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Key Points of Report

A Review of Controls Over Investment Practices at Six Major State Investing Entities

November 1996

Overall Conclusion

Although controls over investment practices are adequate at most of the major investing entities, there are opportunities for the Legislature, governing boards, or management to enhance accountability for, or performance of, the investments managed by these state entities. The six entities reviewed, with investments of approximately \$100 billion as of March 31, 1996, help ensure that sufficient monies are available to pay retirement benefits, fund public and higher education, and pay the State's operational costs.

Controls over investment practices are generally adequate at the four entities with the largest long-term portfolios (Teacher Retirement System, Texas Education Agency, Employees Retirement System, and The University of Texas System). At the State Treasury, which primarily manages shorter-term investments and has now merged with the State Comptroller of Public Accounts, improvements are needed in monitoring and in documentation of policies and procedures. Controls over long-term investments made by the State Treasury on behalf of the Texas Lottery Commission appeared adequate to ensure that future amounts are sufficient to pay prize installments.

Key Facts and Findings Related to Crosscutting Issues

- Periodic independent investment reviews of the State's largest investing entities are not required, with the exception of a recent consultant review of the Teacher Retirement System. Reviews by investment experts would give the Legislature independent assessments of these entities' investment strategies and investment performance.
- Constitutional restrictions on the use of capital gains and ordinary investment income of the Permanent School and University Funds may impair managements' ability to optimize long-term performance of those funds. A constitutional amendment eliminating those restrictions would provide more flexibility in attempting to maximize long-term growth in both the corpus and the distributions from those funds.
- Statutes affecting similar investment operations of four of the largest investing entities are not consistent. Requirements differ concerning the extent of investment expertise on governing boards, independent investment reviews, evaluation and analysis of investment performance, and the extent of securities lending indemnification. These differences could impact the quality of board

Key Points of Report, concluded

decisions and legislative oversight, the perceived objectivity and reliability of reported investment performance, and the income from securities lending activities.

- Public accountability for investment operations may be diminished when nonprofit corporations are established to manage state investments. State laws governing state employee and officer conduct, open meetings, and open records may not apply to the nonprofit investment corporations authorized by the 74th Legislature to manage the investments of the Texas Education Agency and The University of Texas System. The University of Texas Investment Management Company's (UTIMCO) meetings are not open to the public and the minutes are considered confidential.

Key Facts and Findings Related to Individual Entities

- The State Treasury should improve controls over investment practices in several areas. Improvements are needed in portfolio monitoring by executive management and in documentation of important policies and procedures. The State Comptroller of Public Accounts, who is now responsible for the State Treasury's functions, is in the process of contracting for an outside management control audit of these functions which should help identify and correct existing weaknesses.
- The Board of Regents of The University of Texas System should consider using an independent investment consultant to strengthen its ability to meet its investment oversight responsibilities and to ensure that it does not rely solely on information and recommendations from UTIMCO. In addition, adequate documentation of adherence to ethics standards should be maintained in investment files.

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This financial and compliance audit was conducted in accordance with Government Code §§ 321.0131 and 321.0132

Executive Summary

Although controls over investment practices are adequate at most of the major investing entities, there are opportunities for the Legislature, governing boards, or entity management to enhance accountability for, or performance of, these investments. The six entities reviewed, with investments of approximately \$100 billion as of March 31, 1996, help ensure that sufficient monies are available to pay retirement benefits, fund public and higher education, and pay the State's operational costs including payments of lottery prize installments.

The Legislature could enhance accountability for, or performance of, the State's investments by contracting with independent specialists to perform reviews to:

- Enhance legislative oversight of investment strategies and performance.
- Determine if long-term investment performance of the Permanent School and University Funds could be improved through constitutional changes.
- Identify how the State can best attract and retain highly qualified investment personnel.

The Legislature might also wish to review certain statutes affecting the major investing entities to ensure that the statutes accomplish their intended objectives. These statutes involve requirements for investment expertise on entity governing boards, periodic independent external investment reviews, evaluation and analysis of investment performance, the level of indemnification for securities lending programs, and accountability to the public by nonprofit investment management corporations.

Oversight boards or investment management at the individual entities could also enhance

controls over investment practices. At the State Treasury, improvements are needed in portfolio monitoring, in the comprehensiveness of investment policy, and in documentation of specific policies and procedures. At The University of Texas System, the Board of Regents should consider obtaining assistance from an independent investment consultant. In addition, adequate documentation of adherence to ethics standards should be maintained.

Important Assessments Concerning Effective Investment Management Could Be Provided to Legislators by Independent Specialists

Periodic independent investment program reviews of the State's largest investing entities are not required, with the exception of a recent consultant review of the Teacher Retirement System (TRS). In monitoring the State's investments, the Legislature already requires and receives certain investment information from these entities. Beginning in fiscal year 1996, the Legislature requires a periodic, independent assessment of the TRS investment function by an investment expert. Similar reviews of the other major investing entities would help the Legislature strengthen its oversight of the investment strategies, objectives, and performance benchmarks used. Reviews by outside specialists could also provide the Legislature objective information about the following two issues:

- Constitutional restrictions imposed on the Permanent School Fund and Permanent University Fund may limit managements' ability to achieve the primary goals of

Executive Summary

permanent endowment-type funds. The two Permanent Funds are required to retain all capital gains and distribute all interest and dividend income. These restrictions make it difficult to consistently obtain both income and corpus growth. Most other endowment funds have more flexibility in determining distributions, which helps those funds focus on investment strategies that may generate higher overall returns.

- Job design and compensation systems for the investment professionals may not ensure that these entities attract and retain the highest caliber investment professionals. Because of the magnitude of the State's portfolios, even small improvements in investment performance achieved by more skilled managers can result in millions of dollars in additional return. Investment professional compensation did not appear to be consistent across the entities and may not be competitive with private sector compensation.

The Legislature Should Consider Establishing Certain Consistent Statutory Requirements for the Largest Investing Entities

Inconsistent statutes affect similar investment operations of the four investing entities with the largest long-term portfolios. These statutes impose requirements concerning investment expertise on governing boards, independent external investment reviews, evaluation and analysis of investment performance information, and the extent of securities lending indemnification.

The statutory differences could impact the quality of board decisions and legislative

oversight, the perceived objectivity and reliability of reported investment performance, and securities lending income. Differences noted include the following:

- The Teacher Retirement System's nine-member board of trustees is required to include five members with significant investment expertise. Some of the other investing entities are not required to have any board members with such expertise.
- Only the Teacher Retirement System is required to have a periodic, independent, external investment review.
- Only The University of Texas System is not required to obtain an evaluation and analysis of investment performance from an outside service.
- Only the Employees Retirement System's securities lending program must be indemnified against losses from reinvestment of collateral.

Some of these differences may have been intended to reflect differences in the entities' investment objectives or environment. However, to the extent the differences are not necessary, eliminating the inconsistencies may enhance oversight and the effectiveness of investment practices.

Oversight Bodies Should Consider Requiring Stronger Controls Over Nonprofit Corporations Managing Public Funds' Investment Functions

Legislation authorizing creation of two non-profit private investment management corporations did not specifically subject the corporations to laws concerning state employee and officer conduct, open meetings,

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and open records. Accountability to the public by such corporations could be diminished if the corporations' boards do not elect to adopt the provisions of those laws.

The Texas Education Agency had intended for its proposed investment management corporation, which was never formally created by the State Board of Education, to comply with the Open Meetings Act. However, The University of Texas System has not chosen to subject The University of Texas Investment Management Company (UTIMCO), its investment management corporation, to these laws. As a result, UTIMCO's meetings are not open to the public and the minutes of those meetings are considered confidential.

Oversight Functions at the State Treasury Do Not Provide Accountability Over Investment Operations

Executive management has not actively monitored certain aspects of portfolio performance. The State Treasury's portfolio performance is not compared to the performance of an appropriate peer group, nor is it compared to benchmarks established by the Federal Government.

The State Treasury's portfolio is not compared to other portfolios of similar size, composition, and average maturity. Such comparisons would provide executive management with a means to assess the relative success of its investment policies and investment department strategies. The Treasury's portfolio is compared quarterly to the Donaghue Money Market Index, but the Treasury's portfolio does not have the money market fund characteristics needed to make this a meaningful comparison.

Treasury management apparently did not monitor portfolio performance against reimbursement rates established in the federal Cash Management Improvement Act for cash advances of federal funds. In fiscal year 1995, the Treasury's portfolio did not perform as well as the average yield on 13-week Treasury Bills, which is the federal reimbursement rate. As a result, the federal interest liability for these cash advances was greater than the amount earned by the Treasury on those advances. Had the Treasury actively monitored the portfolio against the 13-week Treasury Bill rates, opportunities may have existed to adjust the portfolio and/or communicate to state agencies the need to more closely monitor cash advances to minimize the State's liability.

The Lack of Documented Policies and Procedures at the State Treasury Weakens the Controls Over the Investment of Public Funds

The State Treasury investment policy does not address some critical elements of the investing function, and certain cash management procedures are not documented. Thorough investment policies and complete documentation of procedures are important controls to ensure that transactions and processes will be consistently performed in accordance with management's expectations.

The State Treasury's investment policy does not provide adequate guidance for investing public funds. Elements missing from the policy include diversification limits or ranges, acceptable risk levels, portfolio performance expectations, and portfolio or individual security maturity limitations or expectations.

Executive Summary

In addition, the State Treasury does not have documented policies and procedures for some important cash management activities. There are no documented policies and procedures for the processes used to issue Tax Revenue Anticipation Notes (TRANs), including descriptions of how cash projections are used to determine the amount and timing of TRAN issues. There are also no documented policies and procedures for the preparation, monitoring, and adjustment of cash flow projections. Management could not provide us with documentation to fully support their explanation of why a large cash shortfall occurred in December 1994.

Although the Governance and Oversight Structure at The University of Texas System Has Changed Significantly, Improvements Are Still Needed to Board Oversight

The University of Texas System (UT System) Board of Regents (UT Board) could enhance its ability to fulfill its fiduciary responsibilities by obtaining assistance from an independent investment consultant. Although creation of UTIMCO enhances direct oversight of the investment process, the UT Board of Regents retains overall fiduciary responsibility for the System's investments. The UT Board's required duties include appointing and removing UTIMCO's directors and approving UTIMCO's investment policies and subsequent policy changes. The UT Board of Regents could use an independent investment consultant as a control to ensure that it does not solely rely on the recommendations of UTIMCO.

Controls and Procedures at The University of Texas System Intended to Ensure That Ethics Standards Are Followed Could Be Improved

Controls and procedures should be strengthened to ensure adherence to ethics standards for the System's investments. Improvements are needed in procedures to ensure that investment files contain adequate documentation that conflicts of interest, especially related to the System's private investments, did not occur.

Investment files did not adequately document management's conclusions that conflicts of interest did not exist. In a recent private investment transaction, management communicated its conclusion that no conflicts of interest existed but the investment file did not document how staff reached this conclusion. The complexity of private investments increases the importance of maintaining written documentation of compliance with investment policy or state law.

The Legislature and the State Board of Education May Wish to Reconsider the Rationale for Establishing a Nonprofit Corporation to Manage Permanent School Fund Investments

The Legislature and the State Board of Education should consider revisiting the reasons used to justify the establishment of an "affiliate organization" to manage the Texas Education Agency's (TEA) investments. The reasons cited by TEA do not ensure that meaningful benefits would be provided to the State in the event the authorized nonprofit

Executive Summary

corporation is ever implemented by the State Board of Education.

TEA's objectives in creating an investment management corporation were primarily related to personnel issues rather than on the need to improve investment performance. The State as a whole, however, might not benefit because the State would still be charged for all the operating costs of the affiliate organization. In contrast, The University of Texas System's investment management corporation, UTIMCO, was established to enhance investment performance, primarily through an improved governance structure.

Summary of Managements' Responses

Managements' responses to, or comments on, the Crosscutting Issues, where provided by the entities covered by this review, are included in the Crosscutting Issues section.

Managements' responses to issues discussed in each of the six entities' section of the report are included immediately after the related finding and recommendation. For the Texas State Treasury (Treasury), responses were submitted by State Treasury management prior to the State Comptroller of Public Accounts' assumption of responsibility for the Treasury's operations.

Summary of Objective and Scope

The primary objective of this project was to review the adequacy of management controls over investment practices at state agencies and universities. The six state entities covered by this review (Employees Retirement System, Teacher Retirement System, Texas Education Agency, Texas Lottery Commission, Texas State Treasury, and The University of Texas System) account for the vast majority of the State's investments. These six entities' investments totaled approximately \$100 billion as of March 31, 1996.

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Crosscutting Issues

Crosscutting issues involve recommendations not specifically directed at only one of the entities covered by this review. Most of the issues and recommendations are directed to the Legislature because legislative action would be necessary to implement a proposed change. Section 4 (page 26) addresses an issue which applies equally to two of the entities reviewed.

The entities reviewed were not requested to respond to, or comment on, these issues with the exception of the two entities to which Section 4 applies. All of the entities, however, were offered an opportunity to comment on any issues relevant to them. Only the Employees Retirement System and the Teacher Retirement System chose to comment on those issues, and their comments are included.

Overall Summary

There are opportunities for the Legislature to receive useful information from independent specialists. Such information could help the Legislature enhance oversight of the major investing entities, provide suggestions for enhancing the investment performance of the Permanent School Fund and Permanent University Fund by eliminating certain constitutional restrictions, and help ensure that the State is able to attract and retain highly qualified investment professionals. (See Section 1, page 8.)

Statutes affecting similar operations of the four entities with the largest long-term investment portfolios are not always consistent. The differences in statutes could impact the quality of board decisions and legislative oversight, including the oversight of investment strategies, objectives, and performance benchmarks; the perceived objectivity and reliability of reported investment performance; and securities lending income. (See Section 2, page 20.)

Legislation authorizing creation of two nonprofit private investment management corporations did not specifically subject the corporations to state laws governing state employee and officer conduct, open meetings, and open records. Accountability to the public by such corporations could be diminished if the corporations' boards do not elect to adopt the provisions of those laws. (See Section 3, page 25.)

The Employees Retirement System (ERS) contends that the Constitution prohibits it from delegating investment authority to outside investment managers. If the basis for ERS's contention is correct, a question arises as to the constitutionality of the statutes authorizing its securities lending program. The Teacher Retirement System and the Employees Retirement System have identical constitutional investment authority and similar securities lending statutes. An Attorney General's Opinion could clarify both entities' investment delegation authority which could assist them in planning future investment strategies. (See Section 4, page 26.)

Section 1:

Important Assessments Concerning Effective Investment Management Could Be Provided to Legislators by Independent Specialists

Section 1-A:

The Legislature May Wish to Require and Oversee Periodic External Reviews of the Major Investing Entities

The Legislature does not obtain an independent assessment of the information it receives from most of the State's major investing entities concerning their investments and investment performance. The public depends on the Legislature to periodically monitor the entities with large investment portfolios to ensure that they are effectively managed. Effective management will help ensure that sufficient monies are available to pay retirement benefits, fund education (including the debt service on the universities' bonds) and pay the State's operational costs.

A qualified, independent assessment of the information would put the Legislature in a better position to provide oversight for the investment strategies, objectives, and performance benchmarks used by the entities. In addition, in Sections 1-B and 1-C of this portion of the report (pages 11 and 16 respectively), we recommend independent reviews of the legal structure of the Permanent School and Permanent University Funds and of job design and compensation systems for state investment professionals. These reviews could be performed in conjunction with the periodic external reviews discussed in this section.

The Legislature is currently in the process of receiving more independent information about the State's investments. This investment practices project conducted by the State Auditor's Office evaluated management controls at selected state agencies and universities, and identified opportunities to create, correct, or enhance investment management controls. In addition, the Legislature has required a recent independent, comprehensive investment practices review of the Teacher Retirement System.

However, the additional information the Legislature is receiving on investments will not provide all the information needed to optimize oversight for the State's investments:

- While the State Auditor's investment practices project reviewed management controls at the six agencies which comprise approximately 95 percent of the States' total investments (with portfolios ranging from \$0.9 billion to \$46 billion as of August 31, 1995), the review did not attempt to evaluate investment performance issues. Such evaluation would require the expertise of an investment specialist to provide a second opinion or to challenge the entities' investment decisions or underlying assumptions.

- The Legislature has not yet required independent, comprehensive reviews of the investment performance of the large investing entities other than the Teacher Retirement System. These agencies are the Employees Retirement System, the Texas Education Agency, the State Treasury, and The University of Texas System. (The State Treasury invests on behalf of the Lottery Commission.)

The lack of both adequate oversight by management and a strong, effective system of investment-related management and transaction controls has contributed to several high-profile investment crises in both the public and private sectors, including the TexPool bailout within Texas state government. Our review of investment controls at the six major investing entities did not lead us to conclude that similar control problems exist at these entities. Nevertheless, the Legislature has a vested interest in ensuring that the investment policy decisions made by the governing boards, along with the execution of those decisions by each entity's investment staff, maintain the financial health of these entities. Otherwise, the State's ability to meet the mission of these entities may be impaired. The entities' missions include providing:

- Funding of benefits for almost 150,000 retirees and beneficiaries of the Teacher Retirement System
- Funding of benefits for nearly 40,000 retirees and beneficiaries of the Employees Retirement System
- Funding for over 3.6 million public school students
- Funding for capital projects and Excellence Programs for The University of Texas System and the Texas A&M University System
- Investment management for the State's operating funds and various state and local funds

In addition, independent assessments of the State's investments are needed to determine whether the agencies are in compliance with constitutional provisions. The Constitution directs the governing boards or oversight official of these entities to administer and invest prudently. But, an evaluation of whether the investment process has been prudently administered can only be made by analyzing, evaluating, and, where necessary, questioning specific aspects of investment operations.

The need to receive independent assessments of investments will continue in the future as additional pressures are placed on investment managers to achieve higher returns. As more and more demands are placed on limited state resources, increased pressure will be placed on public entity investment officers to increase investment performance. This increased investment performance must be balanced with appropriate risk levels to avoid investment crises, such as the one TexPool experienced. Thus, the Legislature should also consider the benefits of requiring these assessments to be done on a periodic basis.

Recommendation:

We recommend that the Legislature consider requiring and overseeing periodic investment reviews at the major investing entities, to be performed by specialists who contract with, and report directly to, a legislative body such as the Legislative Audit Committee. These reviews should go beyond controls in order to assess asset allocations, investment strategies, investment performance, and benchmarks.

These reviews would provide legislative leadership and oversight officials with an independent assessment of investment performance and a second opinion on the reasonableness of the investment strategies and objectives.

These reviews should be conducted periodically, such as every three to five years, at each entity. The initial reviews could be more comprehensive and subsequent reviews could focus only on selected areas, such as changes in asset allocations and/or new or high-risk investment types.

Comments from the Employees Retirement System:

Should the Legislature choose to require a periodic review as recommended in this report, consideration and recognition must be given to the constitutional charge under which each of the fund's governing boards must make its decisions. As such, their decisions must be made in consideration of the purpose of the trust as well as its financial condition.

Each fund is unique in its purpose and financial condition, and the fiduciary responsibility of each of the governing boards is to establish a sound investment program designed to meet its own objectives. Therefore, a meaningful evaluation of an investment program should focus on the process by which investment decisions are made:

- *Are the decisions research-based rather than intuitive?*
- *Do the policies provide clear guidance, and are they practical and adaptable?*
- *Is the asset allocation designed to achieve the performance needs/objectives of the program?*
- *Is risk controlled?*
- *Are the performance benchmarks well-defined and consistent with the investment objectives?*
- *Is there a process to regularly review the asset allocation decision for continued validity?*

Comments from the Teacher Retirement System:

We agree oversight of investment performance and objectives is of great value. As noted, TRS has recently undergone such an audit by Bear Stearns Fiduciary Services. The TRS Board also hires independent advisors to assist them in carrying out their fiduciary duties.

Section 1-B:

Constitutional Restrictions Placed on the Permanent School Fund (PSF) and the Permanent University Fund (PUF) May Limit Managements' Effectiveness in Achieving Financial Goals

Constitutional restrictions imposed on the Permanent School Fund and Permanent University Fund may limit management's ability to achieve the primary goals of permanent endowment-type funds. The two competing goals of endowment funds are:

- To generate sufficient income for the needs of current beneficiaries
- To achieve sufficient growth of fund corpus (the assets of the fund) to maintain the purchasing power of income available for future beneficiaries (income growth should at least keep pace with inflation)

The Constitution dictates how investment proceeds for these two funds are to be distributed:

- All capital gains must be retained in fund corpus and may not be spent
- All current income (interest and dividends) after payment of administrative expenses must be distributed to beneficiaries

Because of these limitations, the Permanent Funds' policymakers constantly face a difficult balancing act in selecting investment strategies and investment types that will achieve both goals.

The following observations might be indications that the constitutional restrictions contribute to difficulties in achieving both the income and corpus goals of the Permanent Funds:

- In recent years, neither Permanent Fund has been able to achieve both of the above goals simultaneously.
- Most endowment funds have the flexibility that the Permanent Funds lack to ensure that financial goals are achieved.

- Investment strategies, such as asset allocation decisions, implemented to maximize overall return may have undesirable short-term effects on distributions if implemented by the Permanent Funds.
- Mineral income, which helps the Permanent Funds' corpus grow, has declined, requiring a greater emphasis on maximizing investment performance.
- The Permanent Funds face investment performance evaluation difficulties solely because of the constitutional restrictions.

In recent years, neither Permanent Fund has been able to achieve both the corpus and income growth goals simultaneously. Both Permanent Funds have grown corpus at rates exceeding inflation over a recent four-year period, but neither fund maintained inflation-adjusted income distributions:

Permanent School Fund (PSF)

- The market value of the PSF increased from \$10.2 billion to \$12.3 billion, a total increase of 20 percent, during the four-year period from August 31, 1991, to August 31, 1995.
- During this same period, income distributed to the PSF's beneficiaries (the State's public schools) increased from \$700 million to \$737 million, a total four-year increase of only 5 percent. Had income distributions kept pace with inflation during the period, one of the usual goals of an endowment fund, income of \$785 million would have been distributed in the last year. Additionally, income distributions in the last two years actually declined from the prior-year amounts.

Permanent University Fund (PUF)

- The market value of the PUF increased from \$3.9 billion to \$5.0 billion, a total increase of 26 percent, during this same four-year period.
- Income distributions actually decreased from \$258 million to \$250 million, a total decline of 3 percent. The income suffered year-to-year declines in three of the four years. Had income distributions kept pace with inflation during the period, income of \$289 million would have been distributed in the last year.

The inflexibility of the constitutional requirements may have prevented each Permanent Fund's income distribution from sharing equally in the growth in corpus over this relatively short period. The inability to maintain inflation-adjusted distributions can cause financial hardships for the various beneficiaries who rely on the funding. In addition, the State may be required to provide additional support to public schools from the General Revenue Fund when the Permanent School Fund's distributions are insufficient.

Most endowment funds operate with spending policies that are a function of the “total return” of the fund and therefore have flexibility that the Permanent Funds lack to ensure that financial goals are achieved. Most other endowment funds can be effectively managed by incorporating a spending policy that is ultimately linked to the “total return” of the fund (we refer to these as “total return funds”). “Total return” represents the sum of investment income (interest and dividends) and price appreciation (capital gains). Total return funds (assuming they are tax exempt) are indifferent as to whether their return is in the form of income or price appreciation. Their spending policy usually permits them to distribute, or “spend,” from both return components to whatever extent they deem prudent.

The State’s Permanent Funds are not managed exclusively for maximization of total return because of the constitutional requirements placed on the two components of their return. Income and gains are legally required to be segregated and used for different purposes, as previously discussed. As a result, simply increasing achieved total return does not guarantee that the Permanent Funds’ spending would similarly increase.

On the other hand, total return endowment funds not faced with these constitutional restrictions do have the flexibility needed to help them achieve their corpus and spending growth goals. These funds typically establish a payout formula that is linked to the fund’s market value. In addition, smoothing processes are often used in these payout strategies to minimize the otherwise disruptive effect on distributions when large year-to-year changes in market value occur. Consistent long-term growth of corpus thus automatically results in consistent long-term growth of distributions. If total return, minus inflation, exceeds spending, the real value of fund corpus will increase.

For example, if expected long-term total return is 9 percent, and projected long-term inflation is 4 percent, annual spending of less than 5 percent of the fund’s market value will allow the real value of the corpus to increase. If investment strategies can further enhance the total return achieved by this fund, management could either increase the spending rate or permit the fund’s real value to grow even faster.

Investment strategies, such as asset allocation decisions, implemented to maximize total return may have undesirable short-term effects on distributions if implemented by the Permanent Funds. Asset allocation decisions (the desired mix of asset types, such as stocks, bonds, and real estate) are the primary driver of investment return and risk expectations. Modern portfolio theory is based on the historical analysis of total returns and the volatility (also referred to as “risk”) of those returns. Using modern portfolio theory, fund managers can arrive at asset allocations that can improve expected total return while reducing, or not significantly increasing, expected risk.

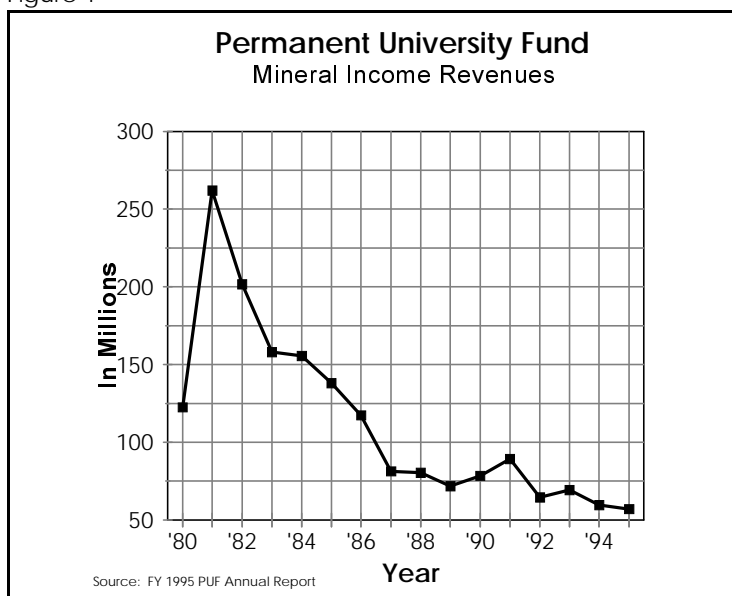
As discussed previously, by increasing long-term total return most endowments may be able to increase distributions. However, similar attempts to increase overall return

by the Permanent Funds could instead result in at least a temporary decline in available distributions.

For example, minutes of a 1994 Permanent School Fund Investment Advisory Committee meeting discuss a consultant's assessment that the PSF's existing asset allocation would result in a substantial long-term decline in the inflation-adjusted market value of the fund. In addition, the consultant predicted the inability of the PSF to sustain current income levels into the future. The PSF's allocation at that time was heavily weighted towards bonds.

To resolve these problems, the consultant proposed a dramatic asset allocation change. The allocation would reverse the existing mix of 35 percent equity (stocks) and 65 percent fixed income (bonds), changing to 65 percent equity and 35 percent fixed income.

Figure 1



Although in the past the Permanent University Fund has relied upon mineral income generated by the West Texas lands as a major source of new money, this revenue has been declining since 1982.

West Texas lands belonging to the Permanent Funds has generally declined both in absolute dollars and in its relation to the Permanent Funds' market value. In addition, these mineral reserves (including oil and gas) are exhaustible. This income is required to be added to corpus. As mineral income declines in significance, the Permanent Funds may need to place a greater emphasis on earning capital gains to maintain the purchasing power of their corpus. If capital gains are targeted to increase without also increasing total return, decreases to current income would be expected.

- Mineral income to the PUF, which peaked at \$262 million in fiscal year 1981, has since steadily declined to \$57 million in 1995, as depicted in Figure 1.

Minutes of the meeting state that, in adopting the allocation change, "the fund would have a reduction in income in the initial twelve years represented by a figure of about \$1.5 billion." The State Board of Education eventually made a commitment to phase in the proposed asset allocation to ensure the long-term health of the PSF. As of March 31, 1996, the PSF's equity component totaled 46 percent of market value. The General Appropriations Act for the biennium ending August 31, 1997, projects lower distributable income expectations from the PSF than were expected for the prior biennium.

Mineral income, which helps the Permanent Funds' corpus grow, has declined, requiring a greater emphasis on maximizing investment performance. Mineral income from

- Mineral income to the PUF has also declined significantly in its impact on corpus. The following illustrates, for selected years, this income as a percentage of the PUF's market value:

PUF Mineral Income			
Fiscal Year	Mineral Income	PUF Market Value	Percentage of Market Value
1980	\$ 123 million	\$ 1.2 billion	11%
1981	\$ 262 million	\$ 1.3 billion	20%
1995	\$ 57 million	\$ 5.0 billion	1%

The diminished contribution of this income source on the PUF's corpus means that the fund must now rely almost exclusively on its investments to provide the needed future growth.

The Permanent Funds face investment performance evaluation difficulties solely because of the constitutional restrictions. The Permanent Funds' investment results are statutorily required to be compared against investments of other funds. The most meaningful comparisons would be made to a large peer group of funds. However, a valid peer group, which should consist of funds having objectives, characteristics, and restrictions similar to the Permanent Funds, may not exist. Comparing the performance of the Permanent Funds to the performance of dissimilar funds may result in incorrect conclusions about the effectiveness of managements' investment decisions.

Allowing the Permanent Funds to focus solely on total return rather than on current income, by changing their legal structure, does not guarantee that future performance will improve. It should not be inferred from the above discussions that all prior income fluctuations or other performance issues resulted solely from legal structure issues. Performance of the Permanent Funds is also affected by policy and strategy decisions of former or current boards and the implementation of strategies by management. For the same reason, there can be no guarantee that removal of the existing constitutional restrictions will ensure strong growth and income for these funds in the future. However, because such changes could increase the likelihood of higher returns in the long run, further study of the issues may be in the State's interest.

A constitutional amendment would be required to change the Permanent Funds' legal structures. While we recognize the fact that the constitutional requirements placed on the Permanent University Fund have been in place for over 100 years, it may be possible to achieve the same level of statewide control and obtain higher performance (both in terms of total return and spendable income) by reevaluating both Permanent Funds' legal structures.

Recommendation:

We recommend that the Legislature consider the benefits of contracting for independent studies to review the Permanent School and Permanent University Funds' legal structure. Elsewhere in this report we recommend periodic consultant reviews of the State's major investing entities (see Crosscutting Issues, Sections 1-A, page 8, and 1-C below). The studies recommended here could be performed in conjunction with the other recommended reviews. The legal structure should be evaluated to determine the following:

- What are the strengths and weaknesses of the current structure compared to a total return structure?
- Can the Permanent Funds' objectives be achieved under the current structure?
- Are the Permanent Funds being managed effectively as non-total return funds?
- What would be the benefits of converting the Permanent Funds to total return funds? Are the benefits quantifiable?
- What would be the risks of converting the Permanent Funds to total return funds? Are the risks quantifiable? How could such risks be controlled?
- What impact would a total return structure have on the income distributions in the short-, intermediate-, and long-term?
- How long would it take to convert the Permanent School and University Funds to total return structures? Would the timing and appropriateness of the conversions be impacted by a downturn in the stock market or significant changes in interest rates?
- What specific legal controls should be required to ensure that spending policies in a total return framework would be based on sound fiduciary policies, preventing depletion of the corpus while maintaining adequate payout to support the public schools and the university systems?

Section 1-C:

The Legislature Should Consider Contracting With an Expert in Compensation Systems to Evaluate Job Design and Salary Structure for Investment Professionals

The Legislature should consider contracting with an expert to evaluate the job design and compensation systems used for the State's investment professionals. During our review, we found some indications that the job design and compensation systems for the investment professionals at the entities with large portfolios may not be entirely

effective. As a result, we are concerned that the State may not be in a position to attract and retain highly qualified investment professionals.

Effective job design and compensation systems are critical tools in attracting and retaining highly qualified investment professionals, which in turn impacts portfolio performance. Because of the magnitude of the portfolios, small improvements in the performance of investment professionals can result in millions of dollars in additional return for the State. In addition, the qualifications of investment professionals has some impact on the risk in the design and implementation of investment strategies and asset allocations. More highly qualified professionals should be able to do a better job of minimizing risk in achieving performance goals.

Effective job design and compensation systems consider competitiveness with the private sector, performance, the difficulty of the work required by each separate job, and the unique skills and abilities required to perform effectively. However, we noted a number of inconsistencies among the job designs and compensation structures for the State's investment professionals, suggesting that the job design and compensation systems in place at the entities may not be uniformly effective when compared to each other or individually effective when compared to the private sector. The inconsistencies included the following:

- **Investment Director Salaries** - Investment director salaries ranged from \$70,000 to \$185,000 per year as of August 31, 1995. However, successful investment professionals in the private sector can reportedly earn over \$1 million in salaries and bonuses.
- **Investment Director Level of Responsibility** - No correlation appeared to exist between directors' salaries and the level of responsibility. For example, the investment director at The University of Texas System (UT System) received a salary of \$185,000 for managing a portfolio totaling \$8.5 billion, while the investment director at the Teacher Retirement System received a salary of \$152,000 (\$33,000 less than the director at the UT System) for managing a portfolio totaling \$46 billion (which is more than five times as large as the UT System's).
- **Assistant Directors** - Only two of the five entities had assistant investment directors. There was a significant difference in the relationship of the directors' salaries to the assistant directors' salaries. At the Employees Retirement System (ERS), the assistant director earned 77 percent of the director's salary; at the Texas Education Agency (TEA), the assistant director earned 54 percent of the director's salary.
- **Fixed Income Director/Manager Salaries** - The salaries of fixed income director/managers ranged from \$41,000 to \$116,000.

- **Equities Director/Manager Salaries** - The salaries of equities director/managers ranged from \$43,000 to \$92,000 in fiscal year 1995.
- **Real Estate Experts** - Only the Teacher Retirement System assigned staff and resources specifically to real estate investments.
- **Private Investment Experts** - Only The University of Texas System assigned staff and resources specifically to private investments.
- **Performance-Based Compensation** - Only The University of Texas System had a performance-based compensation plan.

The differing levels of pay and responsibility suggest that some of the variations may simply be due to each entity's ability and willingness to compensate investment professionals. However, a number of other factors make side-by-side comparison of job design and compensation systems difficult and even potentially misleading. Such other factors include complexity of investment strategies and asset classes, extent of reliance on outside advisors or managers, and the number of separate funds managed.

The State should ensure that it is in the best possible position to attract and retain highly qualified investment professionals. Although the extremely high salaries earned by successful private sector investment professionals may make it impossible for the State to ever be competitive with respect to compensation, the State should ensure that the job design and compensation systems for investment professionals do not make it more difficult to attract and retain highly qualified employees. Only by ensuring that job design and compensation for investment professionals is internally and externally equitable can the State effectively recruit and retain highly qualified employees.

Recommendation:

We recommend that the Legislature consider contracting with an expert to evaluate the job design and compensation systems used for the State's investment professionals. The study should make recommendations to improve the State's ability to attract and retain highly qualified investment professionals, considering the equitability of compensation and levels of responsibility both internally and in comparison to the external market.

The review should include both internal and external comparisons to ensure that employee compensation and responsibility is appropriate, given relationships to other employees in the agency or university as well as employees in other Texas state agencies or universities. In addition, the review should compare compensation and responsibilities of state employees to similar private sector positions. (In Section 1-A, page 8, of the Crosscutting Issues we recommend periodic comprehensive reviews of

the major investing entities. The job design and compensation review discussed here could be performed in conjunction with those other reviews.)

The review should be based on an analysis and comparison of the duties and responsibilities of each position. Such an analysis should include, but not necessarily be limited to, the level and scope of the position's fiscal responsibilities, including:

- Number of dollars managed
- Diversity of investments and funds managed
- Complexity of the entity's asset allocation
- Risk in the entity's investment strategies
- Types of portfolios maintained

The review should also consider the level and scope of the position's supervisory responsibilities, including the number, type, and responsibilities of employees supervised.

External market data for similar positions should be collected and analyzed for comparison. Jobs should be matched based on the duties and responsibilities of the positions and relevancy of the market. Salary comparisons should then be made to comparable positions in the external market.

Finally, the review should include an evaluation of performance-based compensation plans for investment professionals. The review should provide background research, make recommendations about appropriate plan designs (if determined to be applicable), and identify controls that are needed to ensure that higher levels of compensation are not provided to employees through a performance-based compensation plan without actually attaining higher levels of performance.

Comments from the Employees Retirement System:

We agree that it is critical to a successful investment program to attract and retain highly qualified investment professionals, as well as to maintain a continuity of professionals in key positions. Further, we agree that a review of job design and salary structure for investment professionals should consider both internal and external comparisons, given relationships to other employees in the agency. It will be imperative that the expert in compensation systems have in-depth experience and knowledge of the investment environment in order to properly evaluate the responsibilities of each position. As stated in the background text to this recommendation, the number and complexity of factors make side-by-side comparison of job design and compensation systems difficult.

Care must be taken that recommendations resulting from this evaluation be confined to the positions themselves and their responsibilities/compensation levels rather than to how each investing fund has chosen to implement their investment programs. Some manage their programs internally with and without benefit of outside consulting

support, while others retain discretionary managers for a portion of their investment program. Although the differing implementation decisions would be of interest to each of the boards, we believe that there is no “correct” method; these decisions have been made by the respective funds based on their own resources and opinions.

Comments from the Teacher Retirement System:

We recognize that setting appropriate compensation levels for investment personnel is difficult and agree that this is an area the Legislature may want to review. TRS has provided salary information to the House Committee on Appropriations which is reviewing overall salary and benefit levels of state employees and assessing how they compare with the private sector. TRS supports the continued efforts to establish appropriate compensation levels for all employees including investment personnel.

Section 2:

The Legislature Should Consider Establishing Certain Consistent Statutory Requirements for the Largest Investing Entities

The Legislature should consider establishing certain consistent statutory requirements for the largest investing entities. Currently, statutory requirements affecting similar investment operations of four of the largest state investing entities are not consistent in the following areas:

- Investment expertise on the governing board
- Periodic independent investment performance reviews
- Evaluation and analysis of investment performance information
- Securities lending indemnification requirements

The differences in statutes could impact the quality of governing board decisions and the level of legislative oversight, including the oversight of investment strategies, objectives, and performance benchmarks; the perceived objectivity and reliability of reported investment performance; and securities lending income.

Required Expertise on Governing Boards - Proper discharge of the fiduciary responsibilities and required investment decisions of each board would likely be enhanced if more board members were required to possess investment expertise. Most board members for the four entities are not legally required to possess significant investment expertise. Statutes do require the Teacher Retirement System (TRS) Board to have a substantial number of members with some investment expertise. This requirement, however, is not in place for the three other large investing entities that manage portfolios ranging from \$9 billion to \$13 billion. The UT System Board of Regents has chosen to place the minimum number of UT System officials on the UTIMCO board and has selected five external investment professionals as board members.

Board members of these entities do have identical statutory responsibility for developing written investment objectives, which may include such issues as desired rates of return, acceptable investment risk, and investment time frames. In addition, all four boards are required to hire investment performance measurement services or to perform such measurement themselves. The statutorily required investment expertise of governing board members for the four entities is summarized in Figure 2.

Figure 2

Board Member Investment Expertise Requirements				
Investing Entity	Portfolio Market Value (in Billions)	Number of Board Members		Statutory Citation
		Current Total	Number Statutorily Required to Possess Investment Expertise	
Teacher Retirement System	\$49 ¹	9	5	Government Code, §§ 825.002 and .003
Texas Education Agency (Permanent School Fund)	\$13 ¹	15	0	Education Code, §§ 7.101 and .103
Nonprofit corporation (as statutorily authorized)		NS ³	0	Education Code, § 43.006(d)
Employees Retirement System	\$13 ¹	6	0	Government Code, §§ 815.001 - .003
The University of Texas System Administration (PUF and other UT investment funds)	\$9 ²	9	0	Education Code, §§ 65.11 and .12
UTIMCO - Nonprofit corporation operating as of March 1, 1996		9	1 or more	Education Code, §§ 66.08(d) and (e)
¹ Investments and cash equivalents at March 31, 1996 ² Investments and cash equivalents at February 29, 1996 ³ Number not specified; must be Board of Education member				

Required Periodic Independent Investment Program Reviews - The Teacher Retirement System is currently the only one of these entities statutorily required to have periodic independent evaluations of their investment practices and performance (Government Code, Section 825.512 (a)-(d), added by the 74th Legislature). The benefits of such reviews are discussed in detail in Section 1-A, page 8.

Required Investment Performance Evaluations - Statutes are not consistent in terms of who should perform evaluation and analysis of investment results and against what universe the results are to be compared. Although three of the entities are required to use an outside performance measurement service, UT System is not. Two of the three entities required to use outside performance measurement services must use a “well-recognized” outside service. In addition, statutes use several different definitions of the types of funds against which the State’s major funds are to be compared.

Requiring outside performance measurement firms that do not have a vested interest in evaluating investment results in a favorable light enhances the objectivity, consistency, and comparability of this critical information. In addition, the selection of and comparison to appropriate peer groups enhances the evaluation of a fund's performance. For example, appropriate peer groups should include other funds with similar characteristics, such as fund size, purpose, and investment restrictions. Thus, it would seem that the required process to evaluate performance results (i.e., who performs the evaluation and the definition of the peer group) of TRS and ERS should be similar. Likewise, TEA and the UT System would each be expected to have the same performance evaluation process required for the Permanent School and Permanent University Funds.

The following table summarizes the statutory requirements for investment performance evaluation:

Figure 3

Statutory Requirements for Investment Performance Measurement			
Investing Entity	Party Required to Perform Evaluation and Analysis	Universe Against Which to Compare Investment Results	Statutory Citation
Teacher Retirement System	"board . . . shall employ one or more performance measurement services"	"other public funds"	Government Code, § 825.301(c)
Texas Education Agency (PSF)	"board shall employ a well-recognized performance measurement service"	"other public and private funds"	Education Code, § 43.004(b)
Employees Retirement System	"board . . . shall employ one or more well-recognized performance measurement services"	"other public and private funds"	Government Code, § 815.301(d)
The University of Texas System Administration (PUF only)	"board of regents shall evaluate and analyze the investment results of the permanent university fund"	"other funds operating with substantially the same objectives and restrictions"	Education Code § 66.06(b)

Securities Lending Program Indemnification Requirements - Statutes do not require consistent levels of indemnification for securities lending programs of the four entities. ERS is the only entity that is statutorily required to obtain indemnification for both credit risk and collateral reinvestment risk in its securities lending program (the State Board of Education's constitutional authority is presumed to override TEA's statutory restrictions).

Securities lending programs face two primary risks: credit risk due to borrower defaults, and collateral reinvestment risk due to the program administrator’s inability to earn as much on invested cash collateral as must be paid to the borrower as a rebate or interest for use of that collateral.

Indemnification for collateral reinvestment risk is uncommon and becoming more difficult to obtain. In addition, although the more restrictive indemnification requirements may serve to reduce the risk of loss to ERS, the additional restrictions simultaneously reduce ERS’s potential securities lending earnings. There may be some differences among the entities that would make some less risk tolerant than others. However, even without a statutory requirement to obtain this indemnification, each entity appears to possess the necessary investment expertise to impose significant controls over collateral reinvestment to minimize this risk to acceptable levels.

The following table summarizes the statutory indemnification requirements for the four entities:

Figure 4

Statutory Indemnification Requirements			
Investing Entity	Do Statutes Require Indemnification of Borrower Default?	Do Statutes Require Indemnification of Collateral Reinvestment?	Statutory Citation
Teacher Retirement System	Yes	No	Government Code § 825.303(b)(3)
Texas Education Agency (PSF)	Yes ¹	Yes ¹	Education Code § 43.018(b)(5) ¹
Employees Retirement System	Yes	Yes	Government Code § 815.303(b)(3)
The University of Texas System Administration (PUF and other UT investment funds)	N/A ²	N/A ²	No relevant statutes were found in Education Code. ²

¹ Attorney General Opinion DM-175, 1992, concludes that the State Board of Education already has the constitutional authority, based on Article VII, Section 5(d) of the Constitution, to operate a securities lending program provided the program meets the constitutional definition of a prudent investment. Because of the broad authority granted the Board of Education by the amendment creating Article VII, Section 5(d), the Legislature apparently cannot place statutory restrictions on this authority. Therefore, we believe that the above statutory indemnification requirements do not apply to the Board of Education.

² Although there are apparently no statutes authorizing, nor restricting, the securities lending program, the above cited Attorney General Opinion also refers to Article VII, Section 11b of the Constitution. That section granted the UT System Board of Regents the same unrestricted investment authority as that granted to the State Board of Education. Therefore, by inference, no statute is needed to permit the Board of Regents to operate their securities lending program.

Recommendation:

We recommend that the Legislature consider reviewing the statutory investment requirements discussed above and determine whether the existing inconsistencies in wording are intended. We recognize that there are differences among the entities that affect their investment environment. However, the Legislature could enhance its oversight and the effectiveness of investment practices by eliminating statutory inconsistencies that do not directly stem from differences among the entities.

Comments from the Employees Retirement System:

Required Expertise on Governing Boards - The ERS Board of Trustees has a broad range of responsibilities. In addition to the administration of the investment program and the state's defined benefit retirement program, the ERS Board of Trustees also administers the insurance, flexible benefits, and deferred compensation programs. The ERS Board of Trustees is composed of six members--three elected from within the membership of the ERS, and three appointed. Although the Trustees are not legally required to possess significant investment expertise, investment expertise may be a consideration in any of the three appointments. In addition, the Trustees appoint an Investment Advisory Committee, a group of investment professionals, to advise them. As stated in the Trustees' Investment Policy dated February 21, 1996 in Section 4, Item 4, "The Investment Advisory Committee (IAC) is composed of at least five and not more than nine members. The members are selected on the basis of experience in the management of a financial institution or other business in which investment decisions are made or as a prominent educator in the fields of economics or finance . . . The IAC reviews the investments of the ERS to be sure that they conform to the investment objectives and policies adopted by the Board of Trustees. From time to time, together with the ERS staff and investment consultants or advisors, they recommend to the Board of Trustees asset mix, portfolio strategy, investment policy and eligible securities." We believe this structure provides greater depth with a variety of perspectives, allows the investment professionals to concentrate on investment matters, and provides for well-informed investment policy decisions.

Comments from the Teacher Retirement System:

TRS understands the benefits of having consistent statutory requirements but also recognizes the discretion of the Legislature to impose unique requirements. Given the differing purposes for endowment funds versus pension funds, TRS believes that it is appropriate to consider them separately.

Section 3:

Oversight Bodies Should Consider Requiring Stronger Controls Over Nonprofit Corporations Managing Public Funds' Investment Functions

Establishing private corporations to handle public funds' investment functions may technically remove these functions from certain laws governing state employee and officer conduct, open meetings, and open records. Therefore, transfer of investment activities could result in reduced accountability to the public for these state investments.

The authorization to establish two private "affiliate" organizations diminished public accountability for investment operations. The University of Texas System's and the Texas Education Agency's authorized investment corporations were made subject only to their enabling legislation and the Texas Non-Profit Corporation Act. General State laws governing the conduct of state officials and employees, and governing open meeting and open record requirements, may not apply to these nonprofit investment corporations. Such state laws serve as controls to ensure that public servants are accountable for, and do not unjustly benefit from, public funds that they manage.

To the extent that the corporate boards and management do not place great emphasis on public accountability and do not voluntarily choose to adopt provisions of more stringent state laws, protection of the public interest may be diminished. A draft of the bylaws for the Texas Education Agency's proposed investment corporation indicated management's intention to operate the corporation in accordance with the Open Meetings Act. However, the State Board of Education has not proceeded further with the creation of the corporation and therefore never formally adopted these bylaws.

Recent examples of the potential reduction of public accountability include the following:

- The State Auditor's Office was unable to attend a UTIMCO board meeting without receiving prior approval.
- UTIMCO management initially refused to provide copies of corporate board minutes to the State Auditor's Office, citing the corporation's independence. Three months later we were provided with these minutes, and were granted access to future minutes, with the stipulation that the minutes were confidential and did not constitute public information.

Prior to the formation of the corporation, notice of the meeting and its agenda would have been published in advance, attendance would have been open to the public, and board minutes would have been a matter of public record.

Recommendation:

Legislators and/or oversight board members at both The University of Texas System and the Texas Education Agency should assess whether these investment corporations can function effectively and competitively within the framework of current law addressing official conduct, open meetings, and open records. If oversight officials determine that applying such laws to these corporations would not substantially impair investment returns, these officials may wish to modify statute or policy accordingly to restore the previous level of public accountability. If such laws are considered too burdensome, some statutory or policy changes to increase accountability may still be desirable.

Section 4:

ERS and TRS Should Request an Attorney General Opinion Regarding Delegation of Investment Authority and Constitutionality of Securities Lending Programs

ERS and TRS should jointly request an Attorney General Opinion regarding their ability to delegate investment authority and the constitutionality of their statutorily authorized securities lending programs. ERS investment management and legal counsel believe that the Constitution prohibits the ERS board from delegating the investment function to outside investment managers. If ERS is correct in its assessment, we believe the legality of the current securities lending programs of both ERS and TRS is questionable. If ERS is incorrect, then both retirement systems may want to consider whether using outside investment managers could improve their investment functions.

ERS bases its conclusion that its investment function cannot be delegated to outside managers on the 1982 Attorney General Opinion No. MW-429. That opinion, rendered on behalf of the Permanent School Fund, concluded that the fund's constitutionally designated investment function could not be delegated by the Legislature to another entity (a commercial bank). The Constitution describes the investment authority of a statewide retirement system, which includes both ERS and TRS.

We believe that it might not be appropriate for ERS to apply the conclusions in Opinion No. MW-429 to the retirement system without further clarification. The constitutional language describing the statewide retirement systems' investment authority appears less specific than the language, in effect at the time of that Opinion, relating to investment of the Permanent School Fund. Although the Attorney General concluded that the Permanent School Fund's investment function could not be delegated to another entity, we are not certain the same conclusion would have been reached regarding the retirement systems' investment function.

Opinion No. MW-429 ultimately determined that the Permanent School Fund's securities lending program, authorized by the Legislature, was unconstitutional because it involved a delegation of the investment function to a commercial bank that would administer the program. The securities lending programs of ERS and TRS are administered by commercial banks, as authorized by statute. If, as ERS contends, its Board of Trustees cannot delegate its investment authority, we do not see how their securities lending program could be regarded as other than such a delegation in view of the Attorney General's 1982 conclusion.

If ERS is incorrect in its conclusion that Opinion No. MW-429 applies to its own investment authority, both retirement systems may in fact be allowed to delegate other investment decisions to external professional investment managers. We believe that the retirement systems would then want to determine if they could enhance net returns, further diversify into investment types in which they may lack in-house expertise, or otherwise improve their investment function by using external investment managers. To achieve the above expected benefits, and based on revised constitutional investment authority, both the Permanent School Fund and Permanent University Fund currently use external managers for some of their portfolios.

Recommendation:

We recommend that ERS and TRS seek an opinion from the Attorney General to resolve the following issues:

- Are the retirement systems constitutionally authorized to delegate investment authority?
- If so, can the systems delegate discretionary investment authority to external investment managers?
- If not, are the systems' current securities lending programs constitutional?

Management's Response from the Employees Retirement System:

We are of the opinion that the ERS is not constitutionally authorized to delegate full discretionary investment authority to external investment managers. We are also of the opinion that the ERS has not delegated discretionary investment authority to its securities lending agent due to the strict parameters imposed on the reinvestment of cash collateral. Current investment planning does not include retaining external investment managers on a discretionary basis. If, in the future, interest does develop in considering that investment strategy, we agree that all potential legal issues should be carefully reviewed.

Management's Response from the Teacher Retirement System:

Securities lending by TRS is explicitly authorized by statute, and courts will strive to give it an interpretation that would uphold its constitutionality. TRS has structured its securities lending program with detailed, stringent restrictions to avoid delegating to its lending agent the system's own constitutional investment responsibilities. Before TRS delegates full investment authority to external money managers, it should carefully consider, among many other things, whether to seek clarification of its authority through a fiduciary action for court instructions, statutory changes, constitutional amendment, attorney general's opinion, or other course of action. Since no such delegation is presently contemplated, there is no immediate need to evaluate which of these options is most appropriate.

State Auditor's Follow-Up Comment:

We believe that the responses from the two retirement systems illustrate that the issues surrounding delegation authority are not well-settled. Resolving this issue now, by posing the appropriate questions to the Attorney General, would place the retirement systems in a better position to respond quickly should either system later determine that the use of external portfolio managers would benefit their investment program.

In addition, the retirement systems' contention that the extent of restrictions placed on their securities lending programs do not represent a prohibited delegation might possibly be extended to the use of external portfolio managers. Fiduciaries of investment funds who use outside managers for some or all of their portfolios typically require those managers to adhere to specific contractual restrictions. Thus, it might be argued that by imposing restrictions (such as required investment style, limitations on the amount of cash held), by actively monitoring and evaluating manager performance, and by reserving the right to terminate external managers for any reason, the retirement systems would not be impermissibly delegating investment authority.

Finally, an Attorney General Opinion on whether, or to what extent, the retirement systems have the authority to use external portfolio managers might be of interest to legislators. For example, both systems' enabling statutes permit the boards to "contract with private professional investment managers to assist the board in investing the assets of the retirement system." However, these statutes do not address whether the retirement systems could permit these outside managers to independently make and execute certain investment decisions. The Legislature has specifically permitted the State Board of Education and The University of Texas System Board of Regents to delegate such investment decision-making to external portfolio managers for the Permanent School and Permanent University Funds.

Employees Retirement System of Texas

Overall Summary

Overall, controls over investment practices at the Employees Retirement System (ERS) are adequate to ensure accountability for ERS's investments. Major strengths included:

- The effectiveness of controls over investment transactions and over the selection and monitoring of portfolio advisors
- The appropriateness of the organizational structure of the investment function and its position within ERS
- The communication of appropriate information to decisionmakers

Personnel files indicate that key investment personnel have the necessary educational background and experience to fulfill their responsibilities. The Board of Trustees (Board), in conjunction with its outside consultant and the Investment Advisory Committee, provides adequate oversight over the investment function. Opportunities to enhance controls in some of these areas were also noted.

Although we noted no major items of noncompliance, ERS did not consistently prepare automated compliance monitoring reports on a timely basis. Board policy requires quarterly preparation of reports documenting compliance with investment diversification policies. Reports for the second and third quarters of fiscal year 1995 were not prepared until the end of the fourth quarter. (See Section 1-A below.)

Section 1:

ERS Can Enhance Certain Operations Related to Investment Activities

Section 1-A:

ERS Did Not Apply Its Process for Establishing and Monitoring Compliance With Board Policies In a Consistent and Timely Manner

ERS did not consistently and timely prepare its automated reports for establishing and monitoring compliance with certain board diversification policies. We noted the following examples of noncompliance with investment policies during fiscal year 1995:

- Compliance reports were not prepared and provided quarterly to the Executive Director as required by board policy. The reports for the second and third quarters of fiscal year 1995 were not prepared until the end of the fourth quarter. As a result, if significant noncompliance had occurred during those

two quarters, it may have gone undetected and uncorrected by management until the end of the fiscal year.

- These two reports indicated ERS was materially in compliance with board policies at the end of those quarters, although a few instances of technical noncompliance with policy were identified on the reports. The cover page for each report indicated investment management's action to resolve the noncompliance.

The noncompliance items involved exceeding policy limits on investment concentration in the securities of a single corporation or on percentage ownership of a single issuer's debt.

In addition, in one instance the automated report omitted the total number of shares outstanding for one company in ERS's equity portfolio. This amount had not been separately researched and manually entered on the report. As a result, the compliance report did not demonstrate for this security whether ERS was in compliance with policy restrictions limiting ownership to no more than five percent of the total voting stock in any one corporation.

Management responsible for monitoring compliance with board investment policy indicated to us that compliance-related reports from the automated investment management system, in place at the time of our review, were difficult to produce. In addition, these reports did not automatically flag amounts that were nearing policy limits so that corrective action could be taken in advance to prevent occurrences of noncompliance. A compliance module for the automated system was expected to be available in the near future which may resolve these issues.

Recommendation:

We recommend that ERS ensure that compliance monitoring with board investment policies is consistently performed at the required intervals. ERS's actions should include the following:

- Investigate the possibility of obtaining new compliance software for the automated investment information system or consider developing an in-house application to streamline the compliance monitoring process.
- Ensure that any information omitted on automated reports is manually recorded on the reports where necessary to demonstrate compliance.

Management's Response:

The compliance report is prepared by the 30th of the month following the end of each fiscal quarter and furnished to the Executive Director and the Internal Auditor.

- *The compliance reports referred to in the audit affected two quarterly time periods and were delayed due to the implementation of the new investment-accounting system.*

The noncompliance item regarding the percentage ownership of a single issuer's debt applies to a policy which was subsequently removed from the Board of Trustees Investment Policy in February, 1996. Because there was not a strong investment reason for the liquidation of the securities at issue and because of the anticipated removal of this policy, it would have been imprudent to liquidate these securities to enforce compliance.

A compliance module has been acquired and installed in test mode of the investment-accounting system, and is currently in development.

- *The current procedure for the preparation of these reports includes a review for fields that were not populated through the automated process, and manually updated.*

Section 1-B:

Controls Over the Securities Lending Program Can Be Improved

Overall, controls over the securities lending program were adequate. The most effective control was that the securities lending agent provides full indemnification to ERS for losses due to borrower defaults and to reinvestment of cash received as collateral. However, we noted that ERS could enhance some controls over the program, including contract terminology and Board oversight. As of August 31, 1995, ERS reported \$2 billion in securities on loan and fiscal year income from the program of \$3.4 million.

Contract Terminology

- There is no explicit prohibition on lending securities to affiliates of the administrator. Loans to a party related to the administrator, who might not be easily identified on the list of approved borrowers, might not be made on terms most favorable to ERS, potentially reducing the associated lending income.
- There is no prohibition on loans of mortgage-backed securities, including pass-through certificates or collateralized mortgage obligations (CMOs). Borrowers are permitted to sell the securities borrowed from ERS. Because it may be difficult for a borrower or the program administrator to replace such investments with identical mortgage-backed securities, the returned securities may have different cash flow characteristics than those loaned. Alternatively, the administrator may replace the loaned security with cash equal to the

market value of the loan. Although ERS would incur no economic loss in this case, the net effect would be a sale of a security that ERS had intended to hold.

Board Oversight

- The Board neither requires nor receives periodic financial or compliance information about the program, with the exception of annual program income reporting. Trend information on income in total dollars, yield in basis points as a percent of lendable securities, and other program performance measures could be useful to the Board in assessing ongoing administrator performance.

Recommendation:

We recommend that ERS attempt to modify contract terminology to include prohibitions against loans to affiliates of the administrator and restrictions on loans of mortgage-backed pass-through and CMO securities. In addition, Board oversight of the program should be strengthened by requiring that management submit periodic reports of relevant securities lending results, including comparisons to prior periods, for Board review.

Management's Response:

The ERS concurs that an explicit contractual prohibition against loans to affiliates of the administrator, consistent with current practice, would be appropriate. Further, the ERS concurs that an explicit contractual prohibition against the lending of any security where the return of that specific security is unlikely would be appropriate. The basis for restricting loans of mortgage pass-through securities is due to the difficulty in ensuring that the specific pool that is loaned is returned; the ERS' current securities lending administrator does not lend these securities as a matter of practice for this very reason, and their agreements with the borrowers, a sample of which is attached to the ERS contract, provides this restriction by defining "loaned securities" as "all securities loaned to the Borrower hereunder or 'an equal principal amount of the same issue or series' and any securities issued in exchange therefor." Please note that there are securities lending administrators whose lending program is designed to lend pass-throughs in such a way that they can guarantee the return of the same pool. The ERS may at a later date choose to enhance its lending program by expanding in this area. The lending of CMO securities is restricted by the contract administrator, not because of the problems associated with Pass-Throughs, but because of administrative problems in the collection of principal payments.

We concur with the recommendation that the Trustees require management to submit periodic reports relevant to the securities lending activities.

Section 2:

Controls and Processes to Help the Board Provide Effective Oversight of ERS's Investment-Related Activities Should Be Improved

Some improvements in the controls and processes that help the Board perform its oversight responsibilities may enhance the ability of the Board to consistently make effective decisions. The Board's duties include approving investment policy, strategy, and specific investment recommendations; monitoring and evaluating investment performance; selecting and evaluating consultants, advisors, and members of the Investment Advisory Committee; and approving the internal audit plan. These decisions are critical to both the safeguarding and performance of ERS's investment portfolio, valued at \$12.6 billion on March 31, 1996.

We noted the following instances in which the effectiveness of Board oversight could be enhanced:

- **Investment-related policies have not been managed in a way that ensures they are up-to-date and complete.** The policy manual is not updated according to a formal timetable. In the past, the policy manual has been updated on an "as needed" basis.

Regular review and formal revision of policies and procedures is needed because the investment environment is continually changing. Without regular updates, existing policy may not provide sufficient guidance to investment management or other users of the policy as the operations of ERS adapt to changes in this environment.

- **Board member training could be expanded in several areas in which the Board has decision-making responsibilities.** Board members, none of whom are required to be investment professionals, may benefit from additional ongoing training to effectively fulfill all of their investment-related duties. The Board currently receives information and training on a variety of investment-related topics from ERS staff, investment advisors, and an ongoing investment consultant. However, some members expressed an interest in receiving additional training in the following areas.
 - Asset allocation methods
 - Selection of investment managers
 - Economic conditions and trends
 - Comparisons with the investment activities of similar entities
 - Issues related to "alternative" investments (investments outside the traditional public equity or fixed income capital markets).
- **Controls and processes to provide information to the Board could be improved.** We noted the following:

- See Section 1-B, page 31, for issues related to Board oversight of the securities lending program.
- The presentation of annual information concerning brokerage commissions for international equity securities might have led the Board to erroneously conclude that international equity commissions are lower than those for domestic securities. Reports to the Board show fiscal year 1995 commission costs of 5.0 cents per share for domestic stocks and 3.2 cents per share for international stocks. ERS paid \$5.1 million in commissions during the fiscal year.

However, international equity commissions are computed on the dollar value of the total transaction rather than on a fixed price per share as is done for domestic equities. Individual share prices for international equities are generally much lower than prices for domestic equity shares. Had all commission costs been presented in “basis points” (one basis point is 1/100th of one percent) of the total transaction value, the Board would have seen that domestic commissions cost an average of 13 basis points while international commissions cost 31 basis points.

Recommendation:

We recommend that the Board and ERS management take the following steps to enhance the Board’s ability to provide effective oversight:

- Periodic Investment Policy Revisions - ERS should commit to a formal timetable, preferably at least annually, for reviewing and revising investment policy. More frequent changes should occur on an as-needed basis.
- Board Training - To ensure that each Board member receives sufficient training, ERS should consider enhancing its training program for Board members to include the following:
 - Identification and prioritization of individual training needs
 - Determination of when training should be provided by an independent source. Using independent sources can help Board members effectively evaluate information received from sources who are directly involved, and thus have a vested interest, in the investment process. Management may wish to obtain input from the Board members in making this determination.

- Identification of training resources and formats, including consideration of alternative formats such as video and audio tapes, textbooks, and manuals
- Evaluation of the training program for effectiveness and implementation of necessary modifications

In addition, we believe that much of the investment training needs are similar for Board members at the state entities with the most significant long-term investment portfolios (TRS, ERS, TEA, and UT System/UTIMCO). Therefore, to the extent that board members of these entities need training in investment topics that are not entity-specific, we recommend that ERS attempt to coordinate its training programs with the other entities' programs. This could reduce overall training costs, increase communication among board members of the different entities, expose the participants to a wider variety of viewpoints, and make it easier for board members to find a convenient time and place to obtain this training.

- Securities Lending Oversight - Our recommendations for additional Board oversight of the securities lending program is discussed in Section 1-B, page 31.
- Brokerage Commission Reports - When brokerage commission reports are presented to the Board for both domestic and international equities, management should report them in basis points. Per-share commissions for domestic equities would also be useful for comparison to prior periods or to other entities, because that is the typical measurement basis for those commissions.

Management's Response:

- Periodic Investment Policy Revisions - *The ERS concurs with this recommendation.*
- Board Training - *The ERS concurs with this recommendation. The primary training currently provided to the Trustees in the investment area is through an annual workshop held jointly with the Investment Advisory Committee. While the training is conducted in part by ERS staff as well as the ERS investment consultant, the benefits of customizing the information to the Trustees' needs provides for a very efficient and concentrated use of time. In addition, the interaction afforded between the Trustees and the Investment Advisory Committee provides a variety of perspectives. The investment consultant, well-versed in the public as well as the private pension plan arena on a national level, provides comparisons with the ERS's peers. The agenda typically covers general application areas such as fiduciary responsibility,*

asset allocation methods, portfolio structure development and securities lending, as well as the specific application of these topics to the ERS.

Certain high quality workshops are available from time to time and have been communicated to the members of the Board of Trustees. A more concentrated effort will be made to distribute these notifications, as well as to solicit input for other training needs.

The coordination of training between the different investing entities will be evaluated for feasibility and cost-effectiveness.

- *Securities Lending Oversight - Discussed in Section 1-B above.*
- *Brokerage Commission Reports - Commission reports developed within the new investment-accounting system have been modified to report international commission in basis points. Domestic commission reports will be revised to include both per share commission rates, the form in which they continue to be negotiated, as well as in basis points for comparison to the international commission. Historically, these commission reports included a prior period comparison. Reports for the current fiscal year will be modified to provide them as well.*

Section 3:

Procedures for Ensuring Independence Should Be Expanded

ERS's investment policy incorporates a code of ethics and provisions to prevent conflicts of interest from impacting investment decisions of Board and Investment Advisory Committee members as well as investment personnel. However, current procedures do not ensure that these key officials, other than ERS employees, understand and agree to the expected standards of conduct, nor ensure that actual or potential conflicts of interest will be detected.

ERS's investment policy requires all persons responsible for investment decisions or who are involved in the management of assets to be governed by the Standards of Professional Conduct of the Association for Investment Management and Research Standards (Standards) and by applicable state statutes. However, Board and Investment Advisory Committee members are not provided with a copy of these Standards and are not required to affirm compliance in writing. In addition, although Board members are required by law to file financial disclosure statements with the Texas Ethics Commission, ERS does not require these officials to periodically file such statements internally for review by ERS personnel.

ERS's professional investment staff is required to sign a yearly affirmation of compliance with the Code of Ethics and is also required to periodically report all personal investment activity to the internal audit section. Pre-approval of investment

staff members' trades is not required. These requirements do not extend to the Advisory Committee and the Board. However, to the extent that Committee and Board members are not involved in individual trading decisions, disclosure of their investment activity would not be necessary.

Recommendation:

We recommend that ERS strengthen its policies to ensure the independence of all parties involved in investment decisions. We have noted that the Teacher Retirement System appears to have adopted the most stringent ethics requirements of all of the State's major investing entities. Therefore, we strongly encourage each such entity, including the Employees Retirement System, to adopt similar policies. (The Teacher Retirement System's ethics policies are included in this report as Appendix 3, page 156.)

To address the specific concerns mentioned above, we recommend that ERS add procedures to its investment policy requiring the following:

- Each member of the Board and Investment Advisory Committee should be given a copy of the Standards of Professional Conduct established by the Association for Investment Management and Research.
- Members of the Board and Committee should sign an annual affirmation of compliance with the Standards which are adopted as ERS's Code of Ethics.
- Members of the Board should periodically file financial disclosure statements with ERS. Such financial information should be periodically reviewed against ERS's investing activities to ensure no conflicts of interest occurred.

To further strengthen the existing personal conduct requirements, we also recommend the following:

- Members of the professional staff should obtain the approval of the Deputy Director of Investments prior to making personal trades in securities in which ERS also has an interest. Personal trades should not be allowed on the same day that ERS is actively trading in the security.

Management's Response:

We concur and will recommend to the Board of Trustees that the members of the Board of Trustees and the Investment Advisory Committee be specifically incorporated into the Code of Ethics and Personal Investment Activities section of the Investment Policy, consistent with their responsibilities to the System, by signing an annual affirmation of compliance with the System's Code of Ethics--the Standards of

Professional Conduct established by the Association for Investment Management and Research (Standards). Further, a copy of the Standards will be provided to each member as recommended.

Because the Board of Trustees is not involved in the day-to-day investment activities, they do not have advance knowledge of specific buy and sell decisions. As such, the possibility of a conflict of interest with System trading activity does not exist, and there does not appear to be a benefit to a periodic filing of financial disclosure statements by Board members.

We concur with the recommendation on prior approval for personal trade activity by professional staff.

Section 4:

There Are Opportunities to Improve the Employee Performance Evaluation Process

We noted certain strengths in ERS's controls over human resource management, including the following:

- Except for the Deputy Director of Investments, investment personnel were given annual employee performance evaluations.
- All investment personnel had been given a thorough position description for their individual position.

However, we also noted certain weaknesses in the monitoring and evaluation of employee performance. These weaknesses included the following:

- Performance evaluations did not evaluate employees on investment-related technical skills. For example, evaluations did not include quantitative measures, such as comparison of performance against financial benchmarks or against other portfolio managers who have similar objectives, or consideration of dollar amounts of portfolios managed. Another skill-related factor that might be quantitatively evaluated, using proprietary software, is the traders' buy and sell performance. This software compares equity traders' actual transaction prices to average prices for the same stock during the trading period.
- Evaluations did not address how well employees helped meet specific, measurable goals of the investments division relevant to the employees' duties.
- The Deputy Director of Investments did not receive a performance evaluation.

Thus, the current evaluation process might not achieve the desired objectives of a performance evaluation system, which include encouraging good performance, identifying and correcting substandard performance, and providing a basis both for future human resource decisions and for an employee's future training and development.

As of September 1995 there were 13 investment division employees considered "professional" staff. At that date, the annualized salaries for these key employees totaled \$543,000. Their average annual salary as of that date was \$42,000, with individual salaries ranging from \$24,000 to \$87,000.

Recommendation:

We recommend that management enhance the current evaluation process to make all employees accountable for job duties specific to their position. Evaluation criteria should include quantitative assessments of technical skills and should assess, where practical, how well the employee's performance helped reach specific investment goals.

Management's Response:

Job performance is communicated on an on-going basis, while the "formal" evaluations serve to periodically document that performance. A new form is in the process of being adopted on an agency-wide basis which will allow management staff within the Investments Division to customize each evaluation to the specific job responsibilities as they relate to the investment goals.

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Teacher Retirement System

Overall Summary

Overall, controls over investment practices at the Teacher Retirement System (TRS) appear adequate to ensure accountability for TRS's investments. Major strengths included:

- The level of oversight provided by including investment expertise on the Board of Trustees (Board) and by the use of external consultants and advisors
- The effectiveness of controls over investment transactions, comprehensiveness of ethics policies, appropriateness of the organizational structure of the investment function and its position within TRS
- Communication of appropriate information to decisionmakers

In addition, key investment personnel appeared to have the necessary educational background and experience to fulfill their responsibilities. Opportunities to enhance controls in some of these areas were also noted.

Although we noted no instances of noncompliance with laws or with Board-approved investment policies, TRS generally did not have a comprehensive method for monitoring compliance with such laws and policies. (See Section 1 below.)

An outside consultant, Bear Stearns Fiduciary Services, Inc., was hired by the Legislative Audit Committee in late 1995 to conduct a comprehensive investment performance review of TRS. To avoid duplication of work to be performed by the consultant, the scope of our review at TRS was somewhat more limited than our scope at the other entities in this report.

Section 1:

TRS Did Not Have a Comprehensive Method for Monitoring Compliance With Laws and Policies

TRS did not have a formal method for monitoring compliance with laws and with Board-approved investment policies, other than monitoring compliance with asset allocation and strategy policy restrictions. We noted the following:

- There was no requirement for compliance reporting to the Board or its designee.

- TRS's monitoring of compliance with diversification limitations and other policy restrictions was inefficient because it was done manually by the portfolio managers.
- The automated investment management software did not alert TRS's staff that positions in specific securities or categories of securities were nearing investment policy limits or that bond quality ratings were no longer acceptable.

Investment assets could be at a greater risk of loss if not properly monitored for compliance with the investment policy. For example, bonds with acceptable quality ratings at the time of purchase could suffer subsequent rating downgrades to levels unacceptable to the Board. Such lower ratings could result in TRS holding securities with a higher risk of default or loss than the Board intended. Compliance monitoring would alert management that corrective action may be warranted.

In addition, the Securities and Exchange Commission (SEC) requires that owners of 5 percent or more of a corporation's total outstanding stock file a statement with both the SEC and the corporation. If stock ownership is not monitored, TRS might not be aware when its holdings meet the reporting requirement's threshold, resulting in a violation of the SEC's regulations.

TRS recently purchased new investment accounting/portfolio management software and is in the process of tailoring it to meet the needs of the investment and investment accounting divisions. Automated compliance monitoring is included in these needs.

Recommendation:

We recommend that TRS consider making the following improvements to investment compliance monitoring:

- Continue to investigate the possibility of automating the monitoring function by adding a compliance module to the new investment software.
- Design other reliable methods to monitor policy restrictions that cannot be automated.
- Establish requirements for periodic compliance reporting to the Board or its designee.

Management's Response:

We agree monitoring compliance is extremely important. TRS is currently evaluating ways to automate most features of compliance with laws and policies. In addition, the

Internal Audit Department recently completed a special project related to Investment Policy compliance, and offered several recommendations for improvement, including periodic disclosure to the Board.

Section 2:

Opportunities Exist to Improve the Flow of Information Related to TRS's Investment Activities

Section 2-A:

Investment Committee Reports Can Be Improved

Overall, the reports reviewed contained useful information needed by the Board of Trustees, TRS management, and external report users. However, we noted that the usefulness of the Investment Committee (Committee) reports could be improved as follows:

- The Investment Committee report prepared for the Board of Trustees did not contain a complete explanation of the performance information it includes from an outside performance evaluator. The Committee report excludes the narrative explanations accompanying “quartile” performance graphs excerpted from the performance evaluator’s report. The information in these graphs is useful to Board members because the graphs depict the relative performance of TRS’s portfolios and total fund to the performance of benchmarks and peer groups. Both types of performance comparisons are required by statute.

Investment Department staff do not explain these graphs during their presentations to Board members. A majority of the Board is now required to possess investment expertise. Nevertheless, without explanation, the performance evaluator’s quartile graphs could be confusing or misleading to at least some members of the Board or other users of the Investment Committee report.

- Market value information was not presented in the Summary of Investments report. Instead, only historical cost information was used. Market value information, which depicts the current status of TRS’s investments, would be of greater interest to decisionmakers than historical cost information.

Recommendation:

We recommend that TRS enhance the Investment Committee report as follows:

- Supplement the performance information with enough narrative to explain how the performance graphs should be used. The narrative should include an explanation of the symbols used in the graphs, how the quartile graphs are

used, and information pertaining to the peer group populations used for pension fund comparative purposes.

- Include market value information in the Summary of Investment report.

Management's Response:

We agree that Investment Committee reports can be improved. TRS will continue to evaluate the need for additional information to be included in the investment performance reports prepared for the Board and for others. Currently performance results are presented quarterly by Wellington Management Company, and discussed extensively with the Board.

Market value is presented throughout the Investment Committee reports, and is the basis for calculating performance results. TRS will adopt Governmental Auditing Standards Board Statement 25 as of August 31, 1996, and the basis of accounting will change to market value for financial reporting purposes. Accordingly, information will be presented based on market value.

Section 2-B:

Methods for Accumulating Data for Investment Reports Can Be More Efficient

Investment software systems did not automatically generate all needed reports. Instead, relevant data from the automated systems was entered into spreadsheet software which accumulated and summarized the data for reporting purposes. As a result, there was some duplication of effort and an increased possibility of input errors, incorrect use of spreadsheet formulas, or incomplete compilation of data when preparing these reports.

Spreadsheet software was used primarily because the automated investment systems were unable to interface with each other. Information obtained from the equity, fixed income, short-term, and real estate investments systems was placed into the spreadsheet software for formatting purposes.

Recommendation:

We recommend that TRS develop more efficient and reliable methods for accumulating data used for reporting. This improvement in the reporting process could be achieved by specifying reporting capabilities expected from the recently purchased investment accounting/portfolio management software.

Management's Response:

We agree that the reporting process for investment transactions is currently fragmented and inefficient. TRS recognized this issue over 18 months ago, and has been converting to new investment accounting software since October 1995. The new software will provide significant improvements in reporting, and will interface directly with performance measurement services. Conversion should be completed by February 1997.

Section 3:

Board Oversight of Securities Lending Program And Board Training Program Can Be Improved

Section 3-A:

The Board Could Strengthen Oversight of the Securities Lending Program

Although income from the securities lending program is not material to TRS's operating results, Board oversight over this program could be strengthened to ensure that expectations for the program are achieved. At August 31, 1995, TRS reported \$1.8 billion in securities on loan through this program and program revenue of \$4.7 million. Total realized investment income for this period was \$3.7 billion.

The following are examples of where the Board could enhance its oversight:

- The Board neither requires nor receives periodic financial trend information or compliance reports about the program. Trend information addressing income in total dollars, yield in basis points as a percentage of lendable securities, average percentage of lendable securities on loan, or other relevant operational statistics could be useful to the Board in assessing administrator performance and achievement of program expectations.
- Of the two Board members who provided us with information about their knowledge of TRS's securities lending program, one acknowledged being unaware that TRS was involved in this type of program. TRS management subsequently discussed the securities lending program with Board members at the December 1995 board meeting.

Recommendation:

We recommend that the Board strengthen its oversight of the securities lending program. This could be accomplished by establishing operational expectations and by requiring that management submit periodic reports of relevant securities lending activities and results for Board review.

Management's Response:

Staff concurs with the recommendation to provide additional information to the Board about the Securities Lending Program. TRS will consider adding information about securities lending in the quarterly investment reports to the Board.

Based on a recent study completed by the ASTEC Consulting Group, with assistance by the National Association of State Auditors, Comptrollers and Treasurers, TRS was included in the Top 20 Lending programs, including the 20 strongest indemnifications, 20 most precise transaction rules, and 20 clearest relationships.

Section 3-B:

Investment-Related Training Provided to Board Members Can Be Expanded

Although not a critical need, additional investment training for members of the Board of Trustees could be beneficial. Overall, members indicated that they have the expertise to set policy and make broad investment decisions related to TRS's investment portfolio valued at \$49 billion as of March 31, 1996. However, two of the four members who responded to our investment survey believed they could benefit from additional training.

Board members receive in-house training from TRS's staff, investment advisors, and an ongoing investment consultant. In addition, several members have professional expertise in investments. However, some Board members expressed a need for more training pertaining to investment performance evaluation and to the different styles of investing used by portfolio managers.

Recommendation:

To ensure that each Board member receives sufficient training, TRS should consider developing a formal training program for Board members. The training program could include the following:

- Identification and prioritization of individual training needs
- Determination of when training should be provided by an independent source. Using independent sources can help Board members effectively evaluate information received from sources who are directly involved, and thus have a vested interest, in TRS's investment process. Management may wish to obtain input from the Board members in making this determination.
- Identification of training resources and formats, including consideration of alternative formats such as video and audio tapes, textbooks, and manuals.

- Evaluation of the training program for effectiveness and implementation of necessary modifications.

In addition, we believe that much of the investment training needs are similar for Board members at the state entities with the most significant long-term investment portfolios (TRS, ERS, TEA, and UT System/UTIMCO). Therefore, to the extent that board members of these entities need training in investment topics that are not entity-specific, we recommend that TRS attempt to coordinate its training programs with the other entities' programs. This could reduce overall training costs, increase communication among board members of the different entities, expose the participants to a wider variety of viewpoints, and make it easier for board members to find a convenient time and place to obtain this training.

Management's Response:

We agree ongoing training is an important function. The TRS Board has a majority of members who have demonstrated financial expertise, and have broad investment experience. In addition, the statutes require Board members to have very specific training in all programs of TRS. This training has been coordinated by both TRS staff and independent consultants. We will be happy to work with other state entities to continue our training efforts.

Section 4:

Performance Evaluations for Investment Employees Can Be Improved

Although performance evaluations for all 17 key investment personnel were current, the evaluation process for these employees can be improved for the following reasons:

- Annual performance evaluations of Investment Department employees did not fully address investment-related technical skills. For example, evaluations did not include quantitative measures, such as comparison of performance against financial benchmarks or against other portfolio managers, consideration of dollar amounts of portfolios managed, or other skill-related factors.
- Evaluations did not address how well employees helped meet specific, measurable goals of the Investment Department relevant to the employees' duties.

Thus, the evaluation process in place at the time of our review might not achieve the desired objectives of a performance evaluation system, which include encouraging good performance, identifying and correcting substandard performance, and providing a basis both for future human resource decisions and for an employee's future training and development.

As of September 1995 there were 46 Investment Department employees. TRS designated 17 of these employees as “key” investment employees. As of August 31, 1995, the annual payroll for these key employees totaled \$1.3 million. Their average annual salary as of that date was \$75,000, with individual salaries ranging from \$41,000 to \$152,000.

Recommendation:

We recommend that management enhance the Investment Department employee evaluation process to make all employees accountable for job duties specific to their position. Evaluation criteria should include quantitative assessments of technical skills and should assess, where practical, how well the employee’s performance helped reach specific investment goals.

Management’s Response:

An agency-wide effort to improve performance evaluations has been in process for several months. All TRS employee evaluations are being re-written to include specific performance measures, and evaluate attainment of goals. The Investment Department evaluations consider each item described above.

Texas Education Agency

Overall Summary

Overall, controls over investment practices at the Texas Education Agency (TEA) appear adequate to ensure accountability for the Permanent School Fund's investments, although existing controls in some areas could be strengthened. Major strengths included:

- The appropriateness of the organizational structure of the investment function and its position within TEA
- The communication of appropriate information to decisionmakers
- The execution of investment transactions in accordance with management's expectations as defined in the investment policy

Key investment personnel appeared to have the necessary educational background and experience to fulfill their responsibilities. Opportunities also exist to enhance controls in several of these areas.

We noted that the proposed nonprofit corporation structure to manage the Permanent School Fund's investments would not significantly enhance accountability for the investment function. Although creation of this corporation was approved by the 74th Legislature, the State Board of Education (Board) has not proceeded with implementation of this proposal, and may not currently have plans to do so in the foreseeable future. (See Section 1 below.)

Furthermore, although investment transactions conformed to investment policy, controls over day-to-day operating procedures for the investment function could be improved. TEA should develop a procedures manual for investment transactions and related processes. (See Section 2-A, page 52.) In addition, TEA should enhance segregation of duties by restricting access to automated accounting systems to the minimum required for staff members to perform their assigned duties. (See Section 2-B, page 53.)

Section 1:

The Legislature and the State Board of Education May Wish to Reconsider the Rationale for Establishing a Nonprofit Corporation to Manage Permanent School Fund Investments

The Legislature and the State Board of Education should consider revisiting the reasons used to justify the establishment of an “affiliate organization” to manage the

Texas Education Agency's investment function to ensure that meaningful benefits would be provided to the State. As documented, the change in the organizational structure for TEA's investment function does not appear to involve substantive changes that are intended to improve investment performance.

Of the three reasons for establishing an affiliate organization, which we found documented in minutes of the State Board of Education meetings, two relate to management initiatives which have nothing to do with investment performance. The three reasons are as follows:

- Moving investment employees off the state payroll would help TEA comply with a legislative mandate to reduce the size of the agency. In addition, the Permanent School Fund is also moving toward a more complex asset allocation and anticipates the need to increase staff size from the current level, making downsizing still more difficult.
- TEA has expressed a commitment to outsource more of its functions to the private sector.
- The Permanent School Fund would be better able to pay its investment professionals more competitive salaries if they were outside the state payroll system.

We believe that establishing an affiliate organization would represent no substantive progress toward management's goals of reducing counts of full-time equivalent employees. The State would still be charged for all the operating costs of the affiliate organization, meaning that the organization's employees would still be paid (although indirectly) by the State. (In fact, there has been reluctance to start the new corporation until a way can be found to retain state pension and insurance benefits for the employees who would be transferred from TEA.) Thus, the creation of an affiliate organization may help reduce TEA's full-time equivalent employee *count*, but would not necessarily lead to fewer employees doing TEA work.

We also believe that establishing an affiliate organization would represent no substantive progress toward management's goal of outsourcing. Creating an entity that can only do business with the Texas Education Agency and transferring an existing TEA function to the new organization does not represent what is typically considered "outsourcing."

More competitive salaries for investment professionals may have a beneficial impact on portfolio performance, but would be justified only if the performance of those employees was competitive with their private-sector counterparts. However, TEA did not have a performance evaluation process which provided assurance that investment employees' performance was competitive with their private sector counterparts. In fact, the performance evaluation process did not ensure that the performance of investment personnel was evaluated against specifically descriptive or quantifiable

investment criteria, if it was evaluated at all. (See additional discussion at Section 4, page 62.) We noted the following:

- The executive administrator and two senior investment managers had not received written evaluations. (Performance evaluations for exempt-level staff were apparently suspended in 1992.)
- The evaluation criteria on TEA's standard evaluation form were not tailored to address the specific investment-related duties of investment staff.

The rationale for creating a private investment management organization to manage The University of Texas System's (UT System) investments, including the Permanent University Fund, cannot also be applied to the Permanent School Fund. While the Permanent University Fund is similar to the Permanent School Fund, the UT System's rationale for creating its corporation was based on the goal of improving governance. The UT System's plan stipulated that a substantial number of the members of the Board of Directors of the private corporation would have significant investment experience, which would reduce the UT System's Board of Regents' responsibility for daily investment operations. However, according to the Texas Education Agency's plan for creating an affiliate organization, the members of the board of the affiliate organization would have been the members of the State Board of Education, none of whom are required to have investment experience.

Recommendation:

Legislators and the State Board of Education should revisit the issue of whether a nonprofit investment management corporation, as envisioned at the time of our review, would provide meaningful benefits to the State.

Stated reasons such as payment of competitive salaries could potentially be developed through the current internal structure of investment management. Investment personnel could be paid under exempt classifications to ensure competitive salaries. However, we acknowledge that, under current budgetary constraints and possible limitations on creation of additional exempt positions, providing higher salaries for investment professionals may be difficult. (The issue of the salary structure for the State's investment professionals is further discussed at Crosscutting Issues, Section 1-C, page 16.)

Management's Response:

The recommendation was made that the State Board of Education should revisit the issue of whether a non-profit investment management corporation would provide meaningful benefits to the State. At the time of the investment practices review audit, the Texas Education Agency was mandated to reduce the count of full time equivalent

employees by the State Legislature. For this reason and other reasons stated elsewhere in your report, such as the ability to attract and retain competent investment personnel, the State Board of Education did consider establishing a non-profit corporation to manage Permanent School Fund investments. The State Board of Education is committed to prudently managing the assets of the Permanent School Fund and ensuring that there is the proper amount of staff to execute the duties of managing those assets. It is our belief that the State leadership is aware of the staffing in the office of the Permanent School Fund, however, rules for submitting current budget requests do not allow for requests over and above current budget and staffing levels. The non-profit corporation was considered as an alternative to satisfy the 74th Legislature's mandate to reduce full time equivalent employees because the operations of the office of the Permanent School Fund are separate and distinct from the other education related functions of the Texas Education Agency.

In Section 1 it was also stated that the Agency did not have a performance evaluation process which provided assurance that investment employees' performance was competitive with their private sector counterparts. The State Board of Education has approved an investment procedures manual which clearly establishes standards for performance for the internal and external management of assets of the Permanent School Fund.

Section 2:

Controls Over Several Aspects of Operations Should Be Improved

Section 2-A:

Lack of Documentation and Enforcement of Daily Operational Procedures Has Created a Weakness in the Permanent School Fund's Control Structure

A lack of documentation and enforcement has resulted in weaknesses in the Permanent School Fund's (PSF) control structure. Lack of documentation and enforcement of daily operational procedures increases the risk that control procedures are not properly understood and performed by staff, thereby increasing the risk of undetected errors or irregularities.

Lack of documentation or enforcement of procedures has contributed to weaknesses in the control structures over documentation of trades, processing of vouchers, reconciliations, journal vouchers, and compliance monitoring. Examples of the problems in the controls over these areas included:

- No written policies existed for review or monitoring of investment trades.
- Trade tickets were not signed or consistently maintained as documentation of the proper approval of all investment purchases and sales.

- The Comptroller's signature card, which designates who is authorized to release funds, was not updated in a timely manner. The signature card on file in September 1995 included an employee who resigned in February 1995.
- Reconciliations were not signed and dated by the preparer. Evidence of supervisory review was not documented. Reconciliations of investment income were not performed.
- Reconciliation of investment holdings between the Custodian and the PSF's records can be improved by including the determination and agreement of the total balances, rather than reliance solely on computer-generated exception reports. This should be a relatively simple addition to the reconciliation process and would help ensure that the automated system is working as intended.
- No policies existed for proper documentation (logs and prenumbered forms) and approval of journal vouchers.
- Permanent School Fund staff did not document monitoring of compliance with policies limiting the fund to no more than 5 percent ownership of the common shares of a company.

Recommendation:

The Permanent School Fund staff should develop a manual to document daily procedures. Special attention should be given to documenting procedures to correct the weaknesses in the above-noted areas: trades, processing of vouchers, reconciliations, journal vouchers, and compliance monitoring.

Management's Response:

The Permanent School Fund is in the process of developing a more comprehensive procedures manual to document daily accounting procedures. This manual will include the issues mentioned, including control structures over documentation of trades, processing of vouchers, reconciliations, general vouchers, and compliance monitoring.

Section 2-B:

Access Controls Within the Permanent School Fund's Automated Accounting Systems Should Be Improved

Access controls within the Permanent School Fund's automated accounting systems should be improved to enhance segregation of duties. The PSF uses three automated

accounting systems: Uniform Statewide Accounting System (USAS), an investment subsidiary ledger (CAMRA), and a general ledger system.

Although general restrictions (such as personal IDs and passwords) were used, most accounting personnel had significant access within each system regardless of their actual duties. Examples of the access control weaknesses included the following:

- At least three staff members had total access to all the PSF's accounting systems. As a result, there is a possibility that these individuals could make an investment trade from beginning to end. This lack of segregation of job duties creates a risk that errors or irregularities may occur and not be detected in a timely manner.
- All accountants had the same full access to the CAMRA system.
- The executive administrator had the access to enter trades into the CAMRA system.
- All users had administrator access, rather than operator access, to the general ledger system.
- Access to the general ledger system had not been deleted for three individuals who no longer worked for the PSF.

Recommendation:

We recommend that the Permanent School Fund explore ways to customize and define access for accounting staff by individual user to ensure proper separation of duties. Full access to all of the accounting systems for any one individual, with the possible exception of one accountant, should be eliminated. A review should be made of all accounting access and then access should be limited to ensure that no one person has the ability to make an investment trade from beginning to end.

The duties of the accounting staff should be reviewed to determine the type of access needed within the CAMRA system. This review should also include a determination of which staff members should be allowed access. Specific consideration should be given to investment staff members and whether their access is needed. Additionally, the executive administrator's access to enter trades should be deleted.

Administrator access to the general ledger system should be limited to as few individuals as possible. Users should be set up as operators, with appropriate access privileges. Access within the general ledger system should be updated through the timely deletion of employees no longer working for the PSF.

Management's Response:

In general, there is an overlap of duties and functions performed by investment accounting personnel due to the limited size of staff. Additionally, there is a minimum amount of overlap required due to the functions of the CAMRA system accounting modules. The accounting department has currently implemented restrictions to prevent a single individual from making an investment trade from beginning to end. Access to the general ledger system has been deleted for individuals who no longer work for the Fund. It is important to note that while a single individual may have had the ability to account for investment trades from beginning to end, no authorization had been given to broker/dealers for accounting personnel to execute trades. Management is of the opinion that administrator access to the general ledger system is limited to as few individuals as possible.

Section 2-C:

There Are Opportunities to Improve Ethics-Related Policies and Procedures

There are opportunities to improve the ethics-related policies and procedures in place for the members of the State Board of Education and Permanent School Fund investment staff. Currently, policies and procedures are not sufficient to ensure that potential conflicts of interest for either Board members or investment staff would be detected and that actual conflicts would be prevented.

Potential conflicts of interest for the investment staff cannot be adequately monitored because those employees are not required to file financial disclosure statements. Ethics policies do not specifically address financial disclosure or other expectations for Permanent School Fund investment staff.

Potential or actual conflicts of interest for members of the State Board of Education may also not be detected and prevented by current procedures. Financial disclosure statements are filed with the Texas Ethics Commission by the members of the State Board of Education, as required by law. However, these statements are not required to be filed internally where they could be regularly reviewed by knowledgeable staff. Such internal reviews would help ensure compliance with ethics policies and avoidance of conflicts of interest.

Recommendation:

The Board should develop more detailed ethics standards for all Permanent School Fund staff. Ethics policies should cover topics such as gifts, financial disclosure, personal investments, dealings with various external parties, and other relevant matters. The Board and staff should sign a yearly statement, to be maintained in personnel files, affirming that ethical policies have not been violated.

We also recommend that executive management establish procedures to ensure that annual financial disclosure statements are completed by key investment staff of the Permanent School Fund. TEA's internal audit staff should review the financial disclosure statements of Board members and key investment staff and should test for compliance in their annual audit of the Permanent School Fund.

We have noted that the Teacher Retirement System appears to have adopted the most stringent ethics requirements of all of the State's major investing entities. Therefore, we strongly encourage each such entity, including the Texas Education Agency, to adopt similar policies. (The Teacher Retirement System's ethics policies are included in this report as Appendix 3, page 156.)

Management's Response:

The Texas Education Agency maintains a code of ethics for all employees for public service. The code of ethics establishes standards of conduct and procedures for identifying conflicts of interests. The policy addresses topics such as accepting or soliciting gifts, favors, or service that might reasonably tend to influence the individual in the discharge of official duties, personal investments, supplemental employment, etc. Additionally, all employees of the Agency are bound by Chapter 36 of the Texas Penal Code regarding offenses against public administration and Chapter 572 of the Texas Government Code regarding standards of conduct and conflict of interest. The Texas Education Agency will develop more explicit statements of expectations and policies for employees in the Investment Division.

Section 2-D:

Controls Over "Soft Dollar" Transactions Should Be Improved

Procedures to control "soft dollar" transactions should be improved to ensure that these resources are used for the benefit of the Permanent School Fund. (Soft dollar transactions are arrangements made with a specific investment broker wherein a portion of commissions paid by the Permanent School Fund may be used for other investment services, such as subscriptions to investment publications, pricing services, and online investment research.) In the first eleven months of fiscal year 1995, the Permanent School Fund spent over \$123,000 in soft dollars.

We noted the following weaknesses in controls over soft dollar transactions:

- No written policies and procedures have been developed concerning soft dollar activities.
- Soft dollar disbursements are not budgeted by the Permanent School Fund. Although the Board receives information on the commissions paid to soft dollar brokers, they are not provided with information on the balance of soft dollars or what the soft dollars have been used for.

- Monthly statements from soft dollar brokers are not reviewed to ensure that disbursements made are appropriate and agree with invoices from the broker. In addition, total commissions reported on monthly statements are not compared to accounting records.
- There is not a formal process for soft dollar disbursements, thus they are not always documented with initialed or signed statements.

Recommendation:

We recommend that policies and procedures over soft dollar transactions be developed. At a minimum, the policies and procedures should include the following topics:

- Selection of soft dollar brokers
- Approval of soft dollar disbursements
- Approval of soft dollar commissions and rates
- Creation and approval of budget
- Reporting soft dollar activities
- Monthly reconciliations to brokers' statements

Management's Response:

In 19 TAC Chapter 33, the State Board of Education has established policies and guidelines regarding the use of broker dealers in executing trades for the Permanent School Fund. These policies require lowest cost and best execution and allow the establishment of commission recapture agreements. In executing trades with "soft dollar" broker/dealers, the staff of the Permanent School Fund is bound to policies approved by the Board. The office of the Permanent School Fund procures investment research related products and services in order to execute the duties of the office. The Board has delegated discretion for trading to investment management personnel because of the complex and differing capabilities of broker/dealers.

"Soft dollar" broker/dealer firms are regulated and examined by the Securities and Exchange Commission and the National Association of Security Dealers and, as such, set standards and control the activities of "soft dollar" broker/dealers in the dealing with institutional investors.

The staff of the Permanent School Fund is currently in the process of developing more comprehensive policies and procedures for Board consideration for the use of soft dollar and commission recapture arrangements. The procedures will address the items recommended for inclusion.

Section 3:

The Legal Authority and Oversight for TEA's Investment Function Should Be Improved

Section 3-A:

The Inconsistency Between Governing Statutes and Administrative Rules Related to the Permanent School Fund's Investment Authority Should Be Resolved

There is an apparent inconsistency between the constitutional and statutory language establishing Texas Education Agency's investment authority. While the Education Code (Section 43.003) prohibits investments in foreign securities, TEA believes that its investment authority is limited only by the constitutional "prudent person" standard, which would make foreign investments permissible. The inconsistency makes it difficult to determine whether TEA's investment in foreign securities is made in compliance with its legal authority.

TEA's investment authority, as derived from the State Constitution and codified in the Texas Administrative Code, permits investment in foreign securities:

- TEA's legal counsel provided an opinion that the Permanent School Fund's authority to invest is derived from the State Constitution (Article VII, Section 5(d)) which states that "notwithstanding any other provisions of this constitution, in managing the assets of the PSF, the State Board of Education may acquire, exchange, sell, supervise, manage, or retain, through procedures and subject to restrictions it establishes in amounts it considers appropriate, any kinds of investments."
- An Attorney General Opinion has interpreted this constitutional article as giving the Permanent School Fund very broad authority over its investment operations.
- The Texas Administrative Code (Chapter 33) was updated during fiscal year 1995 to reflect a long-term asset allocation passed by the Board, which included foreign securities.

However, the current Education Code prohibits TEA from investing in foreign securities. The inconsistency in the language appears to have resulted when updates were made to statutes affecting TEA. The 74th Legislature amended the Education Code, Chapter 43, to allow TEA to contract with a nonprofit company to manage the Permanent School Fund. However, an old section of the Education Code (Chapter 15), which disallowed investments in foreign securities, was also brought forward into the new Chapter 43 creating a conflict with TEA's Administrative Code.

Recommendation:

The Texas Education Agency's legal staff should work to resolve differences noted in the statutes which govern the Permanent School Fund during the next legislative session. Agreement should be reached with the Legislature as to whether the Education Code (Chapter 43) or the Administrative Code (Chapter 33) contains the most appropriate language establishing TEA's investment authority. Then, the applicable sections should be deleted or updated in order to eliminate the inconsistency noted above as well as any other inconsistencies between the two codes.

Management's Response:

The Texas Education Agency's legal staff will work to resolve differences noted in the statutes which govern the Permanent School Fund during the next legislative session.

Section 3-B:

Communication Among the State Board of Education, Investment Advisory Committee, and Permanent School Fund Staff Should Be Improved

Although the collective investment expertise of the State Board of Education, the Investment Advisory Committee (Committee), and the Permanent School Fund staff appear to be sufficient to fulfill the responsibilities related to the Permanent School Fund, communication among the members of the three groups should be improved. The collective expertise of the three groups can be most effectively deployed to oversee and manage the PSF through successful communication.

We noted instances where the timing of communications between the Permanent School Fund staff and the Investment Advisory Committee could have been improved:

- The Committee met on August 11, 1995, for the first time in over a year. Many of the members were new. The meeting dealt with the creation of a nonprofit corporation to manage TEA's investment authority. Some members believed the information provided was not complete and requested that a new meeting be held so that additional information could be prepared and presented.
- Information requested by the members of the Committee at the August 11, 1995, meeting was not delivered until one day before the next scheduled meeting. As a result, the members did not have sufficient time to review the information. Consequently, a third meeting had to be scheduled to discuss the same issue.

We also noted opportunities to improve communication between the Committee and the State Board of Education:

- Communications between the two bodies are not formally documented.
- The Committee does keep minutes of their meetings, prepared by the Permanent School Fund staff, but the minutes are not reviewed and approved by the Committee.
- Minutes of the Investment Advisory Committee meetings are not typically forwarded to the Board although other written communication between the two bodies may occur. The lack of these minutes may have contributed to a request from the Board to reaffirm, in writing, the position of the Committee with respect to the new long-term asset allocation plan.

Successful communication among the three groups is essential to effective oversight and management of TEA's investment function. None of the 15 Board members are required to possess professional investment experience. Instead, each Board member appoints an individual with investment expertise to serve on the Investment Advisory Committee. The Board relies heavily on the advice of the Committee and the Permanent School Fund staff.

Recommendation:

The minutes of the Investment Advisory Committee meetings should be formally approved and signed by the Chair. The approved committee minutes should be forwarded to the Chair of the State Board of Education or the Permanent School Fund Committee. In addition, the Permanent School Fund staff should make every effort to provide meeting materials to the Committee with sufficient time to allow for review before the meeting.

Management's Response:

In the past, the minutes of meetings of the Investment Advisory Committee or a communiqué from the chairman of the Investment Advisory Committee has been provided to the members of the State Board of Education following meetings of the Investment Advisory Committee. In addition, the individual members of the Investment Advisory Committee regularly communicate directly with the State Board of Education member for which district that they serve. Members of the State Board of Education and the Investment Advisory Committee have stated that this informal direct communication with members of the Investment Advisory Committee is effective.

A procedure will be established for the formal approval of the minutes of the Investment Advisory Committee and signature by the chair for forwarding to the State Board of Education.

Section 3-C:

Training Requirements Related to Investment Activities Should Be Strengthened for Members of the State Board of Education

Additional training on investment activities should be provided to the members of the State Board of Education. Additional training is needed in part because the members of the State Board of Education (as elected officials) are not specifically required to have knowledge of investments. The Board is, however, fiduciarily responsible for the \$13 billion in investments of the Permanent School Fund and is regularly required to make decisions concerning complex investment issues.

Six Board members who responded to a survey believed that additional training would benefit the Board. Two of the six respondents did not believe that sufficient training had been received in the past.

Recommendation:

The Texas Education Agency should develop consistent training and orientation on investment-related matters for the Board. Issues that should be covered include policy development, investment risks, performance analysis, economic trends, and portfolio monitoring. This training can be combined with other Board member training and developed into a formal, ongoing program. A formal training program includes, but is not limited to, the following steps:

- Identify specific training needs.
- Plan and document training sessions or presentations.
- Develop training schedules or calendars.
- Centrally track and coordinate the amount and type of training.
- Evaluate the effectiveness of the training program and adjust accordingly.

In addition, we believe that much of the investment training needs are similar for Board members at the state entities with the most significant long-term investment portfolios (TRS, ERS, TEA, and UT System/UTIMCO). Therefore, to the extent that board members of these entities need training in investment topics that are not entity-specific, we recommend that the Texas Education Agency attempt to coordinate its training programs with the other entities' programs. This could reduce overall training costs, increase communication among board members of the different entities, expose the participants to a wider variety of viewpoints, and make it easier for board members to find a convenient time and place to obtain this training.

Management's Response:

The State Board of Education engages an outside investment consultant for the purpose of conducting investment management workshops related to issues of the

Permanent School Fund. Workshops are scheduled at the request of the Board and are available at all times.

We do not believe that the investment training needs of the State Board of Education are similar to Board members of other State entities due to the uniqueness of each entity's fund, and therefore do not recommend coordinating training programs with other entities' programs.

State Auditor's Follow-Up Comment:

We continue to believe that a more formal, periodic schedule for investment-related workshops is preferable to providing such training only on an as-requested basis. The responses to our survey suggest that the Board may be receptive to a more proactive approach by management in arranging for additional ongoing investment training.

Section 4:

There Are Opportunities to Improve Human Resource Management Systems

Human resource management could be improved through enhancements to the performance evaluation process and by implementation of a program to encourage continuing professional education for key investment personnel. As discussed previously (see Section 1, page 49) three key investment personnel no longer receive annual performance evaluations. As also discussed, the evaluation criteria for investment personnel who are evaluated were not tailored to address their specific, investment-related duties. Furthermore, TEA does not have a program in place which encourages investment staff to maintain a certain level of continuing education or job-related training.

The two "non-exempt" investment staff were evaluated based on broad, agencywide criteria. Rating categories ranged from "unsatisfactory" to "clearly outstanding." However, these evaluations did not include quantitative measures, such as comparison of performance against financial benchmarks or against other portfolio managers, consideration of dollar amounts of portfolios managed, or other skill-related factors. In addition, the evaluations did not address how well employees helped meet specific, measurable goals of the investment department relevant to the employees' duties.

Thus, the evaluation process might not achieve the desired objectives of a performance evaluation system. Such objectives include encouraging good performance, identifying and correcting substandard performance, and providing a basis both for future human resource decisions and for an employee's future training and development.

In addition, TEA has not established any minimum requirements for continuing professional education for its investment professionals. Although investment personnel attend various job-related conferences or training classes, formal records of the continuing education received are not maintained or reviewed. A continuing education program which establishes expectations and monitors achievement of those expectations would help ensure that investment staff remain current on the latest developments in the investment environment.

Recommendation:

We recommend that management enhance the current evaluation process to make all investment employees accountable for job duties specific to their position. Evaluation criteria should include quantitative assessments of technical skills and should assess, where practical, how well the employee's performance helped reach specific investment goals.

In addition, we recommend that management establish a program which defines expected levels of continuing education and assists investment professionals in obtaining such ongoing training. Management should maintain and monitor continuing education records to ensure staff obtains sufficient training.

Management's Response:

The State Board of Education and management of the Texas Education Agency expects investment employees to participate in continuing education seminars to maintain competency levels in staff. The Agency regularly budgets amounts for participation in seminars and research projects related to the securities selection and portfolio management process. We do not believe that a formal program is necessary given the size of the investment staff as it is readily apparent to management when staff is or is not remaining current on the latest developments in the investment environment.

State Auditor's Follow-Up Comment:

Management has not specifically responded to our recommendations to enhance the employee evaluation process. Management's response in Section 1, concerning performance standards defined in the investment procedures manual, indicates that the Board has approved portfolio expectations which could be used in the evaluation process. However, unless all employees are evaluated and their evaluations specifically address these expectations, it is not clear that comparisons of actual performance versus expectations will be performed and documented. In addition, there may be other quantitative measures that could be developed by management to evaluate employee performance in job duties not specifically addressed by the portfolio performance standards.

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Texas Lottery Commission

Overall Summary

The Texas Lottery Commission (Lottery Commission) and the State Treasury share responsibility for the investment functions related to the Lottery Commission's game revenues. When there is a winner for the Lotto, Win-for-Life, or Weekly Grand games, the Lottery Commission communicates the amount of funds available for investment to the State Treasury. The State Treasury invests the funds so that investments mature at the appropriate times to ensure that winners receive their prize installments. The processes used and the controls over the investment of these funds are basically the same as that of other state funds under the State Treasury's control.

Given this shared responsibility, a formal agreement between the Lottery Commission and the State Treasury documenting investment objectives, policies, and risk parameters will improve investment controls. Additionally, opportunities exist to increase interest earnings to the State by reassessing the cost-benefit of maintaining a bank account outside the State Treasury. This interest-bearing checking account had an average balance of \$5.9 million in fiscal year 1995, reflecting over \$170 million of deposits and withdrawals during this period.

Section 1:

A Formal Agreement Between the Lottery Commission and the State Treasury Should Be Developed for Investing Lottery Prize Winnings

The Lottery Commission and the State Treasury did not have a formal agreement that documents each agency's understanding of its responsibilities for investing Lotto prize winnings. Management of the investment process is a shared responsibility for the two agencies:

- The Lottery Commission determines the estimated jackpot and communicates to the State Treasury the actual cash amount available for investment after a winner has been determined.
- The State Treasury invests the funds so that maturities occur to meet annual payment requirements to the Lotto winners.

A formal agreement would ensure that each agency has a clear understanding of its responsibilities related to the management of the Lottery investments on the following issues:

- Identification and documentation of investment constraints and preferences, including the consideration of various types of investment risk

- Establishment of written investment objectives and policies
- Selection of investment instruments to meet the Lottery Commission's needs
- Recording, reporting, and monitoring investment activity
- Responsibility and liability related to reverse repurchase agreement transactions entered into by the Treasury with Lotto investments

Recommendation:

We recommend that the Lottery Commission and the State Treasury formalize their understanding of one another's responsibilities related to the management of the investment process for Lottery prize winnings. The issues identified above should be included in the formal agreement and used as a mechanism to improve communication between the two agencies.

Management's Response from the Texas Lottery Commission:

Texas Government Code Section 466.403 outlines the general agreement between the two parties. Over the past three years, the two parties have clarified the more specific aspects of the agreement in audit correspondence. These specific aspects of the relationship between the two parties are similar to those noted in the State Auditor's Office recommendation and have been the working document for the day-to-day practice even though this has not been put into a formal agreement. We will continue to work with the State Treasury to develop the formal written agreement as recommended by the State Auditor's Office.

Management's Response from the Texas State Treasury:

Texas Government Code, Chapter 466.403 delegates the authority to invest state lottery funds to the State Treasurer, and also grants the Treasurer the authority to determine how funds will be invested. At least annually, the Lottery Commission prepares an acknowledgment letter that outlines the understanding of both agencies with respect to investments for the Lottery. In addition, communication between the Lottery Commission and the Investment Division occurs regularly as a normal course of business. The commission also receives a copy of investments at the time of each award and at any time upon request.

We will work with the Lottery Commission to determine what kind of formal agreement is necessary.

Section 2:

The Lottery Commission Should Reassess the Need to Maintain a Bank Account Outside the State Treasury

The Lottery Commission's maintenance of a bank account outside the State Treasury may no longer be necessary or cost effective. This interest-bearing checking account had an average balance of \$5.9 million in fiscal year 1995. The Lottery Commission maintains the account for processing payments to players of various Lottery games. The State could have earned additional interest of \$187,000 had these funds been deposited in the Treasury.

The Lottery Commission should reassess the need to maintain this account for the following reasons:

- The State's new accounting system (USAS) appears to have the ability to issue warrants to pay Lottery game winners within 24 hours. According to personnel at the State Comptroller's office, some state agencies have the capability to cut their own warrants on a same-day basis. Furthermore, the State Treasury has wire-transfer capabilities through the Texas Safekeeping Trust Company's access to the Federal Reserve System.

The bank account was established (before the implementation of USAS) to ensure that players are paid within the hour after submitting their winning tickets. In addition, the account is used to make direct deposits to winners' bank accounts for the Lotto, Win-for-Life, and Weekly Grand games. Management of the Lottery Commission indicated that the bank account is necessary to achieve the level of service expected from Lottery players who are key to the success of agency operations.

- The State Treasury earned a substantially higher interest rate on its funds than was earned by the Lottery Commission's checking account. In fiscal year 1995, the checking account earned interest of 2.13 percent, net of bank charges, or \$125,000. During the same period, deposits in the State Treasury earned interest at an average rate of 5.29 percent, net of fees. Based on the account's average balance, it would have earned interest of \$312,000 had it been in the Treasury.

The Lottery Commission used the petty cash statutes (Government Code, Section 403.24, Subchapter K) as its legal authority for the account. We question whether this is a proper use of a petty cash fund based on the following facts:

- In fiscal year 1995, \$173 million was deposited into the account and \$174 million was withdrawn from it. The average balance was approximately \$5.9 million.

- As of March 31, 1996, the average monthly balance for fiscal year 1996 was \$5.2 million. Also during this period, almost \$115 million had been deposited into the account, and approximately \$119 million had been withdrawn from it.

In addition, the Lottery Commission did not have adequate controls in place to ensure that bank fees charged against the account were accurate and reasonable. The Lottery Commission had not reviewed detailed statements documenting the amount of bank fees charged on the account for accuracy or reasonableness.

Recommendation:

We recommend that the Lottery Commission reassess the need to maintain a bank account external to the State Treasury. A cost-benefit analysis should be performed to determine if the capabilities of USAS and the State Treasury can replace the services currently performed through this bank account. The Lottery Commission should also determine if the annual Lotto prize payments could be processed by the State Treasury to eliminate the need for the funds transfer to the bank account.

If analysis indicates that the bank account is necessary for the operations of the Lottery Commission, then consideration should be given to seeking legal authority for the bank account beyond Petty Cash Statutes.

We also recommend that the Lottery Commission obtain and review detailed statements of the bank charges applied to the account to ensure that charges are in accordance with the contractual fee schedule.

Management's Response from the Texas Lottery Commission:

The Comptroller's Office established the prize payment account in 1992 to ensure timely payments were made to the winners. If payments had been processed through the Comptroller's Office and warrants issued to winners it may have taken up to ten days for winners to receive their prizes. This was recognized as an unacceptable business practice by the Comptroller's Office, of which the Lottery was a division at the time. As a division of the Comptroller's Office, the Lottery was under the authority and administration of the Comptroller's Office. Texas Government Code Section 403.247 specifically authorizes the head of an agency to request that an account be established outside the Treasury if it is determined that "the account is necessary for the efficient operation of the agency."

Our current contract for financial banking services expires August 31, 1996. The TLC is ready to move in a direction that is timely and cost-beneficial to the State of Texas, the Texas Lottery and Lottery players. We have had preliminary meetings with management from the Comptroller's Office and Treasury to determine to what extent it is feasible and to what extent a change would benefit the State of Texas. The TLC is

prepared to sign an agreement with the Comptroller's Office for management of this account by the Trust Company.

The TLC has reviewed the monthly statements that detail the TLC's transaction fees and interest earned from the financial institution. We discovered a bank error that resulted in the TLC receiving an additional \$97,786.32. The \$97,786.32 includes interest on interest for the period which we did not receive our interest in a timely fashion. For the 19 months ended March 31, 1996, this increases the Lottery's effective yield to 2.97%. This review continues on a monthly basis.

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Texas State Treasury

Overall Summary

Effective September 1, 1996, the State Treasury (Treasury) was abolished and its functions absorbed by the Comptroller of Public Accounts. This report addresses issues identified prior to the merger of State Treasury functions with the Comptroller of Public Accounts. (Responses provided were submitted by State Treasury management prior to the merger.)

Since the State Treasury does not have a governing board, responsibility for the investment of state funds rests with executive management. The responsibility includes monitoring the portfolios and providing oversight to the Investments Division. Executive management will continue to play a critical role in monitoring investment activity after the merger because the Comptroller of Public Accounts also has no governing board.

Improvements are needed in the areas of oversight and monitoring, documentation of policies and procedures, and operational controls:

- Executive management of the State Treasury has not actively monitored portfolio performance against rates established by the Federal Government or against other portfolios of similar size, composition, and average maturity.
- The lack of documented policies and procedures weakens the controls over the investment of public funds. Critical elements of the investing function are not addressed in the investment policy. Policies and procedures related to investments and cash management activities are not thoroughly documented.
- Controls over the Treasury's investment activities are not adequate at the operational level. Wire room activities should be segregated from the investments function, and the selection and retention of broker/dealers should be documented and monitored.

Treasury management has taken steps to correct the weaknesses noted. An investment advisor was hired in fiscal year 1996 to evaluate the Treasury and TexPool portfolios on a quarterly basis. The investment advisor also serves as a resource to executive management for technical questions and advice on investment strategy and related matters.

The Comptroller of Public Accounts formed a team to facilitate the merger of the Treasury's functions into the Comptroller's Office. As part of the merger process, Treasury and Comptroller of Public Accounts personnel have worked to document the policies and procedures needed to perform the Treasury's functions. In addition, the Comptroller of Public Accounts is contracting for a management control audit of the

Treasury's operations that would offer recommendations to improve management strategies, agency structure, internal controls, and administrative efficiency.

The 74th Legislature tightened controls over TexPool operations following the State's bailout of the local government investment pool in December 1994. These controls have been implemented by Treasury management, as required by statute. However, governance and oversight of TexPool could be enhanced by fully defining the roles, responsibilities, duties and authority of the TexPool Advisory Board members. An ethics policy should also be developed, and minimum attendance requirements for board members should be established.

Section 1:

Oversight Functions Do Not Provide Accountability Over Investment Operations

Section 1-A:

Executive Management Has Not Actively Monitored Certain Aspects of Portfolio Performance

The State Treasury's portfolio performance is not compared to other portfolios of similar size and composition, nor is it compared to benchmarks established by the Federal Government. Other conditions exist which indicate that executive management has not provided adequate oversight of the investments function.

There is no documentation to indicate that the State Treasury portfolio is compared to other portfolios of similar size, composition, and average maturity. The Treasury portfolio is compared quarterly to the Donaghue Money Market Index, which is not an appropriate comparison. The Treasury portfolio does not have the money market fund characteristics needed to provide a realistic comparison to this index.

The Treasury portfolio's composition and average maturity is not comparable to a money market fund. The portfolio's average maturity of 350 days to over 650 days for fiscal year 1995 is significantly higher than the maximum average maturity of 90 days allowed for money market funds. In addition, net asset value of the portfolio is neither calculated nor monitored to meet money market fund requirements of \$1 per share.

The management of the Treasury apparently did not monitor portfolio performance against rates established in the federal Cash Management Improvement Act (CMIA). The CMIA requires the State to reimburse the Federal Government for interest on advance draw-downs. The reimbursement rate is tied to 13-week Treasury Bills. In fiscal year 1995, the Treasury's portfolio did not perform as well as 13-week Treasury Bills. As a result, the federal interest liability was calculated at a rate (5.64 percent) greater than the yield (5.33 percent) earned on the Treasury portfolio.

Figure 5

	Average Yield Fiscal Year 1995
State Treasury Portfolio	5.33%
13-Week U.S. Treasury Bill	5.64%
One-Year U.S. Treasury Note	6.24%
Two-Year U.S. Treasury Note	6.61%

Had the Treasury actively monitored the portfolio against the 13-week Treasury Bill rates, opportunities may have existed to adjust the portfolio and/or communicate to state agencies the need to more closely monitor cash advances to minimize the State's liability. Portfolio performance was affected by a period of rising interest rates from February through December 1994. Comparison against relevant benchmarks would have indicated that the 13-week Treasury Bill rate exceeded the portfolio's yield beginning in October 1994. Since this was early in fiscal

year 1995, options might have been available to minimize the amount owed the Federal Government.

In addition, the Treasury portfolio performed worse than the one-year and two-year government securities. These securities are comparable to the Treasury portfolio's average maturity of 350 days to over 650 days for fiscal year 1995.

Other conditions were noted which indicate that executive management has not provided adequate oversight for the investments function:

- A written investment strategy is not developed and adjusted as needed to manage changes in market conditions.
- Executive management does apparently meet with the Director of Investments on a quarterly basis to discuss investments and communicate information. However, there is no evidence to document the results of these meetings.
- Employee financial disclosure information is not reviewed for compliance with the Treasury's ethics policy on an annual basis. Financial disclosure forms were not obtained from employees in calendar years 1992 and 1993. The forms obtained from employees in October 1995, covering calendar year 1994, were not reviewed by executive management until January 1996.
- Performance evaluations are not prepared for exempt positions, including the Director of Investments. (See Section 3-D, page 91, for further details.)
- There is no accurate, written job description for the Director of Investments position. (A generalized description was used to hire a new director in February 1994. See Section 3-D, page 91, for further details.)

In addition, when the former Director of Investments resigned in January 1994, the State Treasury had no other personnel with the knowledge and expertise needed to fulfill the functions of this position. As a result, the former director continued to serve in full capacity through February 1994. In the financial industry, it

is accepted practice to relieve an employee of high-level responsibilities that could impact portfolio performance once a letter of resignation is received. The Director of Investments position is critical to the successful operation of the Treasury's investment practices, in part because of the concentration of authority and responsibility. (See Section 3-D, page 91.)

Recommendation:

We recommend that State Treasury management implement a portfolio-monitoring process that includes comparisons to other portfolios and indexes with similar composition, size, and average maturity. The rates on the 13-week Treasury Bill should be monitored periodically and compared to the performance of the State Treasury portfolio. The comparison should be communicated to the Comptroller of Public Accounts so state agencies involved in monitoring the federal draw-downs can be notified.

A written investment strategy should be prepared and reviewed periodically to determine if adjustments to the portfolio are needed in response to changing market conditions. Executive management's involvement in the monitoring process should be documented.

We recommend that executive management establish procedures to ensure that investment personnel are adequately cross-trained so that Treasury functions continue to operate smoothly when key investment personnel resign. Authority and responsibility for investment portfolio management should be removed once an employee's resignation is received.

Executive management should establish procedures to ensure that financial disclosure statements are completed at least annually by key employees and that these statements are reviewed in a timely manner. A process should also be established to resolve any questions resulting from the review of the financial disclosure statements.

Management's Response:

Treasury management has begun a portfolio monitoring process that includes comparisons to other portfolios and indexes with similar characteristics. It has long been recognized that the Treasury portfolio is unique in its characteristics. These traits make it difficult to find adequate comparisons. Banks appear to be a good comparison, but such data has not been available. However, we will continue to look for new comparisons as they become apparent.

Under the CMIA, state agencies are required to reimburse the federal government for interest earnings on the draw down of federal funds until the funds have been spent from the Treasury. The federal government charges the state an interest rate equal to the 13 week Treasury bill. We only have the money for a very short time, in most cases

three days. We have to invest this in one day (overnight) investments that will seldom earn a rate of return equal to or greater than the 13-week Treasury bill.

In the future we will more closely monitor the 13-week Treasury Bill rate against the yield earned on the Treasury portfolio. If our yield falls below the 13-week Treasury Bill, we will notify the Comptroller's Fiscal Management division so that they may more closely monitor state agency activities in an effort to minimize the state's liability to the federal government.

The auditor's report also questions the lack of a written investment strategy. Each investment made by the Director of Investments is made with a particular strategy in mind. In the future we will ensure that this strategy is in writing.

We agree with the state auditor that investment personnel should be adequately cross trained. We are currently working with the Director of Investments to establish procedures ensuring that the investment division will continue to operate efficiently in case there is a loss of key personnel.

Executive management will undertake a review of other agencies policies with regard to financial disclosure statements. Upon completion of these reviews we will draft the appropriate policies and procedures.

Section 1-B:

Internal Audit Has Not Provided Oversight for Investment Practices

The internal audit function at the State Treasury has not provided oversight for the Treasury's investment practices. Despite the fact that the Treasury manages portfolios which total \$13 billion, Internal Audit conducted no audits of investment practices during the past three years.

Internal audit had scheduled an audit of the Investment Division in fiscal year 1995. The audit was canceled, according to management, in order to avoid duplication of effort when the State Auditor's Office began work on this project.

Recommendation:

We recommend that the internal audit function perform audits relating to the State Treasury investment activity each year. Controls over the acquisition, custody, performance, and disposal of investments should be reviewed and monitored periodically to ensure investments are properly accounted for and transactions are executed in accordance with established policies and procedures.

Management's Response:

The auditor's office is correct that an audit was planned for FY95. It was, in fact, canceled due to the involvement of the State Auditor's Office in an examination of the Treasury's investment practices beginning in January 1995. Since it is our opinion that we should not duplicate the work of the State Auditor's Office, we canceled our review of our investment practices pending the completion of the State Auditor's work.

We will pass along your recommendation of annual reviews to the Comptroller's Office for their consideration.

Section 1-C:

Authority to Enter Into Investment Transactions Is Not Appropriate for Deputy Treasurer and Assistant Deputy Treasurer

The Deputy Treasurer and Assistant Deputy Treasurer have the authority to enter into investment transactions. Since these positions are responsible for providing oversight for the investment function, it does not appear to be appropriate that they should also be able to authorize investment transactions.

We did not find any indication that executive management had actually entered into investment transactions on behalf of the Treasury. However, providing these executive management positions with this authority does create the risk that the Treasury could enter into investment transactions without prior notification to the Investment Division. A clear delegation of authority and responsibility is necessary to ensure that investments are authorized, appropriate, and in alignment with established policies, procedures, and the investment strategy.

Recommendation:

We recommend that management segregate the responsibilities to provide oversight and to enter into investment transactions. Authorization to execute investment transactions should be limited to the Director of Investments and the traders in the Investment Division.

Management's Response:

We agree with the recommendation.

Section 1-D:

The Operations of the TexPool Advisory Board May Not Contribute to Ensuring Accountability Over This Portfolio

The role of the TexPool Advisory Board (Advisory Board) in the system of oversight is unclear since the duties and responsibilities of the Advisory Board are not fully defined, the Advisory Board members receive no formal training, and their attendance at meetings is generally low. In addition, there is no ethics policy for Advisory Board members and they are not required to file conflict of interest statements or financial disclosure forms.

Effective September 1, 1995, the TexPool Advisory Board is composed of 12 members, 6 of whom are required to have investment experience. The remaining 6 members represent TexPool participants. All Advisory Board members are appointed by the State Treasurer.

The roles, responsibilities, authority, and duties of the TexPool Advisory Board in ensuring accountability is unclear. The level and extent of the Advisory Board's responsibility for the TexPool portfolio, in relation to that of Treasury management, is not clear.

There are no written guidelines or criteria distinguishing the Advisory Board from a governing board. The TexPool Participation Agreement states that the Advisory Board's primary responsibilities include:

- Approving the TexPool investment policy
- Approving a fee structure for TexPool participants
- Adopting other rules

Without clear lines of authority, the accountability for decision-making can become difficult and vague. Written roles, responsibilities, and clear lines of authority are necessary to ensure proper accountability and responsibility for decisions regarding the investment of public funds in TexPool.

Advisory Board members have not received formal training related to the management of local government investment pools. Such training would include policy development, investment risks, performance analysis, and portfolio monitoring.

Attendance of Advisory Board members at meetings was generally low in fiscal years 1994 and 1995. Since January 1994, attendance at Advisory Board meetings has typically been just enough to reach a quorum of seven members. From January 1994 through August 1995, five of the meetings were attended by only seven members, with one meeting reaching quorum only because an alternate sat in for a regular member. Two other meetings were attended by nine members. In addition,

during fiscal year 1995, one of the Advisory Board members did not attend any meetings and a second member attended only one meeting.

Eight of the 12 members were present for the November 30, 1995, meeting, when the newly appointed Advisory Board met for the first time. The composition of the Advisory Board changed effective September 1, 1995, to comply with the amendments to the Public Funds Investment Act (Chapter 2256, Government Code).

There is no ethics policy for the TexPool Advisory Board members and they are not required to file annual financial disclosure forms or conflict of interest statements. Ethics policies and conflict of interest statements establish acceptable behavior and relationships with regard to Advisory Board members' roles and responsibilities. They establish parameters relating to the fiduciary duties for board members of a public funds investment pool.

Recommendation:

We recommend the TexPool Advisory Board establish and adopt written roles, responsibilities, and duties for the Advisory Board, including minimum meeting attendance requirements. The Advisory Board's authority and its responsibilities should be clearly established and communicated to all Advisory Board members, Treasury management, and TexPool participants. In developing the written roles and responsibilities, including level of authority, the Advisory Board should consider the differences between an advisory board and a governing board. The Advisory Board should also establish minimum attendance requirements for board members.

The TexPool Advisory Board should receive training in areas related to policy development, investment risks, performance analysis, and portfolio monitoring. The Advisory Board should also be familiar with the criteria related to maintaining a AAA-rated money market fund and the requirements of the Public Funds Investment Act (Chapter 2256, Government Code).

We also recommend the TexPool Advisory Board establish an ethics policy, including conflict of interest statements, with regards to their fiduciary duties as board members. The ethics policy and conflict of interest statement should clearly establish acceptable behavior and relationships with regard to the Advisory Board members' roles and responsibilities. Financial disclosure forms should be required and used to determine Advisory Board compliance with the ethics policy. Procedures should also be established to determine necessary action in the event a conflict of interest is noted.

Management's Response:

The Treasury will document the responsibilities of the TexPool Advisory Board and, as a part of that review, the Treasury will evaluate the need for the Board to submit

financial disclosure forms, conflict of interest statements and an ethics policy for the Board.

Section 2:

The Lack of Documented Policies and Procedures at the State Treasury Weakens the Controls Over the Investment of Public Funds

The State Treasury investment policy does not address critical elements of the investing function and procedures are not documented. Thorough policies and procedures, along with accurate and complete documentation of the Treasury's investment practices, are critical to minimizing the risk that vital controls will not be affected during the transfer of responsibility for the State Treasury's functions to the Comptroller of Public Accounts effective September 1, 1996.

Section 2-A:

The State Treasury's Investment Policy Does Not Provide Adequate Guidance for Investing Public Funds

Weaknesses exist regarding the Treasury's investment policy that governs the State's \$6.75 billion investment portfolio (value as of August 31, 1995). These weaknesses limit the effectiveness of the policy as a management tool:

- **Periodic Policy Review** - The investment policy is not reviewed and updated regularly. The last review of the investment policy appears to have occurred in August 1993. The policy itself calls for regular review on a semi-annual basis.
- **Diversification** - The investment policy does not stipulate diversification limits/ranges for investments other than U.S. Government securities. Diversification is a critical control that helps ensure the safety of public funds, helping to mitigate the risk associated with portfolios that invest heavily in any one type of investment.
- **Acceptable (Tolerable) Risk Levels** - The investment policy does not mention acceptable (tolerable) risk levels for the portfolio or by investment type. Risk levels are used to monitor the extent of the various types of risk assumed in the portfolio and help guide development and modification of the investment strategy.
- **Portfolio Performance** - The investment policy does not document management's expectation regarding portfolio rate of return. The policy states that portfolio performance should be compared to various other indexes, but does not state expectations regarding the Treasury's portfolio performance. Comparing portfolio performance with similar investment funds is a

monitoring tool that can be used to develop, revise, and evaluate the investment strategy in effect. It also provides management with a mechanism to assess how well its Investment Division is performing and the level of risk associated with the portfolio.

- **Maturity Limitations** - The Treasury's investment policy does not have stated limitations or expected maturities for the portfolio and/or individual investments. The policy emphasizes that liquidity is one of the highest priorities for the portfolio, but does not establish maturity limits by investment type to ensure that liquidity is maintained for present and future needs.
- **Eligible Collateral** - The Federal Bankruptcy Code identifies a more narrow range of eligible collateral for repurchase and reverse repurchase agreements than what is allowed by the Treasury's investment policy. We noted no instances of investment transactions which were subjected to bankruptcy proceedings. However, the risk exists that state funds could be lost in the event a counterparty files bankruptcy if the collateral is not eligible under the Federal Bankruptcy Code.
- **Investment Staff Quality and Capability** - The investment policy does not specifically mention investment staff quality and capability, nor does it stipulate criteria. Investment staff members are the main resources that guide portfolio management. Establishing criteria regarding the investment staff's quality and capability provides assurances that funds will be invested prudently and that decisions regarding the investment of public funds are made by trained and qualified personnel.
- **Lottery Investments** - The Treasury's investment policy does not specifically mention investments purchased for Lottery winners. These investments are typically long-term in nature and carry different maturity limits than what is needed for a liquidity fund, such as the Treasury's portfolio. Lottery investments are less diversified by investment type due to the nature and purpose of the investments. As a result, the risks associated with these investments differ from the risks linked to a liquidity fund.

Recommendation:

We recommend that management review the investment policy periodically to ensure that public funds are invested prudently and in accordance with applicable statutes and management's decisions.

We also recommend that the State Treasury revise its investment policy to address portfolio diversification, acceptable risk levels, expectations regarding portfolio performance, investment maturity limitations, eligible collateral, and investment staff quality and capability. The new investment policy should also address Lottery

investments. (The need for a written agreement between the State Treasury and the Texas Lottery Commission concerning investments is discussed in Section 1, page 65, of the Lottery Commission's portion of this report.)

Management's Response:

The Treasury investment policy is currently being revised and the Auditor's recommendations will be considered for inclusion in the policy.

At the time of your review, our investment policy had last been updated in 1993 - it had been reviewed many times since, particularly during the 1995 legislative session. It has now been updated as of July 1996. In the future we will formally review the policy on an annual basis.

Section 2-B:

There Are No Documented Policies or Procedures for Critical Cash Management Activities, Including Issuance of Tax Revenue Anticipation Notes (TRANs)

The State Treasury does not have documented policies and procedures for cash management activities which are critical to the financial operations of the State.

There are no documented policies and procedures for the processes used to issue Tax Revenue Anticipation Notes (TRANs). In addition, written policies and procedures do not exist which describe how cash projections are used to determine the amount and timing of TRAN issues. TRANs are critical to smoothing out cash flows, since revenues are not necessarily received at the time expenditures must be made. Between 1992 and 1996, the use of TRANs has increased by 136 percent (from \$1.1 billion to \$2.6 billion).

There are no documented policies and procedures for the preparation, monitoring, and adjustments of cash flow projections. Adjustments made to the Comptroller's Revenue Estimate to determine the amount and timing of TRAN issues are not documented and appear to be based on the judgement and discretion of one person at the Treasury.

There was no documentation to support the reasons provided by Treasury management for the mid-year cash shortfall that occurred in December 1994. As a result of this shortfall, the Treasury issued \$500 million in TRANs in March 1995. Generally, TRANs are issued at the beginning of the fiscal year. We believe that the TexPool bailout and resulting loss of dollars to the State may have contributed to the cash shortfall. (See Section 4-A, page 92.)

Recommendation:

We recommend that Treasury management document the policies and procedures for preparing, monitoring, and adjusting cash flow projections. Documentation should include the criteria and explanations regarding adjustments made to the Comptroller's revenue estimate and the impact on the General Revenue Fund. Adjustments made to cash flow forecasts should be documented and supported by evidence to ensure the accuracy and reliability of the Treasury's cash management process.

We also recommend that Treasury management document the policies and procedures related to the issuance of TRANs. These procedures should include documentation regarding the timing of information so TRANs continue to be issued on schedule at the beginning of each fiscal year. The reasons and conditions surrounding additional issues during the fiscal year should also be clearly documented.

Management's Response:

The Treasury disagrees with the Auditor's belief that the TexPool purchases resulted in the issuance of more cash management notes. The \$500 million TRAN issue in FY 1995 would have occurred even if the TexPool purchases were not made.

Since 1992, the strategy for issuing notes has been to issue notes early in the year and again in the spring. Although never actually used until FY 1995, this strategy is described in the Official Statement for each of those years. In August 1994, when the forecast was prepared for the September TRAN, the published forecast indicated that the deep hole of \$2.2 billion was expected in May 1995. The cash shortage was to be covered by \$1.7 billion of TRANS and \$500 million of interfund borrowing and, if necessary, commercial paper or fixed interest notes. Since the notes were issued in September and the deep hole was more than six months away, the full amount of the deep hole was not issued in order to avoid paying arbitrage to the federal government.

The reason the additional notes were issued is that cash shortages were \$200 to \$300 million larger than expected at the end of November and beginning of December, prior to the TexPool crisis. If that trend were to continue, the cash shortage in May would increase to more than \$2.4 billion, far more than the \$1.7 billion TRAN issue in September 1994. The \$500 million TRAN issue in March saved the state millions of dollars.

While there are many documents and computer programs that indicate critical steps for issuing TRANS and details for monthly monitoring and reporting of the cash flow forecast, we realize that there is always room for improvement when it comes to documenting policies and procedures.

We are currently in the process of documenting policies and procedures at the Treasury, pending merger with the Comptroller's Office, including those involving the TRAN issue and cash flow forecasting.

State Auditor's Follow-Up Comment:

We were told during the audit that the \$200 million shortfall that occurred in December 1994 was unanticipated. The run on TexPool, which resulted in a \$55 million realized loss and cost the State \$97 million, also occurred in December 1994. Since Treasury management was only able to provide evidence supporting approximately \$100 million of the cash shortfall, we believe that the TexPool bailout may have been a contributing factor to the issuance of the TRANs in March 1995.

Section 2-C:

Supervisory Review and Approval of Investment Transactions Is Not Performed Routinely

Eight of the 21 investment transactions tested did not have evidence of supervisory review or approval by someone other than the person executing the transaction. In addition, two of the reverse repurchase agreements did not have supporting documentation to identify which securities in the portfolio were used as collateral on these transactions.

A reverse repurchase agreement occurs when a broker/dealer or a financial institution transfers cash to the State Treasury. The Treasury simultaneously transfers securities to the broker/dealers or financial institution and promises to repay the cash plus interest in exchange for the same securities at a later date.

Supervisory approval provides evidence that management has reviewed transactions and that the investments purchased comply with established policies, procedures, and the investment strategy. Supporting documentation on the reverse repurchase agreements is necessary to ensure that the underlying collateral is properly accounted for when placed with a custodian bank.

Recommendation:

We recommend the Investments Division ensure that procedures are in place to review and approve transactions executed by investment traders. We also recommend the review process include procedures to ensure that supporting documentation is included in documents that evidence the execution of investment transactions.

Management's Response:

As part of the merger with the Comptroller's Office, all procedures and policies in place are currently being reviewed and documented. As part of this process, we will ensure that the necessary supervisory approval is obtained and supporting documentation is provided on all transactions.

Section 2-D:

Documentation Is Needed for Internal Procedures and the Broker/Dealer Selection Process

The lack of documentation impacting the State Treasury's policies and procedures in other areas related to investment practices was noted:

- **Documentation of Internal Procedures** - The Treasury's procedures manual for investments is outdated and describes the flow of information by individual employee name, rather than position. Since employees leave and/or change positions within an organization, the procedures manual is needed to provide a clear picture of the flow of investment documentation and information. Management acknowledges the need to update the manual.
- **Broker/Dealer Selection Process** - There are no documented policies, procedures, or criteria for broker/dealer selection. It appears that sole authority for broker/dealer selection rests with the Director of Investments. The lack of documented policies, procedures, and criteria increases the risk that decisions may be perceived to be influenced by the personal attitudes or biases of the person in the director position. (See Section 3-B, page 86.)

Recommendation:

We recommend the State Treasury complete the process of updating the procedures manual for investments as soon as possible. The criteria, policies, and procedures used to select broker/dealers should be included in this manual. Executive management, in consultation with the Director of Investments, should make decisions regarding the selection of broker/dealers used in the Treasury's investment transactions.

Management's Response:

As mentioned earlier, we are currently in the process of reviewing, updating and documenting all policies and procedures.

The above areas will be included.

Section 2-E:

The TexPool Investment Policy Can Also Be Improved

The Safekeeping Trust Company has an investment policy for the TexPool portfolio which totaled \$3.5 billion as of August 31, 1995. However, the policy can be improved. The investment policy does not address expected rates of return or stipulate criteria and frequency for comparing the portfolio's performance to similar funds.

Defining expected rates of return and stipulating criteria and frequency for measuring portfolio performance would enhance controls and provide a management tool to monitor investment activity. These additional controls would further strengthen the improved system of controls over the TexPool portfolio which were mandated, in large part, by the 74th Legislature.

Recommendation:

We recommend the TexPool investment policy be revised to include expected rates of return and periodic comparison of the fund's performance with similar portfolios. In comparing TexPool to other portfolios, consideration should be given to other portfolios' objectives, weighted average maturity, net asset value requirements, and size of the fund.

Management's Response:

Since our expected rate of return has always been reported in our Legislative Appropriations Request, we had not felt it necessary to include it in the investment policy. However, as part of the ongoing review of policies and procedures we will take this recommendation under advisement when next updating the investment policy.

Section 3:

Controls Over the Treasury's Investment Activities Are Not Adequate at the Operational Level

Section 3-A:

Wire Room Activities Are Not Appropriately Segregated From the Investments Division

Wire room activities are not properly segregated from the investments function. The wire room, which serves as a "checks and balances" mechanism for investment transactions, is under the supervision of the Director of Investments at the State Treasury.

The wire room verifies the trade tickets prepared by the investment traders and reconciles the transactions to the Federal Reserve Bank data. The wire room also performs the reconciliation of investments held in the Depository Trust Company account established by the Texas Treasury Safekeeping Trust Company (Trust Company).

The lack of segregation of duties over investment activities creates the risk that supervisory intervention could bypass controls in place, causing errors and irregularities to remain undetected. For example, in fiscal year 1992, four agency

notes were purchased by TexPool with maturity dates extending beyond limitations established in the investment policy. Call dates, which indicate the possibility of early maturity, were recorded as the actual maturity dates by the investment traders. During the settlement of these transactions, wire room personnel apparently accepted the call dates even though Federal Reserve Bank records indicated longer maturity dates.

The violation of investment policy related to these transactions was brought to Treasury management's attention during an annual audit. Treasury management considered the issue resolved when the investments were sold to the Treasury portfolio at book value, which also raises additional issues regarding supervisory intervention over established controls.

Recommendation:

We recommend that the wire room activities be segregated from the Investments Division so that errors can be detected without intervention from the traders initiating the investment transactions. Verification and reconciliation of investment transactions should be performed independent of the transaction initiation process.

Management's Response:

We will take this recommendation under advisement during the upcoming merger with the Comptroller's Office.

Section 3-B:

The Selection and Retention of Broker/Dealers Should Be Documented and Monitored

Weaknesses exist in the process for the selection and continued use of broker/dealers for investment transactions:

- There are no documented policies or procedures or established criteria for the selection and retention of broker/dealers involved in the investment process. (See Section 2-D, page 84.)
- Policies and procedures are not in place to ensure that the State Treasury periodically receives and reviews updated financial information from broker/dealers. (Although the State Treasury sent letters requesting this information on June 13, 1995, none of the five brokers whose files were tested had responded to the request as of November 1995. There is no evidence to indicate that reminder letters were sent to the brokers. The brokers remained on the approved list for continued business with the State Treasury.)

- The Director of Investments has sole responsibility for approving, disapproving, or canceling approval of the broker/dealers used for investment transactions initiated at the State Treasury.

The lack of documented policies and procedures, coupled with the sole responsibility of the Director of Investments for selecting broker/dealers, creates a risk that personal attitudes or personal preferences could influence the judgement over these decisions. Thus, the State Treasury may be subject to unnecessary criticism or legal action if these decisions were challenged.

Recommendation:

We recommend that the State Treasury document the criteria, policies, and procedures used in the selection and retention of broker/dealers. Executive management, in consultation with the Director of Investments, should make decisions relating to the selection and retention of broker/dealers.

In addition, procedures should be established to ensure that the State Treasury receives updated financial information from broker/dealers in a timely manner. The Treasury should not use broker/dealers for investment transactions if deadlines for requested information are not met.

Management's Response:

Selection and retention of broker dealers involves many issues and is ultimately a very qualitative decision process requiring judgment. Extensive broker dealer questionnaires and financial statements only provide so much information. Much of the decision process cannot be made using numerical calculations. For example, the press is regularly full of reports of broker/dealer firms that have gotten in trouble for inappropriate or illegal activities, or report of clients who have problems as a result of dealing with less than scrupulous firms and individuals. Unfortunately, such news accounts are reported after the problem has occurred. In addition, both national and local regulatory bodies do not have sufficient information to prevent such problems. By utilizing knowledge of the industry, coupled with years of experience in the business, trouble can be avoided and the most appropriate broker/dealers should be utilized. These decisions should be left in the hands of those most qualified to make those decisions. Management's role should be in an oversight and review capacity rather than the actual selection of specific broker/dealers.

We will document the criteria and procedures used in the selection and retention of broker/dealers.

In the future, we will update financial information maintained on our approved broker/dealers in a more timely manner.

Section 3-C:

Financial Accounting and Reporting for Certain Investment-Related Activities Can Be Improved

Financial accounting and reporting for certain investment-related activities at the State Treasury can be improved in several areas. Improvements can be made in adherence to generally accepted accounting principles, reporting interest income on reverse repurchase agreements, and reporting investment-related costs.

The State Treasury does not fully account for investment activity using generally accepted accounting principles (GAAP). Amortization of premiums and discounts on short-term investments and accretion of discounts on long-term investments are calculated using the straight-line, rather than the effective-interest, method.

Under generally accepted accounting principles, deviation from standards is allowed if the resulting accounting difference is not material to the financial statements. However, the Treasury does not analyze the resulting difference to determine whether or not it is material.

As a result of not using generally accepted accounting principles, the State Treasury overestimated interest revenue on Lottery investments by \$15 million. The State Treasury reported \$61 million related to the amortization of Lottery investments for fiscal year 1995. The Lottery Commission recalculated the amortization on the same investments using generally accepted accounting principles for the same time period and reported \$46 million in its audited financial statements.

The State Treasury does not report interest earned from reverse repurchase agreements to executive management. In fiscal year 1995, approximately \$46.9 million of interest expense was incurred on these investments. Comparing income and related expense would help executive management monitor the investment activity and determine whether these transactions are cost-beneficial to the portfolio.

In addition, the expense on reverse repurchase agreements using Lottery investments and the corresponding income from repurchase agreements is not reported separately on Treasury records. The State Treasury uses Lottery investments in its portfolio as collateral for some reverse repurchase agreements. Reporting this information separately from other Treasury revenue and expense could provide more information regarding the State's earnings from Lottery transactions.

In a reverse repurchase agreement transaction, the State Treasury borrows cash and transfers securities from its portfolio to the lender as collateral. The State Treasury promises to repay the cash plus interest in exchange for the return of the same securities. Treasury management states that cash obtained from reverse repurchase agreements is invested in overnight transactions (repurchase agreements).

In a repurchase agreement, the State Treasury lends cash to a broker/dealer or a bank, and holds securities from that borrower as collateral. The State Treasury receives cash plus interest and returns the same securities to the borrower when the transaction terminates. The State Treasury invests cash from various sources in repurchase agreements, including the cash obtained from reverse repurchase agreement transactions.

The Treasury does not record investment-related costs appropriately on its accounting records. The State Treasury's budget reports do not reflect the actual costs related to the investment function. More than \$1.29 million of expenditures was recorded on the budget summary as costs related to the investment function. However, this amount did not include an additional \$1.26 million in bank charges that were instead recorded as a reduction to revenue.

Other weaknesses were also noted in reporting investment-related costs during fiscal year 1995, including:

- Custodian bank charges not directly related to investment activity were recorded as a reduction in investment income.
- Custodian bank fees related to investment activity are not recorded consistently.
- Custodian bank fees in the amount of \$8,500 paid by the State Treasury included charges related to custodian bank services performed on behalf of the Texas Treasury Safekeeping Trust Company. In addition, these bank charges were not considered in the calculations used to allocate depository interest to various funds in the State Treasury.

Recommendation:

We recommend that the State Treasury use generally accepted accounting principles for recording and reporting investment revenue. While changes are being made in automated programs to comply with GAAP, the State Treasury should determine the materiality of the difference in the method used. Investment revenue should be reported appropriately to ensure the accuracy of accounting records.

We also recommend the State Treasury improve its investment reports by separating the income earned on repurchase agreements in different categories, such as the following:

- Income earned from cash available in the State Treasury
- Income earned from the investment of cash obtained through reverse repurchase agreements

- Income earned from reverse repurchase agreements using Lottery investments as collateral

In addition, investment-related costs should be appropriately recorded on the accounting records. All bank charges should be recorded as expenses on the accounting records to ensure that investment-related costs are reported accurately and consistently. In addition, all fees related to investment activity should be included in the State Treasury's spreadsheet that is used to track bank charges for purposes of allocating depository interest. The current practice of allocating bank charges not directly related to investment activity should be researched to determine if this is equitable when depository interest is allocated to the various funds held in the State Treasury.

The State Treasury should also ensure that costs associated with Trust Company operations are paid by that entity. The Trust Company should pay for the portion of bank services related to its own activities. Expenses should be allocated to the appropriate entity to ensure accurate and proper reporting of financial information and investment activity. The Trust Company should reimburse the State for bank charges paid on its behalf in prior years.

Management's Response:

Both the Treasury Pool and TexPool determine daily interest earnings using the straight line method. We feel that the straight line method is the industry standard for accruing interest on pools.

With regard to the Lottery securities, the Treasury agrees that the use of the effective-interest method would more accurately present the value of the Lottery securities. We will recommend these changes be incorporated in future revisions to the Investment system.

The practice of netting bank and Treasury charges with earnings from funds in the Treasury is patterned after banking practices. A common practice is to pay interest on the average collected balance less any services provided by the bank.

At one time, income from reverse repurchase agreements was included in the reports that executive management received from the Director of Investments. We are not aware of why this practice was discontinued, but it will be reinstated.

The Treasury is currently reviewing all policies and procedures relating to the Trust Company and will ensure that all costs associated with the Trust Company are being paid by that entity.

Section 3-D:

Human Resource Management Controls Can Be Improved

Human resource management controls for investment personnel at the State Treasury can be improved. We noted the following weaknesses in these controls:

- Formalized job descriptions are not current and performance evaluations were not prepared for exempt employees at the State Treasury. The Director of Investments and the Director of the Trust Company did not have written job descriptions nor did they receive performance evaluations from executive management.
- Personnel files and performance evaluations for classified staff were not current. Among ten employee files we tested, two employees had not been evaluated in over two years, one employee had not received an evaluation in over three years, and one employee had not received an evaluation since being hired. In addition, seven of the ten files did not contain job descriptions for the positions on which the employees were evaluated.
- The State Treasury does not have minimum requirements for continuing professional education, and employees receive little external training in areas related to their job responsibilities.
- The Director of Investments is currently the only employee at the State Treasury with the experience and qualifications needed to manage multi-billion dollar portfolios, such as the State Treasury and TexPool. Should the Director of Investments experience an unexpected or lengthy absence, no one is cross-trained to fill this position. (See Section 1-A, page 72.)

The knowledge, skills, and abilities of employees responsible for the State Treasury's investment activities are the most critical element under management's control in the effort to obtain successful portfolio performance. Complete and thorough management of these resources would provide better insight into opportunities to improve portfolio performance.

Recommendation:

We recommend the State Treasury develop and/or update job descriptions for all employees in key areas such as the investments function. Executive management should provide feedback regarding exempt employees' job performance. Procedures should also be implemented to ensure employees in the Investment Division receive timely performance evaluations.

In addition, we recommend the State Treasury establish a program that requires employees in the Investment Division to maintain a certain level of continuing

education related to their job responsibilities. As the financial environment continuously changes, investment personnel should ensure they have the skills necessary to analyze and make decisions relating to investment information presented from various sources.

We also recommend that someone be cross-trained for the functions and responsibilities of Director of Investments to ensure that public funds are managed on a continuous basis by someone with the knowledge and expertise of multi-billion dollar portfolios.

Management's Response:

Formalized job descriptions have been prepared for the Director of Investments and the Director of the Trust Company. The descriptions were furnished to the House Appropriations Committee on June 30.

We agree that all employees within the Investment Division should receive timely performance evaluations. We will see that all files are made current and remain that way. We disagree with the recommendation that exempt employees receive formal performance appraisals. We fail to see the need. They serve at the pleasure of the State Treasurer and their performance is evaluated daily. As for the future, this decision will be up to the Comptroller of Public Accounts.

We agree with the auditor's recommendation that employees within the Investment Division maintain a certain level of continuing education related to their job responsibilities. We will research this issue and implement the appropriate programs.

Section 4:

Other Reports Are Available From the State Auditor's Office Which Relate to the Treasury's Investment Practices

Section 4-A:

The Treasury's Bailout of TexPool, Discussed in Another Audit Report, May Have Had a Negative Impact on Performance of the State Treasury's Portfolio

The yield on the State Treasury portfolio, which has historically been higher than TexPool's yield, dropped after the State's bailout of TexPool. In December 1994, TexPool's yield surpassed the Treasury's yield for the first time since TexPool's inception in 1989.

The State's bailout of TexPool in December 1994 contributed to the following performance of the Treasury's portfolio:

- Yield dropped from 5.33 percent as of November 30, 1994, to 4.87 percent by December 31, 1994. The \$55 million loss incurred by the Treasury's sale of investments reduced interest earnings, thereby decreasing the monthly yield.
- Had the \$55 million loss resulting from the TexPool bailout been allocated to the various funds in the same manner as depository interest, the General Revenue Fund's share of the loss would have been approximately \$7.4 million.
- Almost \$900 million was withdrawn from the Treasury by the State's major investing agencies during the State's bailout of TexPool.

Events leading to the run and actions taken by Treasury management are reported in more detail in the State Auditor's report, *A Review Of The State Treasury's Management Of TexPool* (SAO Report No. 96-053, March 1996).

Section 4-B:

A Management Letter Issued in March 1996 Reported That the State Treasury Does Not Perform Comprehensive Reconciliations for Investments Held in Custodial Accounts

The management letter (SAO Report No. 96-325) recommends improvements in the State Treasury and the Safekeeping Trust Company's reconciliation process to ensure that investments are properly recorded on the accounting records. The management letter is published in *A Report on the 1995 Financial and Compliance Audit Results* (SAO Report No. 96-063, May 1996).

Section 4-C:

The Treasury's Cash Flow Forecasting Department Should Not Be Combined With the Comptroller's Revenue Estimating Division, as Recommended in a Previous State Auditor's Report

The previous recommendation to combine the two critical functions of cash flow forecasting and revenue estimating was based on efficiency. However, additional evidence obtained during the Investment Practices Review indicates that this recommendation should not be implemented if strong financial controls are to be maintained.

The conclusions reached in an earlier State Auditor's report, *An Audit Report on the Treasury Department's Automated Systems and Processes* (SAO Report No. 95-159, August 1995) state:

Combining the Treasury's Cash Flow Forecasting Department with the Comptroller's Revenue Estimating Section could increase efficiency, if the Treasury and Comptroller merge. (Page 2.)

Based on additional work performed during the Investment Practices Review, we believe that the revenue estimating and cash flow functions should remain segregated. Although combining these functions could increase efficiency, the consolidation would create a significant weakness in the State's overall system of financial controls. The combined unit would be responsible for projecting available levels of funding, certifying appropriations, and issuing short-term debt (TRANS) to smooth out cash flows. Allowing one unit to control all these functions increases the risk that short-term debt might be issued to validate the revenue estimate rather than for their intended purpose, which is to smooth cash flows. Smoothing cash flows is critical when expenditures must be made prior to the receipt of anticipated tax revenues.

The University of Texas System

Overall Summary

Overall, controls over investment practices at The University of Texas System (UT System) appear adequate to ensure accountability for the UT System's investments, although some important enhancements to existing controls are needed. Major strengths included:

- The adequacy of direct oversight of the investment function
- The appropriateness of the organizational structure of the investment function
- The communication of appropriate information to decisionmakers
- The existence of detailed investment policies

In addition, key investment personnel appear to have the necessary educational background and experience to fulfill their responsibilities. Significant opportunities to enhance controls also exist in several of these areas.

In March 1996, the UT System transferred direct management of its investment functions to The University of Texas Investment Management Company (UTIMCO), a newly created nonprofit corporation. Most of our review procedures were performed during the period in which the investment function was still managed by the UT System's Office of Asset Management. However, we also reviewed certain aspects of UTIMCO, including its organizational structure and some of its proposed policies, and we observed a UTIMCO Board of Directors meeting. Some of our recommendations are addressed to the Board of Regents (UT Board), which retains the overall fiduciary responsibility for the UT System's investments, whereas other recommendations are relevant to UTIMCO.

- The oversight of the investment function provided by UTIMCO's Board of Directors, as designed and per our observation, represents a significant control. The current Directors have extensive professional investment expertise and their duties are limited to the investment function, in contrast to the pre-UTIMCO structure. Nevertheless, the Board of Regents remains as the ultimate fiduciary of the UT System's investments and has been left with certain statutory oversight duties related to UTIMCO. Although UTIMCO can assist the UT Board in performing these duties, the UT Board should consider hiring an independent investment consultant to enhance its ability to meet its fiduciary responsibilities. (See Section 1-A, page 96.)
- Investment information provided to internal and external users in various reports is generally useful and sufficient. However, the investment decision-making process has sometimes occurred in closed meetings, under both the former and the current management structures, thereby limiting public access to the process. The UT Board or UTIMCO's Board of Directors should

consider increasing public access to the investment process. (See Section 1-B, page 99.)

- The existence of detailed investment policies, aligned with the individual goals and objectives of each major investment fund, also represents a strong control, but opportunities for improvement were noted. Investment procedures generally were in compliance with those policies to ensure that transactions occurred in accordance with management's expectations and only authorized securities were purchased. However, compliance with those policies was not effectively monitored during fiscal year 1995, and UTIMCO should ensure that greater emphasis is placed on monitoring, and reporting on, compliance. (See Section 1-D, page 104.) In addition, controls to ensure that ethics standards have been followed, especially concerning possible conflicts of interest, have not resulted in adequate documentation that no such conflicts occurred. (See Section 2, page 106.)

In notable recent occurrences, all three major rating agencies either upgraded or retained their rating on Permanent University Fund bonds as triple-A, their highest rating. These ratings were based, in part, on the conclusion that current and future income from the fund's investments is adequate to cover its debt service requirements. A potential risk considered by one agency is the planned increase in equity holdings, intended to maintain the fund's purchasing power, which exposes the fund to increased market volatility. Other strengths cited by the rating agencies include the improvement in investment management provided by the creation of UTIMCO, the UT System's experienced investment management team, and the Permanent University Fund's conservatively managed and well-diversified portfolio.

Section 1:

Although the Governance and Oversight Structure Has Changed Significantly, Improvements Are Still Needed to UT Board Oversight and Public Accessibility to Investment Decisions

Section 1-A:

The Board of Regents Should Consider Hiring an Independent Consultant for Ongoing Investment Assistance

The University of Texas System Board of Regents could enhance its ability to fulfill its fiduciary responsibilities by obtaining assistance from an independent investment consultant. The current oversight structure increases the risk that the UT Board will regularly defer to the recommendations of its new external investment management company which may result in an inappropriate level of autonomy for the private entity.

An independent study performed in 1994 identified the UT Board's lack of collective investment expertise and its diverse responsibilities among the factors inhibiting the

UT System's ability to maximize investment performance. This study led to passage of legislation, by the 74th Legislature, allowing the UT System to create The University of Texas Investment Management Company (UTIMCO), a nonprofit investment corporation. The UT Board, as permitted by this statute, has delegated management of the UT System's investments to UTIMCO. UTIMCO's nine-member Board of Directors, which includes three Regents, the UT System Chancellor, and five outside investment professionals, possesses considerable investment expertise. This increase in expertise of oversight officials at UTIMCO, combined with the corporation's ability to focus only on investment management, should enhance the UT System's ability to successfully manage its investments.

Nevertheless, the UT Board cannot delegate its ultimate fiduciary responsibility for the UT System's investments. UTIMCO's enabling legislation expressly reserved certain duties for the Regents, including but not limited to the following:

- Appointing and removing UTIMCO's Board of Directors
- Approving UTIMCO's investment policies and subsequent changes

In addition, the UT Board is required to analyze and evaluate investment results of the Permanent University Fund. The evaluation is supposed to include comparisons of investment results with the UT Board's written objectives and with the results of other similar funds.

The identified lack of collective investment expertise, along with the absence of periodic investment training to develop this expertise, may result in some members of the UT Board deferring decisions on Director selection and removal, investment policy decisions, and performance evaluations to the opinions of the UTIMCO Directors. Retaining an independent consultant to assist the UT Board would help compensate for the UT Board's collective lack of investment expertise and provide an independent assessment of UTIMCO's operations. An independent consultant would be a resource for the UT Board to:

- **Evaluate UTIMCO Directors and assist with removal decisions and new Director searches.** Investment advisors maintain large databases on investment professionals and could be a resource for the UT Board by performing preliminary research and interviewing potential candidates.
- **Analyze UTIMCO's investment policies and strategies.** The UT Board is responsible for approving the overall investment policies of UTIMCO. These policies incorporate long-term investment performance objectives and anticipated risk levels for several investment funds, in part through proposed asset allocation targets. An independent consultant could assist the UT Board in identifying potential policy weaknesses that might otherwise go unnoticed and could ensure that the UT Board fully understands the return expectations and the amount of risk it is accepting in each investment policy.

- **Independently evaluate and analyze investment performance by fund.** In the past, the UT Board was required by statute to employ a well-recognized performance measurement service to compute investment performance of the Permanent University Fund and to provide an evaluation and analysis of this performance against written objectives and against similar funds. The UT Board is no longer required to use an outside firm to perform these functions.

Although UTIMCO receives performance calculations from their custodian bank, without outside assistance the UT Board of Regents will rely solely on UTIMCO's internal analysis and evaluation of investment performance. The UT Board's oversight function would be strengthened by obtaining, from a source independent of UTIMCO, the evaluations, analyses, and comparisons for all funds managed. Such independent evaluations might include assessments of whether actual investment returns are reasonable in relation to the level of risk taken.

- **Provide training to UT Board members on investment-related issues or act as a resource to answer questions.** Responses to our survey of UT Board members indicate that formal, in-house investment training has not been provided to them in the past. Periodic training classes and access to investment experts who can answer technical questions would enable the UT Board to independently acquire and/or maintain the investment expertise necessary to oversee the operations of UTIMCO.

The Directors and management of UTIMCO will undoubtedly provide the UT Board of Regents with some or all of the above information. However, because the UT Board has oversight responsibilities for UTIMCO, use of an outside source to provide and/or validate this information represents an additional control. Without assistance from an independent, external consultant the UT Board may be placed in a position of "rubber stamping" UTIMCO's policy recommendations and performance evaluations. This would effectively allow UTIMCO to approve its investment policies and strategies and evaluate its own investment performance, which are responsibilities reserved for the UT Board of Regents.

Recommendation:

The Board of Regents should consider hiring an independent consultant to enhance its ability to meet its fiduciary responsibilities. The consultant should perform certain investment duties periodically, such as an annual evaluation of the custodian's investment performance calculations against UTIMCO's written objectives and against relevant peer groups. The consultant should also be available to perform specific tasks for the UT Board, such as analyzing proposed investment policies, providing ongoing training, and answering questions from individual UT Board members.

In addition, we believe that much of the investment training needs are similar for board members at the state entities with the most significant long-term investment portfolios

(TRS, ERS, TEA, and the UT System). Therefore, to the extent that board members of these entities need training in investment topics that are not entity-specific, we recommend that these entities attempt to coordinate training programs with each other. This could reduce overall training costs, increase communication among board members of the different entities, expose the participants to a wider variety of viewpoints, and make it easier for board members to find a convenient time and place to obtain this training.

Management's Response:

UTIMCO and its board of directors were established to enhance oversight of investment management by combining regental representatives with experienced investment professionals to govern the investment staff. The required minimum of three U.T. regents plus the chancellor of the U.T. System as directors of UTIMCO increases the level of education and direct involvement in the oversight process by the U.T. Board of Regents (U.T. Board) and the U.T. System executive branch. The level of reporting to the full U.T. Board under the UTIMCO structure will equal if not exceed the reporting level of the former committee structure. The U.T. Board's ability to perform its fiduciary responsibility has been enhanced under the new structure.

The U.T. Board possesses the right to employ an independent consultant for investment assistance regarding any issue at any time. The UTIMCO board was designed to serve as a continuous rather than periodic advisory, with fiduciary duty to the U.T. Board, and is charged with the responsibility of providing the investment assistance to the U.T. Board. External consultants and advisory committees do not have this fiduciary duty. The outside investment professionals serve on the UTIMCO Board to review staff recommendations and to advise regental representatives concerning policies, performance, etc. The regental representatives in turn, as members of the U.T. Board, remain as fiduciaries to the other U.T. regents and to the public at large.

The U.T. Board will consider the use of an independent consultant in the future to supplement the new UTIMCO structure if circumstances warrant. The Board will also consider providing additional investment training for Board members.

Section 1-B:

The UT System Should Assess Whether UTIMCO Can Increase Public Accessibility to Investment Decisions

The UT System's lack of documentation of some investment decisions, under its former structure, and the inaccessibility by the public to those decisions under the current nonprofit corporate structure, limits public oversight of the investment process. Substantive decisions concerning private investments were generally not made in open

meetings. In addition, the UT System's investment corporation was not specifically made subject to the Open Meetings Act in its enabling legislation.

The confidential nature of private investments may limit full deliberation on these investment decisions in an open meeting. (Private investments are investment opportunities, like venture capital and leveraged buyout funds, that have not been identified by traditional capital markets.) However, discussion of the nonconfidential aspects of the investment program and general investment decisions could be made more accessible to the public. This process would provide assurance that the decisions had received due consideration from oversight officials.

Under the former structure, several private investment agreements appear to have been approved by the Asset Management Committee of the UT Board of Regents in closed meetings. These meetings were conducted as briefing sessions which are not legally required to be conducted as open meetings. Although the Asset Management Committee made no formal decisions or approvals during these meetings, it appears that sufficient implicit direction was given to indicate whether or not staff should proceed with an investment. The subsequent formal approval by the full UT Board appears to have been a largely perfunctory approval of the Asset Management Committee's implied recommendation. None of the minutes we reviewed from the various meetings of the UT Board of Regents documented any discussion regarding these private investment agreements, which committed a total of \$285 million to private investments in fiscal year 1995.

A result of creating a private corporation to handle the UT System's investment function has been to limit public accessibility to information relating to the direct management of these public funds. As a private corporation, UTIMCO was not specifically made subject to the Open Meetings Act.

Most decisions related to the investment of the UT System's public funds will be handled by UTIMCO, and thus will not be documented in meeting minutes that are publicly available. The UT Board of Regents will retain ultimate fiduciary responsibility over UTIMCO, but much of the investment authority will be delegated to UTIMCO and its Board of Directors. The UT Board of Regents will periodically appoint the UTIMCO Directors, approve investment policies, and evaluate performance; these processes will continue to occur in open meetings, but the UTIMCO Board of Directors will directly oversee day-to-day investment operations.

Recommendation:

We recommend that the UT Board of Regents and/or the UTIMCO Board of Directors assess whether the investment corporation can provide greater public accessibility to either the decision-making process or to records documenting actual decisions and continue to function effectively and competitively. (These issues are further discussed at Crosscutting Issues, Section 3, page 25.)

The Asset Management Committee structure is no longer in existence as a result of the creation of UTIMCO. Therefore, a specific recommendation related to the conduct and documentation of those meetings is no longer relevant.

Management's Response:

Under the former structure, the Asset Management Committee did not have delegated authority to approve investments. The review process in place prior to the formation of UTIMCO was for the staff to brief the Asset Management Committee regarding all private investment transactions slated for purchase by the staff. The meeting was to provide the staff with a negative assurance expressed by individual members of the Committee. The full U.T. Board approved all investments via docket at its meetings.

Section 66.08 of the Texas Education Code authorized the U.T. Board to enter into a contract with a non-profit corporation for the corporation to invest funds under the control and management of the U.T. Board. UTIMCO's articles of incorporation, bylaws, directors, investment policies and reports are and will continue to all be reviewed and approved by the U.T. Board in open meetings and in a manner that it believes meets the requirement of public accountability.

Section 1-C:

There Are Opportunities to Provide Additional Useful Information to Decisionmakers

We also noted opportunities to provide decisionmakers additional useful information related to the UT System's investments. These opportunities included the following:

- **Ensure that investment performance of the Permanent University Fund is measured and reported in terms of its stated investment objectives.** The UT System's reports do not adequately link the Permanent University Fund's investment performance to its stated objectives. This information is essential for decisionmakers to evaluate how well these public funds are being managed. Although the Permanent University Fund's primary investment objective is to grow income in real terms at a rate equal to or better than inflation, information provided to the UT Board of Regents reported performance only in terms of total return. ("Total return" represents growth or decline in the value of the portfolio, including both capital appreciation and income.)
- **Improve the content, clarity, and consistency of certain reports.** Although useful information is currently being provided to internal and external users, we made suggestions to management to improve the quality and usefulness of certain reports. Specifically, the *PUF Annual Investment Report* could be improved by modeling its content and format after the *Long*

Term Fund Annual Report. The *Long Term Fund Annual Report* could be improved by including peer group analysis.

- **Provide the UT Board with periodic peer group comparisons of external investment managers.** Management stated that it compares the performance of its external investment portfolio advisor and managers to representative peer groups on a monthly and quarterly basis. However, advisor or manager peer comparisons are not periodically presented to the UT Board. This information is useful in determining whether to retain or terminate external managers.
- **Consider whether the equity method of accounting would provide more useful accounting information and is more appropriate than the cost method.** The UT Board and external users receive market value information for limited partnerships in UT System investment reports. However, the cost method of accounting, the method currently used to report the book value of these investments, may not provide the most useful accounting information. The equity method of accounting would provide more useful book value information. The accounting method used directly affects amounts reported on the balance sheet and income statement.

Although there is diversity in practice, we were told by Endowment Advisers, Inc. that the vast majority of universities in its \$1 billion-plus private investments fund use the equity method to account for limited partnership investments. Another university we contacted uses the equity method for its limited partnership interests. That university's custodian bank indicated that most of its institutional investors for which the bank performs investment accounting also use the equity method. An Endowment Advisers' report notes that the equity method is preferred because it more accurately represents the partners' share in the results of operations, investment activity, and the estimated value of the investment.

Under accounting principles applicable to the UT System and UTIMCO, a limited partner's ability to exert influence over the general partner is the criteria which would determine whether the equity method is required. Partnership agreements typically would not permit limited partners to vote on the management of the partnership. Nevertheless, the Securities and Exchange Commission (SEC) requires public companies to use the equity method to account for private investments when ownership is more than 3 to 5 percent. Neither the UT System nor UTIMCO is subject to these SEC requirements because neither is a public company. However, the UT System's ownership averaged 13 percent for its 29 private investments at the end of fiscal year 1995. In addition, the UT System's interests in seven of those partnerships exceeded 20 percent, far in excess of the SEC's threshold for requiring the equity method.

Essentially, the cost method records the original cost of the investment and reduces that amount in the accounting records only when a permanent decline in market value is deemed to have occurred or a liquidating dividend is received. The equity method periodically adjusts the original investment amount to reflect contributions made, distributions received, and the pro-rata share of the net income or loss of the limited partnership. Thus, a \$10 million investment in a limited partnership under the cost method may be reported with a book value of \$10 million throughout the five- to ten-year life of the agreement. Reporting for the same investment under the equity method, however, would more accurately depict the limited partnership's actual results of operations (net income) on an ongoing basis.

Recommendation:

We recommend that management measure and report investment performance of the Permanent University Fund in terms of its stated investment objectives. This information should be presented in the *PUF Annual Investment Report* as well as in the quarterly reports provided to the UTIMCO Board of Directors.

Management should also improve the content, clarity, and consistency of the *PUF Annual Investment Report* and *Long Term Fund Annual Report*. The report on the Permanent University Fund should include the following specific information:

- Report administrative and investment-related expenses associated with the Permanent University Fund and net Available University Fund income.
- Describe the investment objectives of the Permanent University Fund and report performance in terms of those objectives.
- Include performance and outlook analysis from the chief investment officer.
- Provide analysis of each asset allocation class and report how each class performed in terms of its investment objectives.
- Provide a comparison of the Permanent University Fund's investment performance with other peer groups. (A similar comparison should be included in the *Long Term Fund Annual Report*.)

In addition, management should periodically provide the UT Board with peer group comparisons of external investment managers.

Finally, management should consider whether the equity method of accounting would provide more useful information and be more appropriate considering the extent of the UT System's ownership interest in many of its limited partnership investments.

Management's Response:

The U.T. Board of Regents is required to present a PUF Investment Report annually based upon information required by Section 66.05 of the Education Code, which differs from generally accepted accounting principles (GAAP). Reporting and communication of PUF fund activity is complicated by the PUF's constitutional structure. Reporting along constitutionally prescribed lines is substantially at odds with industry convention and fiscal year reporting periods which makes comparison of investment performance with other peer groups difficult. UTIMCO management will attempt to reconcile these inconsistencies and include the recommendations above to produce a PUF report for the fiscal year ended August 31, 1996 that is of greater value to both the financial community and regulatory bodies.

With respect to use of the equity method for private investments, management will solicit the opinion of UTIMCO's financial auditors and research the matter to determine whether adoption of the equity method is merited.

Section 1-D:

Board Policies Should Be Enforceable and Monitored

Compliance with investment policy restrictions was not effectively monitored during fiscal year 1995. As a result, we noted instances of noncompliance with policies that had been put in place by the UT Board. In addition, UT Board policies did not establish requirements that facilitated compliance monitoring. We also noted several instances where the policies put in place by the UT Board were not defined in ways that allowed or facilitated implementation.

We noted the following instances of noncompliance with policies established by the UT Board during fiscal year 1995:

- One external portfolio manager substantially exceeded the investment concentration limit of 25 percent in one industry sector. There was no indication that staff was aware that the manager's holdings in that industry reached 36 percent of the manager's portfolio, and there was no indication that the UT Board was made aware of this violation of the investment policy.
- Private investment commitments during fiscal year 1995 exceeded limits established by the Private Placement Investment Policy. According to this policy, new investment commitments, irrespective of type, were limited to 25 percent of the funded portfolio cap in any fiscal year, without prior approval of the Asset Management Committee. Based on this restriction, private investment commitments in fiscal year 1995 should not have surpassed \$144.5 million without the prior approval. However, actual commitments totaled \$285 million. Although the Asset Management Committee approved each individual private investment, we found no evidence that the Asset

Management Committee had expressly waived the policy limits or that the full UT Board was made aware that this policy restriction had been exceeded.

- One external portfolio manager substantially exceeded the 10 percent limitation on holding cash. This manager held 40 percent of the market value of its portfolio in cash. There was no documentation that this limitation had been waived by the chief investment officer as permitted by policy.

UT Board policies did not establish requirements that would have encouraged more effective compliance monitoring. For example, UT Board policies did not state what information or reports were to be submitted to demonstrate compliance with investment restrictions and did not assign responsibility for monitoring compliance. As a result, limited compliance information was communicated to the now-dissolved Asset Management and Investment Advisory Committees. In addition, the full board was not provided with reports on compliance with investment policies.

Some policy requirements put in place by the UT Board are too narrowly defined to be attainable. For example, the Long Term Fund establishes asset allocation targets but no permissible ranges around those targets. It is unlikely that the Long Term Fund's investments will ever exactly meet the specific targets and, therefore, will always technically be out of compliance with the policy.

In addition, some policy requirements may be out of date or not stated clearly enough to allow or facilitate compliance. As a result, we noted other instances of technical noncompliance with established UT Board policies, including:

- Policies restricting lower-rated or unrated bonds to 1 percent of a fund's book value unless reviewed by the Asset Management Committee were not adhered to, in large part because the Committee stopped receiving and approving a detailed report of bond purchases and related quality ratings. Also, since collateral mortgage obligation investments are typically unrated, the 1 percent limit was consistently exceeded.
- The policy restricting stock ownership to less than 5 percent of the outstanding shares of a corporation was also not always followed. The UT System receives donations of more than 5 percent ownership interest of some non-publicly traded corporations which were probably not intended to be covered by the 5 percent policy limitation.

Recommendation:

With the transfer of the investment management function to UTIMCO, greater emphasis should be placed on compliance monitoring and reporting. Management should report compliance with investment policies to both the UT Board of Regents and its own Board of Directors periodically. The report should compare each

quantifiable restriction to the actual performance and should clearly indicate whether or not UTIMCO is in compliance with each requirement.

UTIMCO should also formally review investment policies and strategies at least annually, and request approval from the UT Board of Regents for any necessary changes. Although the UT System is exempted from the Public Funds Investment Act, which requires that investment policies be reviewed at least once a year, this practice is a good control to ensure that policies are up-to-date and appropriate for prevailing market conditions.

Management's Response:

Management agrees that compliance with policies under the old structure was not adequately documented. UTIMCO has instituted a formal compliance tracking system managed by a designated compliance officer, and has begun submitting compliance reports to the UTIMCO Board and U.T. Board of Regents (U.T. Board) on a quarterly basis beginning May 31, 1996.

It has not been the U.T. Board's practice to reaffirm investment policies annually but to approve an amendment to the policy statement at the time a change to policy was contemplated. The rewriting of investment policies has been delayed due to the implementations of the UTIMCO structure. All investment policies are scheduled for current review by the UTIMCO Board and will be submitted to the U.T. Board on an annual basis. Although management believes that it has been and is substantially in compliance with investment policies and that the exceptions noted above were isolated instances and not representative of compliance in general, the rewrite of all investment policies under the new UTIMCO Board over the next 12 months should eliminate definition and measurement problems.

Management agrees that the many inconsistencies and ambiguities in the investment policies inhibit accurate and effective reporting of compliance.

Section 2:

Controls and Procedures Intended to Ensure That Ethics Standards Are Followed Could Be Improved

The controls and procedures which are intended to ensure that ethics standards are followed for the UT System's investments could be improved. Although we noted recent improvement in some of these procedures, additional improvement is necessary, especially in procedures related to private investments. In 1995, the UT System adopted a plan to commit an additional \$1.1 billion to private investments over the next five years. Because private investments often involve complex business structures and may create subtle relationships among the parties involved, strong

controls are needed to ensure that potential conflicts of interest are adequately identified, resolved, and disclosed.

Weaknesses in controls were noted under both the former investment environment and the current UTIMCO structure. The weaknesses included the lack of adequate investment file documentation of management's conclusions that conflicts of interest, as defined by state law or board policy, had not occurred in certain private investment transactions. In addition, in the pre-UTIMCO structure, documentation was lacking that these conclusions had been communicated to the UT Board of Regents. We observed an April 1996 UTIMCO transaction for which management provided sufficient written communication of their conclusions to the UTIMCO Board of Directors. However, these conclusions were not discussed during the UTIMCO Board meeting.

In addition, UTIMCO's newly adopted Code of Ethics could be strengthened by adding additional or more specific procedures. Finally, UTIMCO's procedures for recording minutes of its Board of Directors meetings could be improved to ensure the accuracy of the minutes.

Investment files did not adequately document management's conclusion that conflicts of interest did not exist. Based on the written analysis provided to us by UTIMCO staff, we agree that the April transaction did not involve a conflict of interest as defined by state law or board policy. State law prohibits UTIMCO from entering into a transaction in which a director, officer, or employee has an "interest." The definition of an interest includes holding at least a 5 percent share of the investment. It is therefore essential, particularly due to the complexity of these transactions, that the files reflect how staff determined there was no legally prohibited interest. However, the files for this investment at the time of the vote did not contain such a written analysis.

In addition, there was no oral disclosure at the April meeting of staff's conclusion that certain investment relationships examined did not represent conflicts of interest. To the extent that all UTIMCO Directors had fully read the information in their materials package, they should have been aware of staff's accompanying conclusion. In that case, oral disclosure of these issues may have been unnecessary. However, discussion at the meeting of the noted relationships and staff's conclusions would further ensure that all UTIMCO Directors were fully informed prior to the vote. In addition, such discussion would help ensure that the meeting minutes accurately reflected the UTIMCO Directors' awareness of these issues before voting. (See subsequent discussion of issues related to accuracy of meeting minutes.)

UTIMCO's newly adopted Code of Ethics could be strengthened by adding additional, or more specific, procedures. The Code of Ethics (Code) approved by the UT Board of Regents does not require the UTIMCO Board of Directors to submit annual financial disclosure statements. In addition, the Code does not establish specific limits on the Directors' or employees' acceptance of gifts from outside parties

interested in doing business with UTIMCO. State statutes which address these issues for state officials and employees may not specifically apply to UTIMCO as a nonprofit corporation. Furthermore, although the Code requires UTIMCO Directors and employees to “comply with all applicable laws and regulations” it does not provide any guidance as to the most significant laws and regulations that would apply. Finally, the Code does not require that potential conflicts of interest be reported to a level above management, for example, to legal counsel and/or the Board of either UT System or UTIMCO.

UTIMCO’s procedures for recording minutes of its Board of Directors meetings may not ensure the accuracy of the minutes. A copy of the minutes of an April 1996 UTIMCO Directors meeting given to us in August contained an inaccurate account of a discussion that occurred at the meeting. Management later explained that the inaccuracy resulted from an attempt to clarify a statement made by one of the participants.

UTIMCO Board meeting proceedings are not tape recorded. In addition, these meetings are not open to the public nor are the minutes publicly available. The importance of the issues discussed at the meetings and the fact that outside parties do not have an opportunity to observe the proceedings contribute to the need to maintain an accurate record of what occurred at the meetings.

Recommendation:

We recommend that UTIMCO strengthen procedures to ensure that all identified potential conflicts of interest in investment transactions are clearly resolved and adequately documented in investment files prior to the UTIMCO Board’s approving the transactions. Investment files should contain a written analysis supporting management’s conclusion as to whether an actual conflict exists. The UTIMCO Board may also wish to require that all identified potential conflicts be discussed or specifically referred to during UTIMCO Board meetings and that such discussion be reflected in meeting minutes.

To strengthen the process of identifying potential conflicts, we recommend that the Code of Ethics require UTIMCO Directors to file financial disclosure statements with UTIMCO and with legal counsel. In addition, UT System internal auditors should periodically compare UTIMCO’s financial transactions against these disclosure statements.

We also recommend that UTIMCO’s Code of Ethics be revised to limit to \$50 the value of gifts from interested outside parties that may be accepted by its Directors and employees, the level established by statute for state officials and employees. We further recommend that the Code cite the most significant laws and regulations with which UTIMCO Directors and employees must comply to ensure personnel are aware of expectations.

The Teacher Retirement System appears to have adopted the most stringent ethics requirements of all of the State's major investing entities. Therefore, we strongly encourage each such entity, including UTIMCO, to adopt similar policies. (The Teacher Retirement System's ethics policies are included in this report as Appendix 3, page 156.)

Finally, to ensure the accuracy of UTIMCO Board minutes, the Board should consider tape recording the meetings and retaining the tapes in case a question should later arise as to what was said at the meeting. In addition, whenever UTIMCO Board meeting minutes are revised to amplify or explain what occurred at the meeting, the minutes should clearly distinguish between what was actually said and what was later included for explanatory purposes.

Management's Response:

Management agrees that, in retrospect, written documentation supporting the staff's determination of an absence of a conflict of interest was not complete at the time of approval of the April 1996 transaction. Management believes that a review of the facts and a simple calculation leads to the conclusion that any future interest under a worst case scenario would not result in a prohibited interest. The process in place identified a potential conflict of interest, and management communicated its existence in writing to the U.T. Board. In addition, the director to whom the potential conflict applied recused himself and did not vote.

Notwithstanding the above and given the desire to avoid any appearances of conflicts of interest in the future, UTIMCO management when recommending approval of a private investment will execute and request that all UTIMCO directors execute a no conflict of interest certificate for each private investment approved. Also, an opinion will be requested from UTIMCO's counsel on all such transactions where an interest concerning either UTIMCO Board or U.T. System Board members has been identified, including an interest allowable under Section 66.08 of the Texas Education Code.

The UTIMCO Code of Ethics and Financial Disclosure Statement are being reviewed by the UTIMCO Audit and Ethics Committee. Development of a statement was initiated at the first meeting of the UTIMCO Audit and Ethics Committee on June 10, 1996 and is one of many items being addressed as part of the UTIMCO start-up process.

The UTIMCO Board believes that there are procedures currently in place to ensure that minutes of its meetings, when ultimately approved by the Board, are an accurate account of the meeting; however, the UTIMCO Board will consider the State Auditor's suggestion for future meetings.

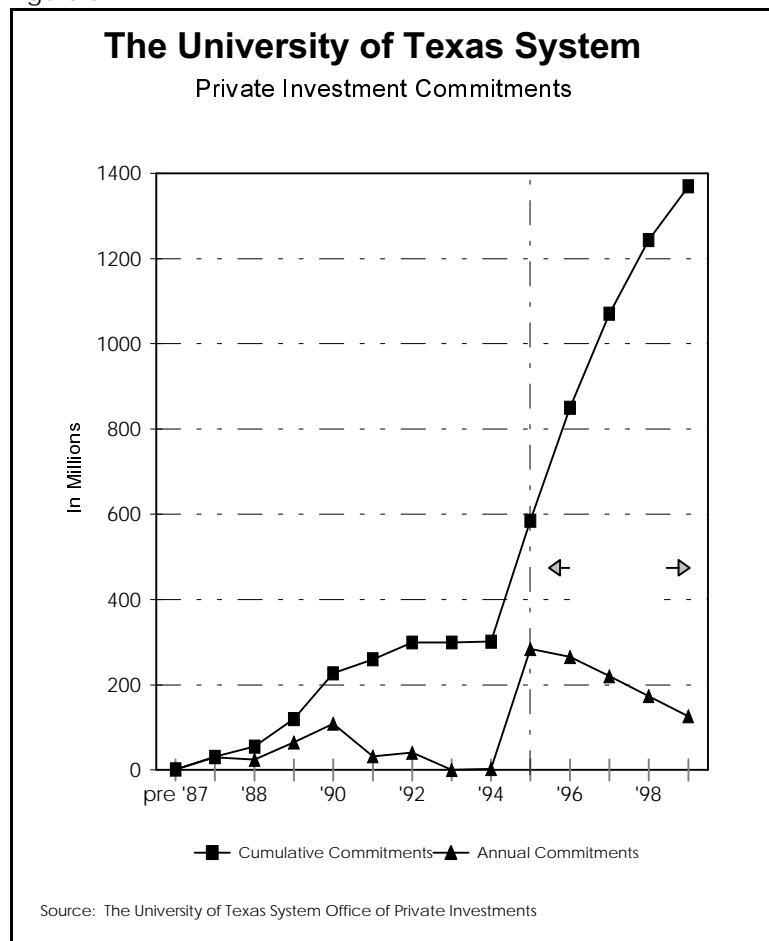
Section 3:

Private Investment Operations Should Be Subjected to Periodic Reviews by an Independent Investment Consultant

The UTIMCO structure provides for more focused oversight of the investment function by a board with more professional investment expertise than existed under the previous structure. In addition, investment management personnel appear to have adequate educational background and job experience to fulfill their responsibilities. Nevertheless, periodic reviews of the private investment program by an independent consultant would add an additional control for the following reasons:

- A significant increase in private investments over a five-year period was approved by the UT Board of Regents. (See Figure 6.) A total of \$285 million in capital commitments to private investments was authorized in 1995. The plan calls for an additional \$780 million in commitments over the next four years in order to achieve the target asset allocation of 10 percent for both the Long Term Fund and Permanent University Fund.

Figure 6



An independent review would provide the UT Board of Regents and UTIMCO's Board with an assessment of UTIMCO's ability to successfully manage the planned level of growth in this asset class.

- A comprehensive review of private investment operations has never been performed. The UT System has been involved with private investments for almost ten years with no formal independent assessment of how effective this more complex asset class is in meeting its investment objectives and whether those objectives are in fact appropriate.
- Periodic reviews by a specialist in this area could provide information to management and the Boards that existing controls ensure that investments are properly evaluated, structured, and

managed. Successful management of this asset class requires that managers be able to effectively screen, analyze, negotiate, and monitor a wide range of specialized investment opportunities including venture capital, leveraged buyout funds, distressed securities, and mezzanine financing.

Recommendation:

The UT Board of Regents or UTIMCO's Board of Directors should periodically contract with an independent consulting firm to review private investment operations. These reviews should evaluate UTIMCO's internal control systems and procedures related to its private investments, including investment evaluations, asset allocation targets, due diligence procedures, performance benchmarks, and performance measurement methodologies. The results of these reviews should be presented by the consultant to both the UT Board of Regents and the UTIMCO Board of Directors.

Management's Response:

UTIMCO and its Board were established to enhance oversight of investment management by combining regental representatives with experienced investment professionals to govern the investment staff. The UTIMCO board is designed to serve as a continuous consultant with fiduciary duty to the Board - a duty external consultants do not have. The outside investment professionals serve on the UTIMCO Board to review staff recommendations and to advise regental representatives concerning policies, performance, etc. The regental representatives in turn, as members of the U.T. Board of Regents (U.T. Board), remain as fiduciaries to the other U.T. regents and to the public at large. The UTIMCO Board is the entity that is charged with the responsibility of providing the investment assistance recommended above.

UTIMCO's policy requires that all private investments be approved by the UTIMCO Board. The UTIMCO Board is composed of five independent investment professionals, in addition to which the chairman of the Board is the senior managing general partner of one of the most successful private investment groups in America.

The U.T. Board will consider the use of an independent consultant in the future to supplement the new UTIMCO structure if circumstances warrant.

Section 4:

The Need for Two Administrative Fees Should Be Reassessed

The UT Board of Regents should determine whether two administrative fees charged to endowment and trust funds by the Office of Asset Management are still needed. In addition, controls are needed to ensure internal management fees are reasonable and expended only for allowable items. During fiscal year 1995, internal management fees collected from the Long Term Fund endowment investment pool totaled \$2 million.

Although the *Quasi-Endowment for Investment Excellence* program is now fully funded, the UT Board approved the continuation of this fee. The fee was established by the UT Board in 1988 to provide salary supplements to investment personnel within the UT System's Office of Asset Management. Once the program became fully funded in 1995, the UT Board approved the continuation of the fee with 60 percent of the funds authorized for investment-related expenses and the remaining 40 percent for educational purposes. Since the "Administrative Charges to Trust Funds" fee is also designated for educational purposes, the UT Board should reevaluate the need to continue assessing it.

The purpose and objectives of the "Administrative Charges to Trust Funds" fee have never been formally defined nor the rate assessment methodology documented. The Texas Administrative Code allows funds collected as "administrative fees" to be used for any educational purpose. We noted that funds from the "Administrative Charges to Trust Funds" account were used for a variety of purposes including travel expenses, investment consulting fees, insurance premiums, various committee expenses, and System Administration "official occasions" and "official residences" expenses. The methodology for determining the assessment changed during fiscal year 1995 to a \$300,000 per year flat fee. (The previous method transferred actual interest earned on funds waiting to "buy into" the endowment pool at the beginning of each quarter into the "Administrative Charges to Trust Funds" account.)

Recommendation:

The UT Board should determine whether it is appropriate to have both fees. If the UT Board chooses to continue charging one or both of these fees, then it should have management:

- Develop a methodology for assessing appropriate administrative fees to non-Permanent University Fund endowments and trusts.
- Establish guidelines to ensure compliance with applicable laws and regulations by clearly identifying allowable uses of the funds collected and monitor compliance with those restrictions.

Management's Response:

The two administrative fees charged to endowment funds are assessed by the U.T. System as authorized by Section 65.37 of the Education Code. The U.T. System staff will review the administrative fees and make a recommendation to the U.T. Board concerning the current fee structure. Since the assessment of fees is expected to continue in the future, U.T. System staff will also:

- *Develop a methodology for assessing appropriate administrative fees to non-Permanent University Fund endowments and trusts.*
- *Establish guidelines to ensure compliance with applicable laws and regulations by clearly identifying allowable uses of the funds collected and to monitor compliance with those restrictions.*

Section 5:

Controls Over Several Operational-Level Activities Should Be Improved

Section 5-A:

Procedures to Select and Contract With External Portfolio Managers and Advisors Should Be Improved

The UT System's procedures did not ensure that the process for selecting an external portfolio advisor was documented. Documentation of a consultant's recommendation and of the evaluation criteria for hiring an external investment advisor, who would recommend country allocations for international equities, were not provided. Although a consultant was hired to provide a list of candidates for this service, we understand that the investment advisor ultimately selected was suggested by a UT Board member rather than by the consultant.

In addition, two of the contracts with external professionals reviewed did not contain language which described expected performance targets. The other contracts reviewed did contain such targets which formalized how the portfolio managers' performance would be evaluated. The UT System retained the right, in its contracts with external managers, to terminate the managers at any time, for any reason. However, including performance expectations in every contract ensures that each party is aware of the performance expectations and helps ensure that manager retention or termination decisions are objectively made.

Recommendation:

We recommend that the selection process for hiring external investment advisors, managers, and consultants be consistently documented to ensure that the process is objective. In addition, performance evaluation criteria should be consistently included in contracts with external professionals.

Management's Response:

As part of its review of investment policies, UTIMCO has asked Vinson & Elkins to review the investment management contracts in order to standardize the contracts. The adoption of a single standard should address inconsistencies in the specification of performance benchmarks in the contracts. The selection process will be documented to ensure its objectivity.

Section 5-B:

Contracts for Securities Lending Arrangements Can Be Improved

Although the current securities lending contract contains provisions to protect the UT System from substantial losses, there are several areas in which the UT System could enhance controls over this program. These areas include contract terminology, compliance monitoring procedures, and UT Board oversight of the program. The additional controls could further reduce the UT System's risk of loss and could assist management and the UT Board in assessing the performance of the securities lending administrator and the overall program.

For example, the UT Board was not provided information explaining a declining trend in program income. Income from the securities lending program has declined steadily from \$1.5 million in fiscal year 1992 to \$400,000 in fiscal year 1995. Market factors may not fully account for this decline as other state funds' lending programs did not experience similar declines. Securities lending income is not material to the UT System's operating results. However, providing the UT Board with trend information and the related analyses would have assisted the UT Board in assessing whether the program was being effectively managed.

Recommendation:

We recommend that UT System management and the UT Board of Regents or UTIMCO's Board of Directors consider making the following revisions to the securities lending program and, where appropriate, to the overall investment policies addressing securities lending:

- Modify contract terminology to include limits on total loans outstanding and on total loans to individual borrowers, prohibitions against loans to affiliates

of the administrator, restrictions on loans of mortgage-backed and collateralized mortgage-backed obligations, and descriptions of periodic reports from the administrator.

- Strengthen compliance monitoring to include formal procedures to periodically monitor the financial condition of the administrator, design more effective collateral market value compliance reports to be provided by the administrator, and ensure more complete adherence to established monitoring procedures.
- Strengthen oversight of the securities lending program by developing operational expectations and requiring that management submit periodic reports of securities lending results to the appropriate board for its review. Reports should include relevant trend information such as yield in basis points, income, and average percentage of lendable portfolio actually on loan.

Management's Response:

Management agrees with the desirability of strengthening compliance monitoring procedures and has implemented additional procedures to accomplish this. To date, no exceptions to lending guidelines have occurred.

Management will also review the custodian's semi-annual SAS 70 report in which an independent audit opinion is obtained regarding effectiveness of the internal control policies and procedures.

Management has also requested, from the lending agent, a monthly report regarding income expectations of the program. Management will submit these reports to the UTIMCO Board on a periodic basis. Reports will include relevant trend information concerning actual results.

Management does not agree with the recommendation to modify the securities lending contract to limit total loans outstanding or total loans to individual borrowers because the U.T. System is indemnified against borrower default by Mellon Trust. The lending agent is monitoring its credit limits to any one borrower and to total loans outstanding. Furthermore, based on our discussions with the lending agent, this provision would require the use of a manual monitoring process by the lending agent and introduce additional compliance risks and the possibility of further reduction in earnings.

Although not specifically addressed in the contract, as a matter of fiduciary standards, loans to affiliates are prohibited under fiduciary standards. This standard is required by ERISA on pension funds and is automated for all public fund lending clients. Also, Mellon's procedures prohibit the inclusion of mortgage backed and CMO obligations in the lendable base with the result that these security types are unavailable for

lending via their computerized system; however, management will request contract amendments regarding the prohibition of loans to affiliates, prohibition against lending of mortgage backed and CMO obligations, and request inclusion of language regarding reports to be issued by the lending agent based on the State Auditor's request.

Income from the loan of PUF securities has ranged from 0.6% to 0.2% of annual investment income. The amount of loan income in any given year is determined by several factors: the "lendable" base of the portfolio, the lender-borrower spreads obtained in the market and the fee split between the lender and agent. The decline in loan income during the 1992-1995 period reflects the reduction in the loanable base due to diversification of PUF securities and the narrowing of lender-borrower spreads in the market.

Section 5-C:

Controls Over Income Anticipation Procedures Were Not Complete and Should Still Be Improved

Controls over income anticipation procedures in place during fiscal year 1995 were not complete. We noted the following weaknesses in the control system:

- Mainframe computer reports were not used appropriately to anticipate income. The reports were generated at the end of each month to verify that all dividends and interest due were actually received rather than being generated at the beginning of the month to project expected income.
- These reports were not always accurate. We identified errors on the income reports such as failure to anticipate any income on a security and a doubling of the amount anticipated.
- An adequate audit trail did not exist for handwritten changes to the amounts on the reports. The reports had been reviewed, but the reviewer's initials and explanation of changes made were not evident.

Although this function has been assumed by UTIMCO's custodian bank, internal procedures should be formalized to ensure that proper amounts are collected. UTIMCO's management has proposed to review an independent accountant's report on the custodian bank's internal controls. Management also proposed to compare monthly income projected by the custodian versus actual collections as a "reasonableness test," and to investigate any material discrepancies noted.

There are additional risks when management relies on external parties for accounting and income anticipation and collection. Management's proposals, if effectively implemented, can help manage these risks.

Recommendation:

We recommend that the U.T. System should, at a minimum, ensure that the reasonableness test be performed on a monthly basis and document the dollar amount threshold that would trigger an investigation. Any manual changes made to automated reports should include an explanation and the reviewer's initials to provide a complete audit trail.

The report on the custodian bank's internal controls should be reviewed semi-annually to help mitigate the risk of full reliance on information provided by an external party.

Management's Response:

Management will review the SAS 70 report issued semiannually by the bank custodian in which an independent audit opinion is obtained on the effectiveness of the internal control policies and procedures on income collection. Management will compare the custodian's projection report against actual income received and note exceptions on a monthly basis to determine if any follow-up inquiries are necessary.

Section 5-D:

Controls Over Board Seats Obtained by Employees as a Result of Their Employment Should Be Improved

The Office of Private Investments does not have formal procedures in place to ensure that corporate board seats obtained by employees as a result of their employment with the UT System revert back to the UT System when the employee leaves. We noted one instance in which the former Vice Chancellor of Asset Management obtained a seat on a board of directors as a result of his position with the UT System, but retained the seat and the compensation provided to the board members after his resignation from the UT System.

Although the UT System later obtained an "Advisory Director" seat with this corporate board, the UT System lost its voting rights and the remission of the \$36,000 annual director's fee.

Recommendation:

UTIMCO should develop formal procedures to ensure that corporate board seats obtained by staff as a result of their employment with UTIMCO are established in the name of UTIMCO and not in the name of specific individuals.

Management's Response:

Current management has always been in compliance with this policy, reports its board directorships annually and directs payment of all fees to U.T. System/UTIMCO. Management will document the policy in writing as recommended above.

At the time of the situation cited above, existing management referred the matter to the Chairman of the Asset Management Committee, who together with the Chairman of the U.T. Board, specifically instructed management to request an Advisory Board seat.

Section 6:

There Are Opportunities to Improve the Completeness of Investment Policies

We noted opportunities to improve the completeness of investment policies, including the following:

- The UT System's investment policies do not specify acceptable levels of risk. As a result, investment managers may not have the guidance they need to effectively manage. Theoretically, portfolio objectives should center on this "risk-return/trade-off" between expected or required return and the acceptable level of risk or volatility tolerance.
- The UT System's investment policies did not contain restrictions limiting the dollar amount or percentage of investments in Collateralized Mortgage Obligations (CMOs, considered a type of "derivatives"). These investments may be volatile.
- Policy limitations were sometimes inconsistent between the Permanent University Fund and the Long Term Fund. One policy limits the maximum concentration in an industry sector only for external portfolio managers while the other policy appears to apply the limit to internal and external managers.
- The investment policy for the Operating Fund, which works in connection with the Short/Immediate Term Fund Investment Memorandum, does not establish allocation targets by investment category in order to clearly define diversification strategies.
- The Short/Immediate Term Fund Investment Memorandum contains a benchmark that is made up of a composite of indexes which is not representative of the fund's assets composition.
- No investment policy exists for the Short Term Fund.

Recommendation:

We recommend that:

- The amount of acceptable risk be quantified in terms of expected variability of rates of return and stated in all investment policies.
- Investment policies contain a restriction in the form of a dollar amount or percentage of investments allowed in Collateralized Mortgage Obligations. The investment policies should also specify the types of allowable or unallowable tranches.
- Wording is consistent across policies for similar policy expectations.
- The “information memorandum” on the Short/Immediate Term fund should be rewritten to contain limitations on investment concentrations. The benchmark for the fund should be re-evaluated to ensure that it is an appropriate tool to measure the fund’s performance.
- A formal investment policy should be developed for the Short Term Fund.

Management’s Response:

Management agrees. All of the recommendations above are consistent with well-drafted investment policies.

It is important to note that the "Short Term Fund" is a convention to classify the aggregate investments of U.T. component institutions operating funds and cash investments of the LTF and other trust funds by duration. The operating funds policy authorized investment in money market funds. Since the "Short Term Fund" is 100% invested in an external money market fund, i.e. the Financial Square Prime Obligations Fund, it is covered by the operating funds policy.

The rewriting of investment policies has been delayed pending the formation of the UTIMCO Board. Review of current investment policies is scheduled to begin with the October 1996 meeting of the UTIMCO Board and is expected to be completed by the end of the fiscal year.

Section 7:

There Are Opportunities to Improve Human Resource Management Systems

There were opportunities to improve the performance evaluation process in place at the Office of Asset Management. Now that the investment function has been transferred to UTIMCO these opportunities for improvement may also be applicable to UTIMCO. There are also opportunities to improve the newly implemented performance

compensation plan which was the basis for paying approximately \$63,000 in bonuses to employees in fiscal year 1996.

Employee evaluations were not performed annually for most Office of Asset Management investment employees. Only 2 of the 11 investment personnel files selected for testing contained an employee evaluation performed within the past year.

We also noted a variety of other weaknesses in the procedures for evaluating employees, including:

- Evaluation criteria are not tailored to address specific investment-related job duties.
- The UT System's Human Resource Department does not routinely follow up on past due employee evaluations.
- Employees are not required to sign performance evaluations.
- Current evaluations are not required to be on file before merit increases or promotions are given.

In addition, the employee performance compensation plan (plan) used by the Office of Asset Management as the basis for fiscal year 1995 bonuses, while clearly attempting to align portfolio manager performance factors with individual fund investment policies, could be improved in some respects. Apparent weaknesses identified included the following:

- Performance calculations for strategic employees are unclear. Although management indicated that the plan includes a special formula for measuring performance of overall strategies at the fund or macro level, the methodology is not documented and does not appear to be reflected in the strategic employees' performance objectives.
- The methodology to calculate performance bonuses for private investment managers contains some apparent deficiencies. For example, the number of bonus points earned is not calculated in relation to the extent performance exceeds expectations. Instead, private investment managers earn all possible bonus points or none at all depending on whether or not the target was met. Thus, substantially exceeding a target would not earn more points than just meeting the target. Performance measures for other investment managers in the plan provide a sliding scale of possible bonus points depending on how much they outperformed the benchmark.

In addition, the plan does not appear to distinguish between the performance of each of the two private investments employees. Each employee received the same score although each may have been responsible for different investments in the portfolio.

The plan does not “penalize” poor cumulative performance. Private investment performance is evaluated by “vintage,” or year, in which investment commitments were initiated. Partial credit is earned for each vintage which meets or exceeds its target performance. Since “negative” points are not calculated for underachieving a target, poor performance in one vintage does not offset bonus points earned in other vintages. As a result, performance of the total portfolio may underperform expectations but bonus points are still earned because some of the vintages exceeded expectations.

- Although most of the stated performance criteria for computing the performance bonuses are objective, some of the language governing the administration of the plan implies some subjectivity in actually awarding bonuses. This language states that the Vice Chancellor for Asset Management (under the pre-UTIMCO structure) must recommend an employee to receive an award. In addition, the Performance Compensation Committee (also under the pre-UTIMCO structure) has the sole authority to select the eligible employees to be granted bonuses. Therefore, it would appear that an employee could qualify for a bonus, based on the computations, but still not be granted a bonus due to subjective factors. Subjectivity in awarding bonuses could harm employee morale and give the appearance of favoritism unless the subjective factors governing the award are clearly defined.
- The bonuses were not awarded according to the timing set forth in the plan. The guidelines require the granting of performance awards within 60 days of the end of the performance period. Since the performance period ended September 30, 1995, the bonuses should have been granted by the end of November. The bonuses were not awarded, however, until February 1996, nearly three months late.

One of the reasons cited by the consultant who recommended creating an “affiliate organization” was the need to create a compensation structure that is competitive with that of the money management industry. However, without more complete performance evaluation and effectively designed performance bonus programs, there is little assurance that higher personnel-related costs will be accompanied by improved performance.

Recommendation:

Because UTIMCO is now fully responsible for personnel management, we recommend that UTIMCO ensure that a comprehensive policy addressing all aspects of the performance evaluation process is developed and enforced. Evaluation criteria should be developed that directly relate to an employee’s specific job duties and evaluation results should support personnel actions.

In addition, the UTIMCO Board of Directors should hire an independent consultant to review the existing performance incentive plan to ensure that it is properly designed to fairly and objectively measure performance and to ensure that risks and rewards are appropriately balanced.

Management's Response:

The UTIMCO business plan for FY 1996-97 contemplates the review and redesign of the performance compensation plan by a compensation consultant and is expected to be completed by the end of the fiscal year. At its August 30, 1996 meeting, the UTIMCO Board established a Compensation Committee which has oversight responsibility for the compensation of UTIMCO directors, officers, and employees.

Section 8:

The Scope of the Investment Office Study Should Have Been Expanded to Include the Permanent University Fund

The UT System's investment management function was transferred to a private, nonprofit corporation named The University of Texas Investment Management Company (UTIMCO) on March 1, 1996. However, the independent consultant that reviewed the UT System's investment office structure and recommended an affiliate structure to handle the UT System's investment management function did not explicitly consider the unique structure of the Permanent University Fund. The limited scope of the study (which considered less than 20 percent of the UT System's investments) was also not clearly communicated to all decisionmakers.

The recommendation to create an affiliate structure resulted from a review of organizational deficiencies which would prevent the UT System from implementing a complex asset allocation for its endowment investment pool recommended by the consultant in an earlier 1994 study. The first study had compared the UT System's Long Term Fund, which accounts for only 19 percent of the UT System's total investments, to a group of other universities' endowments and found that the Long Term Fund had significantly underperformed its peers. Based on that finding, the consultant made investment policy and strategy recommendations to improve the performance of the Long Term Fund. According to the consultant's report, the second study was performed to determine whether the UT System's investment organizational structure could effectively implement the complex strategies recommended for the Long Term Fund in the first study.

The new structure is expected to increase returns on investments in the Long Term Fund by 2 percent by facilitating the implementation of an asset allocation more heavily weighted in equity investments including emerging market securities, distressed obligations, hedge funds, and arbitrage. Management projected a similar 2 percent increase in returns for the Permanent University Fund for a combined increase

of \$100 million per year. (It is unclear, however, whether the UT Board intends to implement the consultant's asset allocation recommendations for the Permanent University Fund.) The increased returns are also expected to result from resolving certain issues which the consultant determined had impaired performance, including an overlapping committee structure, an extended decision-making process, a relatively low level of collective investment experience among board members, a lack of investment focus, and an employee compensation structure which did not appear to be competitive.

Although the scope of the consultant's review was limited to the Long Term Fund, management of all of the UT System's investments, including the Permanent University Fund, was transferred to UTIMCO. The Permanent University Fund accounted for 58 percent of the UT System's \$9.1 billion in investments as of February 1996. The Permanent University Fund has a structure, in part driven by constitutional restrictions, that is significantly different from other endowments. As a result of this structure, the significant asset allocation changes for the Long Term Fund, which created the need for the reorganization, may not be applicable to the Permanent University Fund. (Issues related to constitutional restrictions affecting the management of the Permanent University Fund are discussed in Crosscutting Issues, Section 1-B, page 11.)

In addition, the limited scope of the study, which led to the recommendation to create UTIMCO, was not clearly communicated to all decisionmakers. While most of the UT System regents interviewed were aware that the Permanent University Fund was not included in the scope of the original study, one regent believed that the independent consultant did review this fund. In addition, certain officials interviewed at Texas A&M University, who were presented with the results of the consultant's study, also indicated that they believed the Permanent University Fund had been included in the scope of the reviews.

Recommendation:

Management of UTIMCO should clearly identify the appropriate scope of future independent studies and ensure information provided to decisionmakers is clearly presented.

Management's Response:

Management disagrees with the basis for this recommendation. The study was an investment office study which addressed issues of governance and oversight applicable to the management of investment funds in general. The LTF performance numbers were used by the consultant to compare the underperformance of the LTF versus the universe of other endowments. The performance of the PUF is virtually identical to that of the LTF for the period used, so the conclusions (to the extent there are

conclusions specific to the PUF) are identical. The asset allocation study performed for the LTF was based on a total return analysis. While management intends to increase the allocation of PUF investments in equity securities over time, it will not fully implement the LTF asset allocation for the PUF because of the PUF's nontotal return spending restrictions under the Texas Constitution. The unique structure of the PUF is only peripherally relevant to the organizational deficiencies i.e., the ineffectiveness of overlapping committees, the lack of investment experience of Board members, the lack of institutional memory from Board turnover, the lack of accountability and authority in the investment process, the extended decision making process, the diffused investment focus, the need to attract high caliber investment professionals, the need to provide competitive performance based compensation, and the incompatibility of university and money management cultures identified in the study or the conclusions of the study.

Appendix 1:

Objective, Scope, and Methodology

Objective

The primary objective of this project was to review the adequacy of management controls over investment practices at state entities responsible for significant amounts of state investments.

Scope

Six state entities responsible for significant investment balances were covered by this review:

- Employees Retirement System
- Teacher Retirement System
- Texas Education Agency
- Texas Lottery Commission
- Texas State Treasury
- The University of Texas System

These entities accounted for investments of approximately \$100 billion as of March 31, 1996—the vast majority of the State’s investments.

We reviewed management controls in the following areas related to the entities’ investment operations:

- Effectiveness of oversight provided by governing boards
- Appropriateness and reasonableness of investment policies and procedures
- Appropriateness and effectiveness of the organizational structure of the investment division
- Effectiveness of management of human resources
- Effectiveness of procedures for purchased investment-related services, including securities lending programs
- Usefulness of information provided to internal and external users

Although some information and data reviewed was verified by us, we did not attempt to verify all financial information including investment balances and investment income.

Methodology

The methodology used included collecting information, performing audit tests and procedures, and evaluating the information against pre-established criteria.

Information collected to accomplish our objective included the following:

- Responses from board members to our investment questionnaire and/or to our follow-up phone calls
- Interviews with management and staff of the entities' investment and accounting divisions
- Documents such as the following:
 - Board and committee meeting agendas and minutes
 - Approved investment policies
 - Investment and operating policies and procedures manuals
 - Applicable constitutional and statutory provisions
 - Contracts with consultants, advisors, external portfolio managers, investment custodians, and securities lending administrators
 - Investment division organizational charts
 - Personnel files
 - Investment transaction documentation
 - Investment compliance reports
 - Various investment reports generated for internal and/or external users

Tests and procedures conducted included the following:

- Inquiries of entity personnel
- Completion of internal control structure questionnaires
- Observation of board or committee meetings
- Review of investment policies for appropriateness and comprehensiveness
- Observation of documents or reports to determine that appropriate procedures have been performed
- Tests of investment portfolio reports to ensure compliance with laws or investment policies
- Tests of samples of investment transactions for compliance with laws, investment policies, and control procedures
- Review of contractor selection and evaluation procedures and review of selected contracts for appropriateness of terminology
- Comparison of selected contractor billings with contractual rates
- Review of selected investment personnel files for evidence of adequate job descriptions, periodic performance evaluations, and ongoing job-related training
- Review of investment reports for timeliness, adequacy of content, and clarity

Criteria used to evaluate information received included the following:

- Constitutional and statutory restrictions and requirements
- Public Funds Investment Act (as general guidance although the entities reviewed are exempt from most of the Act's provisions)
- Entity investment policy and operating policies and procedures
- Contractual provisions
- Standard audit criteria

Other Information

Fieldwork at the various entities was conducted from July 1995 to May 1996. The audit was conducted in accordance with generally accepted government auditing standards.

The work was performed by the following members of the State Auditor's staff:

- Roger Ferris, CPA (Project Manager)
- Charles Dunlap, Jr. CPA
- Eric Emmerich
- Worth Ferguson, CPA
- Terry Harris, CPA
- Nancy Hennings, CPA, CISA
- Ann Huebner
- DeAnn Kiser, CPA
- Susan McClean, CPA
- Deborah Mitchell, CPA
- Dianne Oldroyd, CPA
- Randall Reid, CPA
- James Stolp
- William Wood, CPA
- Carol Smith, CPA (Audit Manager)
- Craig Kinton, CPA (Audit Director)

Also, a member of the Internal Audit Division at the Employees Retirement System assisted us in our work at that agency.

Appendix 2.1:

Employees Retirement System Investment Profile

The Texas Constitution under Article XVI, Section 67 authorized the Texas Legislature to establish by law an Employees Retirement System of Texas (ERS) to provide benefits for officers and employees of the State. ERS was established in 1947 and operates primarily under V.T.C.A., Texas Government Code, Title 8, Subtitle B.

Oversight

ERS has the powers, privileges, and immunities of a corporation. ERS is governed by a six-member Board of Trustees (Board) responsible for the general administration and operation of ERS. The Board appoints a person (other than a Board member) to serve at the Board's will as Executive Director.

Investment Policies

The Board of Trustees' investment policies, except where specifically directed otherwise by the State Constitution and statutes, are guided by the "Prudent Person" rule set forth in the Constitution. The trustees have established investment objectives and investment operating policies to obtain the optimum return on ERS's investments consistent with the assumption of prudent risk. The primary goal of ERS's investment program is to earn an absolute (total) return that will insure the payments due to members of the retirement plans and their beneficiaries at a reasonable cost to the members and the taxpayers of the State.

Investment Management

ERS has an Investments Division which comprises 14 investment professionals and 6 support staff. All funds are managed internally. ERS contracts with external investment advisors to advise on specific portfolios. The external advisors do not have full discretionary authority.

Total Number of Investment Professionals	13 ¹
September 1995 Salary Range	\$24,000 - \$87,000
Average Salary	\$42,000
Total Funds Managed Internally; March 31, 1996 ²	\$12.6 Billion
¹ Actual as of September 1995	
² Includes \$9.6 billion managed with advisor assistance as of March 31, 1996	

Funding Sources

The Employees Retirement System of Texas, the Law Enforcement and Custodial Officer Supplemental Retirement Plan, the Judicial Retirement System of Texas Plan One, and Judicial Retirement System of Texas Plan Two are considered to be single employer defined benefit pension plans.

Retirement benefits are financed through the collection of employer and employee retirement contributions, investment income, and legislative appropriations for death and retirement benefits.

For the Employees Retirement Fund, fiscal year 1995 employee and employer retirement contribution rates remained unchanged from the prior year at 6 percent and 6.45 percent, respectively. For the biennium beginning September 1, 1995, the employer contribution rate decreased to 6 percent.

For the Judicial Retirement Plan One Fund, state law requires contributions equal to 6 percent of pay by the employees, as well as appropriations by the State sufficient to administer the plan. The plan is funded on a pay-as-you-go basis.

For the Judicial Retirement Plan Two Fund, fiscal year 1995 employee and employer retirement contribution rates remained unchanged from the prior year at 6 percent and 14.73 percent, respectively. For the biennium beginning September 1, 1995, the employer contribution rate increased to 16.54 percent.

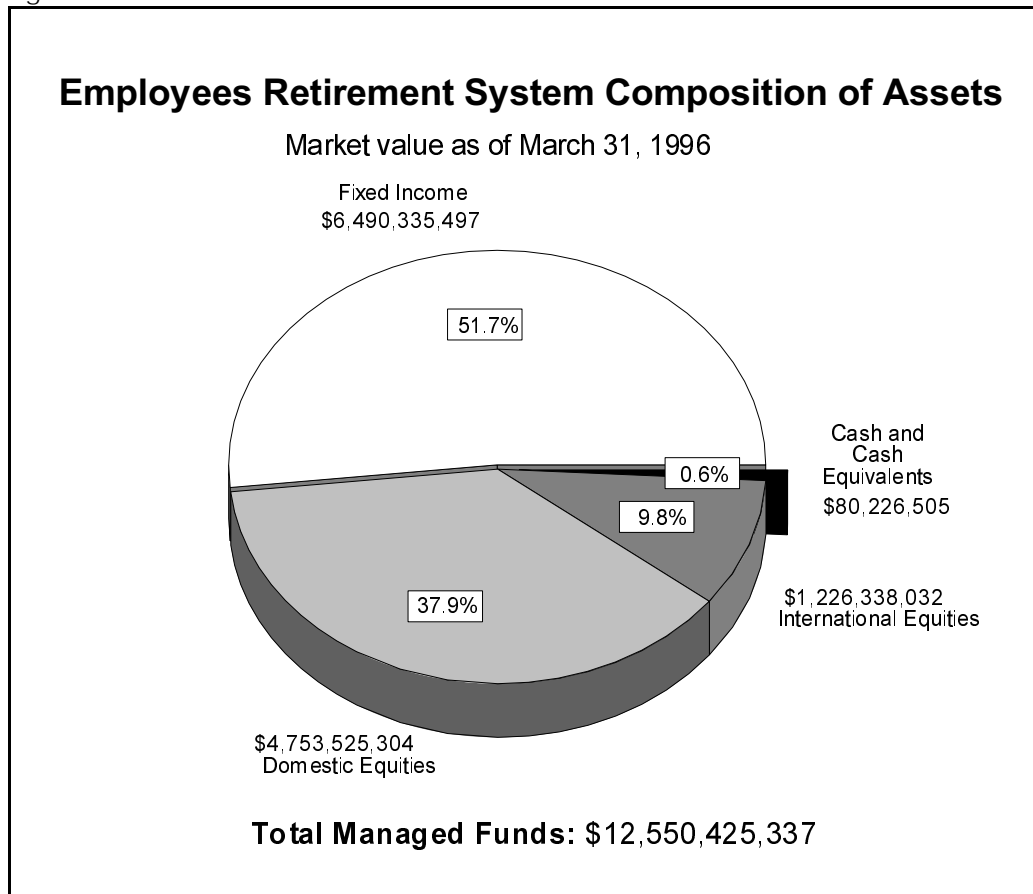
For Law Enforcement and Custodial Officer Supplemental Retirement Fund, there are no member contributions, and it has not received funding from the State since August 31, 1993.

Investment revenues comprise interest, amortization of premium and discount, dividend income, and recognized gains and losses on the sale of securities.

Asset Allocation

The Employees Retirement System of Texas diversifies its portfolio within the following asset classes: fixed income instruments, domestic and international equities, cash and cash equivalents.

Figure 7



Source: Employees Retirement System response to May 1996 House Joint Committee on State Investment Policies *Texas State Agencies and Institutions of Higher Education Investments Questionnaire*.

Asset Class	Actual Mix March 31, 1996	Target Mix*
Fixed Income	52%	54%
Domestic Equities	38%	36%
International Equities	9%	10%
Cash and Cash Equivalents	1%	0%
TOTAL	100%	100%
* Asset allocation policy defines acceptable ranges above or below target allocations for each asset class.		

Appendix 2.2:

Teacher Retirement System Investment Profile

The Texas Constitution under Article XVI, Section 67 authorized the Texas Legislature to establish by law the Teacher Retirement System (TRS) to provide benefits for persons employed in Texas public education in professional and business administration, supervision, and instruction. TRS was established in 1937 and operates primarily under V.T.C.A., Texas Government Code, Title 8, Subtitle C.

Oversight

TRS is governed by a nine-member Board of Trustees (Board) whose selection is made by a diverse combination of appointment and election. The Board of Trustees is responsible for the general administration and operation of TRS. The Board appoints a person other than a member of the Board to serve at the Board's will as Executive Director.

Investment Policies

The Board of Trustees' investment policies, except where specifically directed otherwise by the State Constitution and statutes, are guided by the "Prudent Person" rule set forth in the Constitution. The Board has established investment objectives and investment operating policies to obtain the optimum return on TRS's investments consistent with the assumption of prudent risk. The objectives of TRS's investment program were established to be consistent with the mission of TRS—delivering retirement and related benefits authorized by law for members and their beneficiaries through prudent investment and management of assets held in trust for them in an actuarially sound system administered in accordance with applicable fiduciary principles.

Investment Management

The Teacher Retirement System has discretionary authority for investment decisions. The Teacher Retirement System investment staff, which is currently composed of 32 investment professionals, manage all of the assets internally with the exception of the Texas Growth Fund. However, TRS monitors the investment activities of the Texas Growth Fund Management and has the ability to reject proposed investments. In addition, TRS staff and the Board of Trustees rely on independent investment advice regarding fixed income, equities, and real estate. No assets are managed by external managers on a fully discretionary basis.

Total Number of Investment Professionals	32
August 31, 1995, Salary Range	\$33,000 - \$152,000
Average Salary	\$65,000
Total Funds Managed Internally; March 31, 1996	\$49.2 billion
Texas Growth Fund; March 13, 1996	\$32 million

Funding Sources

Retirement benefits are financed through the collection of member contributions, school district payments, state contributions, and investment income.

TRS is the administrator of a multiple-employer public employee retirement system (PERS). It is a cost-sharing PERS with one exception: all risks and costs are not shared by the employer (unless the employer is a senior college, medical school, or state agency, in which case the employer is considered the State of Texas) but are the liability of the State of Texas. By statute, the State of Texas contributes to TRS an amount equal to the current authorized rate multiplied by the aggregate annual compensation of all members of TRS during that fiscal year.

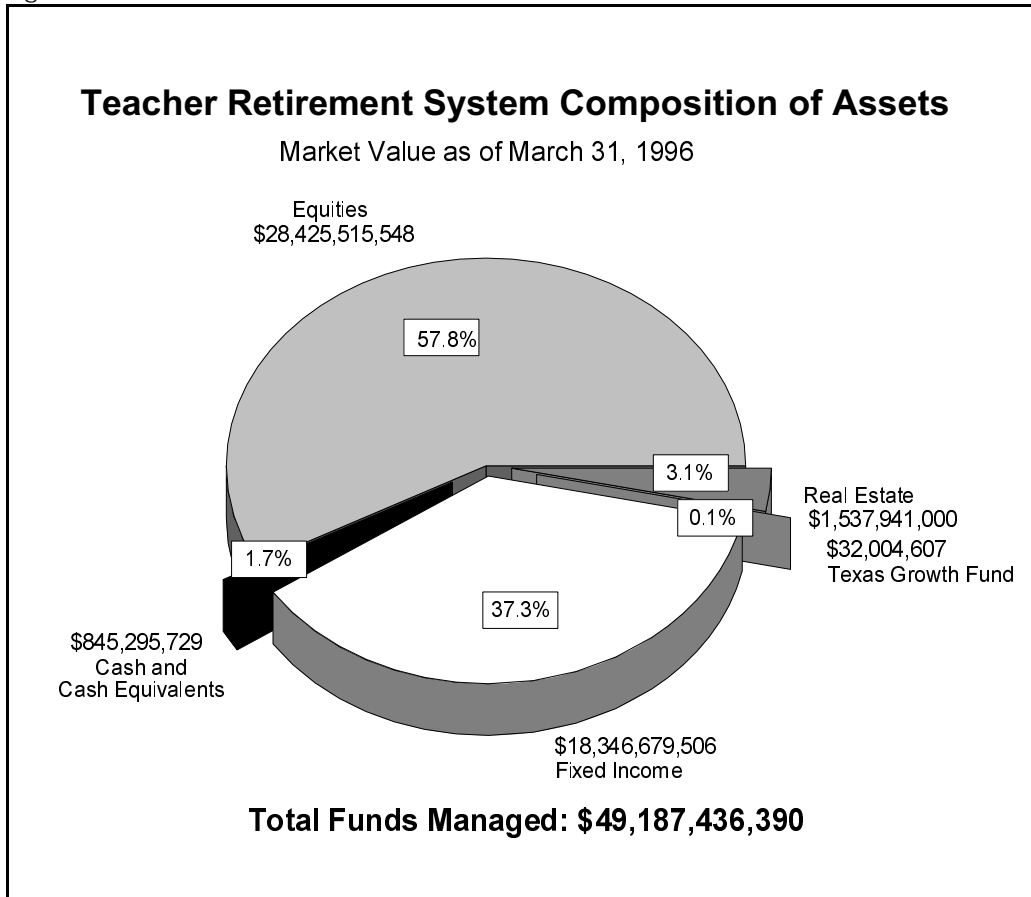
The State of Texas contribution rate was set at 7.31 percent for the biennium ending August 31, 1995, and 6.0 percent for the biennium ending August 31, 1997. The member contribution rate was set at 6.4 percent for both bienniums. These rates were set through the appropriations process. In certain instances, the reporting district (public school, college, university, medical school or educational state agency) may be required to make all, or a portion, of the State's contribution.

Investment revenues comprise interest, amortization of premium and discount, dividend income, and recognized gains and losses on securities.

Asset Allocation

The Teacher Retirement System diversifies its assets within the following asset classes: equities, fixed income instruments, real estate, alternative investments (i.e., Texas Growth Fund), cash and cash equivalents.

Figure 8



Source: Teacher Retirement System response to May 1996 House Joint Committee on State Investment Policies Texas State Agencies and Institutions of Higher Education Investments Questionnaire.

Asset Class	Actual Mix March 31, 1996	Target Mix*
Equities	58%	60%
Fixed Income	37%	34%
Real Estate	3%	4%
Cash and Cash Equivalents	2%	1%
Alternative Assets (Texas Growth Fund)	< 0.1%	1%
TOTAL	100%	100%
* Asset allocation policy defines acceptable ranges above or below target allocations for each asset class.		

Appendix 2.3:

Texas Education Agency Investment Profile

The Texas Education Agency (TEA) provides oversight of the administration and operations of the Permanent School Fund (PSF). However, TEA retains no authority over the investment-related decisions of the Permanent School Fund. That function is the responsibility of the State Board of Education (Board) and its designees.

The Texas Constitution, Article VII, Sections 1 - 8, establishes the Available School Fund, the Permanent School Fund, and the State Board of Education. It also specifies the standard of care State Board of Education members must exercise in managing Permanent School Fund assets. In addition, the Constitution directs the Legislature to establish suitable provisions for supporting and maintaining an efficient public school system, defines the composition of the Permanent School Fund and the Available School Fund, and requires the State Board of Education to set aside sufficient funds to provide free textbooks for the use of children attending the public free schools of this State.

Oversight

The Texas Constitution delegates sole authority and responsibility for investments of the Permanent School Fund to the State Board of Education.

To assist in the administration and oversight of the Permanent School Fund, the State Board of Education established the Committee on the Permanent School Fund. The members of the Committee on the Permanent School Fund are members of the State Board of Education who are selected under the rules of the Board.

An Investment Advisory Committee, consisting of fifteen members appointed by the State Board of Education, provides an independent and continuous review of investment policies and procedures of the State Board of Education.

Investment Policies

The investment policies of the State Board of Education are guided by the “Prudent Person” rule as set forth in the Texas Constitution. The State Board of Education has established investment objectives and investment operating policies within Chapter 33 of the Texas Administrative Code. The goal is to obtain the greatest amount of income and capital appreciation consistent with the safety of principal, in light of the strategic asset allocation plan adopted.

Investment Management

The State Board of Education has discretionary authority for investment decisions. In making investment decisions, the Board relies on its internal investment personnel, private consultants, and a financial advisor to provide investment advice.

The State Board of Education employs an independent investment firm for advice on investment programs and for economic forecasting. This firm is employed in an advisory capacity only. In addition, the Board employs an independent performance measurement service to assist in the evaluation of its long-term investment strategy.

The internal fund managers manage the domestic fixed income securities and domestic equities. The State Board of Education began using external portfolio managers on September 1, 1995. The external managers manage four portfolios which comprise domestic fixed income, domestic equities, international fixed income, and international equities.

As of May 1996, the Investment Division of the Permanent School Fund had 13 employees and had 16 positions authorized. The fund is managed by an Executive Administrator, 4 investment managers (2 for equities and 2 for fixed income); 7 accounting positions, and 1 administrative assistant.

Total Number of Investment Professionals	5
August 31, 1995, Salary Range	\$43,000 - \$125,000
Average Salary	\$70,000
Total Funds Managed Internally	\$9.7 billion
Total Funds Managed Externally	\$3.4 billion

Funding Sources

Based on information from the Texas Constitution, the Education Code, and the Texas Administrative Code, the Permanent School Fund is a perpetual endowment for Texas public schools. It generally consists of:

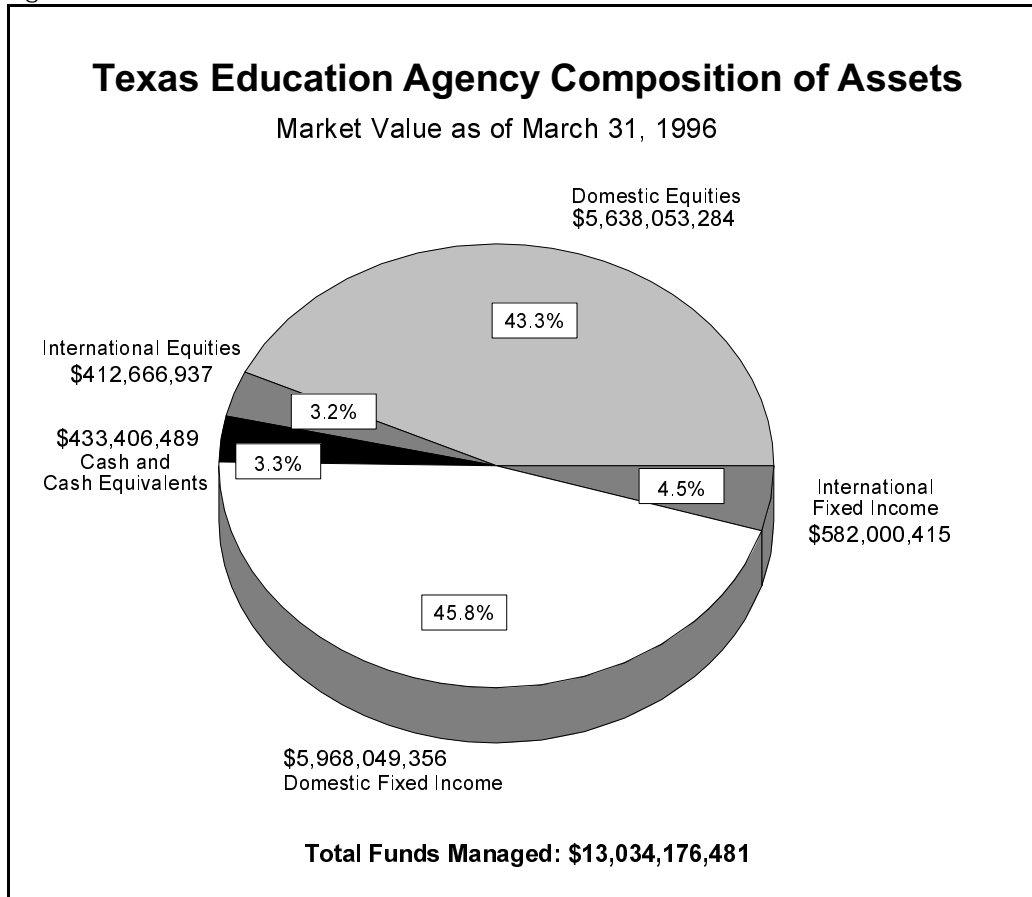
- All land appropriated for the public schools by the Constitution and state laws
- All of the unappropriated public domain remaining in Texas, including all land recovered by suit or otherwise
- All proceeds from the authorized sale of Permanent School Fund land

- All proceeds from the lawful sale of any other Permanent School Fund properties
- All authorized investments of Permanent School Fund properties
- All mineral development income of Permanent School Fund land (including income from mineral development of riverbeds and other submerged land)

Asset Allocation

The State Board of Education Committee on the Permanent School Fund considers the industry diversification and the percentage allocation between fixed income and equity securities within the following asset classes: domestic equities, international equities, domestic fixed income, international fixed income, and cash and cash equivalents.

Figure 9



Source: Texas Education Agency response to May 1996 House Joint Committee on State Investment Policies Texas State Agencies and Institutions of Higher Education Investments Questionnaire.

Asset Class	Actual Mix March 31, 1996	Target Mix*
Equities		
Domestic Large Cap	43%	42%
Domestic Small-Mid Cap	0%	16%
International	3%	5%
Fixed Income (Bonds)		
Domestic	46%	30%
International	5%	5%
Cash and Cash Equivalents	3%	2%
TOTAL	100%	100%
* Asset allocation policy defines acceptable ranges above or below target allocations for each asset class.		

Appendix 2.4:

Texas Lottery Commission Investment Profile

The Texas Lottery (Lottery) was created on August 21, 1991, with the enactment of House Bill No. 54, as a division of the Comptroller of Public Accounts (Comptroller). The Lottery was approved by voters of Texas in a general election on November 7, 1991, and commenced operations on November 20, 1991.

Oversight

The Lottery was officially transferred from the Comptroller to the Texas Lottery Commission (Lottery Commission) on December 3, 1993. Three commissioners, appointed by the Governor of the State of Texas, govern the general administration and operation of the Lottery Commission.

Lottery funds are generally required to be deposited in the State Treasury, which is responsible for controlling and administering the Lottery Commission's investments according to Government Code, Section 466.403. The State Treasurer reports to the executive director regarding the Lottery Commission's revenues, investments, and distributions. (Effective September 1, 1996, the State Treasury was abolished and its functions were absorbed by the Comptroller of Public Accounts.)

Investment Policies

For Lottery prizes to be paid in installments, Government Code, Section 466.403 authorizes the State Treasury to invest as necessary to ensure the payment of the installments. The investments may consist of securities, annuities, or other instruments as determined by the State Treasurer.

Investment Management

The Lottery Commission's investments, whose market value was \$1.1 billion as of March 31, 1996, are managed by the State Treasurer.

Funding Sources

The State Lottery account in the General Revenue Fund consists of revenues from ticket sales, license and application fees, and all money credited to the account from any other fund source under law. Interest earned by the State Lottery account is deposited in the unobligated portion of the General Revenue Fund.

Investment Structure

Investments consist of the United States Treasury zero coupon bonds and REFCO strips (government agency securities). These investments have been purchased by the State Treasury to provide for the payment of Lotto jackpot prizes that are payable annually to the winners over a 19-year period, Weekly Grand prizes that are payable over a nineteen-year period, and the Win-For-Life prizes that are payable weekly until the death of the winner, as the investment matures.

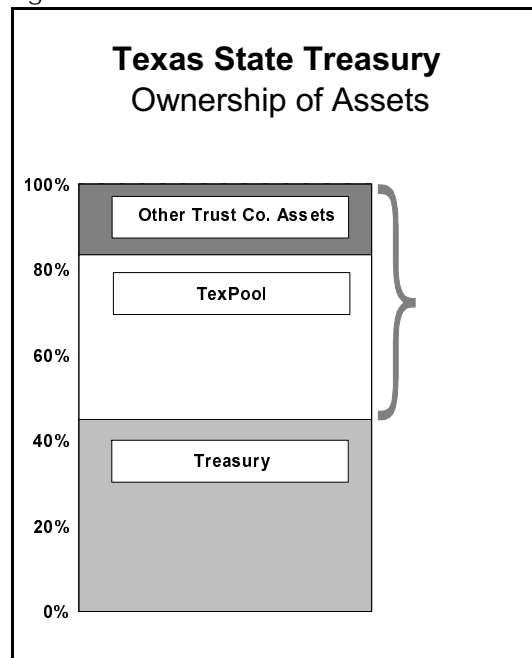
Asset Allocation

The Lottery Commission's investments are composed of government and government agency securities (United States Treasury zero coupon bonds and REFCO strips), with a market value of \$1,061,787,975 as of March 31, 1996.

Appendix 2.5:

Texas State Treasury Investment Profile

Figure 10



Source: Texas State Treasury Cash Management System

The Office of the State Treasurer was established by the Texas Constitution as one of seven offices that comprise the executive department of the State. Pursuant to Government Code, Chapter 404, the Treasurer's general investment-related duties are to manage, disburse, transfer, safekeep, and invest public funds and securities. In addition, the Treasury is responsible for managing the assets of the Texas Treasury Safekeeping Trust Company which includes TexPool.

Effective September 1, 1996, the State Treasury was abolished and its functions were absorbed by the Comptroller of Public Accounts.

Texas State Treasury, Exclusive of the Texas Treasury Safekeeping Trust Company and TexPool

Oversight

According to Government Code 404.041, the State Treasurer is the trustee of funds in the Treasury. The State Treasury has no governing board.

Investment Policies

According to the *Texas State Treasury Investment Policy* of August 1993, the State Treasurer's Investment Objective is as follows:

The objective of the State of Texas' investment and cash management program is to ensure the safety, liquidity, and yield on the funds entrusted to the Treasury. These objectives will assure that all available funds are invested to the maximum extent possible at the highest possible rates

obtainable at the time of investment in conformance with the legal and administrative guidelines as outlined in this policy. All investments shall be consistent with State law and made with the primary objectives of:

- Preservation of capital and protection of principal
- Maintenance of sufficient liquidity to meet operating needs
- Security of state funds and securities
- Diversification of investments to avoid risk
- Maximization of return.

Investment Management

The Treasury's Investment Division includes five investment professionals. All funds are managed internally.

Total Number of Investment Professionals	5
Fiscal Year 1995 Budgeted Salary Range	\$29,000 - \$70,000
Average Salary	\$42,000
Total Funds Managed Internally, March 31, 1996*	\$6.7 billion*
* Excludes funds from TexPool and Texas Safekeeping Trust Portfolios	

Source of Funds

The funds managed and invested by the State Treasury belong to the State, and are entrusted to the Treasury until such time as expenditures must be made using those funds. These funds are separate from the assets of the Texas Safekeeping Trust Fund and the TexPool portfolios, which are separately discussed in this section.

Asset Allocation

The Treasury's investments include repurchase agreements, government securities, commercial paper, and cash.

Figure 10 (repeated)

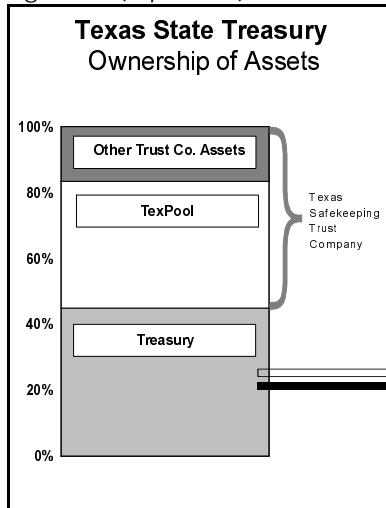
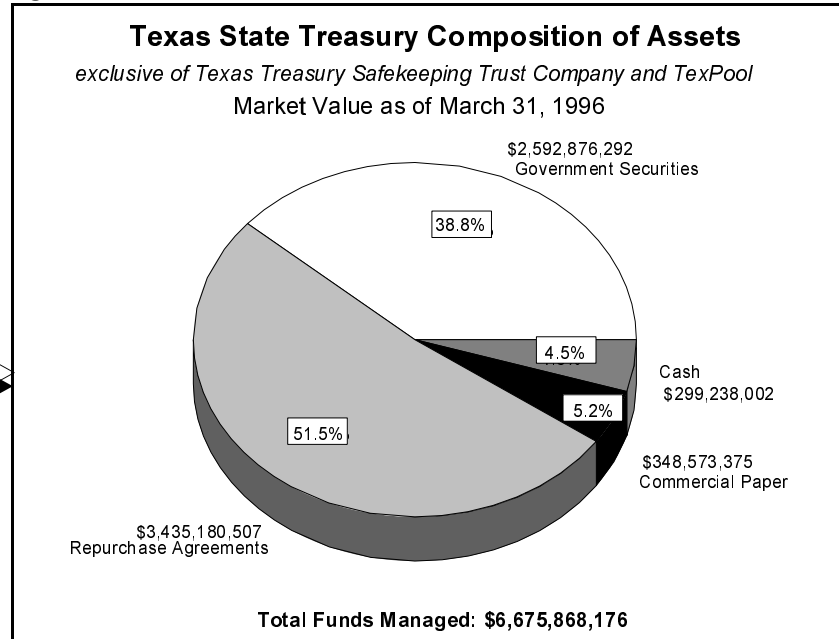


Figure 11



Source: Texas State Treasury Cash Management System

Asset Class	Actual Mix March 31, 1996
Repurchase Agreements	52%
Government Securities	39%
Commercial Paper	5%
Cash	4%
TOTAL	100%

Texas Treasury Safekeeping Trust Company (within the Texas State Treasury)

Section 404.102 of the Government Code enabled the State Treasurer to incorporate a special purpose trust company, the Texas Treasury Safekeeping Trust Company (Trust Company), for the purpose of obtaining direct access to the services of the Federal Reserve System. The Trust Company was created to enable the Treasurer to manage, disburse, transfer, safekeep, and invest public funds and securities more efficiently and economically.

The primary services provided by the Trust Company to the State are to safekeep U.S. Government securities in book-entry form for the Treasurer and the major investment funds of the State with independent investment authority, to safekeep collateral pledged to secure deposits of the Treasury in financial institutions, and to act as trustee for other public bodies to hold and manage funds on their behalf.

The Trust Company is charged with the responsibility of managing specific funds which must remain segregated from the State Treasury's primary functions.

Oversight

The State Treasurer serves as the sole officer, director, and shareholder of the Trust Company.

In this capacity the State Treasurer exercises oversight responsibilities over all aspects of the Trust Company including investment and accounting activity, development plans, employee and staffing matters, etc. Oversight responsibilities are demonstrated by financial interdependency, ability to significantly influence operations, designation of management, and accountability for fiscal matters.

Investment Policies

Specific funds management agreements and bond ordinances of the various funds held in trust direct the investment of those specific funds within the Trust Company. Each member agency of the Trust Company has its own letter of instructions dictating how funds should be invested.

Statute provides that the Treasury shall manage the Trust Company. Accordingly, a contract between the Trust Company and the Treasury provides for the Trust Company to reimburse the Treasury for employees' services performed on behalf of the Trust Company.

Investment Management

The five investment professionals of the Treasury Investment Division also manage all of the funds of the Trust Company.

Funding Sources

The assets managed and invested by the Trust Company belong to the State, state agencies, and local political subdivisions. Funds are invested in accordance with written agreements between each agency and the Trust Company. Local political subdivisions are eligible for participation in TexPool which comprises approximately 70 percent of the Trust Company's assets.

Asset Allocation

The Trust Company's investments are comprised of those authorized by letter of instruction of the participating entities, including: repurchase agreements, U.S. Treasury securities, U.S. government agency securities, state and local government securities, mortgage-backed securities, and guaranteed investment contracts (GICs). Portfolios for 24 entities compose the Trust Company's assets, with TexPool, Texas Public Finance Authority Escrow, Workers' Compensation, Texas Department of Housing and Community Affairs (TDHCA), and the Texas Water Development Board (TWDB) owning the largest portions of the assets.

Figure 10 (repeated)

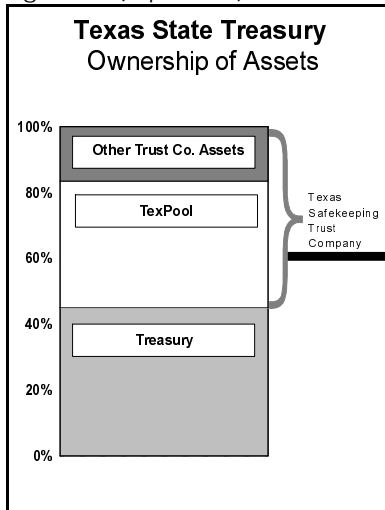
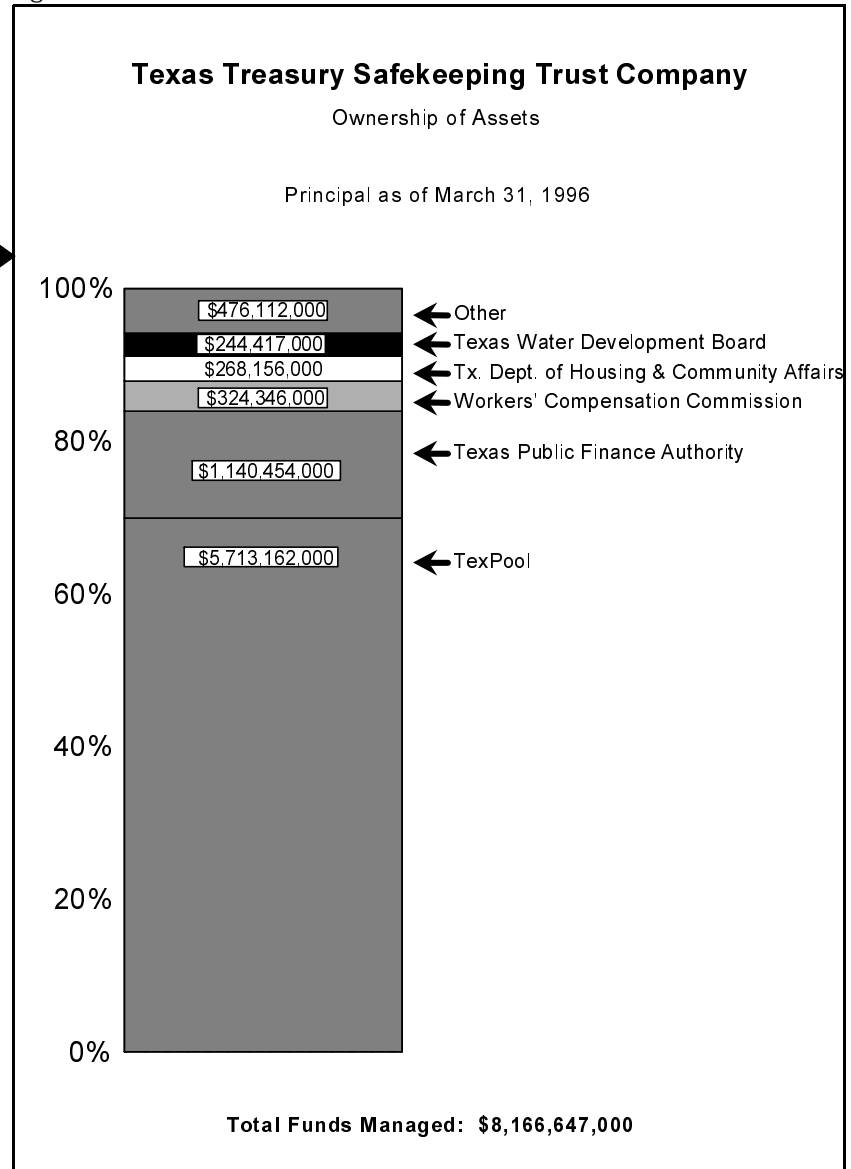


Figure 12



Source: Texas State Treasury Cash Management System

Figure 10 (repeated)

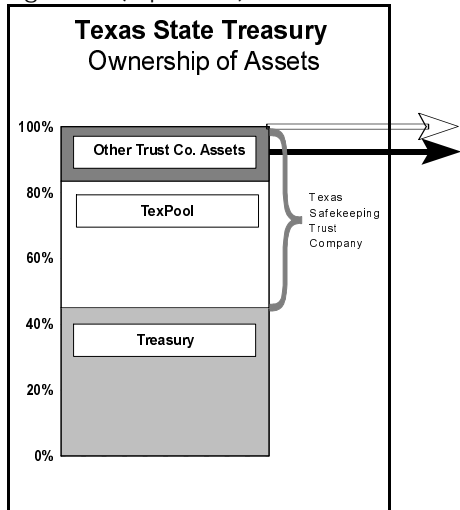
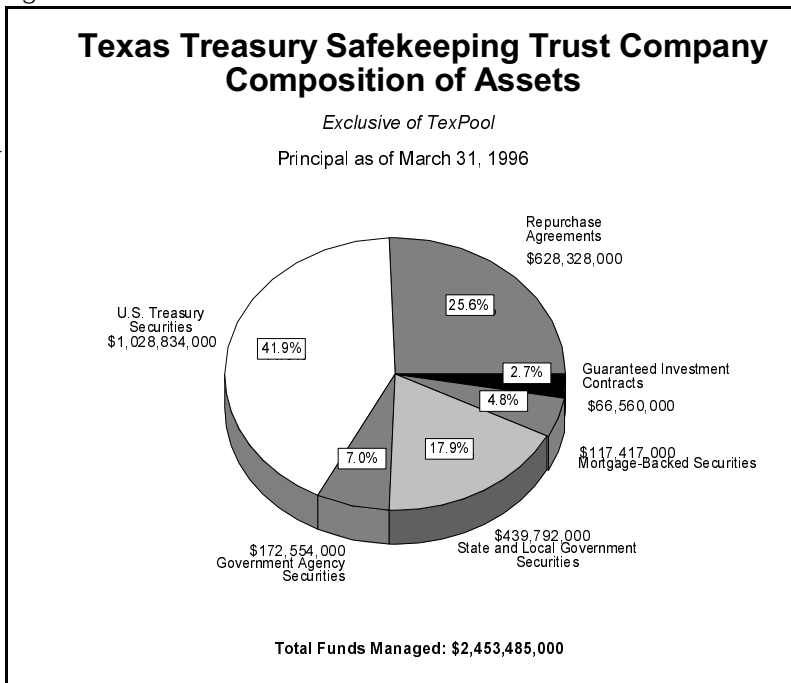


Figure 13



Source: Texas State Treasury Cash Management System

Asset Class	Actual Mix March 31, 1996
Repurchase Agreements	25%
U.S. Treasury Securities	42%
U.S. Government Agency Securities	7%
State and Local Government Securities (SLGs)	18%
Mortgage-Backed Securities (MBS)	5%
Guaranteed Investment Contracts (GICs)	3%
Total	100%

TexPool (Managed by the Texas Safekeeping Trust Company)

In 1989, the Texas State Treasury established the Texas Local Government Investment Pool (TexPool) as an investment program within the Trust Company. The purpose of TexPool is to offer a safe, efficient, and liquid investment alternative to local governments in the State of Texas so that they may benefit from and realize a higher investment return associated with economies of scale and the investment expertise available through the Treasury.

Oversight

The TexPool Advisory Board (Advisory Board), which assists the Treasurer in administering TexPool, is composed of an equal number of members who are participants in TexPool and of other qualified individuals not involved in TexPool. Treasury management exercises oversight by appointing Advisory Board members, making decisions on investing and accounting activities, developing plans, administering employee and staffing matters, etc.

Investment Policies

The TexPool investment policies provide guidance to the TexPool Advisory Board. The Treasury Investment Director supervises and manages the fund's investment assets. It is the policy of the Treasury to invest the assets of TexPool in a manner which will provide for preservation and safety of principal and competitive investment returns, while meeting the daily liquidity needs of the participants. The 74th Legislature mandated stronger controls over the management of TexPool, which are included in the Public Funds Investment Act.

Investment Management

The Treasury Investment Division's five investment professionals also manage all of the funds of TexPool.

Funding Sources

The assets managed and invested by TexPool belong to some public universities and local political subdivisions. Each participant in TexPool must complete a participation agreement. This agreement is the official contract between the participant and the State Treasurer, and it must be filed before any deposits can be received by TexPool.

Asset Allocation

TexPool's investment portfolio consists of the following asset classes: repurchase agreements, reverse repurchase agreements, U.S. Treasury securities, and U.S. government agency securities.

Figure 10 (repeated)

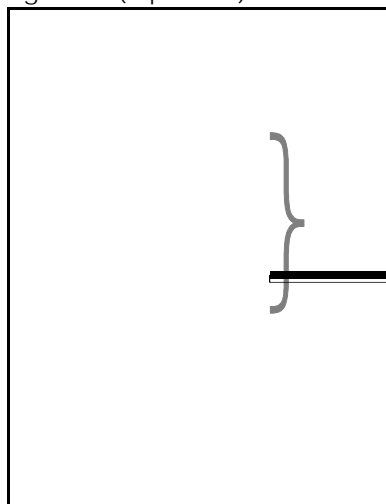
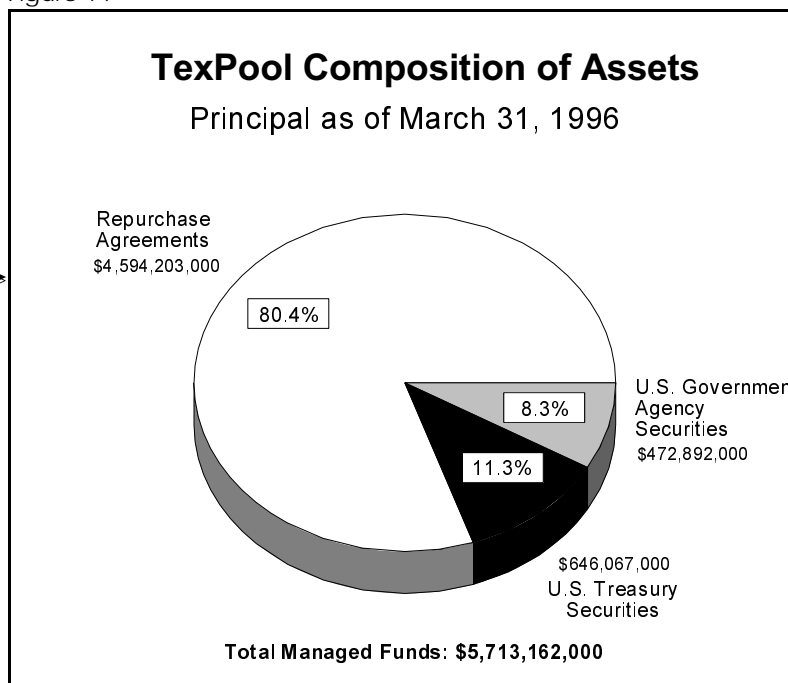


Figure 14



Source: Texas State Treasury Cash Management System

Asset Class	Actual Mix March 31, 1996
Repurchase agreements (net of reverse repurchase agreements)	81%
U.S. Treasury Securities	11%
U.S. Government Agency Securities	8%
Total	100%

Appendix 2.6:

The University of Texas System Investment Profile

On March 1, 1996, the Board of Regents of The University of Texas System (UT System) contracted with The University of Texas Investment Management Company (UTIMCO) to manage the UT System's investments. UTIMCO is a private, not-for-profit corporation made possible by House Bill 1877, 74th Legislature, and is staffed by former employees of the UT System's Office of Asset Management. The former Vice Chancellor for Asset Management is now the President and Chief Executive Officer of UTIMCO.

Oversight

The Board of Regents retain ultimate fiduciary responsibility over UTIMCO. However, much of the investment authority has been delegated to UTIMCO and its Board of Directors. The Board of Regents appoints the Board of Directors, approves investment policies, and evaluates performance, while the UTIMCO board will directly oversee investment operations.

The UTIMCO Board of Directors consists of nine voting members including at least three Regents, the Chancellor of the UT System, and as many as five outside directors. The outside directors (one of whom will be a nominee of the Texas A&M System Board of Regents) are to be experienced investment or business professionals.

Investment Policies

As the UT System's exclusive external investment manager, UTIMCO is responsible for investing the UT System's assets in accordance with investment policies approved by the Board of Regents. The approved policies are guided by the "Prudent Person" rule, as set forth in the Texas Constitution.

Investment Management

UTIMCO employs ten internal investment professionals, who were formerly UT System employees, as well as several external portfolio managers, to manage the UT System's investments.

Total Number of Investment Professionals	10
August 31, 1995, Salary Range	\$48,000 - \$185,000
Average Salary	\$91,000
Total Funds Managed Internally, August 31, 1995	\$5.6 billion
Total Funds Managed Externally, August 31, 1995*	\$2.9 billion
* Includes index funds, Short Term Fund, and external managers' cash and cash equivalents	

Funding Sources

Permanent University Fund (PUF) - The PUF is a constitutionally established perpetual fund created in 1876 for the endowment and support of The University of Texas System and the Texas A&M University System.

Long Term Fund (LTF) - The LTF was established in 1995 by the Board of Regents of The University of Texas System to succeed the Common Trust Fund pooled

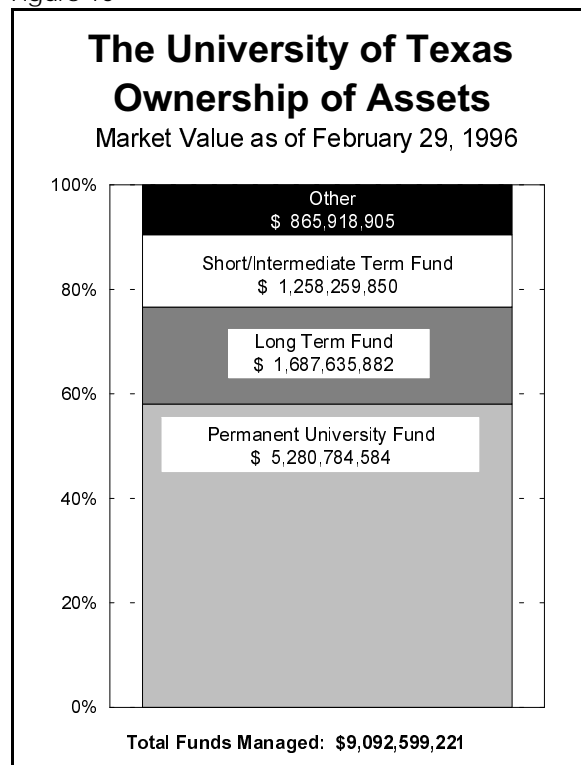
investment fund. The LTF serves as a mutual fund for the collective investment of approximately 4,000 private endowments and other funds supporting various programs and purposes of the UT System. Cash distributions are paid quarterly, on a per unit basis, to each component institution and must be expended as intended by the donor.

Short/Intermediate Term Fund - This fund is a fixed income pool of the short- to intermediate-term operating funds of the UT System component institutions. It was created in March 1993 in order to capture the economies of scale offered by a pooled investment fund and to consolidate portfolio management under a single manager.

Short Term Fund - This fund comprises the aggregate balances maintained by each component institution and UT System Administration in a money market fund. It is used as a cash management account and a short term investment account with each component institution maintaining its own sub-account.

Separately Invested Assets - These funds consist of endowment funds, foundations, charitable trusts, and various other funds. The majority dollar value of these funds is represented by real estate assets. The remaining funds represent privately held illiquid

Figure 15



Source: The University of Texas System response to May 1996 House Joint Committee on State Investment Policies Texas State Agencies and Institutions of Higher Education Investments Questionnaire.

interests as well as traditional fixed income and equity securities where pooling is restricted or prohibited.

Asset Allocation

The UT System's investments comprise four separate portfolios: Permanent University Fund (PUF), Long Term Fund (LTF), Short/Intermediate Term Fund (S/ITF), and Other Assets (including the Short Term Fund and Separately Invested Assets). The investment portfolios for the UT System consist of the following assets: fixed income instruments, equities, alternative assets, real estate, cash and cash equivalents.

Figure 15 (repeated)

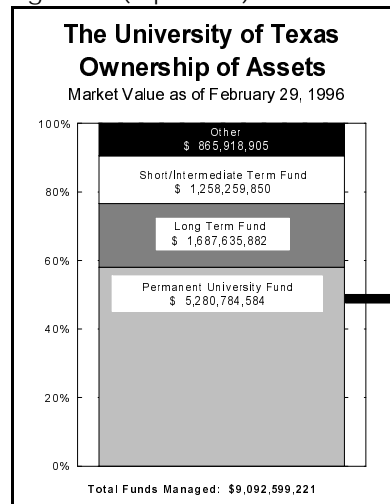
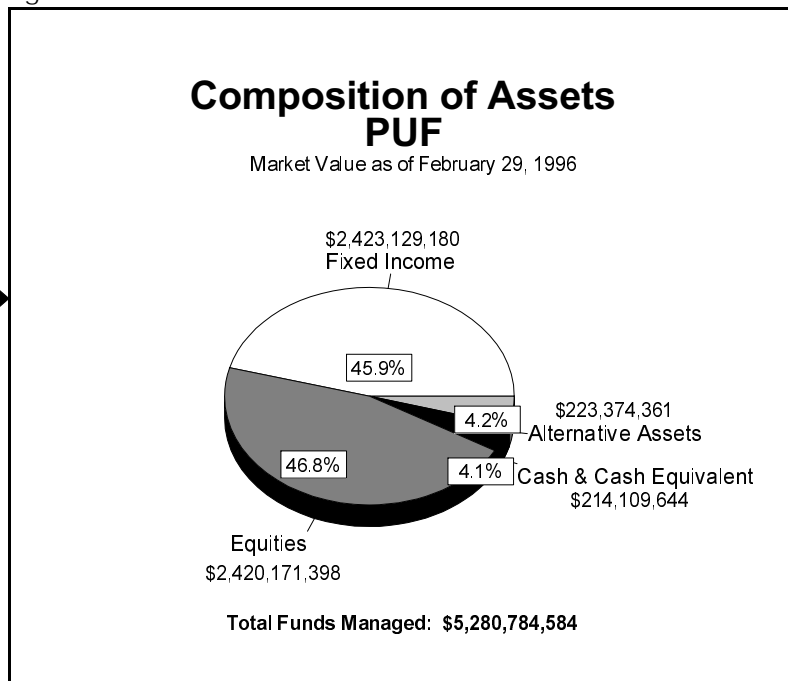


Figure 16



Source: The University of Texas System response to the May 1996 *Texas State Agencies and Institutions of Higher Education Investments Questionnaire* from the House Joint Committee on State Investment Policy.

Asset Class	Actual Mix February 29, 1996	Target Mix*
Fixed Income	46%	30%
Equities	46%	60%
Alternative Assets	4%	10%
Cash and Cash Equivalents	4%	0%
Total	100%	100%

* Asset allocation policy defines acceptable ranges above or below target allocations for each asset class.

Figure 15 (repeated)

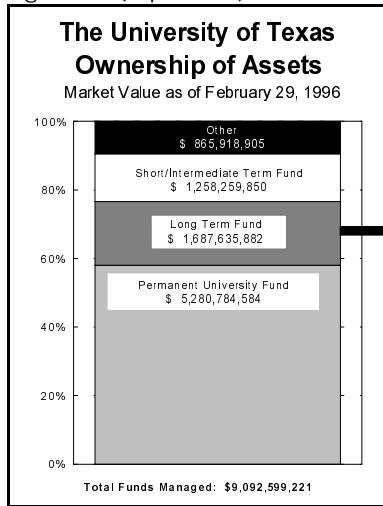
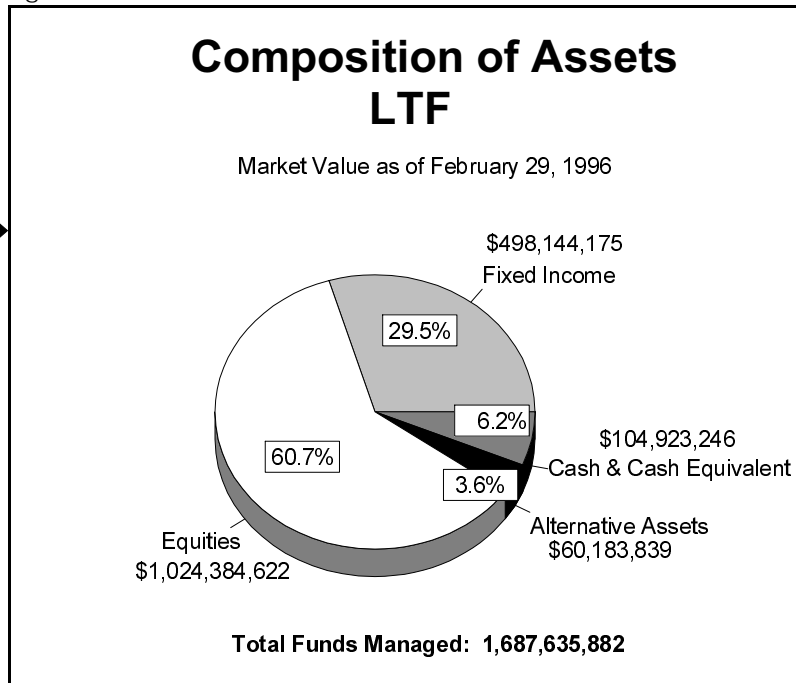


Figure 17



Source: The University of Texas System response to the May 1996 *Texas State Agencies and Institutions of Higher Education Investments Questionnaire* from the House Joint Committee on State Investment Policy.

Asset Class	Actual Mix February 29, 1996	Target Mix
Fixed Income	29%	20%
Equities	61%	50%
Alternative Assets	4%	30%*
Cash and Cash Equivalents	6%	0%
Total	100%	100%
* Includes 10 percent allocation to Inflation Hedging Assets		

Figure 15 (repeated)

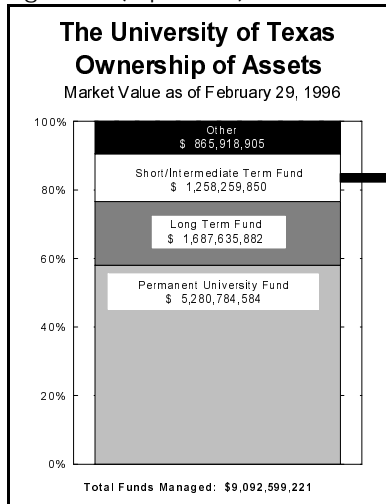
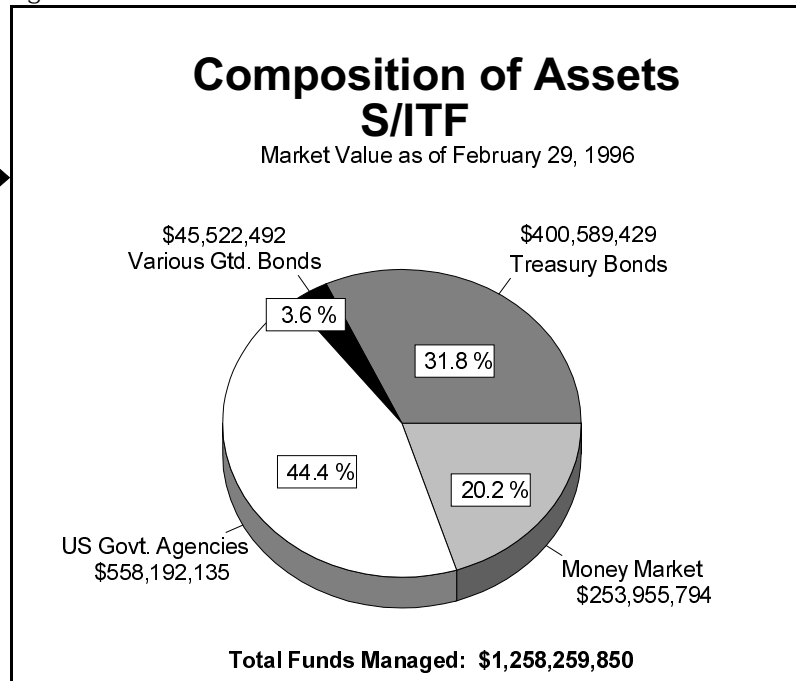


Figure 18



Source: The University of Texas System response to the May 1996 *Texas State Agencies and Institutions of Higher Education Investments Questionnaire* from the House Joint Committee on State Investment Policy.

Asset Class	Actual Mix February 29, 1996
U.S. Government Agencies (Non-Guaranteed)	44%
Treasury Bonds	32%
Money Market	20%
Various Guaranteed Bonds	4%
Total	100%

Figure 15 (repeated)

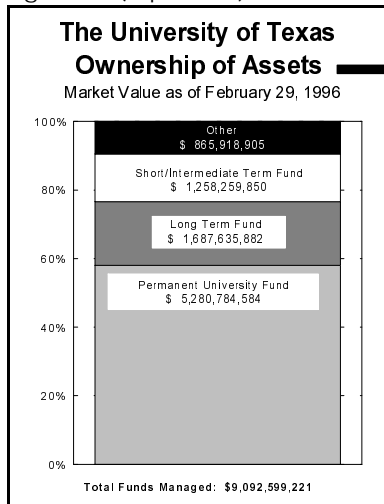
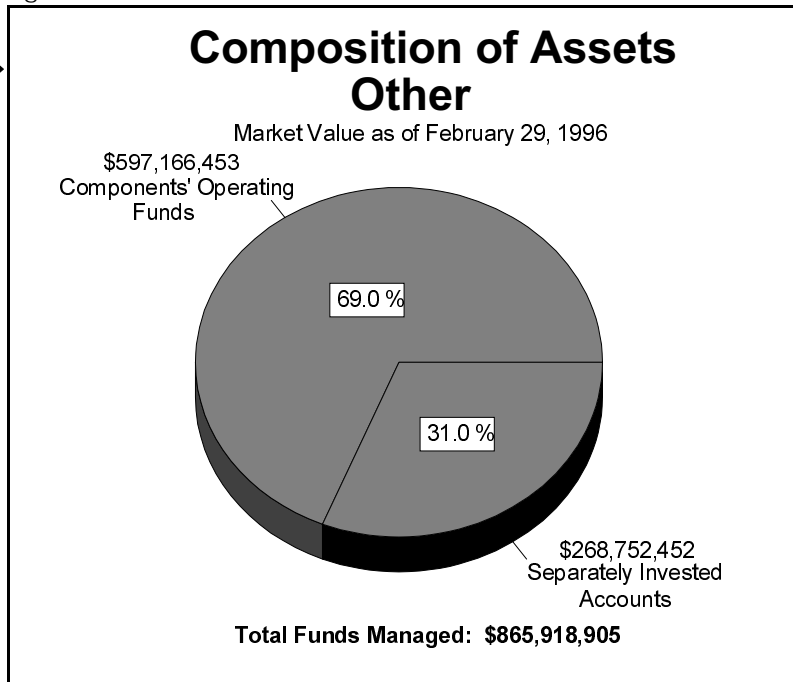


Figure 19



Source: The University of Texas System response to the May 1996 *Texas State Agencies and Institutions of Higher Education Investments Questionnaire* from the House Joint Committee on State Investment Policy.

Asset Class	Actual Mix February 29, 1996
Components' Operating Funds	
Cash and Cash Equivalents	69%
Separately Invested Accounts	
Cash and Cash Equivalents	3%
Debt Securities	14%
Equity Securities	3%
Real Estate	11%
TOTAL	100%

Appendix 3.1:

Teacher Retirement System of Texas Code of Ethics Policy

Adopted March 17, 1992. Revised September 9, 1994.

The Teacher Retirement System of Texas (“TRS”) is charged by the Texas Constitution and state law with the administration of pension and group health insurance funds held in trust for active and retired TRS members and their beneficiaries. Accordingly, its trustees, certain of its employees, and certain of its agents and consultants have fiduciary duties commonly associated with pension and other trusts. These duties extend not only to the investment activities but also to the application of TRS benefit provisions, the establishment of actuarial assumptions, the collection of amounts owed the fund, and the general administration of TRS.

Because TRS is described by statute as a state agency, TRS trustees and employees have the special responsibilities for honesty and integrity applicable to public servants.

This Ethics Policy (the “Policy”) specifies certain standards of conduct expected of trustees and employees in view of these responsibilities. While many of its provisions are based upon legal and fiduciary concepts, this Policy should not be interpreted as an exclusive and complete statement of legal and fiduciary responsibilities and its provisions should not necessarily be construed as only statements of legal and fiduciary responsibility.

The Policy is to be used as a guideline for conduct by affected persons and in the evaluation of that conduct by supervisory personnel.

It is recognized that fundamental rules of fairness require that affected persons not be held strictly responsible under vague or ambiguous principles and standards. It is further recognized that TRS trustees who serve part-time without compensation will have private business activities and that consultants will have other accounts. However, where legal or fiduciary standards also apply, any ambiguity in this Policy should be resolved in accordance with those standards.

Definitions

In this Policy the following definitions apply unless the context requires otherwise:

- (1) “TRS” means the Teacher Retirement System of Texas and its subsidiaries.
- (2) “Board” means the Board of Trustees of TRS.
- (3) “Employee” means a person working for TRS in an employer-employee relationship and includes the Executive Director and Chief Investment Officer of TRS.

- (4) “Trustee” means a member of the Board of TRS.
- (5) “Agent” means a person performing duties on behalf of TRS other than an employee or trustee.
- (6) “Consultant” means a person providing advice to TRS other than an employee or trustee. The term “Consultant” includes “advisors.”
- (7) “Ethics Committee of the Board” means a standing committee of the TRS Board under the TRS by-laws, which is a committee of the whole Board.
- (8) “Fiduciary” means (1) a trustee or (2) such other person, including but not restricted to employees, agents, and consultants, who are fiduciaries because they have been identified as fiduciaries by the Board, by contract, or otherwise or because of the nature of the relationship without any specific identification.
- (9) “Personal securities transactions” means (1) transactions for a trustee’s or employee’s own account, including IRA’s and (2) transactions for an account in which a trustee or employee has indirect beneficial ownership, unless the trustee or employee has no direct or indirect influence or control over the account. Accounts involving family (including husband, wife, minor children or other dependent relatives), or accounts in which the trustee or employee has a beneficial interest (such as a trust of which he or she is an income or principal beneficiary) are included within the meaning of “indirect beneficial interest.”
- (10) “Relative” means a person related in the third degree by consanguinity (blood relative) or affinity (marriage) determined in accordance with Texas Government Code §§573.021-025. Examples of relatives by consanguinity are a child, grandchild, great grandchild, parent, grandparent, great grandparent, brother, sister, uncle, aunt, niece or nephew. A person adopted into a family is considered a relative on the same basis as a natural born family member. Examples of a relative by affinity are a spouse, any person related to the spouse within the third degree by consanguinity, or any spouse of a relative by consanguinity or affinity. A person is considered a spouse even if the marriage has been dissolved by death or divorce if there are surviving children of that marriage.
- (11) “Policy” means this Ethics Policy.
- (12) “Key employee” means an employee who has been designated by the Board as one who exercises significant decision-making or fiduciary authority by virtue of the position he or she holds with TRS.

I. General Ethical Standards

The following general ethical principles apply to TRS trustees and employees:

- A. TRS trustees and employees must comply with all applicable laws. They should specifically be aware of the following statutes: (1) Texas Government Code §825.211 (Certain Interests in Loans, Investments, or Contracts Prohibited) and §825.212 (Retirement System Ethics Policy); (2) Texas Government Code §572.051 (Standards of Conduct for Public Servants); (3) Texas Government Code §§553.001-003 (Disclosure by Public Servants of Interest in Property being Acquired by Government); (4) Texas Government Code §552.352 (Distribution of Confidential Information); (5) Texas Government Code §572.054 (Representation by Former Officer or Employee of Regulatory Agency Restricted) and §§572.002 and 572.004 (General Definitions); (6) Chapter 36, Texas Penal Code (Bribery, corrupt influence, and gifts to public servants); and (7) Chapter 39, Texas Penal Code (Abuse of office, official misconduct). The omission of any applicable statute from this list does not excuse violation of its provisions.
- B. TRS trustees and employees must be honest in the exercise of their duties and must not take actions which will discredit TRS.
- C. TRS trustees and employees should be loyal to the interests of TRS, its members and beneficiaries, to the extent that such loyalty is not in conflict with other duties which legally have priority. TRS trustees and employees should avoid personal, employment, or business relationships that create conflicts of interest. Should trustees or employees become aware of any conflict of interest, they have an affirmative duty to disclose and to cure the conflict in a manner provided for in this Policy.
- D. TRS trustees and employees may not use their relationship with TRS to seek or obtain personal gain beyond agreed compensation and/or any properly authorized expense reimbursement. This should not be interpreted to forbid the use of TRS as a reference or the communication to others of the fact that a relationship with TRS exists, provided that no misrepresentation is involved.

II. Conflict of Interest

- A. A conflict of interest exists for a trustee or employee whenever the trustee or employee has a personal or private commercial or business relationship that could reasonably be expected to diminish the trustee's or employee's independence of judgment in the performance of the employee's responsibilities to TRS. For example, a person's independence of judgment is diminished when the person is in a position to take action or not take action with respect to TRS or its business and such act or failure to act is, may be, or reasonably appears to

be influenced by considerations of personal gain or benefit rather than motivated by the interests of TRS, its members, and beneficiaries.

- B. Employees must promptly disclose conflicts of interest in writing to the General Counsel through the TRS Conflict of Interest Disclosure Statement. A copy of the disclosure statement which is given to the General Counsel must also be provided to the employee's supervisor, team leader, or manager or to the consultant's or agent's supervising or monitoring personnel. The General Counsel will report to the Ethics Committee of the Board regarding the conflict of interest disclosure statements which he receives. Should a person with a duty to disclose conflicts have reasonable cause to believe disclosure to the General Counsel will be ineffective, the person should disclose the conflict to the Ethics Committee of the Board. Disclosure to the Ethics Committee of the Board is accomplished through written disclosure to the Chairman of the Committee whose address may be obtained through the office of the Executive Director. Whether disclosure is to the General Counsel or the Ethics Committee of the Board, a copy of the disclosure statement should be provided to the employee's supervisor or to the consultant's or agent's monitoring personnel unless the person with the conflict believes that such disclosure would be detrimental to the resolution of the conflict.

Trustees must disclose conflicts in writing to the General Counsel unless they are required by Section 572.058 of the Texas Government Code to disclose orally to the Board at a meeting held in compliance with the Texas Open Meetings Act, Section 551 of Title 5 of the Texas Government Code. In cases where they are required by law to disclose at an open meeting, they are also encouraged to consult with the General Counsel prior to the Board meeting. If disclosure is made at a Board meeting, the minutes of the meeting must include the disclosure of the conflict.

- C. TRS trustees and employees who become aware, or reasonably should have become aware, of a personal conflict of interest, have a duty not only to disclose that conflict, but to cure it. A person normally cures a conflict of interest by promptly eliminating it. Persons who cannot or do not wish to eliminate the conflict must terminate the relationship with TRS as quickly as responsibly and legally possible. If a TRS trustee or employee may prudently withdraw from action on a particular matter in which a conflict exists, he or she may cure the conflict in that manner provided that
- (1) the person may be and is effectively separated from influencing the action taken,
 - (2) the action may properly be taken by others, and
 - (3) the nature of the conflict is not such that the person must regularly and consistently withdraw from decisions which are normally his or her responsibility with respect to TRS. Trustees must disclose any conflicts

regarding matters which are before the Board, absent themselves from any relevant deliberations, and not vote on the matter.

- D. Employees who file disclosure statements must refrain from giving advice or making decisions about matters affected by the conflict of interest unless the Board, after consultation with the General Counsel, expressly waives this prohibition. The Board will decide whether to waive any disclosed conflict of interest at a meeting held in compliance with the Texas Open Meetings Act. To assist it in deciding whether to grant waivers, the Board may develop criteria for determining the kinds of relationships that do not constitute material conflict of interest. Any waiver of a conflict of interest, including the reasons supporting the waiver, must be included in the minutes of the meeting. Records of all waivers granted with the supporting reasons will be maintained by the General Counsel.
- E. It shall not be considered a conflict solely because
- (1) a trustee or employee is a member, retiree, or beneficiary of the system or has an interest no greater than a large class of its members or retirees, or
 - (2) a trustee or employee has an investment in the stock of a publicly traded corporation which is owned, purchased, sold, or otherwise dealt with by TRS provided that the affected person's interest in the stock is not more than 5 % of any class of stock and the person is not a director or officer of the corporation.

III. Prohibited Transactions and Interests

TRUSTEES

- A. Trustees may buy or sell a publicly traded security of an issuer which is held by TRS but may not engage in a personal securities transaction when they know or reasonably should know that TRS is trading such securities. TRS is trading securities of an issuer when a buy/sell order has been placed with the TRS trader for execution. In addition, trustees may not engage in personal securities transactions in stock of an issuer not on the TRS Approved Stock Lists when they know or reasonably should know that a formal written investment recommendation by a TRS investment employee has been issued for such stock and has not been acted upon by the Board.

TRUSTEES AND EMPLOYEES

- B. No trustee or employee may participate in a matter before TRS which involves a business, contract, property or investment held by such person if it is reasonably foreseeable that TRS action on the matter would confer a benefit to such person by or through the business, contract, property or investment. This prohibition on participation in matters involving benefits for a person's own interest does not apply if the benefit is merely incidental to the person's membership in a large class such as the class of TRS members.
- C. No trustee or employee, or spouse of the trustee or employee, may have stock or other ownership or profit sharing interest in brokerage firms or consultants with which TRS does business. However, this shall not prohibit the ownership of stock in a company that may own stock in such entities provided such entities are not the dominant or primary business of the parent company.
- This prohibition applies to stock held for a trustee's or employee's own account or an account in which he or she has a beneficial interest (unless the trustee or employee has no direct or indirect influence or control over the account.) For this purpose, a trustee's or employee's own account or an account over which he or she has a beneficial interest includes accounts involving immediate family members (spouse, minor children, or other dependent relatives).
- If a trustee or employee holds such stock or other ownership interest in a brokerage firm or consultant prior to the time TRS commences doing business with the firm or if a new trustee or employee holds such stock or other ownership interest at the time he or she is appointed or hired, respectively, the trustee or employee has a reasonable period of time to dispose of such stock or other ownership interest. Thirty to sixty days is deemed reasonable.
- D. No trustee or employee may recommend or cause discretionary TRS business to be transacted with or for the benefit of a relative.
- E. Trustees and employees may not under any circumstances accept offers by reason of their position with TRS to trade in any security or other investment on terms more favorable than available to the general investing public.
- F. Trustees and employees may not borrow from investment managers, outside service providers, professional advisors or consultants, banks or other financial institutions with which TRS has a business relationship, unless such entities are normally engaged in such lending in the usual course of their business, and then only on customary terms offered to others under similar circumstances to finance proper and usual activities.
- G. No trustee or employee may contract on behalf of TRS with any entity or a controlled affiliate of such entity that employs or is represented by a former trustee or employee of TRS if such employment or representation would violate

the prohibitions on employment of former public servants contained in Section 572.054 of the Texas Government Code, unless the Executive Director, in the case of an employee, or the Board has determined that such action on the part of TRS would be imprudent. TRS contracts must provide for a termination option for TRS if the contractor of a controlled affiliate employs a former TRS employee or trustee in violation of state law and this Policy.

- H. No trustee or employee may represent any person in any action or proceeding before or involving the interests of TRS except as a duly authorized representative or agent of TRS.
- I. No trustee or employee may use TRS information, resources, or facilities nor may they use information or resources paid for by TRS for personal gain or the gain of anyone other than the members and beneficiaries. In this context, “for the gain of members and beneficiaries” means for the gain of this group as a whole and does not include the gain of an individual member or beneficiary who is a relative or friend of a TRS employee. This prohibition means that TRS trustees and employees may not use information paid for by TRS to assist or benefit private clients of the TRS trustees or employees.
- J. No TRS trustee or employee may take action personally or on behalf of TRS which will result in a reasonably foreseeable conflict of interest. Should there be action which a TRS trustee or employee believes to be in the best interest of TRS but which could foreseeably result in a personal conflict of interest, the TRS trustee or employee must disclose such fact to the General Counsel prior to taking such action.

EMPLOYEES

- K. Employees may not engage in outside employment, business, or other activities which detract from the ability to fulfill their full-time responsibilities to TRS.

Key employees must obtain advance written approval from the Executive Director for any outside employment or business, including but not limited to service as director, officer, or investment consultant or manager for another person or entity. Any outside employment by the Executive Director must be approved in advance by the Board.

- L. The following employees must obtain preclearance for personal securities transactions and must provide transactional disclosure for such transactions: (1) those employees who make investment recommendations or participate in investment decisions concerning current portfolio investments or investments under consideration for purchase, (2) those employees who in the course of their regular duties for TRS obtain information concerning such investment recommendations or decisions, and (3) those employees with actual knowledge of investment recommendations or decisions regarding purchases, sales, or other acquisitions or dispositions.

The preclearance and transactional disclosure requirements for personal securities transactions apply only to equity or equity-related transactions, including stocks, convertibles, preferreds, options on securities, warrants, rights, etc., for domestic and foreign securities, whether publicly traded or privately placed. The preclearance requirement does not apply to bonds (with the exception of convertible bonds), mutual funds, financial futures, and options on futures.

Employees must obtain preclearance for personal securities transactions as follows: (1) for stocks on the TRS Approved Lists, they must verify with the TRS Chief Equity Trader, or, in his or her absence, the Equity Trader, that no buy/sell order has been placed and (2) for stocks not on the TRS Approved Lists, they must verify with the Chief Investment Officer or with an Investment Director that a formal written investment recommendation has not been issued and has not been acted upon by the Board.

Preclearance by employees will be documented in a personal securities transaction log which will provide a record of all requests for approval of personal securities transactions. For stocks on the TRS Approved Lists, the Chief Equity Trader or his or her designee will provide preclearance and maintain the log. For stocks not on the TRS Approved Lists, the Chief Investment Officer or his or her designee will provide preclearance and maintain the log. Preclearance for personal securities transactions is effective for one trading day only.

The following prohibitions on personal securities transactions apply:

- (1) For stock on the TRS Approved Lists, if a buy/sell order has been placed with the TRS trader, no employee may conduct a personal securities transaction until one trading day after the buy/sell order has been completed or canceled.
- (2) For stock on the TRS Approved Lists which the Board deletes from an approved list, no employee may conduct a personal securities transaction until ten calendar days after the stock has been deleted from the approved list or until one trading day after a sell order for the stock has been completed, whichever occurs first.
- (3) For stock not yet on the TRS Approved Lists but for which a formal written investment recommendation has been issued by a TRS investment employee, no employee may conduct a personal securities transaction until ten calendar days after the Board has added the stock to a TRS Approved List or until one trading day after TRS has completed a buy/sell order for the stock, whichever occurs first.

Transactional disclosure forms must be completed for personal securities transactions, except for those described above which are exempted from the

disclosure requirement. Transactional disclosure forms must be completed and given to the Chief Investment Officer within ten calendar days of the personal transaction trade date. The transactional disclosure form must contain the following information: name and amount of the security involved, date and nature of the transaction, price at which the transaction was effected, name of the broker through whom the transaction was effected, whether the stock is on a TRS Approved List, and, if not, whether an investment recommendation was outstanding on the trade date.

IV. Confidential Information

- A. TRS trustees and employees may not disclose confidential information, except when duly authorized personnel determine such disclosure is either permitted or required by law. Confidential information must be used by TRS trustees and employees for TRS purposes and not for their own personal gain or for the gain of third parties.
- B. Information derived from a relationship with TRS which might reflect favorably or adversely upon the value of any investment or contemplated investment may not be used by TRS trustees and employees in any manner for the purpose of personal advantage or to provide advantage to others.

V. Nepotism

- A. TRS may not employ a person who is a relative of a trustee. This does not prevent the continued employment of a person who has already been working for TRS for thirty consecutive days prior to the time of the date related to the trustee's appointment.
- B. TRS may not employ a person who is a relative of (1) a key employee, (2) a consultant, or (3) any owners, directors, or officers of consultants. This does not prohibit the continued employment of a person who has already been working for TRS for thirty consecutive days at the time of the selection of a new key employee or consultant. Nor does this prevent the continued employment of persons who have been working for TRS for thirty days prior to becoming relatives.
- C. No TRS employee may exercise discretionary authority to hire, evaluate or promote a relative. No TRS employee may supervise a relative, either directly or indirectly. As used herein, "supervise" means to oversee with the powers of direction and decision-making the implementation of one's own or another's intentions. Supervision normally involves assigning duties, overseeing and evaluating work, and approving leave.

VI. Decision-Making Based on Merit

TRS business transactions are to be based on professional integrity and competence, financial merit and benefit to TRS and, whenever required or prudent, on a competitive basis. TRS benefits decisions are to be based upon the law and rules governing TRS. TRS trustees and employees may not base any TRS business decisions on family or personal relationships.

VII. Observance of TRS Controls and Policies

TRS trustees and employees will observe the accounting and operating controls established by law and TRS policies, including restrictions and prohibitions on the use of TRS property for personal or other non-TRS purposes.

VIII. Gifts and Entertainment

- A. TRS trustees and employees are prohibited from soliciting or accepting gifts or other economic benefits from (or offering or making gifts to): (1) persons or entities with which TRS does business or in which it invests, (2) persons or entities seeking to do business with TRS or with whom TRS is considering doing business or investing, (3) persons or entities seeking official action from TRS, or (4) any other person or entity who gives the gift because of the employee's or trustee's official position.
- B. This prohibition applies to lodging and transportation costs, except as provided in C. below.
- C. This prohibition does not apply
- (1) to business meals and receptions when the donor or a representative of the donor is present,
 - (2) to ground transportation in connection with business meetings, meals, or receptions, or
 - (3) to seminar or conference fees when the seminar relates to the trustee's or employee's job duties and is sponsored by TRS' consultants or agents, prospective consultants or agents, or persons or entities seeking official action from TRS or whose interest may be affected by TRS action.
- D. Attendance at events sponsored by these persons or entities that involve entertainment or recreation may in some cases be in the best interest of TRS. However, employees must obtain specific written approval of their attendance at

such events from the Executive Director or Chief Investment Officer. This approval may not be given for elaborate entertainment events such as ski trips, hunting trips, or stays at expensive resorts.

- E. A trustee or employee is prohibited from soliciting or accepting a gift because of or through use of the employee's or trustee's official position if the gift is from a person other than an employee or a trustee and the employee or trustee knows or should have known that the gift would not have been solicited, offered, or given had the employee or trustee not held his position as a TRS employee or trustee. This prohibition applies not only to gifts solicited or given for the personal benefit of the trustee or employee but also to gifts to third parties.
- F. The prohibitions in this article do not apply to the following gifts:
- (1) gifts given on special occasions between employees and/or trustees;
 - (2) books, pamphlets, articles or other such materials which contain information directly related to the official job duties of an employee or trustee and are accepted by the employee or trustee on behalf of the agency for use in performing his or her job duties; and
 - (3) gifts of nominal value provided that acceptance of such gifts violates no law. Examples of gifts of nominal value are (a) modest items of food and refreshments on infrequent occasions and (b) unsolicited advertising or promotional material such as plaques, certificates, trophies, paperweights, calendars, note pads, pencils, and other items of nominal intrinsic value.
- G. The prohibition on acceptance of gifts offered or given by persons seeking official action from TRS does not apply to gifts from relatives of TRS employees or trustees which are based solely on a personal relationship between the trustee or employee and his or her relative.
- H. Business meals and receptions and other permitted gifts may be accepted or attended to the extent that they violate no law. Section 572.051 of the Texas Government Code prohibits acceptance of gifts, favors or services that may "reasonably tend to influence" or that the employee "knows or should know are intended to influence his official conduct" and also prohibits benefits "for official action in favor of another." Section 36.02 of the Penal Code prohibits bribery and Section 36.08 of the Penal Code prohibits gifts to public servants. For purposes of Section 36.08 of the Penal Code, a gift does not include an item with a value of less than \$50, excluding cash or a negotiable instrument as described by Section 3.104 of the Texas Business and Commerce Code.
- I. Under no circumstances may TRS trustees and employees accept a gift if the source of the gift is not identified or if the trustee or employee knows or has reason to know that the gift is being offered through an intermediary.

- J. If an unsolicited prohibited gift is received by a trustee or employee, he or she should attempt to return the gift to its source. If that is not possible or feasible, the gift should be donated to charity.

IX. Compliance with Professional Standards

TRS representatives who are members of professional organizations which promulgate standards of conduct must comply with those standards.

X. Financial Disclosure

- A. Trustees and the Executive Director must comply with the requirements for personal financial disclosure set forth in Chapter 572, Subchapter B of the Texas Government Code.
- B. Key employees, as defined in this Policy, must file financial disclosure statements with the Executive Director. The content of these statements must comply with the requirements for personal financial statements for state officers governed by Chapter 572 of the Texas Government Code. TRS also requires additional disclosure than that required for state officers as follows. If a trustee or employee is a director, officer, or more than 5 percent owner (by shares, stock, or otherwise) of a corporation or other business entity, he or she must also disclose (1) the nature of the business of the entity and (2) the identity of the persons and/or entities that are the owners, director, and officers of the business.

Key employees must file their financial disclosure statements within 30 days of their date of employment and by April 30th of each year. The Executive Director may postpone a filing deadline for not more than 60 days on written request or for an additional period for good cause, as determined by the Chairman of the Board. A financial disclosure statement must be maintained by TRS for at least 5 years after the date of its filing.

XI. Key Employees and Fiduciaries

- A. The Board shall designate by position with TRS the employees who exercise either significant decision-making or fiduciary authority or both. By virtue of their position with TRS, these persons are “key employees.”
- B. Employees designated as key employees must acknowledge their key employee status in writing through the annual ethics compliance statement.
- C. Employees designated as fiduciaries must acknowledge their fiduciary status in writing through the annual ethics compliance statement. These employees have

a strict duty of loyalty and care to TRS, its members and beneficiaries which may exceed the explicit requirements of this Policy.

- D. Requirements of this Policy which are specifically applicable to key employees are the following:
- (1) personal financial disclosure,
 - (2) annual conflict of interest disclosure
 - (3) disciplinary action disclosure, and
 - (4) advance approval of outside employment, including service as a director, officer, or investment consultant or manager for another person or entity.

XII. Ethics Training and Advice

- A. The Executive Director will appoint an Employee Ethics Committee composed of TRS personnel which has responsibility for
- (1) providing ethics training for TRS personnel and
 - (2) issuing opinions on the proper interpretation of this Policy.
- B. TRS employees may file a written request with the Committee for an opinion on the proper interpretation of this Policy and may rely upon that opinion with respect to compliance with the Policy.
- C. The Chairman of the Employee Ethics Committee is the General Counsel.

XIII. Compliance and Enforcement

- A. The Board will enforce this Policy through the Executive Director who is responsible for its implementation with respect to TRS employees, consultants, and agents.
- B. The full range of disciplinary options under TRS personnel policies and practices may be used with respect to TRS employees who violate this Policy, up to and including termination.
- C. The Board is responsible for the enforcement of this Policy with respect to violations by individual trustees through resolutions of reprimand, censure, or other appropriate parliamentary measures, including requests for resignation.

- D. TRS employees who are fiduciaries and trustees shall take appropriate action as co-fiduciaries in the event a violation of this Policy involves a breach of fiduciary duties.
- E. TRS trustees and employees with knowledge of a violation of this Policy must report such violation to the General Counsel or to a member of the Ethics Committee of the Board. No retaliatory action will be taken for any such report made in good faith.
- F. Within sixty days of their employment or appointment, employees and trustees, respectively, must sign and date a compliance statement that they have received and read this Policy, that they will comply with its provisions, that it is their duty to report any acts by other TRS trustees, employees, consultants, or agents when they have knowledge of violations of this Policy, and, for employees, that adherence to this Policy is a condition of their employment. The statement will also include a disclosure of any conflicts of interest or violations of the Policy of which they are aware and a reminder that they are required to update their statements if a change in circumstances occurs which would require reporting under this Policy. Persons employed by TRS on the date of adoption of this Policy must sign and date the statement within thirty days of the adoption of this Policy. The signed statements will be maintained in the employee's personnel file. Persons serving as trustees on the date of the adoption of this Policy must also sign the compliance statement within thirty days of the adoption of this Policy. The compliance statements of trustees will be maintained by the Executive Director.
- G. Trustees and key employees, including acting or interim key employees, must sign and date annual compliance statements as described in F. above. The annual compliance statements by employees are due in the TRS Personnel Office on April 30. Any employee who is a key employee on April 30 of any year must file an annual compliance statement for that year. Trustees' annual compliance statements will be maintained by the Executive Director.
- H. Trustees and key employees must also file disciplinary action disclosure statements which are due in the TRS Personnel Office on April 30 of the first year of designation as a trustee or key employee or, for those persons already serving as trustees or designated as key employees on the effective date of this Policy, April 30 following the effective date. Disciplinary action disclosure must be promptly updated if any action occurs which would cause a trustee's or an employee's answers to change.
- I. Custodians for open records purposes of disclosure statements required under this Policy are the following: (1) the Executive Director for the financial disclosure statements and (2) the General Counsel for the conflict of interest disclosure statements. If the Board grants any waivers of conflicts of interest, the custodian of the waivers for open records purposes is the General Counsel.

- J. A list will be maintained of the consultants and agents who have been found to be in violation of the Code of Ethics for Consultants and Agents and whose relationship with TRS has been terminated because of such violation. The custodian of this list is the Executive Director. TRS will not do business with a consultant or agent found to be in violation of the Code of Ethics for a period of at least ten years after the termination of the relationship between the consultant or agent and TRS.
- K. The Executive Director will notify the Ethics Committee of the Board in writing by May 31 of each year of the following: (1) any approval given for outside employment by key employees, including the nature of the employment, and (2) any disciplinary action disclosed by trustees or key employees.

Appendix 3.2:

Teacher Retirement System of Texas Code of Ethics Policy for Consultants and Agents

Adopted September 9, 1994

I. Definitions

In this Code of Ethics for Consultants and Agents (this “Code”) the following definitions apply unless the context requires otherwise:

- (1) “TRS” means the Teacher Retirement System of Texas and its subsidiaries.
- (2) “Board” means the Board of Trustees of TRS.
- (3) “Employee” means a person working for TRS in an employer-employee relationship and includes the Executive Director and Chief Investment Officer of TRS.
- (4) “Trustee” means a member of the Board of TRS.
- (5) “Agent” means a person performing significant duties on behalf of TRS other than an employee or a trustee.
- (6) “Consultant” means a person providing advice to TRS other than an employee or trustee. The term “Consultant” includes “Advisors.”
- (7) “Fiduciary” means agents and consultants, identified by contract or otherwise as TRS fiduciaries.
- (8) “Relative” means a person related in the third degree by consanguinity (blood relative) or affinity (marriage) determined in accordance with Texas Government Code §§573.021-025. Examples of relatives by consanguinity are a child, grandchild, great grandchild, parent, grandparent, great grandparent, brother, sister, uncle, aunt, niece or nephew. A person adopted into a family is considered a relative on the same basis as a natural born family member. Examples of a relative by affinity are a spouse, any person related to the spouse within the third degree by consanguinity, or any spouse of a relative by consanguinity or affinity. A person is considered a spouse even if the marriage has been dissolved by death or divorce if there are surviving children of that marriage.

II. Conflict of Interest

- A. A conflict of interest exists for a consultant or advisor to TRS whenever the consultant or advisor has a personal or private commercial or business relationship, unrelated to the services that the consultant or advisor performs for TRS, with any other party to a transaction with TRS, and the relationship could reasonably be expected to diminish the consultant's or advisor's independence of judgment in the performance of his or her responsibilities to TRS. For example, a person's independence of judgment is diminished when he or she is in a position to take action or not take action with respect to TRS or its business and such act or failure to act is, may be, or reasonably appears to be influenced by considerations of personal gain or benefit rather than motivated by the interests of TRS, its members, and beneficiaries.
- B. Consultants and agents must promptly disclose conflicts in writing to the General Counsel through the TRS Conflict of Interest Disclosure Statement. The General Counsel will report to the Ethics Committee of the Board regarding the Conflict of Interest Disclosure Statements which he receives. Should a person with a duty to disclose conflicts have reasonable cause to believe disclosure to the General Counsel will be ineffective, the person should disclose the conflict to the Ethics Committee of the Board. Disclosure to the Ethics Committee of the Board is accomplished through written disclosure to the Chairman of the Committee whose address may be obtained through the office of the Executive Director. Whether disclosure is to the General Counsel or to the Ethics Committee of the Board, a copy of the disclosure statement should be provided to the employee's supervisor or to the consultant's or agent's monitoring personnel unless the person with the conflict believes that such disclosure would be detrimental to the resolution of the conflict.
- C. Consultants or agents who become aware, or reasonably should have become aware, of a personal conflict of interest, have a duty not only to disclose that conflict, but to cure it. A person normally cures a conflict of interest by promptly eliminating it. Consultants or agents who cannot or do not wish to eliminate the conflict must terminate the relationship with TRS as quickly as responsibly and legally possible. If a person may prudently withdraw from action on a particular matter in which a conflict exists, he or she may cure the conflict in that manner provided that
- (1) the person may be and is effectively separated from influencing the action taken,
 - (2) the action may properly be taken by others, and

3.2 - CODE OF ETHICS POLICY FOR CONSULTANTS AND AGENTS

- (3) the nature of the conflict is not such that the person must regularly and consistently withdraw from decisions which are normally his or her responsibility with respect to the system.
- D. Consultants and agents who file disclosure statements must refrain from giving advice or making decisions about matters affected by the conflict of interest unless the Board, after consultation with the General Counsel, expressly waives this prohibition. The Board will decide whether to waive any disclosed conflict of interest at a meeting held in compliance with the Texas Open Meetings Act. To assist it in deciding whether to grant waivers, the Board may develop criteria for determining the kinds of relationships that do not constitute material conflicts of interest. Any waiver of a conflict of interest, including the reasons supporting the waiver, must be included in the minutes of the meeting. Records of all waivers granted with the supporting reasons will be maintained by the Office of the General Counsel.
- E. It shall not be considered a conflict solely because a consultant or agent is a member, retiree, or beneficiary of the system.

III. Standards of Conduct for Consultants

- A. Consultants and agents must file annually an expenditure report on TRS' form which details by category expenditures of more than \$50 per day made on behalf of each trustee or employee. Consultants and agents will comply with TRS' rule which governs the filing of and requirements for the Expenditure Report.
- B. Consultants and agents must comply with all applicable laws.
- C. Consultants and agents must comply with all applicable professional standards.
- D. Consultants and agents may not have a personal business relationship with TRS trustees and employees unless disclosed and waived as provided for in this Code.
- E. Consultants and agents may not employ any TRS employee or former employee for two years after the employee terminates employment with TRS unless the former TRS employee will not work on or have any involvement in TRS-related business of the consultant or agent. This prohibition applies only to employment of former TRS employees who were compensated, as of the last date of TRS employment, at or above the amount prescribed by the General Appropriations Act for step 1, salary group 17, of the position classification salary schedule, including an employee who is exempt from the state's position classification plan.

- F. Consultants and agents may not make unauthorized use or disclosure of confidential or sensitive information acquired as a result of the relationship with TRS. Consultants and agents must protect sensitive or confidential TRS information and use it only for legitimate TRS business purposes.
- G. Consultants and agents may not use information derived from a relationship with TRS which might reflect favorably or adversely upon the value of any investment or contemplated investment in any manner for the purpose of personal advantage or to provide advantage to others.
- H. Consultants and agents must report conflicts of interest as provided in this Code.
- I. Consultants and agents must comply with all prohibitions on gifts to TRS trustees and employees, including gifts of travel, lodging, trips, and entertainment.
- J. Consultants, real estate brokers, or other agents may not participate in or advise or consult on a specific matter before TRS which involves a business, contract, property or investment held by such person if it is reasonably foreseeable that TRS action on that matter could confer a benefit on such person by or through the business, contract, property or investment. This prohibition on participation in matters involving benefits for a person's own interest does not apply if (1) the benefit is merely incidental to the person's membership in a large class such as the class of TRS members or if (2) the benefit is merely the awarding of another contract for other business with TRS.
- K. Consultants, brokers, and other agents may not contract to provide any services to TRS if an employee of the consultant or agent provides advice to TRS on policies or is under contract to provide such advice.
- L. Consultants who are designated as fiduciaries may not represent any person in any action or proceeding before or involving the interests of TRS except as a duly authorized representative or agent of TRS.
- M. Consultants and agents may not take action personally or on behalf of TRS which will result in a reasonably foreseeable conflict of interest. Should there be action which a consultant or agent believes to be in best interest of TRS but which could foreseeably result in a personal conflict of interest, the consultant or agent must disclose such fact to the General Counsel prior to taking such action.
- N. Consultants and agents must observe the accounting and operating controls established by law and TRS policies, including restrictions and prohibitions on the use of TRS property for personal or other non-TRS purposes.

3.2 - CODE OF ETHICS POLICY FOR CONSULTANTS AND AGENTS

- O. Consultants and agents must sign and date annual compliance statements which certify that consultant or agent has read and received this Code, the TRS policy on gifts and entertainment, and the Expenditure Report rule and form; that consultant or agent is in compliance with this Code and all applicable professional standards and laws; that consultant or agent has no conflicts of interest; that consultant or agent is unaware of any violation of this Code by other TRS representatives; and that consultant or agent will promptly report any change in circumstances which occurs which would require reporting in accordance with this Code.
- P. Consultants and persons related within the second degree by consanguinity or affinity to consultants may not have a relationship prohibited by Section 825.211 of the Texas Government Code.

IV. Compliance and Enforcement

- A. The Board will enforce this Code through the Executive Director who is responsible for its implementation with respect to consultants and agents.
- B. The requirements of this Code applicable to consultants and agents will constitute a part of the contract or agreement with these parties. Violations of this Code by any agent or consultant are grounds for terminating the contract or relationship. Any consultant or agent whose contract or relationship with TRS is terminated by TRS because of a violation of this Code of Ethics may not have another contract or relationship with TRS for a period of a least ten years from the date of the termination of the relationship. The Executive Director will maintain and serve as custodian for a list of the consultants and agents whose relationship with TRS has been terminated because they were found to be in violation of this Code.
- C. Consultants and agents who are fiduciaries shall take appropriate action as co-fiduciaries in the event a violation of this Code involves a breach of fiduciary duties.
- D. Consultants and agents with knowledge of a violation of this Code must report such violation to the General Counsel or to a member of the Ethics Committee of the Board. No retaliatory action will be taken for any such report made in good faith.

I acknowledge that I have received and distributed this Code to those persons with _____ who work on TRS matters. They have read this Code and are familiar with the standards which govern the conduct of TRS' consultants and agents.

Signature

Printed Name

Title

Consultant or Agent Entity Name

Date

Appendix 4:

Glossary of Terms

Alternative Investments	Investment opportunities which have not been identified by traditional public equity or fixed income capital markets. Also may be defined as private, non-traditional, illiquid investments. (In this report, The University of Texas System’s alternative investments asset class is generally referred to as “private investments.”) Alternative investments are accomplished almost exclusively through private offerings of debt or equity interests, and are often made through entities organized as limited partnerships. Examples of alternative investments include international and emerging market stocks, hedge funds, event driven strategies, as well as illiquid equity investments such as venture capital, mezzanine financing, private equity and buy-out investing, real estate, and oil and gas.
Asset Allocation (Asset Mix)	The process of diversifying an investment portfolio among asset classes (stocks, bonds, real estate, etc.) in order to achieve a particular investment objective. Asset allocation is used to anticipate the long-term future direction of markets, and to deploy assets in a way that will result in superior performance in the context of acceptable risks. Studies have shown that asset allocation has a far greater effect on investment performance than does the selection of investment managers or the selection of individual securities.
Basis Point	The smallest measure used in quoting yields. One basis point is .01 percent, or 1/100 of a percent of yield. Thus, 100 basis points equals one percent. A bond’s yield that increased from 8.00 percent to 8.50 percent would be said to have risen 50 basis points.
Benchmark	Something that serves as a standard by which others may be measured. In the investment environment, the benchmark may be a common economic or financial index, such as the Consumer Price Index, the S&P 500 (Standard & Poor’s 500), etc. See also Index and S&P 500.
Bonds	Contract to pay specified sum of money (the principal or face value) at a specified future date (maturity) plus interest paid at an agreed percentage of the principal. Maturity is usually longer than one year. The relationship between the bondholder and issuer of the bonds is that of creditor and debtor. Thus, the holder has no corporate ownership privileges as stockholders do.
Broker	A person who acts as an intermediary between a buyer and seller, usually charging a commission.
Cash Equivalents	Investment instruments having such high liquidity and safety that they are virtually as good as cash. They typically have a short maturity. Examples include a money market fund, Treasury Bills, and investments in a custodian

	<p>bank's STIF (short term investment fund) or similar fund. Such securities help to minimize risk during volatile market periods as well as to provide cash flow.</p>
Collateralized Mortgage Obligation (CMO)	<p>A security created using the underlying cash flows from mortgage-backed securities as collateral. A CMO shifts the uncertainty regarding the exact timing of principal return in a mortgage-backed security. This uncertainty exists because the timing of mortgage principal payments is influenced by changes in interest rates, the current economic climate, and the geographic makeup of loans.</p>
Common Stock	<p>Share in a public company or privately-held firm. Common stockholders typically have voting and dividend rights. In the event of corporate bankruptcy or other liquidation of assets, common stockholders are paid after secured and unsecured creditors, bondholders, and preferred stockholders.</p>
Corpus	<p>The principal of a fund or estate as distinct from income or interest.</p>
Counterparty	<p>The party that pledges collateral or repurchase agreement securities to the government, or that sells investments to or buys them for the government. For collateral on deposits in financial institutions, the pledging financial institution is a counterparty. For brokerage accounts, the broker or dealer is a counterparty. For repurchase agreements, the seller-borrower in the repurchase agreement is a counterparty. More than one party can be a counterparty in a single transaction. For example, the counterparties in a repurchase agreement can include both the seller-borrower and the broker-dealer or financial institution that acquires the repurchase agreement for the government.</p>
Credit Risk	<p>The likelihood that a party involved in an investment transaction will not fulfill its obligations. This type of risk is often associated with the issuer of the investment security and is affected by the concentration of deposits or investments in a single instrument or with a single institution.</p>
Custodian Bank	<p>Used by an entity with large investment holdings to hold securities, record transactions, and collect interest or dividends from investments. The custodian bank is sometimes referred to as the primary or master custodian because it obtains the services of subcontractors and agencies to actually hold and trade the securities.</p>
Derivatives	<p>A contract or financial arrangement whose value is based on the performance of an underlying financial asset, index, or other investment. Derivatives are available based on the performance of assets, interest rates, currency exchange rates, and various domestic and foreign indexes.</p>

Diversification	The spreading of risk by investing in several individual investments or categories of investments, such as stocks, bonds, cash equivalents, and real estate.
Duration	A concept that measures bond price volatility by measuring the “length” of a bond. It is a weighted-average term-to-maturity of the bond’s cash flows, the weights being the present value of each cash flow as a percentage of the bond’s full price. The greater the duration of a bond, the greater its percentage volatility. In general, duration rises with maturity, falls with the frequency of coupon payments, and falls as the yield rises.
Endowment	Funds given to an entity, such as a college or university, with donor-imposed restrictions that the funds are not to be expended but are to be invested for the purpose of producing income.
Equity Investments	Ownership interest possessed by shareholders in a corporation—stocks as opposed to bonds.
External Manager	A person or firm that makes investment portfolio decisions and executes transactions independently, subject to the overall restrictions agreed upon by contract between the fiduciary for the fund and the external manager.
Financial Benchmark	See Benchmark and Index.
Fixed Income Investments	A security that pays a fixed rate of return, in the form of interest or dividends, over a specified period of time and include government, corporate, and municipal bonds, preferred stocks, and certain mortgage investments. This asset class is expected to provide regular, predictable income and greater stability of market value than available from equity investments. It is advantageous in times of low inflation, but does not protect holders against erosion of buying power in times of rising inflation because interest or dividend payments do not increase.
General Partner	Member of a partnership who is jointly and severally liable for all debts incurred by the partnership; or a managing partner of a limited partnership who is in charge of its operations. A general partner has unlimited liability.
Indemnification	An agreement to compensate another party for damage or loss. In securities lending programs, the program administrator may agree to indemnify the lender of securities for any losses caused by the failure of the borrower to return borrowed securities. In addition, the administrator may indemnify the lender for any losses incurred on the reinvestment of cash collateral provided by the borrower.
Index	A statistical composite that measures changes in the economy or in financial markets, often expressed in percentage changes from a base period. For

example, the Consumer Price Index, which is composed of the prices of key goods and services, moves up or down as the rate of inflation changes. Other indexes measure the ups and downs of the stock, bond, and other investment markets. Common indexes include the New York Stock Exchange Index, Standard & Poor's Index, Shearson Lehman Aggregate Index, etc.

Investment Advisor	A person or service retained by the investing entity to provide investment advice for a fee. The advisors may present economic information such as expected changes in interest rates, current and future national or global economic growth, and other factors that may affect the economy in the future. Investment advisors also present industry information that may affect future decisions in selecting specific securities. The advisor may specialize in a particular kind of investment, such as emerging growth stocks or international stocks.
Leveraged Buyout Fund	Equity investments in public or private companies that result in the purchase of a significant portion or majority control of the company.
Limited Partnership	An organization composed of one or more general partners, who manage a project, and limited partners who invest money but have limited liability and are not involved in day-to-day management.
Liquidity	The ease with which an asset can be converted to money. Also, the ability to buy or sell an asset quickly and in large volume without substantially affecting the price.
LTF (Long Term Fund)	The University of Texas System's Long Term Fund functions as a mutual fund for approximately 4,000 private endowments as well as other funds supporting various programs and purposes of the UT System. The Long Term Fund is a total return fund .
Maturity	The date on which a debt's principal is to be repaid.
Mezzanine Financing	Investment in the subordinated debt of privately owned companies. The debt holder participates in equity appreciation through conversion features such as rights, warrants, or options.
Modern Portfolio Theory (or Portfolio Theory)	An investment decision approach that permits an investor to classify, estimate, and control both the kind and the amount of expected risk and return. Portfolio theory quantifies the relationship between risk and return and assumes that investors must be compensated for assuming risk. It departs from traditional security analysis by determining the statistical relationships among securities comprising the overall portfolio rather than analyzing the characteristics of individual investments.
Mutual Fund	Portfolio of securities professionally managed by the sponsoring management company or investment company that issues shares to investors. The major

advantages of mutual funds are diversification, professional management, and ownership of a variety of securities with a minimal capital investment.

Peer Group	One group that is of equal standing with another group. In comparing an investment fund's performance with its peers, the peer group should include other funds with similar characteristics, such as fund size, purpose, and investment restrictions.
Portfolio	A combined holding of more than one investment. The purpose of a portfolio is to reduce risk by diversification.
Private Investments (As used in this report, similar to Alternative Investments)	Investment opportunities which have not been identified by traditional capital markets. Typically more volatile than traditional securities, private investments require strong due diligence controls.
Private Placement	A securities issuance which is exempt from the registration requirements of the Securities Act of 1933. It generally involves the sale of stocks, bonds, or other investments directly to an institutional investor.
PUF (Permanent University Fund)	The Permanent University Fund is a land grant endowment established in 1876 by Article VII of the Texas Constitution. The designated beneficiaries of the PUF endowment are The University of Texas and Texas A&M University Systems. The PUF, in addition to cash and securities, consists of 2.1 million acres of designated lands in West Texas. The PUF is not a total return fund, since the Constitution distinguishes between the disposition of realized gains and ordinary income. Realized gains cannot be spent and remain in the corpus whereas all ordinary income must be distributed to the Available University Fund.
Risk	In exchange for a return on investment, the investor may expose assets to possible losses. Risk is the probability or possibility of such losses. Risk is also often defined in terms of market volatility, variability, or standard deviation of returns. The standard deviation is a statistical measure of portfolio risk which reflects the average deviation of observations from their sample mean. It is used as an estimate of risk because it measures how wide the range of returns typically is. The wider the range of returns, the higher the portfolio risk.
S/ITF (Short to Intermediate Term Funds)	The University of Texas System's fixed income pool of short to intermediate term operating funds of the UT System's component institutions.
S&P 500	An index which measures the performance of the common stock of 500 corporations. The S&P 500 represents the aggregate market value changes

	relative to a base period of 500 stocks primarily traded on the New York Stock Exchange.
Securities Lending	A program in which an institutional investor transfers their securities to broker-dealers and other borrowers in exchange for collateral and a promise by the borrower to return the identical securities. The collateral may consist of cash, securities, or letters of credit. The lender agrees to return the collateral to the borrower upon maturity of the loan and return of the borrowed securities.
Small Capitalization Stocks (Small Cap)	Stocks of companies with market capitalization of \$500 million or less. Such stocks generally represent companies that are less well-established, but are often faster growing than mid caps (market capitalization of \$500 million to \$3-5 billion) or large caps (\$1 billion or more). They are often more volatile than stocks of more well-established companies.
Total Return	The annual return on an investment including appreciation and interest or dividends. In this report, a “total return fund” is one which is indifferent to whether the return is generated by appreciation or ordinary income because it can spend from both categories. The Permanent School Fund and Permanent University Fund are not considered total return funds because the Constitution distinguishes between the disposition of appreciation and ordinary income.
Tranche	A class into which a multi-class security, such as a collateralized mortgage obligation (CMO) is split. The different tranches of a CMO which may range from a fast-pay class to long-term slow-pay class, are designed to meet different investor objectives for portfolio diversification.
Venture Capital	Equity investments in companies that have undeveloped or developing products or revenues.
Volatility	The extent to which a security or market tends to rise or fall sharply in price within a short-term period.
Yield	The annual return on an investment (from dividends or interest) expressed as a percentage of either cost or current price. Yield is one component of return.

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