

Performance Audit of Metropolitan Nashville Public Schools Pension Plan



**METROPOLITAN GOVERNMENT
OF
NASHVILLE AND DAVIDSON COUNTY**

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kpmg

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Introduction

The intent of this report is to provide an in-depth analysis of the Metropolitan Nashville Teachers Retirement Fund (“Teacher’s Pension”) investments. As of June 30, 2003, this fund was valued at \$98.45 million. Our analysis focuses on performance and operational issues surrounding the pension investments, from the setting of the plan’s target asset allocation policy to the analysis of performance results. In conducting our analysis, we interviewed various members of the Administrative Retirement Committee (“ARC”), employees of Metropolitan Nashville Public Schools and Metropolitan Nashville and Davidson County (“Metro”) government to gain an understanding of the decision making process surrounding pension investments. In addition, we reviewed documents associated with the management of investments, which include: Contracts and Agreements with outside vendors, Board minutes, plan performance reports and other materials distributed surrounding pension investments.

KPMG relied on the information supplied by Metropolitan Nashville and Davidson County, its employees and vendors. KPMG did not independently verify all information provided by these sources or conduct a financial statement audit under generally accepted accounting principles. KPMG has relied on sources Metro and Teacher’s Pension relies upon but has no responsibility for any information supplied by any other entity.

Each section of this report is segregated into three major components: An overview of standard industry practices, Teacher’s Pension current policy, and an issues and recommendations component. After reviewing Teacher’s Pension current policy versus standard practices, we were able to bring forth issues we feel should be addressed.

Our recommendations are aimed at improving the overall management of the Teacher’s Pension investment performance.

Executive Summary

KPMG Investment Advisors has been retained to review the operations and oversight of the pension assets associated with the Metropolitan Nashville Teachers Retirement Fund (“Teacher’s Pension”). The fund was valued at \$98.45 million as of June 30, 2003. This review included analysis of existing contracts, reports, minutes to meetings and interviews with key individuals associated with the oversight of the assets, which included the Administrative Retirement Committee (“ARC”), employees of the Metropolitan Nashville Public Schools and the investment consultant.

In general, we found the individuals of the ARC and Metropolitan Nashville Public Schools to be passionate about their duties associated with the Teacher’s Pension plan. All were quite interested in improving the processes and extremely responsive in requests for information and in explaining the details associated with the plan. Most had little expertise in professional money management, but all exhibited a willingness to increase their understanding and elevate the oversight process of the plan’s assets.

The investment return of the plan over the last five years has been quite high, as compared to its peers, with each of the managers retained by the plan at June 30, 2003, outperforming its benchmark for the last year. Overall, the total return of the plan has been in the top 35% of similar plans over the last three years and top 1% over the last five years.

In our review, we identified a number of areas where the plan could benefit from changes, including:

- The oversight suffers from a lack of segregation of duties. The nature of the ARC and the responsibilities left to the administrative staff of the Metropolitan Nashville Public Schools places too much oversight responsibility on the consultant. Manager selection and oversight should be segregated from performance reporting and custodial oversight. A chief investment officer or other oversight position, permanently staffed with Metropolitan Nashville and Davidson County (“Metro”) should be responsible for overseeing reporting, custodian and consulting services, as well as general ledger reporting. We believe this function could be placed with the Treasurer, as that position has a current staff performing this function for the Metropolitan Nashville and Davidson County Retirement Plan and would allow for efficient leverage of resources.
- The current consultant has been the sole provider of services to the ARC and the Teacher’s Pension fund since 1988. In 2001, when the individual providing consulting services, Tom Steele, began his own practice, he was retained by the ARC without a competitive bid process. Until April, 2001, the consultant was compensated using soft dollars (a practice where the broker executing the trade pays a fee to the firm responsible for directing the trade to that broker), which led to an inherent conflict of interest with regard to the investment managers retained and the active (versus passive) nature of their styles. This has led to a plan with no passive investment exposure; were the plan to have a level of passive investments in line with its peers, it would have saved \$177,000 in management fees over the last year (however, it should be noted that each of the equity managers had performance in excess of its benchmark for the past year, so such a decision would have had a material impact on total return for the plan, reducing total return). We believe there should be a competitive procurement process to evaluate the investment consultant. As well, given the relationship

between the consultant and the ARC, this bid process should include the support of a more independent party, such as the Treasurer.

- The investment policy statement should be revised, with additions made to address asset allocation and manager oversight. It should more clearly delineate the duties of the ARC, the consultant and others associated with the assets of the plan.
- The current manager agreements could benefit from re-negotiation and potentially a restructuring of the relationships. The current manager fee structure is materially higher than the mean of like plans. This is due in part to the fees themselves as well as the lack of any passive investments within the plan. Were the fees to be in line with the average of similar municipal plans, the plan would have saved \$228,000 last fiscal year. Combining relationships with the Metro pension plan could provide more favorable pricing for the Teacher's Pension plan. Additionally, we became aware that while the consultant has changed their fee arrangement to a fixed fee contract, they are still receiving commission based compensation due to trades placed by one investment manager retained by the plan.
- The performance reporting should be revised to include universe comparisons, risk measurements, style evaluations and key characteristics to better evaluate the performance of the individual investment managers. As well, the total plan evaluation should be revised to include universe, risk and characteristics, as well as dynamic and static benchmarks, and attribution analysis.
- The plan has enjoyed very strong returns over the last five years, the period for which we performed detailed analysis. The fund was in the top third of public plan sponsors over the last three years and the top 1% over the last five years. The five year results are due entirely to the performance of two managers during the fourth quarter of 1999; absent these returns, the plan is much closer to the peer median. However, the risks associated with the returns are also quite high; the fund ranked in the top 25% of plan risk for the three year period, and in the top 5% of the most risky plans for the five year period. While the fund has exceeded its benchmark returns, the level of risk undertaken has been quite high. It does not appear that the evaluation of performance has considered the cost, in terms of risk, undertaken to arrive at its results.

A listing of all observations and their related recommendations is included on the next several pages.

| Section | Observation | Recommendation |
|-------------------|---|--|
| Investment Policy | The Policy Statement does not detail the source of authority for each responsibility identified within the Statement. | The Policy Statement should detail the source of authority for each responsibility identified within the Statement. |
| | The Policy Statement assigns the duty of custodian selection and oversight to ARC. | Remove any reference to custodian selection or oversight from the Policy Statement. |
| | The Policy Statement authorizes the consultant to direct the custodian to prepare reports. | Remove any reference to custodian direction by the consultant from the Policy Statement. |
| | There is no total fund comparison versus the Policy Statement "Policy Index" benchmark, and the policy statement does not require a comparison versus a static benchmark. | The Policy Statement should be updated to require the Balanced (or "Static") index, detailing its creation, and the performance reports should be modified to include the Policy Index required by the policy statement. |
| | The Policy Statement requires comparison to a universe of "similarly structured funds", but no such comparison is included in the performance reports. | Universe comparisons should be added to the performance reports, as required in the Policy Statement. |
| | The Policy Statement does not delineate between gross and net fees in the comparisons of fund and manager performance evaluation. | The Policy Statement should clearly state the nature of fees in return calculations for all comparison and evaluation requirements. |
| | Turnover is not addressed as an evaluative criteria for investment managers. | The Policy Statement should clearly state turnover as one criteria, among others, that will be used in the manager search and selection process. In addition, turnover should be regularly monitored. |
| | Derivative usage is not addressed by the Policy Statement. | The Policy Statement should include a derivatives policy. |
| | The Policy Statement does not address asset allocation | The Policy Statement should be revised to include a section detailing the asset allocation process and the duties and responsibilities of the ARC in the creation and implementation of the asset allocation. |
| | No asset allocation study has been performed for Teacher's Pension. | The fund should have an asset allocation study completed as soon as possible, taking into account the guaranteed pension payments for closed plans and the liabilities described in the most recent actuarial study. |
| | There is not sufficient detail in the information provided by the consultant to substantiate the selection of finalists for a search. | The investment consultant should supply the Board with sufficient detail to support the initial selection of semi-finalists and to support the eventual selection of the manager hired. |

| Section | Observation | Recommendation |
|----------------------------|---|--|
| Investment Policy (Con't.) | It does not appear that Teacher's Pension is negotiating the lowest fee possible. | <p>Negotiate the lowest possible fee by:</p> <ol style="list-style-type: none"> 1. Comparing the fees paid by other clients who use the same or similar managers, and utilizing existing relationships within Metro government to secure best pricing. 2. Comparing managers to other Teacher's Pension managers in the same asset class. 3. Using fees as one of the screening and selection criteria in the manager search process. 4. Continuing to monitor fees by including fee schedules and comparative information on fees in the quarterly performance report. 5. Becoming more aggressive in fee negotiations with investment managers. 6. Include a most favored nation clause. |
| | The historic use of a soft dollar commission arrangement has not allowed the consultant to be objective in the recommendation of passive investments. | Reconsider passive investments in an objective fashion. Include an analysis of the savings in both management fees and commission dollars from passive investments relative to active management. |
| | The consultant contract has never been put out for public bid since Equitable Securities was hired as the sole consultant of the fund in 1988. | The consultant contract should be placed out to a public bidding process periodically issuing and reviewing RFPs. The RFP should be publicly advertised in an industry publication such as "Pension and Investments". |
| Monitoring and Reporting | The ARC is too reliant on the consultant for investment advice and analysis. | A Chief Investment Officer or similar position with appropriate qualifications should be assigned the responsibility to report to the ARC and to manage all aspects of the investment function, including independently evaluating recommendations and analysis presented by the consultant. This responsibility could be addressed immediately by the Treasurer, since that part of Metro government currently performs this task for the Metropolitan Nashville and Davidson County pension plan and has the resources and expertise. |
| | ARC members are not required to sign a conflict of interest form. | Members of the ARC should be required to fill out and sign disclosure and conflict of interest forms every year. |

| Section | Observation | Recommendation |
|-----------------------------------|---|--|
| Monitoring and Reporting (Con't.) | There are no procedures to ensure that investment balance totals reported on the general ledger, the custodian reports, investment manager reports and the consultant's quarterly performance reports are in agreement. | The pension investment general ledger balances and activity should be updated monthly based on the custodian reports. Drafts of quarterly performance reports should be reconciled to the custodian reports prior to the board meetings where investment performance is reviewed. |
| Contract and Agreements | Each Investment Manager contract is materially different, making oversight of the managers more difficult. | Manager contracts should be based upon a Teacher's Pension template, with similar terms, conditions and duties for each party to the contract, simplifying the oversight for the ARC. |
| | Investment Manager contracts have not been updated to reflect the current compensation relationship between Teacher's Pension and the consultant. | All contracts should be made current in their terms. |
| | Investment Manager contracts do not have specific investment guidelines or mandates included in their terms. | Contracts should be amended to address the investment mandates of the investment policy statement. The policy statement should be revised to include style mandates. Finally, the ARC should implement a process of evaluating investment managers against the criteria set within the policy statement. |
| | The use of some flat fee arrangements in the plan may cause Metro to pay higher fees than otherwise necessary. | Teacher's Pension should re-evaluate fee arrangements with investment managers, specifically where managers charge a flat fee. In addition, Teacher's Pension should consider passive investing, consolidating mandates by asset class and aggressively negotiating to reduce investment manager fees. |
| Performance and Reporting | The quarterly performance report does not include any analysis of risk. | Include risk-return analysis for all managers. |
| | The quarterly performance report does not display Metro's historical asset allocation over time and does not compare the plan's current asset allocation to other similarly managed plans. | Include a comparison of Teacher's Pension current asset allocation to previous allocation policies and to other similarly managed plans. These comparisons should be included in the quarterly performance reports to the ARC. |
| | The quarterly performance report does not provide characteristic, style evaluations or attribution analysis. | The performance report should be modified to include total plan level attribution, style analysis and characteristics at the plan level and individual fund level. |

| Section | Observation | Recommendation |
|------------------------------------|--|--|
| Performance and Reporting (Con't.) | The consultant's quarterly performance reports only display seven years of performance data. | Expand the performance comparisons to include longer time periods. |
| | While the difference is generally immaterial, the consultant's quarterly performance reports do not reconcile with the custodian's report. | Require quarterly reconciliation of performance reports and custodian information to ensure accuracy of information provided to the ARC. |

Teacher's Pension Overview

The Metropolitan Nashville Teachers Retirement Fund investments are managed by the Administrative Retirement Committee ("ARC") of the Metropolitan Board of Education, as specified in the Metropolitan Board of Public Education Teachers Retirement Plan, Dated January 1, 1988 and amended September 14, 1999. The Metropolitan Charter gives authority to the Board of Education to establish a pension and retirement plan for teachers and Section 8.02 of that plan allows it to delegate the administrative duties and responsibilities to an administrative committee in whatever manner it sees fit. The ARC has five selected members and a single ex officio member. Selected members include two appointments made by the Chairman of the Board of Education with one being a member of the Board of Education. Three elected members to the ARC include an Employee, an Employee who is a member of the Plan and a retired employee. Finally, the Assistant Superintendent of Human Resources for the Board of Education shall be a voting ex officio member of the ARC. Generally, the term of ARC members is two years, with the exception being the ex officio member who remains a member during their tenure in the position of Assistant Superintendent.

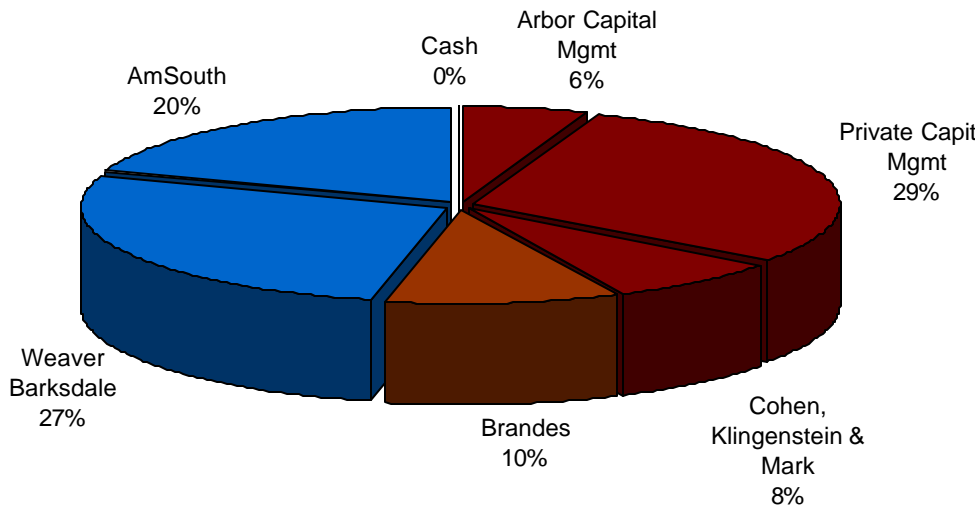
The ARC retained a consultant beginning in 1988 to provide services in the monitoring, selecting and retaining outside vendors for the plan. Equitable Securities (later acquired by SunTrust) was retained by the ARC and acted as the sole consultant, with Tom Steele providing those services as an employee of Equitable Securities. In February, 2001, SunTrust Equitable Securities made the decision to exit the consulting business, effective April 1, 2001. Mr. Steele formed his own company, Equitable Advisors, Inc. and was retained by the ARC effective April 1, 2001. The original consulting contract with SunTrust Equitable Securities provided for soft dollar commissions, with a guaranteed minimum. Equitable Advisors has generally been compensated under a fixed fee arrangement since 2002, though is receiving a soft dollar fee for trades made by one of the investment managers because the contract with the manager has not yet been updated by the ARC.

It should be noted that while the ARC has retained Equitable Advisors as the consultant to the plan, in reality, the committee has retained Tom Steele. The committee has a high degree of trust in Mr. Steele and a very large dependence on his judgment and work product. The firm of Equitable Advisors may support Mr. Steele, but it is the individual who has been retained by the ARC.

The assets of the pension plan were originally custodied with First Tennessee Bank, N.A. in their corporate trust area in Memphis. In February, 2001, the assets were transferred to Chase Manhattan Trust Company, N.A., as First Tennessee exited the institutional custody business. Chase Manhattan Trust was eventually acquired by JP Morgan Institutional Trust Services, though continues to retain its corporate identity. The Treasurer's Office of Metro Nashville has recently issued an RFP for custodial services which has included the Teacher's Pension assets within the request.

Asset Allocation

The plan had assets of \$98,453,047 as of June 30, 2003, allocated as follows:



The allocation of the plan as of June 30, 2003, was 53% equity and 47% fixed income. The style exposure is:

| | |
|---------------------------|-----------|
| Small Growth | 6% |
| Large Growth | <u>8%</u> |
| Total Growth | 14% |
| Mid Value | 30% |
| International | 10% |
| Intermediate Fixed Income | 27% |
| Short-Term Fixed Income | 21% |

All of Metro Teacher's investment managers are considered active managers, able to make investment decisions that are different than their pre-determined benchmark. The ARC has chosen not to invest in passive investments, where the goal is to match the return on a pre-determined benchmark. Many pension plans have chosen to invest some portion of their domestic large cap equities in passive investments, under the belief that the large cap segment of the market is very efficient and outperforming an index such as the S&P 500 is very difficult.

Disbursement of trades

As part of the compensation agreement with SunTrust Equitable Securities, individual managers were encouraged to trade through Equitable Securities Corporation. Equitable was expected to provide pricing for trades that were in line with other discounts available to the investment

managers for similar trades made on the same day. No manager was required to trade with Equitable, but rather only allow Equitable to compete for the trade. For the 1998, 1999, 2000 and 2001 fiscal years of the plan, Private Capital Management ran all equity trades through Equitable Securities, generating commissions of \$22,414, \$17,195, \$47,459, and \$27,025, respectively. Eleven trades in the 2002 fiscal year were run through Steele Advisors, generating commissions of \$950. The average price per share for both Equitable Securities and Steele Advisors was \$0.06. Brandes executed trades generating a commission of \$4,787 in the current fiscal year with Equitable Securities, though the plan has no relationship with that firm currently. This trade represented slightly less than half of the commission dollars spend by Brandes in the period. It does not appear that any other manager materially traded with either Equitable Securities or Steele Advisors over the last three fiscal years.

For the fiscal year ended June 30, 2003, the plan utilized 62 different brokers, with total commissions paid of \$44,561 on principal trades of approximately \$71,310,000, or about 6.2 basis point of the principal amount. The top five brokers for the most recent fiscal year were:

| <u>Broker</u> | <u>Commissions Paid</u> | <u>Percentage of Total Commissions</u> | <u>Average Commission per share</u> |
|----------------------------|-------------------------|--|-------------------------------------|
| First Clearing Corporation | \$11,554 | 24.4% | \$0.05 |
| SunTrust Equitable | \$4,787 | 10.1% | \$0.06 |
| Credit Suisse First Boston | \$2,947 | 6.2% | \$0.04 |
| Bloomberg Tradebook | \$2,705 | 5.7% | \$0.02 |
| Goldman Sachs | \$2,231 | 4.7% | \$0.06 |

Investment Policy and Procedures

Investment Policy Statement and Manager Guidelines

The role of the investment policy statement is to present a written document which outlines the objectives and policies of the pension plan. The policy statement covers a broad array of components from the delegation of responsibilities to the analysis of performance.

Delegation of Responsibilities

The investment policy usually begins by defining who is responsible for managing the assets in the plan. For public pension plans, the responsibility for managing the plan is usually defined within state and local statutes. An investment board or committee is created with overall responsibility for all the decisions made on behalf of the plan. In this context, the committee takes on the role of a fiduciary to the plan. Within the pension community, fiduciary responsibility varies depending upon the type of plan. Federal law under the Employee Retirement Income Security Act (ERISA), governs corporate pension plans. Public plans are not subject to ERISA, but fiduciary responsibility falls under the Prudent Investor Rule and state, county and municipal specific regulations. The concept of fiduciary duty was defined by the legal system and became known as the Prudent Man Rule, which was interpreted as preserving capital and avoiding risk. The Prudent Man Rule stated: *“Investments shall be made with judgment and care, under circumstances then prevailing which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived”*. In this context, each individual investment was subject to the Prudent Man Rule. However, as modern portfolio theory evolved, the concept of prudence changed. It is now more important to view an investment not as a single investment, but as part of the overall portfolio. This allows trustees to add risky investments if they help reduce the overall risk of the portfolio. This concept became known as the “Prudent Investor Rule” and is being adopted by most U.S. jurisdictions and by U.S. courts.

Asset Allocation Policy

A major section of the policy statement should discuss the asset allocation strategy of the plan by defining a target policy for the plan. The goal of the target policy is to clearly define which asset classes are to be included in the portfolio and the optimal allocation of each asset class. The target policy for the plan is usually determined from an asset allocation study. The target for each asset class can change over time due to the conclusions reached in an asset allocation study. Some pension plans conduct asset allocation studies once a year, while other plans might opt to conduct a study every couple of years. Within the asset allocation section is a formal statement defining the re-balancing strategies of the plan, which sets target ranges for each asset class within the portfolio. Target ranges can be expressed as either an absolute range around the target or can be expressed as a maximum/minimum percentage deviation from the target. For example, if the domestic equity asset class has a target policy of 60% of total assets, the asset class may range from 55% up to 65%. Expressed as a percentage deviation, the asset class may move no more than +/- 5% from the target policy. Given the volatility of the market and the cost of re-balancing a portfolio, re-balancing strategies must manage the tradeoff between deviations from the target against the cost of re-balancing the portfolio back to the target policy.

Investment Objectives and Performance Standards

After an asset allocation strategy has been set, the next issue an investment policy statement should address is the analysis of fund performance. The policy statement should define the relevant benchmarks that the fund will be measured against at both the total fund level and for each asset class. In many cases, plans will analyze performance versus several benchmarks. For instance, a static benchmark can be used to measure the asset allocation policies of the plan to understand whether the plan's asset allocation changes over time have added value to the plan. An allocation benchmark can also be used to measure manager performance versus a set of indices. That is, does active management add value relative to passive investments? In addition to analyzing performance versus various benchmarks, the plan should also analyze performance versus comparable peer group universes.

Another element in analyzing plan performance is through the measurement of risk. Most plans will measure risk using standard deviation and measure a portfolio's return risk profile. Unlike the analysis of return, the measurement of risk is more difficult to quantify. Most plans, in the investment policy statement, will usually have a section devoted to the risk objectives of the fund.

Risk is an important component in the investment objectives of a fund. One can think of risk as the price to be paid in order to receive the level of return the assets provide. The amount of risk to be undertaken, how that is measured and how it is monitored, are important aspects of the investment plan. Without such standards, the type of risk and its relative influence, could well be outside the range a prudent investor might undertake, and without a specified means of monitoring and controlling risks, the plan and its fiduciaries are truly "driving blind".

Investment Guidelines

Asset class and manager guidelines for the plan can be included in the investment policy statement or as a separate document. In either case, the role of the guidelines is to create a set of standards that specifically outline the types of instruments that can be included or excluded in the portfolio. In addition, the investment guidelines place limits on certain types of holdings in order to control risk within a specific manager's portfolio and within the total portfolio. For instance, a plan may explicitly state that no derivatives are allowed in the portfolio in order to limit the manager's ability to raise the risk of the portfolio by trading derivative instruments. Other restrictions help to avoid concentrations in a company or industry which may place undue risk on the portfolio. Usually, each manager is given a set of guidelines for their specific mandate, which is signed by both the manager and the plan. This helps avoid potential issues concerning allowable securities within the portfolio and other issues related to the overall management of the portfolio.

Metro Teacher's Investment Policy Statement

The policy statement for Metro Teacher's covers Delegation of Responsibility, Investment Objectives and Performance Measurement, and Investment Guidelines. The Policy Statement is well organized and easy to follow. It covers many of the issues within each component which are necessary for proper management of the plan's investments.

Metro Teacher's Delegation of Responsibility

The Delegation of Responsibility identifies four areas: The Administrative Retirement Committee, the Investment Consultant, the Investment Manager and the Custodian. The ARC

has overall responsibility for administration of the plan, developing investment objectives, asset allocation, selecting managers, reviewing managers, selecting a custodian and distributing assets. The Investment Consultant is given the duty to assist in writing the policy statement, asset allocation and monitoring investment managers and the custodian. Both investment managers and custodian are identified as having those duties and responsibilities generally assigned to such fiduciaries of plans.

We have the following issues related to the Delegation of Responsibilities section of the investment policy statement, along with our recommendations.

Issue IP-1: The Policy Statement does not detail the source of authority for each responsibility identified within the Statement.

Because of the nature of the formation of the Metropolitan Government of Nashville and Davidson County, as well as the history of the Board of Education and the evolution of the different pension plans associated with both Metro Nashville and the public schools, those authorities and duties assigned to the Board of Education by the charter and the assignment of those duties to the ARC by the Board of Education should be clearly explained. As will be seen below, the Investment Policy Statement delegates certain duties that by Metro charter are not authorized to the Board of Education or ARC. A complete and accurate evaluation of the duties and responsibilities of the plan and who should properly be held to oversee those responsibilities is the first step in drafting an investment policy statement.

Recommendation: The Policy Statement should detail the source of authority for each responsibility identified within the Statement.

Issue IP-2: The Policy Statement assigns the duty of custodian selection and oversight to the ARC.

Based upon the current Metro charter, all aspects of safeguarding the monies of Metro Nashville resides with the Treasurer. This would include the selection of custodians and the oversight of those custodians. It is improper to suggest within the Policy Statement that ARC holds this duty, or that the ARC can delegate this duty to the investment consultant. It is understandable that the initial policy of Teacher's Pension would anticipate the custodial oversight responsibilities would fall to the Board of Education and to the ARC, given the timing of the formation of the plan. The Teacher's Pension plan was originally drafted in 1963, the same year as the adoption of the current charter for Metropolitan Nashville and Davidson County. It appears the Teacher's plan did not fully incorporate the requirements of the Charter. It is clear that those duties officially belong to the Treasurer, necessitating an update to the investment policy statement.

Recommendation: Remove any reference to custodian selection or oversight from the Policy Statement.

Issue IP-3: The Policy Statement authorizes the consultant to direct the custodian to prepare reports.

Generally, it is considered best practice to limit the groups and individuals who have the authority to direct the custodian, or investment managers. While the policy statement appears to leave the ability to direct investment managers to the ARC, it allows the consultant to direct the custodian to create and deliver reports. It could be assumed this was drafted in this manner as a clerical

convenience, not requiring the consultant to request reports of the ARC, which in turn would have to request the reports of the custodian and eventually deliver them to the consultant. We believe it best to allow only the charter specified authorities to conduct business with the custodian.

Recommendation: Remove any reference to custodian direction by the consultant from the Policy Statement.

Metro Teacher's Investment Objectives and Performance Standards

The overall objectives of the fund are to meet actuarial assumptions and keep pace with the rate of inflation. From these objectives, the Metro fund must outperform the 91-day Treasury Bill rate and the CPI index, plus 4%. The fund is measured over a five-year time frame. In addition, the fund has a secondary objective to measure performance against a composite of unmanaged market indices using the actual weights of the asset classes in the fund. This index has no name associated with it in the Policy Statement, but for purposes of this report, we will refer to it as the "Policy Index". The purpose of the Policy Index is to measure the performance of active managers relative to a fully passive strategy. In other words, it measures whether active management added value to the fund's performance or would the fund have been better off placing their assets in index funds.

The following are issues we found within the Investment Objectives and Performance Standards section of the investment policy statement, along with our recommendations.

Issue IP-4: There is no total fund comparison versus the Policy Statement "Policy Index" policy benchmark, and the policy statement does not require a comparison versus a static benchmark.

It appears there is some confusion on the creation and use of static and policy benchmarks for the fund. While the policy statement only considers the "Policy index" for the total portfolio, the performance reports KPMG was able to review did not contain the "Policy Index", but rather a static index, referred to in the report as the Balanced Index. While not identified within the policy statement, the Balanced Index is a favorable addition to the performance report. While the policy mandated policy index is a good benchmark for measuring the role of active management versus passive management, that benchmark does not measure the effect of Metro Teacher's asset allocation policies, which would be measured against some form of the Balanced Index. Many industry articles have quoted and paraphrased a 1986 article by Brinson, Hood and Beebower identifying asset allocation decisions as accounting for approximately 90% variance in portfolios' rates of return. In a static benchmark, the weights of the indices are pre-set and do not change over time as the portfolio weights change. Currently, it is unclear as to how the Balanced index is modeled over time. Without a comparison to a static benchmark, the ARC does not have any type of analysis to determine if their asset allocation decisions added value to the plan and could not address, for example, whether the movement of assets into small cap equity or international equity added value or detracted from total fund performance. In addition, there are no comparisons or analyses to determine the effect of the consultant's asset allocation recommendations adopted from its annual asset allocation report.

Recommendation: The Policy Statement should be updated to require the Balanced index, detailing its creation, and the performance reports should be modified

to include the Policy Index required by the policy statement.

Issue IP-5: The Policy Statement requires comparison to a universe of “similarly structured funds”, but no such comparison is included in the performance reports.

The Policy Statement correctly requires a universe comparison for the total fund to similar pension funds. Such a comparison helps to identify the relative performance of the fund as compared to peers. While this comparison generally does not provide dramatic insights, since the expected largest difference between plan’s returns will be asset allocation, and this factor is unknown in most universe comparisons, it does provide useful details to the fiduciaries in terms of relative risk/return performance. The universe should be adequately identified in the Policy Statement. In the Performance Assessment section of this report, we provide a universe comparison for the plan as of June 30, 2003.

Recommendation: Universe comparisons should be added to the performance reports, as required in the Policy Statement.

Issue IP-6: The Policy Statement does not delineate between gross and net fees in the comparisons of fund and manager performance evaluation.

The investment policy statement does not address the return comparisons it requires to be gross of investment management fees, or net of those fees. Gross of fee returns are usually used in a peer group analysis, since peer group returns are also shown gross of fees. However, it is also important for Teacher’s Pension to display returns net of fees when comparing their performance versus a comparable benchmark. Investment managers are selected based on their ability to outperform a comparable benchmark. The fee they charge for managing the portfolio is used to compensate the manager for having the ability to add value over and above a predetermined benchmark. The investment management fee accounts for the majority of fees within the plan and directly affects the total rate of return of the plan. In fact, the investment management fee reduces the overall return of the fund. Therefore, a manager should be measured against a predetermined benchmark with their fees deducted from the total return calculation. If an investment manager can not outperform their predetermined benchmark after being compensated for their investment skills, then the fund might be better off moving to a passive alternative. Much of the debate that surrounds the active vs. passive management topic focuses on whether active management can justify their fees through superior performance, relative to a benchmark.

Recommendation: The Policy Statement should clearly state the nature of fees in return calculations for all comparison and evaluation requirements.

Teacher’s Pension Investment Guidelines

The Metro fund has two layers of investment guidelines. The first set of guidelines are broad based in nature and cover the specific asset classes and focuses on permissible securities and diversification. The second set of guidelines covers the sub-asset classes that are being managed by the various investment managers. These guidelines focus on investment objectives for the sub-asset classes, along with other restrictions on the portfolio. The guidelines at both levels are sufficient and cover the necessary objectives and restrictions as required by the fund.

The following are issues we found within the Investment Guidelines section of the investment policy statement, along with our recommendations.

Issue IP-7: Turnover is not addressed as a evaluative criteria for investment managers.

While the fund is tax exempt, and therefore the total cost of portfolio turnover is much less than a taxable portfolio, there is still a material cost associated with a manager's turnover. Normally, portfolio turnover is one criteria, among many, that is evaluated in the manager search and selection process. Typically, a consultant will be wary of managers who have a turnover ratio that is substantially higher relative to their peers. Turnover may lead to excessive commissions, market impact and other transaction costs within the portfolio. However, if a manager has a superior performance record relative to their peers, then the issue of turnover may play less of a role. It is preferable to have a high turnover manager with superior performance rather than a low turnover manager with average performance.

Recommendation: The Policy Statement should clearly state turnover as one criteria, among others, that will be used in the manager search and selection process. In addition, turnover should be regularly monitored.

Issue IP-8: Derivative usage is not addressed by the Policy Statement.

The use of derivatives has increased dramatically over the last twenty years. This is especially true within the fixed income marketplace, where new instruments develop very quickly and many have become commonly used in portfolio construction. Many of these new instruments are synthetic securities, which can be classified as derivatives, in broad terms. A synthetic security is a security that obtains its value from other securities. Fixed income instruments that are widely used - such as mortgage-backed securities, credit card receivables and other asset backed securities - can be classified as derivatives. However, there are some derivative instruments such as IO's (Interest Only) and PO's (Principal Only) that, if used incorrectly, could cause a substantial loss in the portfolio. Both of these securities have more price volatility than a standard mortgage pass-through security, and can be considered speculative investment vehicles. Teacher's Pension should have a discussion with each of their managers to ascertain their use of derivatives and monitor their usage over time.

Recommendation: The Policy Statement should include a derivatives policy.

Asset Allocation Policy

Asset allocation is the process of analyzing a plan's current asset class weights relative to a set of alternative portfolios. The goal of the process is to determine whether the plan's current asset class weightings are considered optimal. In this context, optimal refers to a portfolio that has the highest return for a given level of risk. To determine if the portfolio is indeed optimal, a quantitative model is run using expected returns, standard deviations and correlations between asset classes. The process of analyzing optimal portfolios focuses on the future, not the past. When conducting an asset allocation study, a plan must determine risk tolerance. There are many portfolios that are considered optimal, and choosing the correct asset mix for the plan depends on the risk constraints of the plan. In defining the risk constraints of the plan, an asset allocation

study should incorporate the liability status of the plan, including plan demographics. Is the plan currently overfunded or underfunded? Does the plan have a high percentage of retirees, or are the majority of participants younger and will not require benefit payments for quite some time? Incorporating both the plan's assets and liabilities will allow the plan to properly match their asset allocation strategy to their liability payments.

Some plans will conduct an asset allocation study once a year while others will conduct a study every couple of years. The timing of the study depends on the views of the plan's Board and consultant, if one exists.

Teacher's Pension Asset Allocation Policy

Currently, the asset allocation process consists of the consultant recommending to the ARC changes in manager exposures based upon recent performance. The current allocation appears to be 50% equity and 50% fixed income, with the long-term allocation expected to be 60% equity and 40% fixed income, based upon the construction of the Balanced index presented in the performance reports and conversations with the investment consultant. The underperformance of equities in general over the last three years, compared to the relative strong performance of fixed income appears to have led to the current allocation. The consultant has recently suggested certain changes to the allocation, though these have not yet been implemented while the ARC and Metro await this report.

The following issues were found in our review of the Asset Allocation process, along with our recommendations:

Issue IP-9: The Policy Statement does not address asset allocation.

There is no section within the Policy Statement that address asset allocation. Without a section to detail the asset allocation process, assumptions, frequency and risks, there is no basis for investment selections and overall portfolio structure, or a means of evaluating the performance of the ARC as the asset allocation changes.

Recommendation: The Policy Statement should be revised to include a section detailing the asset allocation process and the duties and responsibilities of the ARC in the creation and implementation of the asset allocation.

Issue IP-10: No asset allocation study has been performed for Teacher's Pension.

KPMG was informed in the document request for the most recent asset allocation study that no allocation study had been prepared for Teacher's Pension. KPMG was provided with the most recent actuarial study, detailing the liabilities of the plan.

The asset allocation of the plan has been based upon a loosely followed 60% equity / 40% fixed income target. This is due to Tom Steele's general belief in relative asset allocation, where it is his position that a plan cannot go wrong with an allocation such as this. His process does not include asset class exposures, relative expectations of returns or risks for the asset classes, or any modeling of different assumptions or matching with the liability. The ARC has not been provided with different mean-variance efficient alternatives and provided with sufficient detail and knowledge to support a selection of a particular target.

It also does not appear that the ARC has materially questioned the general asset allocation approach or the methodology followed to arrive at the allocation recommendation. Reviews of the Committee's minutes, as well as discussions with the current committee members does not indicate any questioning of the approach or process. As with many other of the recommendations made by the consultant, the ARC has typically followed with little documented analysis or discussion.

Without an asset allocation study, it is not possible to ascertain whether the current allocation of the portfolio is line with the expectations of the ARC or has the statistical probability of meeting the investment return objective detailed in the Policy Statement. The asset allocation should also address the relative risks to be considered. The absence of an asset allocation indicates there is no basis upon which the ARC has made decisions regarding the allocation of funds among managers and asset classes. **This is to be considered a violation of their fiduciary duty.** The ARC should have a current asset allocation study, with various allocation mixes, their expected returns, potential distributions of returns and probabilities, and a matching of the existing assets to current liability.

This process is even more important in the case of Teacher's Pension, since the present value of the liability as of July 1, 2002, exceeded the assets by more than 2.1 times. The majority of the funding of the liability is to be made from the current operating budget of Metro. This fact would have a material impact on the asset allocation assumptions and process.

Recommendation: The fund should have an asset allocation study completed as soon as possible, taking into account the guaranteed pension payments for closed plans and the liabilities as described in the most recent actuarial study.

Investment Manager Selection

After a plan has set its asset allocation strategy, the next step in the development of an investment portfolio is the selection of investment managers. More than any other phase, the selection and monitoring of investment managers requires the most time and effort from the plan's committee members. It is in the manager selection phase that the committee will further define their asset allocation strategy by developing specific style allocations for each asset class. For instance, suppose a plan has set a large cap equity allocation of 40% of total plan assets. Before choosing investment managers, the plan must decide how to split the 40% allocation into the various investment styles. In this case, how much of plan assets will be allocated to growth, value or a core strategy?

After a plan has set its style allocations, the selection of investment managers can proceed. Managers are evaluated using various criteria developed by the committee and by their consultant. In the selection process, a plan will focus on a manager's performance record, risk profile, stability of the organization and its investment professionals and, lastly, investment management fees. The majority of pension plans hire a consultant to help them select managers, among other consulting functions. The consultant, after performing a search for specific investment styles, will present the committee with a report detailing various statistics on each of the managers they have chosen. The number of managers initially presented to the Board varies by investment style, but the list of managers should allow the committee sufficient choice. The committee will then select several managers who will make a formal presentation to the

committee. After a formal presentation, the committee will discuss and choose an investment manager for their plan.

Within the investment manager selection process, the committee, with help from their consultant will make a determination concerning the use of active versus passive management for each investment style. This decision is usually based on the committee and/or consultant's opinion concerning the value of passive management within a portfolio. The role of passive management is determined on an asset class by asset class basis.

Teacher's Pension Manager Selection Process

Equitable Advisors has overall responsibility for developing criteria for the investment manager selection process. The ARC has not detailed any guidelines or manager qualifications, other than those presented in the investment policy, which deal only with investment objectives and not with manager specific criteria.

The ARC uses Equitable Advisors to develop a universe of managers for the selection process. The universe of managers is selected by using an outside database, CDA, and supplementing it with managers that have called on Equitable Advisors. The database is a standard third party product used in the industry by many consultants; it acts as a starting point to screen managers based on quantitative measures.

Generally, Equitable has recommended what type of manager the plan needed to consider, whether equity or fixed and asset classes within those general categories. For instance, Mr. Steele might suggest a need to add a small cap manager. The recommendation is not based upon an asset allocation study or other formal process, but rather a general sense of the relative needs of a well diversified portfolio. From this, the database is queried, using capitalization limits in this example, as a screen, generally arriving at 500 or more managers. Equitable further reduces this list using relative risk and return results, style bias of the manager (with a preference to present both growth and value), tenure of the investment team, and consistency of performance. This will lead to 25 to 30 managers, which are presented to the ARC in a summary fashion, using scattergrams, with the ARC eventually selecting 3 for further review, interviews and a final selection.

The three finalists make a formal presentation to the ARC. Equitable Advisors produces a summary sheet, with 1, 3, 5 and 10 year returns, risk, manager tenure, asset under management and other quantitative information provided by the managers in their marketing materials. Equitable does not independently verify the detail, but rather simply summarizes it in a common format.

Throughout the investment manager selection process, Equitable Advisors is the primary contact before, during, and after the search function. The ARC has little contact with the investment managers, with the exception of manager presentations made during committee meetings. It is our understanding that current Metro procurement procedures do not allow for contact by a representative of the ARC, which Mr. Steele would be considered, during the selection process, but rather contacts of potential service providers must be accomplished through purchasing or by the ARC as a whole. It is considered improper to allow the consultant sole contact during the evaluation process.

The following are issues we found within the Investment Manager Selection process, along with our recommendations.

Issue IP-11: There is not sufficient detail in the information provided by the

consultant to substantiate the selection of finalists for a search.

While the scattergram and other details provided by the consultant are no doubt helpful in allowing the ARC to sift through a large amount of data, the process, criteria and results that led to the semi-finalists (25 or 30 managers) should be included in the documentation. Without a complete reporting of the entire process, it is not possible for the ARC to support the decisions it makes. This process dilutes the power and independence of the ARC. Although Equitable Advisors was hired to perform the search function for the ARC, the ARC is not taking a proactive approach in the process. They appear to be relying too heavily on Equitable Advisors and not fulfilling their oversight responsibilities. In addition, without any documentation there is no audit trail for this selection of finalists. Any future ARC member or staff member within Metro would not be able to understand the decision making process. Finally, there is limited written justification for the finalists. Since the selection of investment managers is a fiduciary responsibility of the ARC, the ARC needs to know that this critical task was conducted properly and completely.

Recommendation: The investment consultant should supply the Board with sufficient detail to support the initial selection of semi-finalists and to support the eventual selection of the manager hired.

Issue IP-12: It does not appear that Teacher's Pension is negotiating the lowest fee possible.

After a manager has been selected, the fee negotiation appears to consist of simply signing the manager's standard fee agreement. In a review of the investment manager agreements, only Cohen, Klingenstein & Marks agreement was drafted on Teacher's Pension letterhead. None of the agreements contemplate the fact that managers might also be employed by the Metropolitan Nashville and Davidson County's pension plan, and none have "most favored nation" clauses.

There is currently some overlap in investment managers within the Teacher's Pension plan and the Metro pension plan. As well, it can be expected that economies could be gained by more closely linking the managers within the two plans. This process should lead to materially lower fees for Teacher's Pension. In any event, Teacher's Pension would benefit from a more comprehensive fee negotiation process.

Recommendation: Negotiate the lowest possible fee by:

- 1. Comparing the fees paid by other clients who use the same or similar managers, and utilizing existing relationships within Metro government to secure best pricing.**
- 2. Comparing managers to other Teacher's Pension managers in the same asset class.**
- 3. Using fees as one of the screening and selection criteria in the manager search process.**
- 4. Continuing to monitor fees by including fee schedules and comparative information on fees in the quarterly performance report.**
- 5. Becoming more aggressive in fee negotiations with investment managers.**
- 6. Include a most favored nation clause.**

Managers are terminated based on recommendations from Tom Steele. At the quarterly meetings, Mr. Steele will discuss his recommendations with the ARC orally while also using the performance pages from the quarterly performance reports as documentation on the manager's performance. After a discussion about the manager, the ARC will vote on whether to accept Equitable Advisors' recommendation. Managers can be terminated for a number of reasons, including poor performance, personnel turnover, style drift and other factors.

Active Management versus Passive Management

Currently, Teacher's Pension does not have an allocation to a passive investment in its portfolio. All managers for Teacher's Pension are active managers whose objective is to outperform their respective benchmarks. It does not appear that the use of passive investments within the Teacher's Pension portfolio has been considered by the ARC. It has tended to be the position of the consultant that active management will outperform passive management.

Issue IP-13: The historic use of a soft dollar commission arrangement has not allowed the consultant to be objective in the recommendation of passive investments.

Tom Steele at Equitable Advisors, and its predecessor firm, was historically paid through soft dollar commissions. The commissions were generated through trading activity, principally equity trading activity. The initial agreement set a base amount of soft dollar commissions, to be made up in hard dollar payments by Teacher's Pension should the managers fail to generate sufficient trades. This fee arrangement was only recently changed, to provide for a hard dollar payment. Interestingly, one manager, Private Capital, still performs some portion of its trading to allow for soft dollar payments to Equitable Advisors. This has not been changed by Teacher's Pension, which apparently must modify the investment manager agreement to specifically remove the approved broker from the trading list.

Presently all of Teacher's Pension investment managers are considered active managers. An active manager will trade much more frequently than a passive manager in order to generate excess returns and outperform the benchmark. In a passive investment, trading is only executed to handle cash flows and rebalance the portfolio versus its appropriate benchmark. Therefore, active managers will generate significantly more transactions relative to passive managers, which leads to increased commission costs to the portfolio. The Teacher's Pension investment policy statement discusses certain criteria that are used to analyze managers, but fails to include trading

as a factor in evaluating managers. It appears that both Teacher's Pension and the consultant are unconcerned about portfolio turnover and the amount of commissions that are generated from trading activity. This is not unusual in broker/consultant relationships.

The use of passive investments is quite common among pension plans. A study completed in 2003 by Greenwich Associates of 1,729 investment funds shows that on average, almost 20% of the assets, and fully one third of the equity assets, were passively invested as of December 31, 2002. This represented more than \$1 trillion of plan assets. More specifically, the study looked at 194 municipal pension funds and found 24% of the assets (42% of equity assets) were passively invested.

If 40% of the equity holdings of the Teacher's Pension had been invested passively, at an average expense of 15 basis points, the savings in management fees alone for the last fiscal year would have been \$177,000. This is based upon an assumption that each active equity account was ratably reduced 40% to provide the source of assets for passive investing, and that passive investments averaged a cost of 15 basis point annually.

It should be noted, however, that the individual active managers selected for the plan have performed better than their respective passive indexes for the last year. A decision to increase passive exposure would have reduced costs, but also would have reduced return.

Recommendation: Reconsider passive investments in an objective fashion. Include an analysis of the savings in both management fees and commission dollars from passive investments relative to active management.

Role of Investment Consultant

Many pension plans presently employ an investment consultant to advise them on plan specific investment issues. Consultants are hired for a variety of reasons, but the most common reason is that the investment committee lacks all the necessary investment skills to manage the assets of the plan properly. Although the committee may have certain investment skills, a consultant is able to advise the committee on issues such as asset allocation policy, selection and monitoring of investment managers and performance reporting. In addition, these plans are looking for independent financial advice that is free from many of the potential conflicts of interest that may arise when investment decisions are handled internally. In some cases a committee may have the staff to perform the necessary analysis required by the plan but may choose to have an independent third party opinion. Most plans will hire one consultant as a generalist to handle all the related investment issues. Some of the larger plans, plans with assets greater than \$1 billion, will hire multiple consultants as their asset bases grow in size and complexity. Many of those larger plans are using complex asset classes in their portfolios, such as alternative investments, which require a great deal of time and effort to analyze.

Role of Teacher's Pension Consultant

The role of the consultant is defined in the investment policy statement. The consultant will help advise the ARC on a variety of issues including asset allocation, manager search and selection, performance reporting, and custodian oversight. In this capacity, the consultant acts as a fiduciary to the plan and is held up to the Prudent Investor Rule.

Before 1988, it is unclear as to whether Teacher's Pension retained a consultant. In 1988, the ARC initiated a search for an investment consultant and eventually retained Equitable Securities.

Mr. Tom Steele, of Equitable Securities, was placed on the account. Initially, his services consisted of preparing quarterly performance reports for the plan. Beginning in 1992, Equitable Securities started to make recommendations for the plan, starting with the custodian. As well, the first version of the Investment Policy Statement was drafted, and recommendations for manager changes and manager searches began.

Equitable Securities was acquired by SunTrust in the late 1990's. SunTrust later made the decision to retain only the brokerage activities of Equitable, and notified clients in February of 2001. Mr. Steele was aware of the intent to exit the consulting business, and began several months prior to the date to form his own consulting firm. Teacher's Pension and the ARC retained Steele Advisors (the name was subsequently changed to Equitable Advisors) in April, 2001, based upon discussions which occurred during the February 22, 2001 ARC meeting.

Mr. Steele attends all ARC meetings, providing advice and reports to the ARC regarding the investments of the plan. He has generally recommended asset allocation changes on an annual basis, in written form, submitted to the ARC for consideration at one of its meetings.

Issue IP-14: The consultant contract has never been put out for public bid since Equitable Securities was hired as the sole consultant of the fund in 1988.

Since 1988, Tom Steele has been the sole consultant to the Teacher's Pension plan. The contract was changed once, when Mr. Steele left to form his own firm. Since the hiring of Equitable Securities/Advisors as the sole investment consultant to the plan, the ARC has never put out a public bid for consultants. This arrangement is highly unusual, especially among public funds. Many public funds, under state or local law, are obligated to have their consultant(s) contracts re-bid in an open environment periodically. In the State of Tennessee, there is not a requirement to place a contract out to bid, and such a requirement is not specifically required under the Metro Charter or the plan document.

There have been several requests by members of the ARC, Board of Education Staff and the consultant himself to remain associated with the Teacher's Pension. This is not unusual, as the consultant has been the single constant factor in the oversight of the assets since being associated with the fund. Most knowledge of the plan, its history, past decisions and recommendations have been made at the hands of Mr. Steele. This should be considered the single most important reason to send this relationship out for bid.

An RFP is typically made public via various trade journals allowing any consultant firm to bid for the consulting contract. The current consultant to the plan can also reapply for the contract by submitting their bid. In many cases, the current consultant is re-hired by the plan; however, the public bidding process serves a very important purpose. By reviewing other RFPs, the committee can compare the services and fees of their current consultant versus other consultants. This would allow Teacher's Pension to review the fee they pay Equitable in relation to other consultant fees. It would also allow the ARC to discover how other consultants structure their fees. The discovery process of issuing RFP allows for the evaluation of fee arrangements, compare services of other consultants, performance reports and analysis.

Generally, the ARC would be responsible for conducting a search, as they have been given authority over the management of the assets by the Board of Education. However, since the ARC has typically relied upon their consultant for all support, it does not appear that the ARC is capable of conducting such a search without help. Two choices would be to retain a third party to conduct a search, or to utilize resources within Metro Nashville to help conduct the search. Those

resources can be found within the Office of the Treasurer, as it has performed similar searches for the Metro Employees Benefit Trust.

Recommendation: **The consultant contract should be placed out to a public bidding process periodically issuing and reviewing RFPs. The RFP should be publicly advertised in an industry publication such as “Pension and Investments”.**

Monitoring and Reporting Function

The structure and reporting functions of pension plans vary dramatically depending upon the type of plan and the legal structure. For public plans, the structure of the plan is determined by local statutes which define the number of Board members, the term of each member and who has the authority to appoint members of the Board.

Current Structure and Reporting

The Metropolitan Board of Public Education adopted the Metropolitan Board of Public Education Teacher Retirement Plan, which provided retirement benefits to certificated employees elected after April 1, 1963 and before July 1, 1969 as a condition of employment. The plan document, under Section 8.02, gives authority to the Board of Education to delegate the oversight of the plan and its assets to the Administrative Retirement Committee (“ARC”). The plan has been amended twice, with the second amendment addressing aspects of the ARC. The ARC has five selected members and a single ex officio member. Selected members include two appointments made by the Chairman of the Board of Education with one being a member of the Board of Education. Three elected members to the ARC include an Employee, an Employee who is a member of the Plan and a retired employee. Finally, the Assistant Superintendent of Human Resources for the Board of Education shall be a voting ex officio member of the ARC.

The ARC retained a consultant beginning in 1988 to provide services in monitoring, selecting and retaining outside vendors for the plan. Equitable Securities (later acquired by SunTrust) was retained by the ARC and acted as the sole consultant, with Tom Steele providing those services as an employee of Equitable Securities. In February, 2001, SunTrust Equitable Securities made the decision to exit the consulting business, effective April 1, 2001. Mr. Steele formed his own company, Equitable Advisors, Inc. and was retained by the ARC effective April 1, 2001. The original consulting contract with SunTrust Equitable Securities provided for soft dollar commissions, with a guaranteed minimum. Equitable Advisors has generally been compensated under a fixed fee arrangement since 2002, though is receiving a soft dollar fee for trades placed by Private Capital Management.

The consultant provides the ARC with the evaluation of performance and is the primary source for data and information concerning the plan. Each quarter, Equitable Advisors provides the ARC with a quarterly performance report, which Mr. Steele explains at the ARC’s quarterly meeting. The master custodian sends all information to Equitable who then processes the information for the quarterly update reports.

Until recently, the school board office was responsible for taking summarized investment information from the pension plan and booking entries into the General Ledger. They were also responsible for reconciling the detail of the custodial statements to summarized information provided by the master custodian. This duty has since been moved to the Treasurer.

Issue MR-1: The ARC is too reliant on the consultant for investment advice and analysis.

The ARC has no real administrative or support staff, other than what can be provided by the Metropolitan Nashville Public Schools business office. The support provided by the business office has been limited to administrative help, including setting meetings, mailing information and acting as a central point of contact. The staff does not have investment or accounting backgrounds and therefore is not qualified to perform investment analysis.

As a result, the ARC has depended on the advice of the consultant almost exclusively for managing pension investments. In effect, the ARC does not have any independent oversight over pension investments. It has no means of evaluating the advice or analysis provided by the consultant. Due to the nature of the selection process of the members of the ARC, there is not inherent in the system a continuity of knowledge within the ARC, so that such knowledge and legacy is only truly available from the consultant and the MBOE support staff.

This has not allowed for adequate segregation of duties or the creation of a reasonable control environment. The consultant had taken on duties that represent both the front office (manager evaluations, manager selection and termination, asset allocation) as well as the middle office (analysis and performance reporting). This type of arrangement should be modified.

Recommendation: A Chief Investment Officer or similar position with appropriate qualifications should be assigned the responsibility to report to the ARC and to manage all aspects of the investment function, including independently evaluating recommendations and analysis presented by the consultant. This responsibility could be addressed immediately by the Treasurer, since that Office of Metro government currently performs this task for the Metropolitan Nashville and Davidson County pension plan and has the resources and expertise.

Issue MR-2: ARC members are not required to sign a conflict of interest form.

Many employees of the government who hold key positions are required to fill out and sign a financial disclosure form and a conflict of interest statement. However, members of the ARC are not required to complete these forms. Committee members, as fiduciaries to the plan with the responsibility for managing \$100 million of investments, may find themselves in situations where conflicts of interest may exist. Without the ability to review the financial interests of the ARC members and obtain their signed written representations that they do not have conflicts of interest with regard to plan investments, proper oversight is not in place.

Recommendation: Members of the ARC should be required to fill out and sign disclosure and conflict of interest forms at the time of becoming a member of the ARC and every year they are part of the committee.

Issue MR-3: There are no procedures to ensure that investment balance totals reported on the general ledger, the custodian reports, investment manager reports and the consultant's quarterly performance reports are in agreement.

The general ledger pension investment balances have not been updated since July, 2001. Additionally, there were differences between the values presented by the consultant at 6/30/2002 and those shown on the custodian statement. It also does not appear that the individual money managers are required to reconcile their balances with the custodian on a recurring basis. These differences appear to be accounting errors and do not suggest that there were any funds missing. These issues led to a material weakness and reportable condition for the audited financial statements for fiscal year 2002. As stated in the auditor's management letter:

“MNPS maintains a significant volume and dollar amount of investments for three retirement funds. While investment activity for funds invested in the Metropolitan Investment Pool (MIP) was recorded throughout the year, activity for funds held by the third party trustee was not recorded until adjustments were proposed as a result of the annual audit. The large volume of activity and high dollar amount of investments indicate a need for a formal monthly reconciliation process. Lack of such reconciliations leaves such assets at risk and potentially creates the opportunity for untimely identification of errors. This same condition existed for fiscal 2001, and no notable progress was made during fiscal 2002.”

KPMG LLP, October 31, 2002

The lack of general ledger controls can result in undetected errors in the custodian reports, and information reported to the ARC may not be accurate if the quarterly performance reports are not reconciled to the custodian records.

Subsequent to the start of this report, the Office of the Treasurer has provided staff to reconcile and book the entries as of June 30, 2003. While such reconciliation should look to take place more timely, the reconciliation has been performed.

Recommendation: The pension investment general ledger balances and activity should be updated monthly based on the custodian reports. Drafts of quarterly performance reports should be reconciled to the custodian reports prior to the board meetings where investment performance is reviewed.

Contracts and Agreements

Contract Language and Compliance

The purpose of an investment management contract is to clearly state the objectives, services and fees that will be provided by the various parties (investment managers, consultants, custodians, etc.) who have been hired on behalf of the pension plan. In this regard, there should be clear communication between the plan and the various parties. One of the key components of the contract is the calculation of fees. The contract should explicitly state how fees are calculated and when those fees are payable. Fees are usually stated as a flat percentage or in a graduated scale format. The contract is signed by both of the parties involved, the plan and the provider of the services to the plan. As such, this document should be legally binding should any problems arise in the future. This document allows the plan to go back to the various parties if certain services were not provided or if fees were incorrectly calculated.

Teacher's Pension Investment Management Contracts

As of June 30, 2003, Teacher's Pension employed six investment managers, each managing a single account for Teacher's Pension. The copies provided to KPMG each has a manager signature, with the exception of Arbor Capital Management, and all have a signature of an ARC member, with the exception of AmSouth, which appears to be a duplicate contract. Each contract is different in form and content, as it appears each is the standard contract issued by the investment manager, with the exception of the contract for Cohen, Klingenstein & Mark, which is on Teacher's Pension letterhead and was issued by Teacher's Pension to the manager; all other contracts were issued by the manager to Teacher's Pension.

Only the Arbor Capital Management contract has a reference to investment guidelines, though the reference is not to those guidelines included in the investment policy statement, but rather are an abbreviated set of guidelines for the Arbor account only.

The following are issues we found within the Contracts and Agreements process, along with our recommendations.

Issue CA-1: Each Investment Manager contract is materially different, making oversight of the managers more difficult.

Each investment manager contract is different, due primarily to the fact that they were negotiated at different points in time, and most are of a format and content specified by the investment manager, not Teacher's Pension. This makes each manager relationship completely unique. Given the nature of the oversight process within Teacher's Pension, the lack of staff, and the short tenure for most ARC members, this process places undue responsibility on the consultant to oversee the investment managers, which is a fiduciary responsibility of the ARC. Without a high level of consistency between manager contracts and their respective duties, the time and effort of manager oversight is greater and more inefficient.

Recommendation: Manager contracts should be based upon a Teacher's Pension template, with similar terms, conditions and duties for each party to the contract, simplifying the oversight for the ARC.

Issue CA-2: Investment Manager contracts have not been updated to reflect the current compensation relationship between Teacher’s Pension and the consultant.

Under the previous contracts between the ARC and the consultant, Equitable Advisors was paid with soft dollar commissions. Certain contracts, including Cohen, Klingenstein & Mark, still specifically address the requirement to execute trades through Equitable Securities. It is our understanding that all managers have been notified as to the change in the compensation arrangement with the consultant, and the Brandes Investment Management contract has a copy of the notification sent to them advising of the change (this is necessary as this letter is labeled Exhibit B and is part of the contract by reference). Conversations with the consultant have indicated he still receives some compensation from commissions from managers that continue to execute through Equitable Securities. Since Equitable Securities has one of the highest commission rates, this practice should be discontinued, as it is not required under any existing relationship and is not cost effective for the plan.

Recommendation: All contracts should be made current in their terms.

Issue CA-3: Investment Manager contracts do not have specific investment guidelines or mandates included in their terms.

The investment policy statement identifies certain investment mandates for the managers, including fixed income-short duration, fixed income-intermediate duration, core equity, small cap equity and international equity. However, none of the investment manager agreements reference the requirements and restrictions identified within the investment policy statement. In fact, one manager, Arbor Asset Management, has a set of investment policies attached to its agreement which differ from the mandates included in the investment policy statement.

Additionally, the mandates included in the policy statement do not address style investing. Teacher’s Pension has retained three domestic equity managers with specific style objectives, but has not included any means of determining style characteristics or monitoring style investing within the policy statement.

The monitoring of the investment managers against their investment guidelines requires the review of holdings and trading activity. It cannot be accomplished by simply reviewing quarter end position statements. The use of derivatives and other complex instruments may not be completely presented in custodian statements, and managers can “window dress” before a review date. Reviews must include detailed analysis of trading activity during the period and comparison of manager actions against the stated and agreed to mandates. While it appears the ARC does review a manager’s holdings at their review date, a more complete analysis of manager activity, which may include policy monitoring software or consultant assistance, should be implemented, as the process of investment guideline review is an aspect of the fiduciary duties of the ARC.

Recommendation: Contracts should be amended to address the investment mandates of the investment policy statement. The policy statement should be revised to include style mandates. Finally, the ARC should implement a process of evaluating investment managers against the criteria set within the policy statement.

Fee Arrangements

Teacher’s Pension has negotiated separate fee arrangements with each of its investment managers. Generally, the ARC is provided a summary of manager fees for their review, but this summary, included in the quarterly performance report, only includes the actual dollars paid. It does not include the breakdown of the fee schedule by asset class, or a comparison of the fees against peers or the average for the asset class. Based upon the fee schedules and average assets by quarter, below is a summary of estimated fees for each manager for the fiscal year ended June 30, 2003. These amounts represent estimated fees paid, and not fees accrued.

Metropolitan Nashville Teachers Retirement Fund
Estimated Fee Summary
For the Year Ended June 30, 2003

| | <u>Assets Under Mgmt</u> | <u>Type of Fee</u> | <u>Fee (In bps)</u> | <u>Fee (in dollars)</u> |
|----------------------------|------------------------------|------------------------|-------------------------|-----------------------------|
| Domestic Equity | | | | |
| Gardner Lewis Asset Mgmt | - | Flat | 100.00 | \$29,199 |
| Arbor Capital Management | \$5,057,483 | Flat | 100.00 | 45,286 |
| Private Capital Management | 27,045,805 | Flat | 100.00 | 245,891 |
| Cohen, Klingenstein & Mark | <u>7,215,743</u> | Scale | <u>82.97</u> | <u>52,077</u> |
| TOTAL DOMESTIC EQUITY | \$39,319,031 | | 97.21 | \$372,454 |
| International Equity | | | | |
| Brandes Investment | <u>\$9,394,701</u> | Scale | <u>95.83</u> | <u>\$82,155</u> |
| TOTAL EQUITY | <u>\$48,713,732</u> | | <u>96.96</u> | <u>\$454,609</u> |
| Fixed Income | | | | |
| Weaver Barksdale | \$24,466,509 | Flat | 20.00 | \$49,594 |
| AmSouth | <u>17,878,230</u> | Flat | <u>20.00</u> | <u>36,343</u> |
| TOTAL FIXED INCOME | <u>\$42,344,739</u> | | <u>20.00</u> | <u>\$85,937</u> |
| TOTAL PORTFOLIO | <u>\$91,058,471</u> | | <u>60.16</u> | <u>\$540,546</u> |

Fee Comparison – Industry Standards

Reviewing the fees paid above, it appears that Teacher’s Pension’ fee structure is higher than other similar plans. Using the 2002 Greenwich Market Dynamics report, the average investment manager fees paid by all reporting plans (1,032 reporting plans in 2002 and 1,064 in 2001) was 27.4 basis points in 2002, up slightly from 2001 which had a mean of 27.3 bps. Public funds tended to have higher fees, with a mean of 27.8 bps in 2002. As expected, smaller plans paid higher fees than larger plans, since fewer assets tended to limit the benefit of scaled fee structures.

Public plans with assets below \$500 million had an average of 35.1 basis point. It should be noted the plan averages in the Greenwich study include passively managed assets, which are materially lower fee structures, thereby reducing the mean for those plans. Were Teacher's Pension able to negotiate fees in-line with the average public fund, they could have saved potentially \$228,000. This savings could result from more aggressive fee negotiations and from passively managing some large cap equity asset similar to other public funds.

Issue CA-4: The use of some flat fee arrangements in the plan may cause Metro to pay higher fees than otherwise necessary.

Further impacting fees is the fact that Teacher's Pension pays some investment managers through a flat percentage fee arrangement. Fee arrangements are manager specific; some offer a flat fee arrangement while others offer the graduated scale arrangement. Depending upon the negotiation process, it may be preferable to pay a manager on a graduated scale arrangement, where the fees paid to the manager decrease in basis points as the market value of the account increases.

As an example, assume two investment managers are managing the same mandate and receive \$100 million dollars apiece. Manager A is charging a flat fee of 50 basis points. Manager B is charging fees based on the following graduated scale: the first \$100 million of assets are charged 50 basis points, the next \$50 million in assets are charged 40 basis points and assets over \$150 million are charge 35 basis points. In year two, if the market value of the account rises to \$150 million for each manager the fees would be as follows:

| | | Annual Fee | Annual Fee |
|------------|-----------------|------------|------------|
| | | Year 1 | Year 2 |
| Manager A | Flat Fee | \$500,000 | \$750,000 |
| Manager B | Graduated Scale | \$500,000 | \$700,000 |
| Difference | | \$0 | \$50,000 |

Investment manager fees would be \$50,000 less under the graduated fee scale arrangement. As assets continue to grow, the gap between the two managers' fees would continue to grow.

Recommendation: Teacher's Pension should re-evaluate fee arrangements with investment managers, specifically where managers charge a flat fee. In addition, Teacher's Pension should consider passive investing, consolidating mandates by asset class and aggressively negotiating to reduce investment manager fees.

Performance Reporting

Adequacy of Performance Reporting

After a pension plan has set its asset allocation policy and selected its investment managers, the last step is the evaluation of performance. The plan will focus not only on the total fund but also on an analysis of the underlying asset classes and managers that comprise the total plan. One of the first steps is a comparison of returns, both at the total fund level and manager level, versus the appropriate benchmark. In many cases, the evaluation of performance is compared versus multiple benchmarks. This is especially relevant when a plan chooses style specific managers for its plan rather than adopting a core approach. For instance, the primary benchmark for a large cap growth manager is probably the S&P 500. In addition, the manager could be compared versus a growth index such as the S&P/BARRA large cap growth index. Comparing performance versus benchmarks is one method of analyzing performance. It is also important to compare performance versus a universe of peers. If an investment manager outperforms their benchmark but fails to outperform the majority of similarly managed funds, then there could be a performance issue with the manager.

Although return is a key component in analyzing fund performance, equally important is the measurement of risk. It is critical for a plan to understand how much risk the plan is taking and the type of risk. Is the plan being properly compensated for the amount of risk taken? The term “properly compensated” refers to the return of the plan. In general terms, a plan that takes more risk than another similarly structured plan should earn a higher return, all other items being equal. In its basic form, risk is defined as standard deviation. Usually the risk of the plan is displayed in a risk-return diagram shown over various time periods.

The type of the risk within the plan is dependent on the type of managers selected for the plan and the manager’s stock selection process. For instance, the plan may have a large concentration of growth managers. If each of these managers holds a large quantity of technology stocks, the plan would then have a large overall concentration in the technology sector. The risk to the plan is a downturn in the technology sector, which would have an adverse impact on the plan’s overall return.

In order to help a committee understand the dynamics of their plan, performance reports will usually chart the portfolio’s asset allocation structure over time. In addition, a comparison will be shown between the plan and the average of other pension plans within a similar universe. The plan will be able to gauge how their asset allocation decisions have changed over time and how their structure differs from similarly managed plans.

Teacher’s Pension Performance Report

The ARC receives four quarterly performance reports from their consultant, Equitable Advisors. The reports include performance analytics on the total fund, the equity component, the fixed income component and the individual managers. Performance is compared against a series of benchmarks only. No comparison to peers is included in the report. On a total fund level, the report includes the current value of assets and the value one year prior, as well as the percentage allocation between equities, fixed income and cash. The individual manager sections include returns over specific time periods for the manager for their total account, the security component

(equity or fixed income) and the cash component. As well, each section has a summary of cash flow activity for the last four quarters.

The reports are the same for each quarter; there is no annual report with additional information or detail.

The following are issues we found within the Performance Reporting section, along with our recommendations.

Issue PR-1: The quarterly performance report does not include any analysis of risk.

The quarterly performance reports do not include any mention of risk at the total fund, asset class, or manager level. The report does not include a standard risk-return scatter diagram to display each manager's risk profile. A risk-return scatter diagram would help the ARC understand the level of risk each manager is taking in order to achieve performance returns. Is the manager a high return, high risk type of manager? Or does the manager take less risk but is still able to earn comparably high returns? The inclusion of scatter diagrams over multiple time frames would allow the ARC to gain insight into manager risk profiles over time. Equally important, this would allow the ARC to compare managers within the same asset class.

Recommendation: Include risk-return analysis for all managers. Such reviews should include the same periods for which returns are measured and evaluated (YTD, one, three, five, seven and ten years, for example).

Issue PR-2: The quarterly performance report does not display Metro's historical asset allocation over time and does not compare the plan's current asset allocation to other similarly managed plans.

The performance report includes a page detailing the plan's asset class and manager allocation weights. However, the report does not compare the current asset allocation to the plan's historical allocation or to allocation weights of similarly managed plans, making it difficult for the ARC to maintain an awareness of the changes to its asset allocation policy and equity exposure over time. In addition, the ARC should be aware of the allocation strategies of similarly managed plans, specifically public funds. Is the Teacher's Pension plan more aggressive than other plans?

Recommendation: Include a comparison of Teacher's Pension current asset allocation to previous allocation policies and to other similarly managed plans. These comparisons should be included in the quarterly performance reports to the ARC.

Issue PR-3: The quarterly performance report does not provide characteristic, style evaluations or attribution analysis.

The report provided quarterly by the consultant consists of performance numbers and benchmarks. While the basis return of the total fund and the individual managers is important, it can only be evaluated effectively if the events that created that return are known. The relative exposures to sectors, credit qualities, durations, market caps, price to earnings, price to book and other key characteristics must be known for each manager, and for the portfolio as a whole in order to understand what created the returns that are presented. As well, an evaluation of the style consistency of the managers and the fund, and a review of the attribution of the plan (how

has the ARC's selection of managers and allocation decisions helped or hurt total plan performance) should be presented quarterly. The performance reports as they are currently presented do not provide enough detail for the ARC to effectively manage the plan, nor does it allow for an objective evaluation of the decisions of the ARC and the consultant.

Recommendation: The performance report should be modified to include total plan level attribution, style analysis and characteristics at the plan level and individual fund level.

Issue PR-4: The consultant's quarterly performance reports only display seven years of performance data.

Returns for the pension fund can be traced back to June of 1986, but the quarterly reports shows performance going back seven years and since 1986. This does not allow the ARC to fully analyze the fund's performance over longer time periods. In addition, Equitable Advisors, in one form or another, has been the sole consultant to the Teacher's Pension plan for approximately 15 years, and the inclusion of longer time periods in the report would allow the ARC to more fully evaluate Equitable Advisor's asset allocation and manager selection recommendations.

Recommendation: Expand the performance comparisons to include longer time periods.

Issue PR-5: The consultant's quarterly performance reports do not reconcile with the custodian's report.

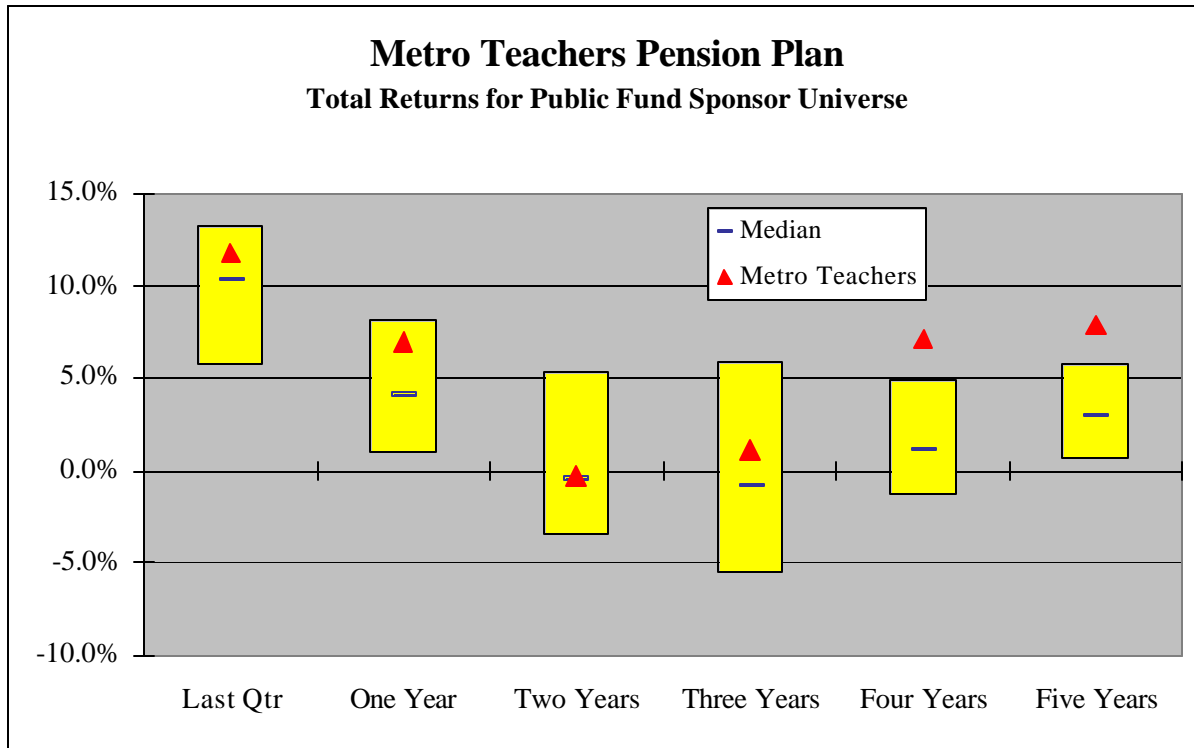
We observed for the periods we received both a consultant statement and a custodial report, the amounts presented for manager totals and total plan were not the same, and no reconciliation between the amounts was presented. We did not consider the difference to be large enough to materially impact the results presented, but we were concerned to learn that results did not agree. One would expect recurring reconciliation of the custodian reports to the performance reports, to ensure the accuracy of the performance results.

Recommendation: Require quarterly reconciliation of performance reports and custodian information to ensure accuracy of information provided to the ARC.

Assessment of Performance

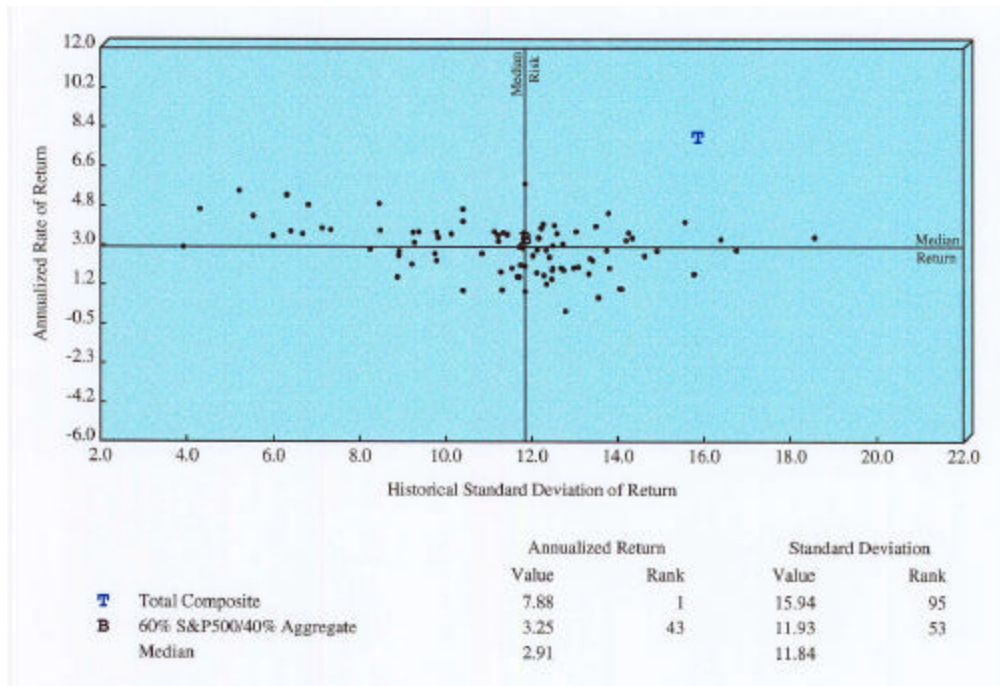
KPMG requested and received the quarterly returns of each of the investment managers for the Teacher's Pension plan for the last five years, as calculated by the investment consultant. KPMG did not receive cash flow activity, individual holdings or market values for positions and did not recalculate the reported performance for the managers or for the plan.

The Teacher's Pension plan has had strong performance over the last five years ended June 30, 2003, with a total return of 5.80%, compared to Metro pension plan return for the same period of 3.83%. This return, when compared to a static benchmark of 60% S&P 500 and 40% Lehman Aggregate, is also strong, bettering the index by 255 basis points.

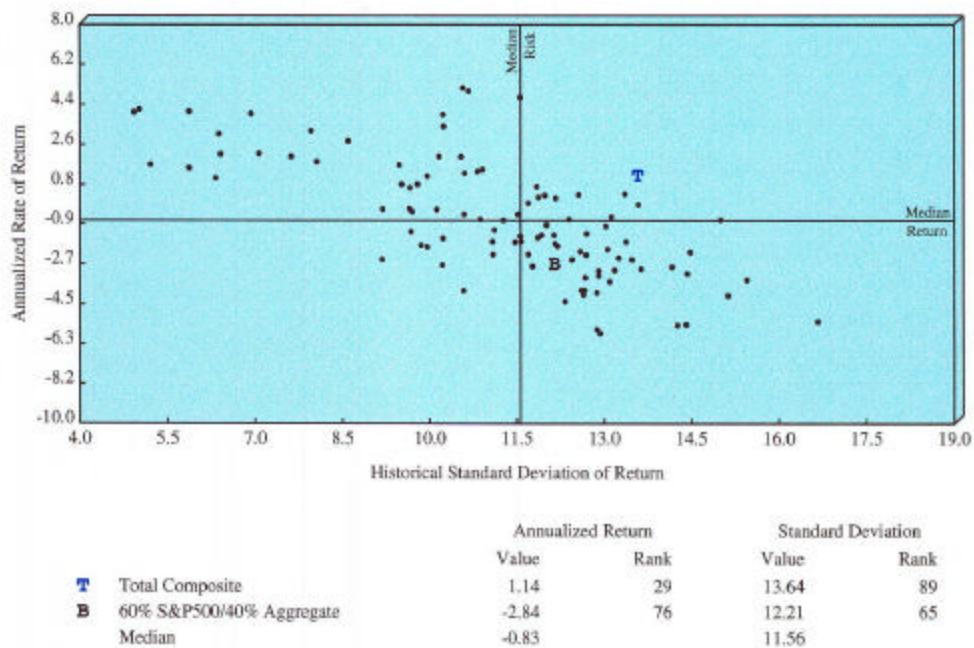


As the universe comparison above shows, the plan is in the top 1% of all public pension plan sponsors over the last five years, and top 2% over the last four years (the yellow bar represents the universe of public plan returns from the 5th percentile to the 95th percentile, the bar represents the median and the red triangle is the result of Teacher's Pension). This strong performance can be sourced to the June 30, 2000 fiscal year results of Gardner Lewis and Private Capital, which had returns of 60.7% and 45.1%, respectively. Specifically, the fourth quarter of calendar year 2000 produced returns for these two managers of 42.45% and 32.44%. That quarter is the source of the outstanding five year performance of the fund. More recent returns are still respectable, at or slightly above the median for all plans over the last two and three years, respectively.

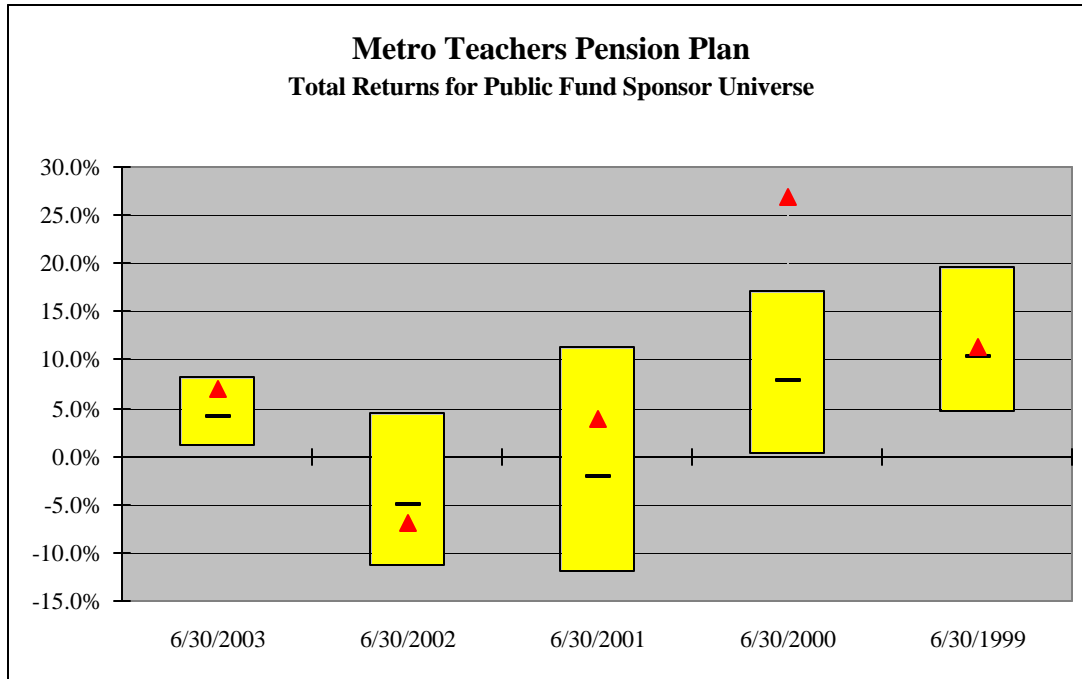
The plan experienced an extremely high level of risk over the same five years. The fund ranked in the 95th percentile in terms of risk against all public pension plans for the five year period ended June 30, 2003.



Interestingly, removing the extreme results of the two managers by looking at only the last three years, where returns ranked at the 29th percentile shows risk still very high at the 89th percentile.



Returns on a fiscal year basis are presented below. Again, the outperformance of the June 2000 fiscal year can be seen clearly. The plan ranked as follows for the years 1999 through 2003: 43rd (1999), 1st (2000), 17th (2001), 78th (2002) and 8th (2003).



Generally, the fund has tended to perform at or above its benchmark, while exhibiting materially higher levels of risk as compared to its peers.