no further recommendation on this issue is included in the November 2007 audit.

Prior Recommendation Number 12: The Department of the Treasury should continue to obtain any allocation to equity investments through the use of external managers, including mutual funds, commingled trusts, and separate accounts.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: The lack of any equity investments makes this recommendation not applicable. At the time of the prior audit, only two funds were authorized to invest in equity: the Colorado Compensation Insurance Authority Fund and the Tobacco Settlement Trust Fund. The first of these two funds is no longer managed by the Treasury. The Tobacco Settlement Trust Fund has no equity investments.

Prior Recommendation Number 13: The Department of the Treasury should periodically evaluate the potential benefits associated with the use of external managers for a portion of assets. This review should consider the competitiveness of returns achieved for the various pools managed by the Treasury and those achieved by institutional investment management organizations operating with similar portfolio constraints.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. The Treasury has calculated the cost of internal management to be approximately 1 basis point, and has compared this cost to the expected fee charged by external management on an annual basis. Using this analysis, the Treasury has consistently concluded that external managers are much more expensive, and not appropriate.

Prior Recommendation Number 14: The State Treasurer should designate a Compliance Officer, who would be responsible for verification that the funds are in compliance with policy.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation not implemented due to budget constraints. (See Recommendation No. 7 of the November 2007 audit.)

Prior Recommendation Number 15: The Department of the Treasury should continue to pursue greater participation in the Treasury Pool.

Department of the Treasury Response: Ongoing/Statutory Change – Requires Legislative, not Treasury action.

Callan Verification of Current Status: Recommendation implemented. The size of the Treasury Pool has increased by over 60% over the eight years. All of the funds managed by Treasury (MMIF, PSPF, UPTPTF, and SEF) have assets invested in the Treasury Pool.

Prior Recommendation Number 16: The Department of the Treasury should take steps to improve the advance notification of cash flows into the funds.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. The Treasury educated State agencies about the importance of providing advance notice of large cash flows. As a result, communication has been improved through the use of e-mail.

Prior Recommendation Number 17: The Department of the Treasury should pursue replacing the Transaction Order (TO) paper-based procedure with an electronic one.

Department of the Treasury Response: Agree.

Callan Verification of Current Status: Recommendation implemented. When the new custodian was hired in mid-2005, this recommendation was pursued, and successfully implemented. According to Treasury staff, this recommendation was not economically feasible under the arrangement with the prior custodian.

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