

**UNIVERSITY OF COLORADO
INVESTMENT PROGRAM
PERFORMANCE AUDIT**

July 2002

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July 22, 2002

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This report contains the results of a performance audit of the University of Colorado Investment Program. This audit 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.

This report presents our findings, conclusions, and recommendations, and the responses of the University of Colorado.

Richard M. Todd, CIMC
Principal

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I. REPORT SUMMARY

The Office of the State Auditor retained Innovest Portfolio Solutions LLC in April 2002 to review the University of Colorado's Investment Program.

The performance audit covered the following seven major topics:

1. Investment Performance
2. Appropriateness of Benchmarks
3. Appropriateness of Asset Allocation
4. Internal Controls over Investments and Investment Managers
5. Investment Managers Meeting Their Fiduciary Responsibilities
6. Cash and Liquidity Needs
7. Efficiency and Effectiveness of Portfolio Accounting and Performance Calculation

The University Treasurer is responsible for protecting the financial resources of the University and effectively investing the resources. Authorization of the function arises from constitutional and statutory authority provided to the Board of Regents.

The Treasurer's responsibility includes implementing an investment strategy in support of the prudent investor standard, and providing liquidity, safety, and yield to the University. It also includes diversifying investments and selecting appropriate investment time horizons that contribute to the achievement of benchmark returns at appropriate levels of risk.

The Treasurer's Office maintains four portfolios. All University monies are pooled for investment purposes except certain monies that are not eligible or appropriate for inclusion, such as endowment funds and proceeds from bond issues. In cases where pooling is either not permitted or appropriate, the Treasurer makes specific alternative arrangements to assure fiduciary oversight of those monies. The University of Colorado has the following investment portfolios:

Treasury Pooled Funds	12/31/01 Market Value
Segment 1 – Daily Working Capital	\$ 48,813,351
Segment 2 – Non Recurring Proximate	\$114,764,396
Segment 3 – Contingency	\$ 34,135,403
Segment 4 – Non Recurring Future	\$150,731,874
Sub Total	\$348,445,024
Non-Pooled Funds	12/31/01 Market Value
26 Different Restricted Trusts	\$180,305,128
TOTAL	\$528,750,152

Summary of Major Audit Findings

The University Treasurer has established an investment process that incorporates prudent practices associated with investment management. We found there are relevant investment policies for each asset category which are reviewed on an ongoing basis; the asset allocation process is carefully developed, applied, and reviewed on an ongoing basis; the financial assets are held in custody by a financial institution in the name of the Regents of the University of Colorado; the investment managers are selected by a competitive bid process; the average fees paid to investment managers are below average; and monitoring of investment returns is performed by an independent expert using both peer comparisons and relevant benchmark comparisons.

Investment Performance

The overall performance of the Pooled and Non-Pooled investment portfolios has been good. Our analysis found the rates of return received by the University compare very favorably with the returns of benchmarks and investment peer groups. Further, the investment portfolios are properly diversified based on time frame, liquidity needs, and return expectations.

In the last four years, the overall performance of the Pooled Funds has exceeded the total Pool benchmark in 3 of the 4 years. From 1998 through December 2001, the annualized return of the Pooled Funds was 5.67% versus 5.43% for the benchmark. The total Pool benchmark is calculated using the beginning market values of each of the portfolios weighted by their respective targets.

We did note that the performance of one of the Pooled Funds has been relatively poor (the Cadence Small Cap Growth Fund). The University should consider using another firm for the type of investments desired for this Fund. In addition to improving performance, this could also increase diversification by obtaining the services of a firm with a different approach to money management.

Appropriateness of Benchmarks

In general, we believe the benchmarks are appropriate for the Pooled Funds and Non-Pooled Funds where performance is measured. We did note several areas where the benchmarking process could be improved for Pooled Funds.

- The University's Daily Working Capital Funds are invested in short-term notes of 30-90 days or less. The Investment Policy calls for using 30-day Treasury Bills as the benchmark while the University's Performance Report compares earnings to the 90-day Treasury Bills. We believe a more appropriate benchmark is a weighted average between the 30-90 days based on the average days to maturity of the University's individual money market funds.
- The University uses a different benchmark for one of its investment products (Fischer Francis Short Term account) than specified in the Investment Policy. We believe the

reasons for using a different benchmark are justified, but should be reflected in the Investment Policy.

- Using a separate account peer group instead of a mutual fund peer group for Cadence Capital will result in a better performance comparison.

Appropriateness of Asset Allocation

We found the asset allocation of the Pooled and Non-Pooled Funds to be appropriate. The University should consider using absolute return strategies (specifically long-short investing) in the Non Recurring (Segment 4) Pooled investments to increase diversification and decrease overall risk of the portfolio.

Internal Controls over Investments and Investment Managers

For the Pooled Funds, our review did not disclose anything to indicate the University is not in compliance with applicable laws, policies and procedures.

For the Non-Pooled Funds, we have several suggestions for improvement.

- It may be advantageous to pursue consolidation of some of the separate pools of funds into the Foundation or the Treasury Pooled Funds. A cursory review of the investment pools indicates that five separate funds totaling over \$2.4 million might be appropriate for consolidation. A consolidation of investment funds into one larger pool could lead to lower investment and management fees, improved performance, and greater administrative efficiency.
- The University of Colorado Children's Diabetes Research Charitable Trust was funded with \$5 million in 1986 with the expectation that it would completely distribute and deplete all of the assets in approximately 15 years. In 1999, the Trust had investments valued at approximately \$5.5 million. In May 1999, the Trustees decided to continue the Trust in perpetuity while providing for funding to the Diabetes Center every year. The University should evaluate whether the decision to continue the Trust in perpetuity is in the best interest of the University. If it is not, the University should explore whether other options are available to restructure the Trust. Other options could include obtaining the Trust assets in a lump-sum payment or structuring the Trust to reduce the ongoing fees currently associated with the Trust.
- The University Treasurer has the fiduciary responsibility to monitor the investment performance of certain trusts within the Non-Pooled investments. This responsibility is not being fully met for several of the trusts. The Treasurer should monitor the performance of the Lawrence Street Center Capital Reserve Fund, the Dravo 1 and Dravo 2 Funds, and the Consolidated Endowment. The monitoring should include comparing quarterly investment returns of the Funds to benchmarks and peer groups.

Investment Managers Meeting Their Fiduciary Responsibilities

Our review did not disclose anything to indicate the University or its investment managers are not substantially in compliance with all applicable fiduciary responsibilities. We did note that the University could achieve more consistency and clarity on compliance with such responsibilities by investment managers. It could do so by creating a separate signature page for each manager to acknowledge compliance with the University Investment Policy Statement Operating Procedures.

Cash and Liquidity Needs

Our review showed adequate coverage for the liquidity needs of the portfolios for both the Pooled and Non-Pooled Funds.

Efficiency and Effectiveness of Portfolio Accounting and Performance Calculation

For the Pooled Funds, we believe the University would benefit by using automated downloads of daily transactions from the Custodian rather than paper statements. This could increase productivity and decrease manual entry errors.

RECOMMENDATION LOCATOR

Below is a brief description of each recommendation including a reference to the page number in the Audit Report where the recommendation is described in more detail. The University's response, and, if appropriate, the date or expected date of implementation is also set forth.

Rec. Number	Page Number	Recommendation Summary	University Response	Implement. Date
1	14	Continue to closely monitor the Fischer Francis account	Agree	Ongoing
2	16	Consider another firm for small cap exposure	Agree	January 2003
3	18	Improve benchmarking process by changing benchmark to blend of 30 & 90 day TBills, using the Lehman benchmark for the Fischer Francis account, and using a gross universe to compare Cadence Small Cap performance	Partially Agree/Agree/Agree	January 2003
4	19	Improve asset allocation of the Pooled Funds by determining if differences in expectations are acceptable and considering use of absolute return strategies	Agree/Agree	October 2002/ Dec. 2004
5	22	Improve internal controls by changing reference in documents to prudent investor rule and differentiating the duties of separate account managers from mutual funds in the Investment Policy Statements and Operating Procedures	Agree/Agree	Dec. 2002/ October 2002
6	24	Create a signature page for investment managers for acknowledgement of compliance with Investment Policies and Procedures	Agree	January 2003
7	25	Increase efficiency by having Investment Consultant use automated downloads to calculate performance	Agree	January 2003
8	26	Explore consolidation of as many separate pools as possible for Non-Pooled Funds	Agree	Ongoing
9	27	Explore options to see if Children's Diabetes Trust should be restructured	Agree	August 2003
10	29	Monitor investment performance and apply standard investment management practices to Lawrence Street Center Capital Reserve Fund, the Dravo Funds, and the Consolidated Endowment	Agree	July 2003

DESCRIPTION OF THE UNIVERSITY OF COLORADO INVESTMENT PROGRAM

As set forth in the University of Colorado Investment Policy, “The University Treasurer is responsible for protecting the financial resources of the University. Authorization for the function arises from constitutional and statutory authority to the Board of Regents mandating exclusive control and direction of all funds and specific authorization to elect a University Treasurer.” The University of Colorado has the following investment portfolios:

<u>Treasury Pooled Funds</u>	<u>12/31/01 Market Value</u>
Segment 1– Daily Working Capital	\$ 48,813,351
Segment 2 – Non Recurring Proximate	\$114,764,396
Segment 3 – Contingency	\$ 34,135,403
Segment 4 – Non Recurring Future	\$150,731,874
<i>Sub Total</i>	<i>\$348,445,024</i>
<u>Non-Pooled Funds</u>	<u>12/31/01 Market Value</u>
26 Different Restricted Trusts	\$180,305,128
TOTAL	\$528,750,152

The Treasurer has the responsibility for preserving and protecting the financial resources of the University and effectively investing these resources. The Board of Regents has established an Investment Advisory Committee to provide advice to the Treasurer. The Treasurer also uses the services of an investment consultant (Callan Associates, Inc.).

Pooled Funds

The Pooled Funds are categorized into four segments based on an annual review process conducted with the oversight and input of the University of Colorado Investment Advisory Committee and the support of the University’s Investment Consultant. The first step in the review is to develop projected revenues and expenditures and to estimate the timing of the associated cash flows. Next, an asset allocation decision is made for each liquidity segment and performance benchmarks are selected. Based on these data, projected investment return is calculated. Then one or more investment managers appropriate for each liquidity segment are selected. After these decisions are made and any necessary approvals are secured, the plan is implemented.

The four segments are described below.

The Daily Working Capital (Segment 1) represents the day to day operating funds and is the segment that is most susceptible to seasonal fluctuations due to tuition payments and drawdowns of state appropriations.

The Non Recurring Proximate Items (Segment 2) represents assets that are specifically earmarked for capital projects and other programs for which both timing and amount are fairly certain.

The Contingency segment (Segment 3) serves as a buffer for both the Daily Working Capital and Non Recurring Proximate Items segments. Shortfalls that occur from either segment will be met by withdrawals from the Contingency segment.

The Non Recurring Future segment (Segment 4) is a part of the Pool that is not expected to be spent within the near term.

Non-Pooled Funds

Certain financial assets of the University may not be commingled, or pooled with other University investments. The assets that cannot be pooled are referred to as Non-Pooled Funds. Each Non-Pooled fund is invested, tracked and reported separately by the Treasurer of the University. These pools are explained below.

University of Colorado Health Sciences Center (UCHSC) Professional Liability Self-Insurance Trust (12/31/01 Market Value \$10,131,472)

This Fund was established along with the Department of Risk Management to control medical malpractice lawsuit exposure. An oversight board was also created. UCHSC management is interested in the fund having limited volatility in order to permit insured departments and schools to avoid large, unanticipated budget increases in premiums due to changes in the market values of the Fund's reserves.

University of Colorado Insurance Pool (12/31/01 Market Value \$4,955,541)

This Fund's assets represent the "tail-end" of an insurance program for the University Hospital and the University of Colorado. The assets within the Fund represent insurance reserves, which are waiting to be disbursed for claims and/or settlements for claims incurred between 1991 and 1996. Investments are all in short-term, government agency bonds with specific maturities in a passively managed bond ladder strategy.

University of Colorado Risk and Insurance Management Fund (12/31/01 Market Value \$22,812,340)

This Fund is composed of the insurance reserves of the University of Colorado. This self-insurance fund began on September 1, 1996 and is the replacement for the University of Colorado Insurance Pool. Insurance coverage types are: workers compensation, automobile, and general liability. Investment vehicles used are U.S. Treasury and agency securities and a money market fund.

The University of Colorado Technology Corporation (12/31/01 Market Value \$551,414)

The University of Colorado Technology Corporation (UTC) was established to license patents and other results of research created by University faculty and researchers. The UTC manages its own resources and investments. It is tracked within the Non-Pooled

investments because, for financial statement purposes, its financial statements are blended into those of the University of Colorado.

The University of Colorado Children's Diabetes Research Charitable Trust (12/31/01 Market Value \$4,809,492)

This Non-Pooled Fund was created and funded in May 1986 to support the University's research of children's diabetes. The Treasurer's Office has no direct input into the investment of the Trust's assets. Investment decisions are made by the trustees in accordance with the terms established by the donor in the trust document.

University of Colorado Tobacco Settlement Research Fund (12/31/01 Market Value \$12,601,523)

The Tobacco Settlement Research Fund represents money to be used, in accordance with State of Colorado statutes, to fund certain research projects. Annual funding is established by statute and can be modified by the State Legislature. The funding received is used to support approved research projects. Each project has its own unique cash flow needs. In general, the funds are expected to be paid out over the life of the project, typically from one to three years.

Charles Ayers Trust Under Will (12/31/01 Market Value \$109,204)

The Charles Ayers Trust was established after the death of the donor. The Trustee makes decisions about investments and distributions to support romance languages at the University of Colorado. Income is received by the University. It is unlikely that additional assets will be added to this Fund.

David Randall-MacIver Deed of Trust (12/31/01 Market Value \$974,594)

This Fund is managed by U.S. Trust Company of New York under the Deed of Trust of 1932. The University receives income but has no input into investment decisions. It is unlikely that any new resources will be added to this Fund.

Permanent Land Fund (12/31/01 Market Value \$1,945,080)

The Permanent Land Fund was established as a quasi-endowment by the Regents in January 2000. Funds were placed in the Consolidated Endowment and invested with the University of Colorado Foundation. Proceeds from the State Board of Land Commissioners and from the sale of real estate are added to the account.

The Charles Denison Memorial Trust (12/31/01 Market Value \$200,700)

Assets held in this Trust created in September 1937 generate revenue to support the library of the University of Colorado Health Sciences Center campus. The University has selected the Foundation as investment manager for these funds. The Foundation makes investment decisions and the Trust's assets are not commingled with other funds.

Dickman Life Income Fund (12/31/01 Market Value \$57,928)

The Dickman Life Income Agreement was created in 1966 and established a scholarship program for medical students of the University of Colorado Health Sciences Center. The University has selected the Foundation as investment manager for this Fund.

Investment earnings on the proceeds of the sale of donated real estate is restricted to the scholarship program.

Syvret Endowment Fund (12/31/01 Market Value \$948,996)

The Syvret Endowment Fund was created in the 1990's with donations from Mr. Charles F. Syvret of Denver. Endowment earnings are to be used to support loans to Boulder campus graduate and undergraduate students in engineering and business.

Consolidated Endowment (12/31/01 Market Value \$63,195,379)

The Consolidated Endowment includes endowment and quasi-endowment funds owned by the Regents of the University of Colorado that are commingled for investment purposes. The University of Colorado Foundation, Inc. provides investment management services for these assets and invests them in the Foundation's Investment Pool. The Foundation's Investment Pool is a diversified pool including investments in fixed income securities and funds, equity funds, real estate, and alternative investments.

1996 COP Debt Service Reserve (12/31/01 Market Value \$3,409,215)

The purpose of this Debt Service Reserve is to pay debt service owed to bondholders in the event of non-appropriation. The earnings on the investments in the reserve reduce the portion of the lease payment supported directly by the operation of the co-generation plant on the Boulder campus. The choice of investments is limited by the lease documents. Most of the assets are invested in a repurchase agreement.

Lease Program (12/31/01 Market Value \$1,081,851)

The purpose of the Lease Program is to have funds available that are adequate to make periodic lease payments.

Dravo Fund 1 and Dravo Fund 2 (12/31/01 Market Value \$1,039,851)

The University of Colorado Denver Building, known as Dravo, is leased by the University from the Auraria Foundation. As part of that lease, the University has set aside two pools of money called Dravo Fund 1 and Fund 2. The purpose of these Funds is to cover capital improvements that may from time to time be necessary to keep the building attractive to potential renters. The Auraria Foundation has some input into the investment process as stipulated in the lease agreement (i.e., type of investment, maturity, credit quality, etc).

2001 B Enterprise Bond Construction Proceeds for the Housing II Project (12/31/01 Market Value \$353,370)

This Fund holds the bond proceeds for a specific project on the Boulder campus. Funds will be spent within a year.

2001 B Enterprise Bond Construction Proceeds for the Housing Residential Halls (RH) Project (12/31/01 Market Value \$13,248,558)

This Fund holds the bond proceeds for a specific project on the Boulder campus. Funds will be spent within a year.

Joint Institute for Laboratory Astrophysics (JILA) Specific Portion of the 1986 Research Building Revolving Fund Debt Reserve (12/31/01 Market Value \$278,001)

This Fund contains proceeds from a National Science Foundation grant that are to be used to defray some of JILA's costs associated with the 1986 Research Building Revolving Fund Bonds. The final bonds mature on June 1, 2002, and this Fund will be liquidated at that time.

Lawrence Street Center Capital Reserve Fund (12/31/01 Market Value \$524,625)

This Fund was established to meet the requirements of the lease between the Auraria Foundation and the Regents of the University of Colorado for the Lawrence Street Center. The Fund is a capital reserve fund that is to be used to maintain the attractiveness of the real estate covered by the lease. The Treasurer's Office staff coordinates the funding of this reserve and determines the time horizon of each addition to this reserve from the Denver campus lease manager and selects complementary investments.

1986 Research Building Revolving Fund Bonds Debt Service Reserve (12/31/01 Market Value \$121,412)

This Fund contains bond proceeds that established a reserve fund for debt service on the 1986 Research Building Revolving Fund Bonds. The last bonds mature June 1, 2002. The Fund will be liquidated at that time.

Tax Exempt Commercial Paper Fund (12/31/01 Market Value \$108,647)

This Fund contains earnings from investments for the University's Commercial Paper Program. This money will be spent within twelve months. It is invested in a money market fund.

The University Improvement Corporation (12/31/01 Market Value \$3,367,273)

The University Improvement Corporation (TUIC) is a "501(c)3" corporation affiliated with the University to manage certain selected real estate properties for the Regents. TUIC manages its own resources and investments. It is reported within the Non-Pooled investments because, for financial statement purpose, it is blended into the statements of the University of Colorado.

2001 B Enterprise Bond Construction Proceeds for the University Memorial Center Project (12/31/01 Market Value \$8,325,685)

This Fund holds the bond proceeds for a specific project on the Boulder campus. In addition to project funds, a small amount of capitalized interest is also in the Fund. These proceeds are expected to be spent within a year.

Replidyne, Inc. (12/31/01 Market Value Negligible)

This corporate stock was distributed to the Regents and is associated with the technology transfer activities of a faculty member. It is not publicly traded at this time, and does not have any market value. If the business venture is successful, it will become more valuable.

Fitzsimons Trust Fund (12/31/01 Market Value \$25,152,977)

This Fitzsimons Trust Fund was established by state statute in 1998. The principal and interest in the Fund will be dedicated to the University of Colorado Health Sciences Center's move to the former Fitzsimons army base. The money may be appropriated to pay for approved capital construction projects at Fitzsimons. The Fund is managed by the Department of the Treasury of the State of Colorado.

II. FINDINGS AND RECOMMENDATIONS AND UNIVERSITY OF COLORADO RESPONSES – POOLED FUNDS

Investment Performance

Innovest uses sophisticated performance measurement capabilities to provide a comprehensive and informative evaluation of the total portfolio and individual portfolio managers. Our analysis of the University of Colorado's performance consisted of evaluating a portfolio's time-weighted rates of return, characteristics, and sector commitments. This information was compared to both benchmark indices and managers of similar styles. Peer group comparisons are essential to gauge the performance of any manager.

In each of the segments of the Pooled Funds, we also evaluated each manager's long-term performance outside the University of Colorado to get a clearer picture of manager quality. This involves using the manager's composite. A composite is the weighted-average performance of separate account clients.

The following provides our analysis of the segments and individual funds within the segments. We provide charts that show several different rates of return as described below:

- Investment Fund or Account "Return" is the annual rate of return earned by the University for the time period the University had such investments (up to ten years). We obtained these rates of return from the University.
- Fund manager's "Composite" is the performance of the University's investment manager for all clients. We obtained these rates of return from either the managers or our databases.
- "Universe" is the peer group performance of investment managers of similar styles. We selected similar managers based on our firm's knowledge and experience of investment managers and obtained their rates of return from our database of over 14,000 investment products.
- "Benchmark" is the performance goal set by the University, returns which we obtained from our database.

We compared the rates of return earned by the University on its funds and accounts to the other return rates to gauge the University's performance. Mutual fund returns are reported net of fees and separate account returns are reported gross of fees. We also analyzed performance over cumulative and rolling three-year periods and on a risk adjusted basis. Charts reflecting the results of this additional analysis are not included in this report and have been separately provided to the University.

Total Pooled Funds (12/31/01 Market Value \$348,445,024)

The overall performance of the Pooled Funds has been good on a cumulative basis and over annual periods compared to the custom benchmark. The custom (total pool) benchmark is calculated using the beginning market values of each of the portfolios weighted by their respective targets. We believe this benchmark is appropriate.

Although the overall return of the Pooled Funds was below the benchmark in 1998, the returns of the Pooled Funds recovered nicely after that. From 1998 through December 2001, the annualized return of the Pooled Funds was 5.67% versus 5.43% for the benchmark.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>
Total Fund Return	2.64%	6.66%	5.97%	7.64%
Custom Benchmark:	2.46%	5.20%	4.60%	9.59%

Segment I – Daily Working Capital (12/31/01 Market Value \$48,813,351)

Money Market Funds

The Daily Working Capital Segment is made up of six different money market instruments (Dreyfus Government Money Market, Dreyfus Treasury Money Market, PNC TempFund, AIM Liquid Assets, AIM Prime Portfolio, and Merrill Lynch Premier Institutional Money Market). The relative performance of the total money market pool has been very good with the Total Fund being in the top 10 percent of the Money Market universe. Each individual fund has been in the top third every year since its inception or last ten years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>
Total Money Market Fund Return	4.12%	6.42%	5.14%	6.39%
Universe: Median Money Market Manager	3.69%	5.90%	4.64%	5.03%
Benchmark: 30 Day T-Bills	3.68%	5.65%	4.43%	4.55%
Benchmark: 90 Day T-Bills	4.42%	6.18%	4.85%	5.25%

Segment II – Non Recurring Future (12/31/01 Market Value \$114,764,396)

Reams Asset Management

Reams Intermediate Aggregate has performed well in its one-year tenure with the University with above median performance. To look at a longer track record, the manager composite was compared to the Intermediate Fixed Income Style universe. The manager composite was above median seven out of ten annual periods.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Reams Asset Management Return	8.80%									
Reams Asset Management (Composite)	8.01%	11.87%	1.46%	8.20%	8.09%	5.02%	16.06%	-0.37%	10.01%	8.42%
Universe: Median Inter. Fixed Manager	8.75%	10.36%	0.68%	8.21%	8.34%	4.28%	15.51%	-1.62%	9.16%	7.30%
Benchmark: LB Inter. Aggregate Bd Index	8.67%	10.63%	0.99%	7.84%	8.45%	4.54%	15.82%	-1.77%	8.06%	7.11%

Western Asset Management

Western Asset Management has performed well in its one-year tenure with the University with above median performance. To look at a longer track record, the manager composite was compared to the Intermediate Fixed Income Style universe. The manager composite was above median eight out of ten years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Western Asset Management Return	9.43%									
Western Asset Management (Composite)	8.74%	11.13%	0.94%	7.97%	9.07%	5.00%	15.78%	0.17%	12.30%	7.91%
<i>Universe: Median Inter. Fixed Manager</i>	<i>8.75%</i>	<i>10.36%</i>	<i>0.68%</i>	<i>8.21%</i>	<i>8.34%</i>	<i>4.28%</i>	<i>15.51%</i>	<i>-1.62%</i>	<i>9.16%</i>	<i>7.30%</i>
<i>Benchmark: LB Inter. Aggregate Bd Index</i>	<i>8.67%</i>	<i>10.63%</i>	<i>0.99%</i>	<i>7.84%</i>	<i>8.45%</i>	<i>4.54%</i>	<i>15.82%</i>	<i>-1.77%</i>	<i>8.06%</i>	<i>7.11%</i>

Segment III – Contingency (12/31/01 Market Value \$34,135,403)

Fischer Francis

The Fischer Francis account was above median for three out of four annual periods with the University compared to the Defensive Fixed Income Style universe and five out of ten for the manager composite.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Fischer Francis Return	9.31%	9.68%	1.95%	7.15%						
Fischer Francis (Composite)	7.42%	8.53%	2.33%	6.96%	6.97%	5.21%	10.84%	0.95%	5.64%	6.28%
<i>Universe: Median Defensive Fixed Mgr</i>	<i>8.52%</i>	<i>8.41%</i>	<i>3.46%</i>	<i>6.93%</i>	<i>6.85%</i>	<i>5.05%</i>	<i>10.94%</i>	<i>0.28%</i>	<i>7.39%</i>	<i>6.64%</i>
<i>Benchmark: ML Corp/Govt 1-5</i>	<i>8.98%</i>	<i>8.87%</i>	<i>2.19%</i>	<i>7.69%</i>	<i>7.15%</i>	<i>4.61%</i>	<i>12.97%</i>	<i>-0.55%</i>	<i>7.12%</i>	<i>6.90%</i>

Fischer Francis has done a good job in the relatively short time it has been managing funds for the University. However, the consistency of its longer-term performance outside the University has been poor. Because of its relative long-term poor performance over the past ten years, the University should watch the performance of Fischer Frances in the future to ensure it remains good.

Recommendation 1:

The University Treasurer should continue to monitor the performance of the Fischer Francis account to determine if returns are adequate.

University of Colorado Response:

Agree. The University's Investment Advisory Committee (IAC) will continue to monitor the performance of the manager, Fischer Francis Trees & Watts, to determine if returns are adequate. The account will continue to be compared to both the selected benchmark and peer group quarterly. The IAC will follow the investment manager monitoring process described in the governing investment operating procedures.

Segment IV – Non Recurring Future (12/31/01 Market Value \$150,731,874)

Barclays Global Equity Index 500

The annual returns of Barclays S&P Index fund are very near the Standard and Poor’s 500 index less the six basis point management fee. Generally, most index funds underperform the S&P 500 due to fund expenses not reflected in the index return, and from trying to remain fully invested in light of the timing of fund cash flows.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>
Barclays GI Inv: S&P 500 Return	-11.86%	-9.10%	20.87%	28.32%				
Barclays Fund Return (Composite)	-12.11%	-9.34%	20.59%	28.42%	33.06%	22.63%	37.15%	0.78%
Benchmark: S&P 500	-11.89%	-9.11%	21.04%	28.58%	33.36%	22.96%	37.58%	1.32%

Cadence Mid Cap Growth

In examining the investment performance in Cadence Mid Cap Growth fund, Innovest compared the University of Colorado’s performance versus that of the mutual fund composite, a benchmark, and to relative peer performance. Taking into account risk adjusted cumulative and rolling returns, overall performance has been solid. On an annual basis, the mutual fund composite was above median five out of ten years and the University’s performance was above median one out of three years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Cadence (PIMCO) Mid Cap Return	-19.39%	28.43%	7.52%							
Cadence (PIMCO) MC Fnd (Composite)	-19.35%	28.43%	12.50%	7.94%	34.17%	23.35%	37.65%	-2.37%	15.77%	9.65%
Universe: Median Mid Cap Core Mgr	-13.22%	-1.21%	32.39%	9.91%	21.29%	18.87%	32.94%	-2.01%	13.22%	10.54%
Benchmark: S&P 400	-0.60%	17.50%	14.73%	19.11%	32.25%	19.20%	30.95%	-3.58%	13.95%	11.91%

Cadence Small Cap Growth

As with the mid cap growth product, the investment performance of Cadence’s Small Cap Growth composite, both gross and net, were reviewed. As before, Innovest has evaluated the manager’s long-term performance outside the experience of the University of Colorado. The returns provided to Innovest are gross of fees. On an annual basis, the manager composite (gross) was above median five out of ten years and one out of three years relative to the universe for the University’s account.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Cadence Small Cap Return	-8.92%	18.87%	0.91%							
Cadence Small Cap (Composite)	-9.37%	17.09%	6.83%	-7.28%	27.96%	18.25%	22.73%	1.77%	25.66%	17.95%
Universe: Median Small Cap Core Mgr	3.28%	7.43%	16.69%	-2.04%	24.27%	21.43%	28.86%	-1.26%	18.45%	17.53%
Benchmark: S&P 600	6.54%	11.80%	12.40%	-1.30%	25.58%	21.32%	29.96%	-4.77%	18.79%	21.05%

The Cadence Small Cap Growth Fund performance relative to its peers and to the index has been less than adequate. This is based not only on its performance shown in the above chart, but also on our analysis of its performance over cumulative and rolling three-year periods and on a risk adjusted basis. In addition, a strong point could be made for manager diversification. The University should consider using another firm for small cap style exposure. A key to quality diversification is using firms with different approaches to money management. Knowing that Cadence’s Small Cap performance has been poor, replacing

this portion of the segment with a complementary small cap manager to the Cadence Mid Cap fund could be a plus to the segment and overall portfolio.

Recommendation 2:

The University Treasurer should consider another firm for small cap exposure to improve performance and achieve more manager diversification.

University of Colorado Response:

Agree. As a result of discussions during the regular investment manager monitoring process with the Investment Advisory Committee (IAC), the Treasurer has decided to consider other investment manager options for this allocation.

Credit Suisse Core Fixed Income

The Credit Suisse University account was above median in one out of four annual periods versus the Core Bond Style Universe, and four out of ten for the manager composite. The University terminated the Credit Suisse in the first quarter of 2002.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Credit Suisse Core Fixed Inc. Return	7.97%	10.97%	-0.06%	8.39%						
Credit Suisse (Composite)	8.60%	11.32%	-0.04%	8.22%	9.65%	4.07%	18.71%	-2.45%	10.46%	7.99%
<i>Universe: Median Core Bond Mgr</i>	8.61%	11.76%	-0.94%	8.73%	9.86%	3.60%	18.85%	-3.09%	11.19%	7.80%
<i>Benchmark: LB Aggregate Bond</i>	8.43%	11.63%	-0.82%	8.70%	9.64%	3.64%	18.46%	-2.92%	9.75%	7.40%

Vanguard International Growth Fund

Innovest compared the Vanguard International Growth Fund to a universe of international equity mutual funds and to the Morgan Stanley Capital International Europe Australia Far East (EAFE) index. Overall performance has been solid. The fund placed above median in the international equity mutual fund universe in eight out of ten calendar years from 1992 to 2001. In addition, the fund outperformed the EAFE benchmark in seven of the past ten calendar years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Vanguard Intl Growth Return	-18.92%	-8.60%	26.34%	16.99%	4.12%	14.65%	14.90%	0.75%	44.75%	-5.69%
<i>Universe: Median International Eq Mgr</i>	-22.04%	-17.43%	34.71%	13.44%	3.97%	11.98%	9.93%	-0.04%	36.06%	-4.40%
<i>Benchmark: MSCI EAFE</i>	-21.44%	-14.17%	26.96%	20.00%	1.78%	6.05%	11.21%	7.78%	32.57%	-12.18%

Appropriateness of Benchmarks

Benchmarks and peer groups are used in performance measurement to gauge an investment product's performance. Using the correct benchmark and peer group is imperative in order to make informed judgements. In our analysis of the University's benchmarks, we analyzed the benchmarks and universes both quantitatively and qualitatively. Quantitatively, Innovest analyzed each money manager and the benchmark currently being used by the University and measured the relative correlation. We then used additional benchmarks and re-ran the analysis to determine if a higher correlation benchmark exists. Qualitatively, Innovest analyzed the actual money manager portfolios against the benchmark portfolios to identify duplication.

Generally, we believe the benchmarks for each of the segments of the Pooled Funds are appropriate with the following exceptions.

First, in Segment I - Daily Working Capital, the University's daily working capital money market funds are invested in short-term notes of 30-90 days or less. The Investment Policy calls for comparison to 30-day Treasury Bills. However, the University's performance report compares it to the 90-day Treasury Bills. While the 30-day Treasury Bills is a very attainable benchmark as seen in the table below, a more appropriate benchmark may be a weighted average between 30-90 day Treasury Bills based on the average days to maturity of the individual money market funds.

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>
Total MMF Return	4.12%	6.42%	5.14%	6.39%
<i>Universe: Median Money Market Manager</i>	3.69%	5.90%	4.64%	5.03%
<i>Benchmark: 30 Day T-Bills</i>	3.68%	5.65%	4.43%	4.55%
<i>Benchmark: 90 Day T-Bills</i>	4.42%	6.18%	4.85%	5.25%

Second, in Segment III – Contingency, the University's Investment Policy Statement specifies the use of the Merrill Lynch Government Corporate 1-5 index as the benchmark for the Fischer Francis Short Intermediate product. However, the University uses the Lehman Government Credit 1-5 in its Performance Reports as historical performance information for this is of better quality. We believe the Lehman Index is a suitable benchmark for this product. Therefore, we recommend changing the policy benchmark to the Lehman Index.

Third, also in Segment IV – Contingency, for Cadence Small Cap Growth, the University's performance report uses a mutual fund universe (returns are reported after fees) for comparison to the Cadence Small Cap Growth account (returns are reported before fees) in terms of performance, risk/return charts, and portfolio characteristics. This can make the performance of the Cadence Small Cap Growth account appear inflated, as it is a gross (before fees) number being compared to a net (after fees) universe.

Recommendation 3:

The University Treasurer should improve the benchmarking process by:

- a. Using a more appropriate benchmark for the Money Market Funds such as a weighted-average between 30-90 day Treasury Bills based on the average days to maturity of the money market funds.
- b. Changing to the Lehman 1-5 Government/Credit benchmark for the Fischer Francis account in the Investment Policy Statement.
- c. Using a gross universe to compare Cadence Small Cap Growth's performance.

University of Colorado Response:

- a. Partially Agree. The Treasurer will discuss this recommended refinement of the benchmarks with the Investment Advisory Committee and the University's Investment Consultant and determine whether this refinement would add value to the University's monitoring process. If so, it will be implemented.
- b. Agree. The Treasurer will recommend to the Investment Advisory Committee that the benchmark for Fischer Francis Trees & Watts be changed to the Lehman 1-5 Gov/Credit. The change will be implemented upon the concurrence of the Committee.
- c. Agree. The peer group used for the Cadence Small Cap Growth will be changed to the appropriate group of managers that report performance before fees.

Appropriateness of Asset Allocation

Asset allocation is the backbone of the investment process. Several studies have shown that approximately 92% of the volatility of investment returns can be controlled through the asset allocation process. However, computerized asset allocation is subject to the standard computer phrase of "Garbage In, Garbage Out." We believe the Pooled Funds asset allocation approach used by the University is well thought-out and sound.

Generally, we found the asset allocation to be appropriate for each of the segments in the Pooled Funds except as noted below.

The University's Operating Procedures when originally drafted had an expectation of a nominal return of 6.8% (3.3% real rate of return based on inflation of 3.5%). However, based on current economic conditions, our econometric modeling of the asset allocation results in a nominal return of 5.8% (2.9% real rate of return based on inflation of 2.9%). The University should determine if amending its Operating Procedures regarding the expected nominal return is necessary.

In addition, we believe that the University should consider absolute return strategies in addition to the traditional investments in Segment 4. Absolute return strategies generally

have a very low correlation to traditional asset classes and benchmarks. The low correlation comes from the manager's ability to reduce risk by hedging, combining long and short positions, and diversifying across various financial instruments. Absolute return strategies encompass many different styles and strategies. Some strategies are driven by the same market forces as traditional investments and can be considered return enhancers. Other strategies are affected very little by those market factors that drive traditional investments, and therefore are considered return diversifiers.

Generally speaking, the most common absolute return strategy is a market neutral strategy. Managers invest in securities both long and short, attempting, on average, to have a very low net market exposure. Managers generally attempt to select longs that are undervalued and shorts that are overvalued. However, this is only one of many strategies. As is the case with traditional asset management, an individual investment is typically dominated by a relatively narrow approach. Because there are so many strategies and styles, significant diversification is recommended. Absolute return strategies use manager skill to exploit anomalies in the markets. These strategies tend to run in cycles and funds are designed to blend various strategies and smooth out the cycles. Even more so than with traditional asset classes, there is a diversification benefit in combining strategies. By pooling various strategies, the risk of the portfolio tends to fall dramatically. A well-designed absolute return strategy portfolio can be used as a bond or equity surrogate depending on the volatility of the underlying managers. Further, the fund is taking advantage of an asset class with uncorrelated investment returns not only to traditional asset classes but to each other as well.

Recommendation 4:

The University Treasurer should improve the asset allocation of the Pooled Funds by:

- a. Reviewing the nominal return expectations in the Operating Procedures.
- b. Considering the addition of absolute return strategies to the asset allocation of Segment IV.

University of Colorado Response:

- a. Agree. These allocations and expectations are updated annually in the first quarter of each calendar year based on current five-year capital market projections. The Operating Procedures will be revised and expanded to explain the annual updating process.
- b. Agree. The Investment Advisory Committee discussed absolute return strategies in mid-June, 2002. There will be additional discussions and active consideration of this asset class.

Internal Controls over Investments and Investment Managers

Throughout the entire review process, Innovest considered whether the University was in compliance with state laws, Regent Policies, and other regulatory requirements. The scope of our review included all of the documents provided to us, including responses to questions we asked during the course of the review.

We reviewed the Treasurer's stated controls and believe that they are reasonable as to their standards. Examples of procedures used by the University are:

- The Operating Procedures for the Investment Policy Statement (OP/IPS) contains sections dealing with Security and Portfolio Guidelines and Performance Monitoring Requirements.
- For separately managed accounts, the custodian's monthly reports of holdings and transactions are checked for eligible securities, maturity limits, credit quality, diversification limits, and prohibited securities. Duration limits are checked quarterly using the University's reports.
- The Treasurer's Office makes investment reports to the Regents quarterly and reconciles internal reports monthly.
- The Treasurer's Office uses the University's accounting system to record all receipts and expenditures. All University funds are included in the University Treasury unless the Regents have authorized otherwise. The Treasurer's Office indicated that the only exception involves gifts to the University that are forwarded to the University of Colorado Foundation, Inc. The University provided us with a Policy Statement that provides guidelines for the University and Foundation when dealing with gifts and grants.
- The Investment Advisory Committee (IAC) meets eight or nine times each year. The IAC reviews the performance of the money managers quarterly and qualitative issues are discussed whenever they occur. The IAC documents its periodic review of the investment policy and money managers.

Investment Policy Statements and Operating Procedures for Pooled and Non-Pooled Assets

Based on Innovest's extensive experience with investment policy statements, our overall observation is that the Investment Policy Statements (IPS) and Operating Procedures (OP) for the various investment portfolios are comprehensive, well written and demonstrates compliance with fiduciary responsibilities. We do, however, have a few observations about the Investment Policy Statements and the Operating Procedures.

Colorado Uniform Prudent Investor Act

Investment Policy Statements for both pooled and Non-Pooled investments, the Operating Procedures for the Investment Policy Statement (OP/IPS) and several other documents refer to compliance with the “prudent person standard.” Colorado enacted the Colorado Uniform Prudent Investor Act (CRS 15-1.1-101), effective July 1, 1995. CRS 15-1-304.1 provides that “On or after July 1, 1995, when investing and managing assets, fiduciaries shall be governed by the standard for trustees set forth in the “Colorado Uniform Prudent Investor Act”, article 1.1 of this title.”

Unless there is a statutory exception for the University of Colorado, it appears that the Colorado Uniform Prudent Investor Act applies to the management of the University’s investment portfolios. Therefore, references in any Investment Policy Statement or other document should be to the “prudent investor rule,” since it has superceded the “prudent person” rule. Under the new law, fiduciaries are held to a higher standard, that of a prudent investor and not just a prudent person. Any fiduciaries involved with the management of University of Colorado investment assets should be made aware of the Colorado Uniform Prudent Investor Act and its fundamental requirements.

References to Mutual Funds in Operating Procedures for the Investment Policy Statement

Throughout the Operating Procedures for the Investment Policy Statement, there are sections where distinctions should be made more clear between mutual funds and separate account managers.

The Security and Portfolio Guidelines section of the Operating Procedures recognizes that the governing instrument of a mutual fund (generally the Prospectus and Statement of Additional Information) governs its security guidelines. As a result, the mutual fund selection process appropriately focuses on the acceptance of the guidelines as set forth by the mutual fund.

The Duties and Responsibilities of the Money Managers subsection in the Performance Monitoring section of the Operating Procedures does not clearly distinguish between the duties and responsibilities of a mutual fund as opposed to a separate account manager. As noted above, the duties and responsibilities of a mutual fund are limited to compliance with its governing documents. The University’s Operating Procedures requires money managers to acknowledge and agree in writing to their fiduciary responsibility, however mutual funds cannot comply with this requirement since they are a pooled investment vehicle with many different investors. Mutual funds within the Operating Procedures should be held to different standards.

It should be noted that a mutual fund’s compliance with its governing instruments would substantially provide for compliance with the Duties and Responsibilities of Money Managers requirements. To make the appropriate distinction, the Operating Procedures might be revised to state that “Mutual funds must adhere to the terms and conditions of their governing instruments.” It could further make the distinction clear by providing,

just before the list of duties and responsibilities, that “Separate account managers must adhere to the following duties and responsibilities.”

Recommendation 5:

The University Treasurer should improve the Operating Procedures for investments and investment managers by:

- a. Changing applicable references in the Investment Policy Statements, Operating Procedures, and other appropriate documents to the prudent investor rule.
- b. Distinguishing the duties and responsibilities of mutual funds from separate account managers in the Investment Policy Statements and Operating Procedures.

University of Colorado Response:

- a. Agree. The Investment Policy and Operating Procedures will be updated to reflect the *prudent investor rule* language.
- b. Agree. The Investment Policy Operating Procedures will be expanded to differentiate between the responsibilities of separate account managers and mutual funds.

Investment Managers Meeting Their Fiduciary Responsibilities

Innovest reviewed the methodologies and processes used by the investment managers to determine if they are meeting their fiduciary responsibilities. Throughout the entire review process, Innovest considered whether the managers were in compliance with all applicable fiduciary responsibilities.

Analysis of Fees

Innovest conducted an analysis of both total fees and each of the money managers’ fees. The University, as a fiduciary, has a duty to incur only costs that are reasonable and necessary.

The manager fees for Fiscal Year 2002 for the Pooled Fund is estimated to be \$754,730 or approximately 0.22% of the December 31, 2001 market value of \$348,445,024. We believe that 0.22% is extremely reasonable considering the amount of equity exposure in the portfolio.

The “Fiduciary Fee Analysis” presented in the table below identifies each money manager, the approximate amount invested, the fees per the manager’s contract or prospectus, and the median fees for a money manager in the same asset class for the same size account. In most cases the University’s manager fees are lower than the median. The only exception is Cadence Small Cap, where the manager’s fees are higher than the median.

Fiduciary Fee Analysis

Name of Fund/Firm	Approx \$Amt Invested	Investment Type	Asset Class	Manager Contract Rate	Median Fee
AIM STIC Prime	N/A (1)	Mutual Fund	Money Market	0.11% (2)	0.59%
AIM STIC Liquid	N/A (1)	Mutual Fund	Money Market	0.12% (2)	0.59%
PNC Institutional TempFund	N/A (1)	Mutual Fund	Money Market	0.18% (2)	0.59%
Dreyfus Institutional Government Cash	N/A (1)	Mutual Fund	Money Market	0.20% (2)	0.59%
Dreyfus Institutional Treasury Cash	N/A (1)	Mutual Fund	Money Market	0.20% (2)	0.59%
Merrill Lynch Premier Institutional	N/A (1)	Mutual Fund	Money Market	0.18% (2)	0.59%
Reams Asset Management	\$56 million	Separate Account	Intermediate Fixed Income	< \$50m - 0.20% > \$50m - 0.15%	0.28%
Western Asset Management	\$57 million	Separate Account	Intermediate Fixed Income	< \$100m - 0.30% > \$100m - 0.15%	0.28%
Fischer Francis	\$34 million	Separate Account	Defensive Fixed Income	< \$100m - 0.20% > \$100m - 0.15%	0.28%
Credit Suisse	\$71 million	Separate Account	Long Fixed Income	< \$50m - 0.15% > \$50m - 0.10%	0.28%
PIMCO/Cadence Mid Cap Growth	\$9 million	Mutual Fund	Mid Capitalization Core	0.70%	1.19%
Cadence Small Cap	\$4 million	Separate Account	Small Capitalization Core	< \$50m - 1.00% > \$50m - 0.50%	0.85%
Barclay Global Investors Index 500	\$46 million	Mutual Fund	Large Core Index	0.06%	0.51%
Vanguard International Growth	\$21 million	Mutual Fund	International	0.49%	1.14%

(1) Total Money Market Investments are \$49 million

(2) Contract rate per fund prospectus

Acknowledgement of Fiduciary Responsibilities

The Duties and Responsibilities of the Money Managers subsection in the Performance Monitoring section of the Operating Procedures requires all money managers to “Acknowledge and agree in writing to their fiduciary responsibility to fully comply with the entire Investment Policy Statements set forth herein, and as modified in the future.” This would apply to separate account managers, since mutual funds can only be held to the terms and conditions of their governing instruments (prospectuses).

Innovest reviewed the contracts of all of the separate account money managers. While the money managers agreed to their fiduciary responsibilities, compliance with the Investment Policy Statements were not specifically addressed. To help achieve more consistency and clarity, we suggest the University use a separate signature page on the Investment Policy Statements for money manager acknowledgement and agreement.

Recommendation 6:

The University Treasurer should require a signature page as part of the Operating Procedures for acknowledgement and agreement by each of the separate account money managers to its compliance with the Investment Policy Statements.

University of Colorado Response:

Agree. A manager contract for separate accounts will include a requirement that, when signed, acknowledges the manager's fiduciary responsibilities for University assets.

Cash and Liquidity Needs

The Treasurer's Office is well positioned to forecast expected cash inflows and disbursements and to schedule investments to maximize earnings. The collection of the major portion of revenue is fairly predictable. Projection of expenditures is based upon patterns that are well established and reasonably predictable. Approximately 65% of the University's total expenditures are regular, periodic payments.

Our review of the cash flows and liquidity needs of the Pooled Funds found that Segment 1, the Daily Working Capital, has been adequate to cover all the disbursement needs of the University. This is confirmed in our review of Segments 2, 3 and 4, in that the only withdrawals are for rebalancing back to the target asset allocation of Segment 4.

In addition, we reviewed the University's cash flow forecasting process and it appears adequate for normally occurring activities. The first step in the process is to develop projected revenues and expenditures and to estimate the timing of the associated cash flows. Next, an asset allocation decision is made for each liquidity segment and performance benchmarks are selected. Based on this data, projected investment return is calculated. Then one or more investment managers appropriate for each liquidity segment are selected. After these decisions are made and any necessary approvals are secured, the plan is implemented.

Efficiency and Effectiveness of Portfolio Accounting and Performance Calculation

In order to review the efficiency and effectiveness of the custody operations of the University's Pooled assets, we developed a questionnaire for the University Treasurer's Office staff to complete. Based on the responses of the questionnaire and our experience with different custodians, we have the following comments.

The University uses Wells Fargo Bank (Custodian) as its investment custodian for the Pooled Funds. Wells Fargo has a good reputation for custody work. Its statements are easy to read and its technology, especially as it relates to its web based reporting, is good. In addition, the University appears to be very thorough in reconciling statements and holdings for compliance with investment policies, as well as communicating to all interested parties when managers are hired and terminated, or funds are deposited or withdrawn.

The University's Investment Consultant is currently only receiving paper statements to calculate performance and perform attribution analysis. There are more automated ways of doing this to increase productivity and decrease manual entry mistakes. Using an automated portfolio accounting system and getting an automated download of daily transactions from the Custodian may be desirable. These changes could reduce the potential for manual mistakes in calculating performance. In addition, there may be ways to consolidate holdings and produce reports that the University could use in its reconciliation or credit quality monitoring. For example, reports could be downloaded to excel spreadsheets that could be manipulated to list consolidated holdings in order of credit quality, maturity, etc.

Recommendation 7:

The University Treasurer should have the Investment Consultant use an automated download of daily transactions from the Custodian.

University of Colorado Response:

Agree. The University Treasurer will offer the University's Investment Consultant the option of automatically obtaining investment transaction and balance information from the University's Custodian. The Treasurer will encourage the Custodian to use this service if the Consultant finds it to be cost-effective.

III. FINDINGS AND RECOMMENDATIONS AND UNIVERSITY OF COLORADO RESPONSES - NON-POOLED FUNDS

We reviewed the 26 Non-Pooled Funds and found that generally the cash and liquidity, appropriateness of asset allocation, appropriateness of benchmarks, investment managers meeting their fiduciary responsibility, investment performance, and internal controls were appropriate. However, we noted some areas that can be improved as follows.

Trust Consolidation

It may be advantageous to pursue consolidation of some of the separate pools of funds into the Foundation or the Treasury Pooled Assets. A consolidation of investment funds into one larger institutional pool should lead to lower investment and management fees, improved performance and greater administrative efficiency. The Uniform Management of Institutional Funds Act (CRS 15-1-1101) provides in CRS 15-1-1109 for the release of restrictions on use or investment of an institutional fund imposed by the applicable gift instrument. A restriction can be released with the written consent of the donor. Alternatively, if the release of the donor can't be obtained, the governing board may obtain a release after following appropriate procedures by order of a district court.

Several of the smaller trusts (Denison, Dickman, Ayers, Diabetes Research Charitable Trust, Syvret Endowment) might be considered for consolidation. A review of the investment pools that range in size up to \$1 million indicates that five separate funds totaling over \$2.4 million might be appropriate for consolidation. Although there might be near-term costs and inconvenience, they may be outweighed by longer-term savings.

If it is determined that the benefits from certain of the investment pools must be used for specified purposes (e.g., the Ayers trust is intended to benefit romance languages), it still may be appropriate to consider consolidation. After consolidation into a larger investment pool, the relative contributions of the various trusts could be unitized, similar to a mutual fund. In this manner, the total investment pooled would still benefit while enabling the University to respect the original donor intentions. Whether the various trusts legally qualify for release of restrictions and consolidation under the Uniform Management of Institutional Funds Act is a legal question that will need to be evaluated by the University's legal staff.

Recommendation 8:

The University Treasurer should explore the consolidation of some of the smaller Non-Pooled Trusts with the University's legal counsel.

University of Colorado Response:

Agree. The Treasurer will continue to examine Non-Pooled investments for consolidation opportunities and, when appropriate, will seek University Counsel's support for legal actions necessary to accomplish this.

The University of Colorado Children's Diabetes Research Charitable Trust

This Non-Pooled Fund was created to support the research of children's diabetes. The asset allocation is approximately 60% equities and 40% fixed income. Wells Fargo Bank, as one of the three Trustees, manages the assets. Investment products are selected under the guidance of the Trust Board. The Treasurer's Office makes no investment decisions for this fund.

In October 1982, Marvin Davis entered into an agreement with the Regents of the University of Colorado to provide a building for diabetes research and funds on an annual basis to support a diabetes research team. The Children's Diabetes Research Trust was created and funded in 1986. The Trustees of the new Children's Trust were to make annual payments from the Trust in the same amounts and on the same terms as provided in the 1982 agreement.

The Children's Trust was funded with \$5 million in 1986 with the expectation that it would completely distribute and deplete all of the assets in approximately 15 years. According to a letter dated June 18, 1999 written by Norwest Bank Investment Management & Trust, the Trust had distributed \$6 million for the benefit of the Barbara Davis Center as of that date. The market value of the investments in the Trust at that time was approximately \$5.5 million. At a meeting in May 1999, the Trustees decided to continue the Trust in perpetuity while providing for funding to the Diabetes Center every year.

We are unclear on whether the decision to continue the Trust is in the best interest of the Center as the beneficiary. The University should explore whether other options are available and desirable. This could include determining whether it is possible to obtain the Trust assets in a lump-sum payment or structure the Trust in some other fashion to reduce the ongoing fees currently associated with the Trust. Combining these assets with the significantly larger Treasury assets should result in significant cost savings, improved performance, and greater administrative efficiency.

Recommendation 9:

The University Treasurer should consult with appropriate parties to determine if the decision to continue the Children's Diabetes Research Charitable Trust is in the University's best interest, and if not, whether other options are available to restructure the Trust.

University of Colorado Response:

Agree. The University Treasurer will consult with the Health Sciences Center and other appropriate parties to identify whether there are lower cost options available for effectively and efficiently managing the funds of the Trust. If such options are identified, they will be presented to the Trust Board for consideration.

Lawrence Street Center Capital Reserve Fund

This Fund was established to meet the requirements of the lease between the Auraria Foundation and the Regents of the University of Colorado for the Lawrence Street Center. The Fund is a capital reserve fund that is to be used to maintain the attractiveness of the real estate covered by the lease. The Treasurer's Office staff coordinates the funding of this reserve and polls the Denver campus lease manager about the time horizon of each addition to the reserve.

The investments are all in domestic, defensive fixed income securities in a mutual fund. Returns are expected to be that of a short-term fixed income portfolio. A money market fund is also available as an optional investment for semi-annual transfers with shorter time horizons. The lease identifies permitted investments.

Fischer Francis Trees & Watts Limited Duration Portfolio was selected as the defensive fixed income portfolio. The manager selection process was sound, and the Treasurer has the fiduciary responsibility to monitor the Portfolio on an ongoing basis. To meet this responsibility, the Treasurer should review the Fund's quarterly performance versus both benchmarks and peer groups to gauge the performance of the product.

Dravo Fund 1 and Dravo Fund 2

The University of Colorado Denver Building, known as Dravo, is leased by the University from the Auraria Foundation. As part of that lease, the University has set aside two pools of money called Dravo Fund 1 and Fund 2. The purpose of these funds is to cover capital improvements that may from time to time be necessary to keep the building attractive to potential renters. The Auraria Foundation has some input into the investment process and, as such, included language in the lease that restricts the Fund's investments. The Auraria Foundation has chosen Piper Jaffray to oversee the investment accounts.

The building operator and contractor provide capital expenditure plans to the University. The lease manager works with the Treasurer's Office and investment account firm to match liabilities with investments. Dravo Fund 2 will be tapped soon for some modest, capital repairs based on the capital plan. Because the investment options are limited by the lease, all securities are in fixed income investments with defensive fixed income return expectations.

We believe the investment policy is sound based on the investment options. However, there are no formal operating procedures in place for these funds other than the lease documents. The Treasurer should be reviewing the Funds' investment performance versus both benchmarks and peer groups to gauge the performance of investment manager.

Consolidated Endowment

Before the University of Colorado Foundation, Inc. was established in 1984, the University did its own fund raising. The Foundation was created to be an effective fundraiser for the University and was organized as a separate entity. The University has contracted with the Foundation to provide investment management services for endowments owned by the University. The hiring of the Foundation to provide investment management for these assets facilitates similar reporting to beneficiaries and provides for a single policy that covers all endowment recipients. As of December 31, 2001, the Foundation was managing the University Consolidated Endowment which had a market value of \$63,195,379.

The University has a close relationship with the Foundation since it raises funds for support of the University. However, the Foundation's responsibilities are no different than that of any other University vendor, manager, or service provider. Regardless of the affiliation between the two entities, the University has the fiduciary responsibility to monitor and supervise the activities of the Foundation as they relate to the investments of the Consolidated Endowment. In addition, University policies and procedures should be used by the foundation to drive investment decisions; assets should be diversified; fees and expenses should be controlled and analyzed; and the Foundation should acknowledge its fiduciary responsibility.

Recommendation 10:

The University Treasurer should apply standard investment management practices to the investment manager of the Consolidated Endowment, and monitor the performance of the investment portfolio for the Lawrence Street Center Capital Reserve Fund, the Dravo Funds, and the Consolidated Endowment.

University of Colorado Response:

Agree: The University will seek the advice of its Investment Consultant and Investment Advisory Committee to establish benchmarks for these Funds. Subsequently, the Treasurer will monitor the investment performance relative to the benchmarks. The Treasurer will also seek to implement standard management practices for the Consolidated Endowment.

IV. DISTRIBUTION PAGE

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