

Metro

Investment Management Program

August 1996



METRO

Alexis Dow, CPA
Metro Auditor



METRO

OFFICE OF THE AUDITOR

August 2, 1996

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Councilor Ruth McFarland	Councilor Ed Washington

Re: Review of Metro's Investment Management Program.

Dear Mr. Burton and Councilors:

The accompanying report covers an independent review of Metro's investment management program. The work on this project was performed under contract by Arras Advisory Services, an independent consulting firm.

The report finds that Metro's investment portfolio is well managed. Practice conforms to policy guidelines, there is a diligent effort to maximize yields while maintaining liquidity and preserving capital, and control practices appear adequate. No serious shortcomings in the program are identified. Recommendations are made to enhance development of the program as it evolves.

The report has been reviewed with the Executive Officer, who is Metro's Investment Officer, the General Counsel, and the Chief Financial Officer. They generally agree with the report's findings and recommendations. The last section of this report presents the written response of Executive Officer Burton.

We appreciate the cooperation and assistance provided by the Executive Officer, Chief Financial Officer and Investment Analyst.

Very truly yours,

A handwritten signature in cursive script that reads "Alexis Dow".

Alexis Dow, CPA
Metro Auditor

Metro's Investment Management Program

Report presented to Metro Auditor Alexis Dow, CPA

ARRAS ADVISORY ASSOCIATES

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Executive Summary

Metro's cash investments have increased dramatically over the past year and are expected to continue to be in the range of \$220-230 million through the next twelve months.

The investment portfolio is well managed, inasmuch as:

- Practice conforms with policy guidelines.
- There is a diligent effort to maximize yield using methods consistent with the overriding objectives of safety and liquidity.
- Performance has exceeded return standards in all but two of the past twenty four months.
- Control practices appear adequate. These are evaluated by Metro's external auditors annually during their examination of Metro's financial statements.

Since it is expected that Metro will continue to grow, periodic reconsideration of policy and procedures is warranted. There is historical evidence that refinements have been introduced as the investment program has developed. Recommendations here represent possible next steps in this evolutionary process.

These enhancements include:

- Clarification of roles and responsibilities.
- Possible revision of criteria for qualifying financial institutions.
- Introduction of means of verifying yield calculations.
- Completion of the Code's investment policy update already underway.
- Review of the cash forecasting activity.
- Possible reorientation of Metro's Investment Advisory Board meeting agendas.
- Increased access to investment-related information.
- Possible revision of the format used for quarterly investment reports to make its information more readily accessible.

Objectives, Scope and Methodology

Our purpose was to evaluate Metro's investment management program.

A comprehensive response to this question involves four areas of inquiry:

- compliance,
- approach to instrument selection and portfolio design,
- investment performance, and
- suitability of internal control practices.

As part of Metro's annual financial statement audit, auditors KPMG Peat Marwick evaluate Metro's investment process and controls. Therefore, the emphasis in this report will be placed on the other issues outlined above to avoid duplication of effort.

We consulted multiple sources during the course of this effort. We reviewed various written materials, and also conducted personal and phone interviews with Metro staff, members of Metro's Investment Advisory Board, KPMG Peat Marwick's audit team, as well as others who provided perspective on these matters.

Background

Several generally predictable sources generate the cash that accumulates in the investment pool. Cash raised by means of bonds issued to fund large projects supplements these governmental and proprietary sources.

Until the summer of 1995 Metro's investment portfolio averaged approximately \$70 million. With the issuance of bonds related to the Open Spaces program, the total balance has increased to over \$200 million. Current forecasts suggest that approximately \$220-230 million will be in the portfolio through June of 1997.

Since the timing of cash needs varies, cash accumulated is invested in accordance with a policy stated in Metro's Code. The Code addresses issues such as objectives; authority and responsibility; diversification; selection processes; safekeeping; and reporting requirements. Preservation of the capital is the primary goal stated in the Code. Ready liquidity is the next highest priority, followed by the best yield consistent with the two higher goals. These particular objectives are commonly found in the investment policies of public sector entities like Metro and often are referred to with the abbreviated term "SLY" — safety, liquidity and yield.

Findings

Overall, we found that Metro has developed its investment management program very well. There appear to be no serious shortcomings in the strategy or routine related to the investment program.

Compliance

Oregon law requires all government entities within the state to conform to the investment guidelines set forth in Chapter 294 of the statutes. Metro has adopted these guidelines in large part as Chapter 2.06 of its own code.

We reviewed the Oregon statute and Chapter 2.06 of the Metro Code, as well as Metro's Quarterly Investment Reports for the periods ended June 1994 through March of 1996.

With respect to the technical requirements of the Code (such as appointment of an investment advisory board, the provision of periodic reports, the type of instruments authorized for investments), the investment management program is in compliance with all but one provision. That provision, in Section 2.06.140, requires a written annual evaluation of the program's overall performance by the Investment Advisory Board. Although the Investment Advisory Board does not actually prepare such a report, the requirement is substantially met quarterly since the Investment Advisory Board reviews and accepts every quarterly report authored by the Investment Manager before the report is forwarded by the Investment Officer to the Council.

Based on figures accepted from the Investment Manager, there is no question that Metro is in compliance with Chapter 2.06 of the Code. It should be noted that the historical calculations that we reviewed were prepared by Metro's Investment Manager. The same calculations, done as of June 30, 1996, will be tested by KPMG Peat Marwick as part of its current annual audit of Metro's financial statements. These calculations are based on conventional formulas and disinterested third party information.

Approach to Instrument Selection and Portfolio Design

Research has shown that the overriding consideration in a portfolio with Metro's investment objectives is diversification and that principle clearly is acknowledged in the Code. As noted above, Metro's practice conforms with its Code.

Key issues related to diversification are instrument type, maturity, and the number and quality of parties to the transaction.

Metro's investment choices are rather narrowly proscribed by the Code. Acceptable instruments include what are generally acknowledged as conventional short-term investment vehicles, such as direct obligations of the US Government, obligations of US government-sponsored agencies, Commercial Paper, Certificates of Deposits from financial institutions and Bankers Acceptances.

Maturity limits are distinguished in the Code, based on the intended use of the funds. Maturities for securities purchased in connection with specific long term projects are matched to the expected timetable of needs for those projects. Of the total portfolio on June 28, 1996 of \$225 million, the aggregate funds dedicated to specific projects totaled \$143 million. The \$82 million balance of the portfolio were funds not required for immediate expenditure. Extension of the current eighteen month maturity limit for the funds not immediately required presently is under discussion.

Diversification with respect to financial obligors has three aspects in the Metro Code: the variety of issues, the financial strength of the individual obligor and the maximum amount of investment with any single institution. Specific investment instruments are named and allocation limits set for many of the categories.

Portfolio design refers to its balance and emphasis within the proscribed boundaries, as gauged by factors like maturities, sponsorship, etc. Such weightings are a matter of judgment, based on both practical and strategic considerations such as liquidity needs or perceived trends in the capital markets. Metro's Investment Manager undertakes a broad effort to inform his perspective and recommendations concerning portfolio weightings by gathering information from a variety of respected third party sources and by seeking the opinion of others who have professional training and/or interest in relevant issues. We therefore conclude that there is a serious effort to address not only the primary issues of safety and liquidity, but also the matter of optimal performance.

Investment Performance

The first fundamental step for thoughtful investors is to identify the point on the risk/reward spectrum that best suits their objectives and temperament prior to taking action. Once established, performance standards or targets can be set. These usually are stated in relation to published indices of widely traded securities.

Metro's Code states that portfolio return must regularly exceed the average return on 90 day US Treasury Bills, using prudence and assuming the primary objectives of safety and liquidity are met. This performance is measured by comparing the average annualized yield at month end against the performance of the 90-day US Treasury Bill issue maturing closest to 90 days from month end and the Local Government Investment Pool's monthly average yield. Yield is defined as interest income.

Portfolio performance since June 1994 has been exceeded these external targets in all but two months.

Control Practice

Based on our high level review of the process with the Investment Manager and discussion with a member of the KPMG Peat Marwick audit team, we conclude that the control practices related to Metro's investment activities generally appear to be appropriate and sound. In the interest of avoiding unnecessary duplication, we reviewed these activities verbally for reasonableness and understanding to the extent that it was necessary to have a balanced perspective on the investment activities.

Recommendations

As with any organization that has sustained and managed substantial, ongoing growth, periodic consideration of program adjustments and refinements is worthwhile. The fact that this report recommends some revisions in policy or practice is not intended to detract from the quality of the program already in place but is intended to enhance an already satisfactory program.

Enhancements to Metro's investment program that merit further consideration include these issues:

- 1. Clarification of roles and responsibilities—particularly the interrelationships among roles—would strengthen control and may improve investment performance marginally.**

The current incumbent in the position of Investment Manager brings significant relevant expertise and seasoning to the role. As the role continues to evolve and time permits, it would be wise to integrate the action steps taken in the course of performing the duties of the position into a single reference document. This would facilitate both temporary back-up and succession, as well as the mutual understanding of the scope of authority for purposes of indemnification under Code Section 2.06.100.

As part of this endeavor, we recommend:

- identifying effective methods of supervising an incumbent in the role of Investment Manager with respect to both the technical and conceptual aspects of the position. At present it appears unclear who among those with formal responsibility for the outcome of the investment effort has sufficient experience, or views it as their role, to add value to the incumbent's thinking. It is acknowledged that it well may be impractical and unnecessarily costly to achieve full resolution on this point.
- specifying what responsibility the CFO or other superiors to the Investment Manager actually have for the investment activities, according to the Executive Officer (who also serves as Metro's Investment Officer) and the Council.
- determining how the Investment Advisory Board's experience can be more fully tapped on behalf of Metro. It may be beneficial to move discussion beyond rate predictions, strategy validation and portfolio performance review to discussion of relevant issues where their

professional experience or current involvement in other forums enables them to add value to Metro's thinking or practices.

- formally documenting appointment of a back-up investment manager who has periodic opportunity for hands-on training.

2. Explore and reconcile the Code's stated priority on safety of the cash invested with its broad criteria for qualifying a financial institution.

Currently, good judgment is reflected in the selection of financial institutions for deposits and interest-bearing investments. No doubt this reflects the extensive experience the current incumbent brings to the Investment Manager position. However, there is a discrepancy between current procedures and the Code, which should be explored and reconciled so that a competent replacement would be capable of determining the acceptability of a bank's financial strength by relying solely on Code requirements.

Assuming that preservation of capital remains Metro's highest priority, we recommend that the Code articulate the more rigorous criteria actually applied so that there is clear, common understanding on this point. This issue no doubt is particularly sensitive for a public agency which faces the general expectation that it support local institutions. And, there is some sense among those consulted that actual loss of funds is a remote possibility, given the requirement of partial collateralization and FDIC insurance. In this case, additional factors to consider include the amount of management time required to recover funds from a failed institution, and to attend to the media or other interest groups who may focus on such an event.

3. As a control measure, find an effective means of verifying the yield calculations made by the Investment Manager on a monthly or, at least quarterly, basis.

Although the incumbent Investment Manager is meticulous in his work, and the total portfolio is reconciled by the accounting staff once transactions are completed and calculations also are tested by KPMG Peat Marwick once a year, the Investment Manager currently is in the position of checking all of his own calculations.

The formulas and third-party sources of the information used in yield calculations appear valid. However, given the sheer number of calculations

made during the course of a year, there is a possibility of a simple mistake, such as a transcription error, which could skew performance reports.

While adding cumbersome procedures to already leanly staffed activities is undesirable, it is unlikely to require much time or effort for someone in the accounting department to double check the calculations by doing a periodic sampling of the work on a regular basis. Accordingly, we recommend adoption of procedures to periodically verify a sample of these calculations.

4. Complete the effort already underway to update the Code's investment policy.

Extension of the maturity limits from eighteen to sixty months is well advised given the consistent and stable level of cash generated by operations and the predictability of cash expenditures.

Since amendments to the current Policy are to be raised with the Council, there is an opportunity to clean up housekeeping matters with little additional time or attention required on the part of the Council.

Review of the investment policies or guidelines from other organizations or entities suggest consideration be given to these revisions:

- Prohibit commitment to invest funds more than 14 days in advance of settlement date.
- Prohibit agreeing to invest funds or sell securities for a fee other than interest.
- Prohibit lending of securities, unless authorized by an investment policy that has been reviewed by the Short Term Fund Board.
- Clarify the definition of yield as it is used to calculate performance (average annualized yield).
- Identify the persons responsible for generating individual reports by position.
- Add expectations regarding ethics/conflict of interest.
- Add more specifics of bank/dealer qualification.
- Add clear delegation of authority to subordinate staff.

- Have Metro attorneys verify that the code conforms with Oregon statutes.

Review of sample policies suggests that the Code could be made somewhat more user-friendly with formatting and organizational changes.

5. Evaluate the efficacy of the current cash forecasting effort in meeting Metro's dual investment objectives of liquidity and the maximum investment return consistent with capital preservation.

This issue was raised as a source of concern. It may only be a matter of confusion. Exploration of the matter with the Investment Manager, who is the person principally responsible for consolidating relevant information from internal sources, suggests that the process in place well may be adequate, given the high level of predictability in revenues and expenditures. Therefore, the action necessary may be limited to confirming that the process in place has been reliable with respect to intermediate term cash flows. This will become more of a focus when the Code is revised to permit maturities longer than eighteen months for cash not earmarked for specific projects. Accordingly, we recommend:

- documenting the internal sources of information and steps already taken in the course of consolidating the information into a forecast, so that its comprehensiveness is apparent
- communicating the scope and historical reliability of the process in place to interested parties, such as internal Metro staff, and the Investment Advisory Board.

6. Evaluate the use of time in the Investment Advisory Board meetings and contemplate reorienting the agenda to allow more dialogue on issues and perhaps somewhat less time on open-ended topics like interest rate trends.

7. Evaluate the cost and time effectiveness of the sources currently used for information needed in developing investment strategy.

Metro has an investment portfolio of significant size. Up-to-date awareness of current market dynamics is essential for maximum returns in a situation where selection is constrained by other objectives. Accordingly, we recommend giving the Investment Manager access to the Internet. This

allows an opportunity to gather information inexpensively from a vast number of diverse sources. There already is a Web page on government investing which could provide very relevant and timely information.

8. Thoughtfully analyze the format used for the quarterly investment reports from the perspective of information accessibility.

Presenting the information imbedded in the quarterly reports in layers (e.g. concise overview or highlights progressing to detailed account breakdowns) would facilitate absorption of the information and make it easier for readers to develop perspective.

In evaluating the visual displays, bear in mind that comparisons, changes and causes should be apparent, and straightforward design with rich, accurate detail create a winning formula.

Possible sources of ideas for modifications to the current presentation format are Edward Tufte's books entitled *The Visual Display of Quantitative Information* and/or *Envisioning Information*.

Response to the Report

**METRO**

Date: July 31, 1996
To: Alexis Dow, CPA, Metro Auditor
From: Mike Burton, Executive Officer *MBurton*
Re: Response to Investment Management Program Review

I have received the audit report on the Investment Management Program dated August 1996. Thank you for the opportunity to respond to this report. The following constitutes the response of the Executive Officer and staff to the report.

1. **Recommendation: Clarification of roles and responsibilities - particularly the interrelationships among roles - would strengthen control and may improve investment performance marginally.**
 - a) Both the Accounting Manager and the Financial Control and Reporting Supervisor have been attending the quarterly Investment Advisory Board (IAB) meetings to broaden their knowledge.
 - b) The reporting structure has been clarified (see attached). Temporary back-up and succession will also be defined.
 - c) The current IAB membership is especially valuable to Metro in terms of relevant experience. They have demonstrated a consistent desire to add value to our thinking and practices. Starting with the quarterly meeting to be held July 31, 1996, an agenda item will address relevant issues other than rate predictions, strategy validation and portfolio performance.
 - d) The appointment of a back-up investment manager will be defined as described above.

Timetable: August 31, 1996 - Investment Program reference document
July 31, 1996 - IAB relevant issue discussion

2. **Recommendation: Explore and reconcile the Code's stated priority on safety of the cash invested with its broad criteria for qualifying a financial institution.**

The goal of this recommendation is to further reduce the risk of loss of principal from deposits and interest-bearing investments with banks. Management will expand its Administrative Procedures to include published independent rating minimums for both existing and new banks. This would allow flexibility to adapt to future revisions in the rating methods without the necessity to change code.

Timetable: August 31, 1996 - Revised Administrative Procedures

- 3. Recommendation: As a control Measure, find an effective means of verifying the yield calculation made by the Investment Manager on a monthly or, at least quarterly, basis.**

This recommendation is accepted as a method of verifying accuracy in the booking of investments and of yield calculations. Accounting Services Division activities include internal audit duties which will be expanded to test the booking of investments.

Timetable: October 20, 1996

- 4. Recommendation: Complete the effort already underway to update the Code's investment policy.**

Nine specific items are listed in this recommendation and they will be included in either the investment policy revision or in Administrative Procedures as appropriate.

Timetable: September 30, 1996 - Revised code to Short Term Fund Board for review

- 5. Recommendation: Evaluate the efficacy of the current cash forecasting effort in meeting Metro's dual investment objectives of liquidity and the maximum investment return consistent with capital preservation.**

Over the last two years, pooled cash has averaged \$67 million. A significant portion of this amount is kept in the Local Government Investment Pool (LGIP) for liquidity based on planned short term expenditures. The remainder is invested in a laddered portfolio such that a stable flow of funds matures monthly.

Significant and extraordinary revenues and expenses are identified from the adopted budget and related adjustments are made in investment maturities. Department budget managers are interviewed to learn of significant plans beyond the current

adopted budget year. Further investment maturity adjustments are made based on these interviews.

This brief and general outline defines the forecast methodology. The specifics will be detailed and reviewed with the IAB in order to improve their comfort level with Metro's liquidity position and to identify potential improvements to cash forecasting.

Timetable: October 20, 1996 - Completion of detailed cash flow forecast

6. **Recommendation: Evaluate the use of time in the Investment Advisory Board meetings and contemplate reorienting the agendas to allow more dialogue on issues and perhaps somewhat less time on open-ended topics like interest rate trends.**

The IAB meeting agenda will provide opportunity to discuss relevant issues beyond interest rate trends.

Timetable: July 31, 1996 - IAB relevant issue discussion

7. **Recommendation: Evaluate the cost and time effectiveness of the sources currently used for information needed in developing investment strategy.**

The Investment Manager presently uses *The Wall Street Journal*, Reuters News Service, *Municipal Market Review* from Lehman Brothers, *Public Investor* from Government Finance Officers Association (GFOA), *In The Vanguard* from Vanguard Group, weekly bulletins from Morgan Stanley & Co., and daily news bulletins from the Economic Department of Bank of America as information sources. These tools provide comment regarding investment products and strategies, as well as current prices and yield curves.

The recent GFOA national conference held in Portland emphasized the advantages of the Internet as an information source. The Investment Manager will evaluate cost and availability of funds in seeking access to Metro's internet as an additional resource.

Timetable: July 31, 1996 - Request for software installation

8. **Recommendation: Thoughtfully analyze the format used for the quarterly investment reports from the perspective of information accessibility.**

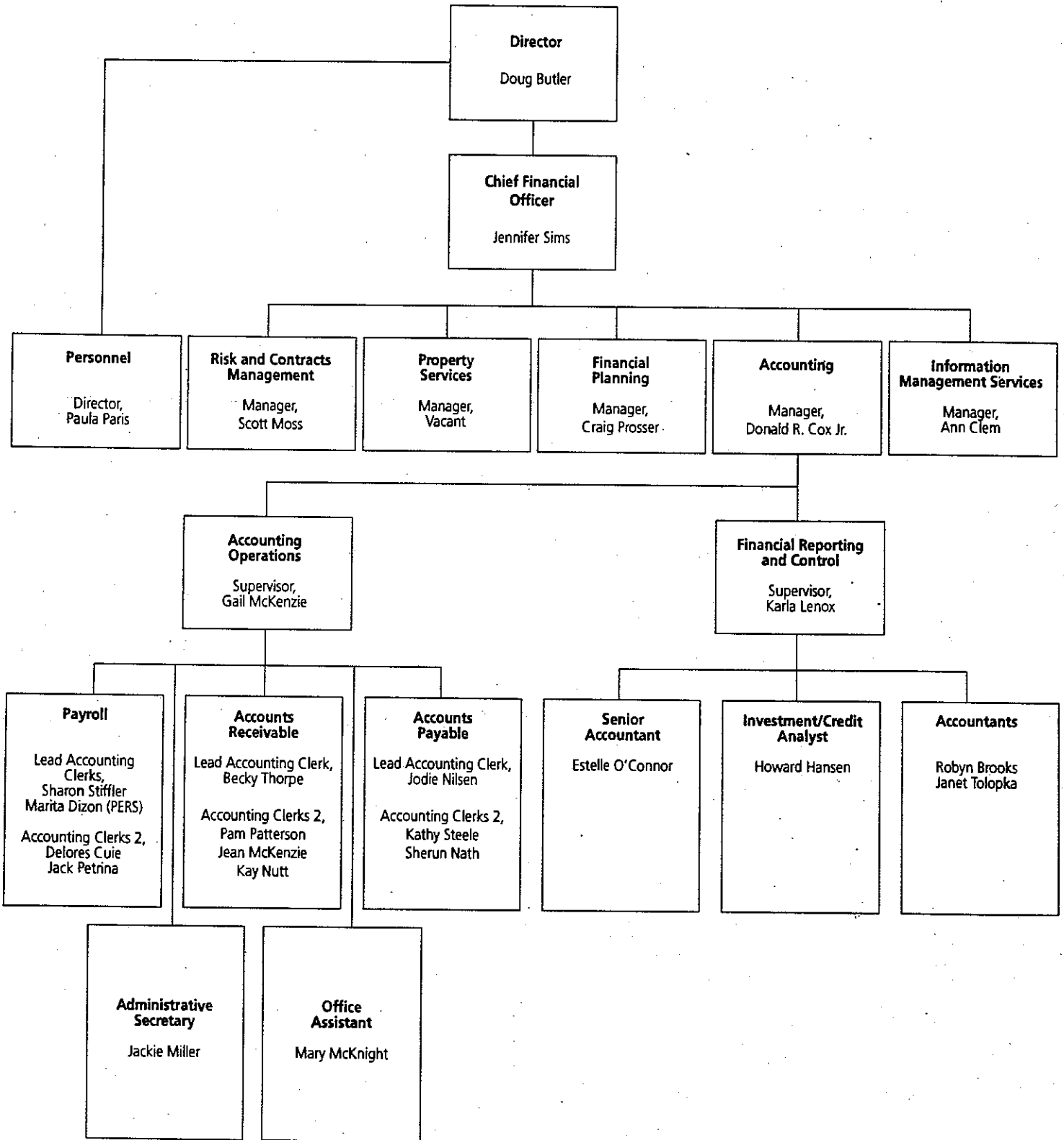
Portrayal of data in the quarterly Investment Report is intended to confirm adherence to code limitations. The challenge of summarizing highlights while adequately displaying detail is acknowledged. The report format has experienced significant evolution in recent years, and yet there is a value to consistent presentation.

The Investment Manager will do a survey of other comparable reports and recommend changes to improve information accessibility. He will focus on providing more summary data.

To insure continuous possible improvements, Metro Creative Services staff will be surveyed for input regarding visual displays.

Timetable: August 31, 1996

ADMINISTRATIVE SERVICES DEPARTMENT AND ACCOUNTING DIVISION





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Metro Auditor Report Evaluation Form

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Suggestions for our report format: _____

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Other comments, ideas, thoughts: _____

Name (optional): _____

Thanks for taking the time to help us.

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