# FINAL AUDIT REPORT



# Audit of Gainesville Regional Utilities Non-Pension Investments

A Report to the City Commission

**Mayor** Lauren Poe

Mayor Pro-Tem Harvey Budd

### **Commission Members**

David Arreola

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Harvey Ward Jr

Helen Warren

City of Gainesville Office of the City Auditor

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November 15, 2017

#### **EXECUTIVE SUMMARY**

November 15, 2017



## Why We Did This Engagement

Gainesville Regional Utilities requires operating and other restricted funds in order to carry out its operations, pay for capital projects, hold customer deposit funds and other needs. There is an inherent risk that funds will not be managed in an optimum manner.

#### **Related Facts**

- On December 31, 2016, GRU had:
  - -Operating related investments of \$59,192,198
  - Restricted investments of \$162,806,089
  - -A total investment portfolio of \$221,998,287.
- The cash portion of the total portfolio was 25.6% and other investments were 74.4% of the portfolio.

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# Audit of Gainesville Regional Utilities Non-Pension Investments

#### **BACKGROUND**

Gainesville Regional Utilities (GRU) manages an investment portfolio of over two-hundred million dollars. Investment are held for various reasons that include customer deposits held until returned, rate stabilization funds held for use with the rate stabilization program, and funds accumulated for debt service, capital projects, and equipment purchases used in GRU operations. The City Auditor Office retained an external third-party audit firm to perform an audit of the management, reporting on, and internal control environment of the investment portfolio. The scope of the audit included the period of January 1, 2016 through December 31, 2016.

#### **OBJECTIVES**

The objectives of the engagement were to determine the following:

- Examine the overall internal control environment of the investment portfolio management.
- Examine the GRU Investment Policy for consistency and adherence to best practices.
- Determine the accuracy of periodic reports of the investment portfolio.
- Test sample transactions to determine if reasonable, allowable, and consistent with the GRU Investment Policy.

#### WHAT WAS FOUND

- During the period under review (calendar year 2016) segregation of duties was an issue due to the assignment of only one staff member to perform one-hundred percent of all activities as well as other activities related to debt and derivative instruments.
- The portfolio management process could be strengthened by enhancing the reporting process to make it more frequent and to include key metrics.
- A substantial reliance for the restricted funds was provided by manual spreadsheets which are inherently prone to spreadsheet error.

Note: During the planning and fieldwork stage of the audit, management at GRU was already addressing the most important of the key issues noted by adding additional manpower and oversight to the process as well as implementing the SAP financial module (FMIS) to replace the overreliance on spreadsheets for restricted fund activity.

This engagement was performed in accordance with the institute for Internal Auditors International Professional Practices Framework (IPFF).

# Gainesville Regional Utilities Non-Pension Investment Process Audit Internal Audit Report: September 29, 2017



Experis US, Inc. 7000 Central Parkway Atlanta, GA 30328



# **INTERNAL AUDIT REPORT INDEX**

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#### I. Background

Gainesville Regional Utilities ("GRU") is a utility company that provides gas, electric and other services to the citizens and other constituents of its owner, the City of Gainesville, Florida (the "City"). Total cash and investments (the "GRU Portfolio") of GRU amounted to \$222 million as of December 31, 2016. GRU is required to follow the provisions of the Amended and Restated Utilities System Revenue Bond Resolution adopted by the City on January 30, 2003 (the "Resolution"). The terms of the Resolution requires GRU to set aside certain cash balances to be used for specific purposes ("Restricted Funds"). Funds that are not restricted are held in the Operating Fund.

The GRU Portfolio as of December 31, 2016 is summarized as follows:

Category	Cash	Investments	Total	Percentage
Operating	\$29,948,055	\$29,244,143	\$59,192,198	26.7%
Restricted	\$26,848,259	\$135,957,830	\$162,806,089	73.3%
Total	\$56,796,314	\$165,201,973	\$221,998,287	100.0%

The following is a summary of the Restricted Fund balances as of December 31, 2016:

Fund	Purpose	Balance
Rate Stabilization	To stabilize energy costs over multi-year period. GRU collects funds from customers and releases to revenue in future periods	\$71,764,961
Utility Plant Improvement	To pay for capital projects, debt service, redemption of bonds, repayment of bonds, and operation and maintenance expenses as applicable	51,158,093
Construction	To accumulate funds for the cost of acquisition and construction of the system	17,168,131
Debt Service	To accumulate funds to provide for the payment of principal and interest on or redeem outstanding debt	13,087,539
Utility Meters	To hold deposit monies received from customers on system equipment	9,627,365
Total		\$162,806,089

The GRU Portfolio must be managed in accordance with the terms of the GRU Investment Policy dated June 1, 2015. The Investment Policy, which is consistent with the provisions of the Resolution, has three stated objectives: Safety of Capital, Liquidity of Funds and Yield. In order to achieve these broad objectives, specific guidelines are given around maturity limits, credit rating, and portfolio composition. The list of authorized investments ranges from U.S. Treasury and Agency securities to corporate instruments such as bonds and commercial paper. Many money market instruments are on the authorized list such as deposits, certificates of deposit, money market mutual funds, and repurchase agreements.



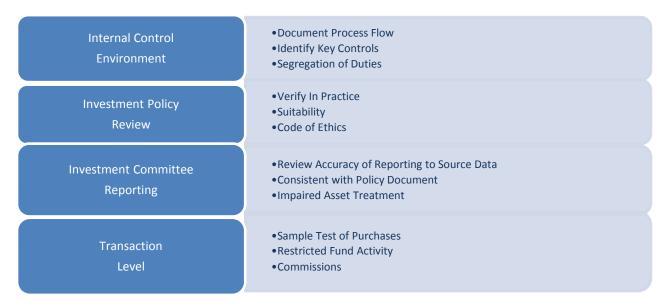
The Investment Policy limits investments to securities with terms of ten years or less and the average portfolio term may not exceed seven years. Investments are required to be rated by a nationally recognized rating agency at a minimum acceptable level at the time of purchase. The Investment Policy contains other governance-related topics such as Custodial Arrangements, Internal Controls, Ethical Standards, Reporting & Performance Measurements, Approved Dealers, and Continuing Education. Administration of the investment process falls under the responsibilities of the Chief Financial Officer of GRU. The day-to-day investment activities are administered by the members of the Finance Division.

## II. Objectives, Scope, and Methodology

Experis US, Inc. ("Experis") conducted a limited-scope internal audit of the non-pension investment process of GRU for the one year period ended December 31, 2016 (the "Audit Period"). The scope of the audit was limited to certain agreed upon procedures that were outlined in our engagement letter dated March 3, 2017. Experis was retained by the City Auditor of Gainesville to perform this review.

#### **Objectives**

The overall objective of the audit was to review the internal control environment and governance of the investment process. Specific objectives by area included:



#### Scope

Based on the objectives noted above, the scope of work performed by Experis Finance included the following:

• Documented the overall process flow for the purchasing and holding of non-pension investments.



- Identified the key internal controls present in the process, including those related to the processing of transactions as well as those related to reporting, oversight and compliance.
- Compared the current process flow and controls to the standards set by the Investment Policy.
- Verified that adequate Segregation of Duties exists throughout the investment process.
- Reviewed the Investment Policy with respect to the suitability of investments and determine whether the clarity of guidance is appropriate.
- Reviewed the controls and supporting documentation for prices paid to brokers including commissions.

In addition, Experis performed expanded procedures to include testing of the following:

- Reviewed any impaired assets to verify proper accounting treatment and disposition
- Reviewed a sample of sales of securities that took place during the audit period for compliance with existing policies, including review of gains and losses and comparisons to market prices;
- Tested additions to and disbursements from the restricted asset balances to validate activity is in compliance with appropriate policies;
- Reviewed accuracy of the latest quarterly investment summary by validating key data points to the underlying general ledger or other support; and
- Reviewed monitoring controls of personal trading to any applicable Code of Ethics.

#### Methodology

Our audit was conducted in accordance with the principles of the Institute of Internal Auditors. The audit procedures performed included the following:

- Reviewed source documentation including the Investment Policy, Investment and Debt Committee minutes, operating policies and procedures and available flow charts.
- Interviewed key personnel in order to confirm and clarify our understanding of the process flow that was determined by our review of source documentation.
- Reviewed transactions on a sample basis to determine effectiveness of procedures in place.
- Prepared and analyzed schedules of financial data based on internal financial reports provided to us by GRU.



#### III. Summary of Findings

During the course of our audit, we noted that the GRU Portfolio maintained an average quarterly balance of \$254 million in non-pension investments during the Audit Period. To add some perspective, we compiled a review of available mutual fund data showing that at least 23 mutual funds in relevant fixed income categories either approximate or are smaller than the average quarterly balance of the GRU Portfolio during the Audit Period.

A total of 335 investment purchases were processed, during the Audit Period, representing a total value of \$378 million. The weighted average maturity of these investment purchases was 1.29 years. The invested (non-cash) portion of the GRU Portfolio averaged \$204 million on a quarterly basis during the Audit Period. Using these data points, we can see that the invested portion of the GRU Portfolio had a turnover rate of 1.85 during the Audit Period. The Treasury staff that performed the investment function for GRU during the Audit Period was effectively one staff member performing 100% of all the activity required to support these assets. It should also be noted that this Treasury staff member maintained other responsibilities during this time period as well, such as managing the debt and derivative portfolio of GRU.

Our observations are set forth in the next section and relate to the following categories of Internal Control and Governance:

- Segregation of Duties
- Frequency of Management Reporting
- Enhancements to the Investment Policy Document
- Improvements to Performance Reporting

The central theme uniting these observations is that, during the Audit Period, one employee was responsible for performing the majority of key tasks related to supporting the GRU Portfolio which, given its asset size, is comparable to a stand-alone mutual fund.

During our field work, we were made aware of, two developments that may have an impact on promoting segregation of duties in the non-pension investment process for 2017 and beyond:

- 1. The Treasury team staff has been increased by two resources one senior manager and one additional staff; and
- 2. An SAP software implementation that is being used to automate some of the manual spreadsheet efforts required to support the Restricted Fund activity.

Given the current level of resources available to support the GRU Portfolio, we encourage management to consider using external mutual fund offerings as an alternative to managing the GRU Portfolio based exclusively on the selection of individual securities. In making this recommendation, we cite the following potential benefits:



- Economies of Scale (eliminate the time spent to research, execute and process up to several hundred security purchase transactions annually).
- Take advantage of the size and scale of the research and portfolio management skills available at large investment mutual fund companies at reasonable costs.
- Allow GRU Treasury staff to focus more on performance reporting, governance, and technology initiatives.
- Improve Segregation of Duties in the investment process by eliminating or simplifying the transaction authorization process.

The procedures performed included an independent review of the monthly custodian account reconciliation performed by the GRU Accounting Group as of December 31, 2016. Our review showed that all balances were found to be accurately reported and no exceptions were noted. It was also observed that GRU underwent its annual external audit as of September 30, 2016 and that its external auditors reported no issues regarding the investment process in their report.

Our fieldwork commenced on August 7, 2017 and was completed on September 1, 2017. A draft report of potential audit observations was submitted to GRU's Rates and Investments Director on September 1, 2017. Our observations, as well as our recommendations, are designed to assist management in carrying out their responsibilities in the most effective and efficient manner possible.

#### IV. Audit Issues

Segregation of duties within the Treasury function requires strengthening. The Treasury Manager
is responsible for executing investment purchase transactions, recording these transactions in
GRU systems, and has primary account authority over the third party custodian. The current
structure does not maximize the Segregation of Duties concept that is a key principle of internal
controls to prevent/detect errors, omissions or fraud. There is also a high degree of Key Person
Risk to GRU if the Treasury Manager were suddenly unavailable to perform the existing function.
(High Risk)

#### **Observations**

We documented the overall process flow for the purchasing on non-pension investments. In addition, we performed an evaluation of Segregation of Duties in the process in order to identify any conflicting duties between roles that support the Investment Purchase Process. Our analysis shows that the Treasury Manager performs the following tasks in the normal course of business activity:

- 1. Monitors available funds and determines the need to purchase an investment.
- 2. Researches and chooses from available investment opportunities (according to policy guidelines).
- 3. Executes the transaction with the approved broker/dealer.



- 4. Notifies the custodian (third party) of the purchase.
- 5. Communicates with the custodian or broker/dealer on any trade or settlement discrepancies.
- 6. Inputs the transaction into the GRU investment sub-ledger system.
- 7. Uses the output from the sub-ledger to provide Accounting with financial data at month-end that is used to close the General Ledger
- 8. Prepares the quarterly Investment and Debt Committee Report that is used to review performance of the portfolio as well as monitor compliance with limits established by the Investment Policy.

Assigning different people the responsibilities of authorizing transactions, recording transactions and maintaining custody of assets is intended to reduce the opportunities to allow any one individual to be in a position to both perpetrate and conceal errors, irregularities or fraud in the normal course of his or her duties.

#### Recommendations

Item#	Description
<b>1</b> a	Consider shifting, at least partially, the security selection and individual purchase function to an investment management firms through the use of high quality mutual funds that are consistent with the Investment Policy and GRU's liquidity requirements.
1b	Each phase of the new trade process should be captured via supporting documentation which is then aggregated with the daily investment sheet and passed to a second person for a completeness review (including limit testing against the portfolio regarding the impact of the new trade). The Rates and Investments Director should then sign-off on the daily investment sheet package.
1c	Post-trade copies of sub-ledger reports should be retained so that compliance with portfolio limits can be substantiated on dates that are not quarter-end or month-end dates.
1d	The Treasury Manager compiles the quarterly report that goes to the Investment and Debt Committee. The financial data used to prepare the report are obtained from the sub-ledger system (controlled by the Treasury Manager). The integrity of the report would be strengthened if GRU were to transfer certain report preparation tasks to Accounting or have Accounting certify (notate) that the presented data is consistent with the General Ledger and that they have independently reconciled to the Custodian's records. Accounting should also have direct access to all custodian reports and have read-only access to the sub-ledger system in order to compile and reconcile financial data with complete independence.
Item#	Description



1e	Validation of portfolio limit compliance should always be performed by a person not involved in the actual purchase of the investment transactions. The Treasury Analyst or the Rates and Investments Director may be best to perform this task.	
1f	Management has properly taken the position that all investment purchases should be settled via the "Delivery versus Payment" method with each of its two custodian banks. Under this method, funds are only released from GRU's account when the matching security CUSIP has been delivered electronically to the custodian account. The legal documents that support these relationships should be updated to clarify GRU's intent that the foregoing is the only settlement method permitted under the relationship.	
1g	ider cross training other individuals on the current Treasury Manager's onsibilities to ensure the ability to continue the position's activities should the sury Manager leave GRU or transfer to another area.	

2. The portfolio management reporting process requires strengthening. Portfolio management reporting should be more frequent and timely to ensure that senior management is made aware of any key portfolio developments that are occurring, including the status of compliance with portfolio limits. This will enable senior management to apply their knowledge and question results that may appear to be inconsistent with expectations. Currently, the formal reporting on the portfolio takes place on a quarterly basis. (High Risk)

#### **Observation**

Our review of the investment purchase process indicates that there are two primary detective controls: (i) the monthly Custodian to General Ledger Reconciliation performed by Accounting and (ii) review of the Investment and Debt Committee financial report that is prepared on a quarterly basis (Note: the Segregation of Duties issue noted in Issue 1 impacts the effectiveness of these control procedures). In order for management to be fully abreast of key events occurring in the portfolio, reporting of key metrics should be performed more frequently than quarterly. Important items such as compliance with limits, new securities purchased, impending maturities, and cash flow requirements should be formally reported on a more frequent basis in order to identify issues or areas of concern more timely.



#### Recommendations

Item#	Description
2a	Design a short form report that covers existing positions, new trades, yields, liquidity and limits without commentary that is distributed after each new trade or at least on a weekly basis. This short form report should be distributed to at least the first level of senior management, the Rates and Investments Director. Doing so will establish the key element of management oversight at the earliest possible point in time.
2b	The data required for the Investment and Debt Committee Quarterly Report is compiled monthly but only distributed to senior finance management on a quarterly basis. We recommend issuing a condensed version of the report for each interim month in order to allow senior management to be in a position to add oversight to the control of the investment portfolio at an earlier point in time.

3. The Investment Policy requires strengthening in several areas such as Annual Review and Approval; Suitability of Assets and Disposition of Impaired Assets. Compliance with the existing Investment Policy document can be strengthened in other areas as well: Cash Flow Requirement and Investment Objective Reporting; Clarifying Delegated Authorities, and the Code of Ethics. (Medium Risk)

#### **Observation**

The Investment Policy is one of the two key governance documents regarding the administration of the GRU Investment Portfolio. We compared the contents of the Investment Policy to the current investment process as well as leading practices in investment management and noted several areas where compliance with the policy, or the contents of the policy itself, can be improved. As noted below, the policy itself can be improved in the areas of annual review and approval, delegated authorities, suitability of assets, and impairment. Areas where compliance with the existing policy can be strengthened include the matching of cash flow requirements, reporting on investment objectives, and documenting internal controls.



#### Recommendations

	endations 	
Item #	Description	
3a	Periodic Review and Approval – The Investment Policy should be reviewed, updated and approved by the CFO on an annual basis. GRU should use this as an opportunity to revisit the policy and make any changes needed to continue meeting its investment needs and update names, titles and responsibilities of individuals performing the investment process that may have changed or become outdated. After approval by the CFO, the approved policy document should then be submitted to the General Manager of Utilities.	
3b	Delegated Authority – The Investment Policy, or an appropriate written supplement, should be specific as to the individuals in the organization that have received delegated authority from the CFO as permitted under the policy. This section should also include any appropriate transaction limits for the individual. For example, Treasury Manager can execute purchases up to \$10 million with any purchase above that amount preapproved by the Rates and Investments Director. The annual Investment Policy update should also include the then current list of approved trading counterparties. Further, the Internal Control section of the Investment Policy (Page 11) allows the CFO to accept bank receipts in lieu of securities as collateral for short term cash loans (repo). Given the current Segregation of Duties that exist in this process, this provision should be removed from the Investment Policy as it increases the potential for loss due to errors, omissions or fraud.	
3c	Suitability of Assets – The current version of the Investment Policy permits the purchase of Structured Notes and Private Placements, as long as allowed tenor and credit criteria are met. Language should be added to the Investment Policy that, notwithstanding any other terms of the Investment Policy, states that investments that contain any speculative elements, such as leverage or exposure to non-interest rate returns, are not allowed.	
3d	Cash Flow Requirements – The Investment Policy requires that "the maturity schedule of the portfolio will provide sufficient liquidity to meet the budgeted operating and capital requirements and to meet other cash requirements, which might reasonably be expected." At present, the cash requirements are monitored informally, and are not subject to any readily available quantification sources. At a minimum, the Investment and Debt Committee Quarterly Report should include an estimate of future cash flow requirements and compare it to the currently presented schedule of asset cash flows.	
3e	Investment Objectives (Yield): One of the stated objectives of the Investment Policy is that the investment program will seek to provide returns commensurate with risk limitations and liquidity needs identified by the program. Our review of the Investment and Debt Quarterly Report shows that GRU constructs the risk profile of the portfolio given management's view of the current interest rate environment. In order to strengthen the accountability and transparency of the portfolio management, GRU should calculate a "maximum return model" portfolio allowable under the terms of the Investment Policy and then reflect the management decision to not carry risk at that	



	level.	
Item #	Description	
3f	Impairment/Downgrade/Default – The existing language in the Investment Policy only requires GRU to take action on an underperforming security if an event of default has actually occurred. It would be prudent to have a policy that requires management to take preventative actions in case a security loses a particular rating or is producing substandard returns subject to final decision by the CFO.	
3g	substandard returns subject to final decision by the CFO.  Code of Ethics/Personal Trading – The Investment Policy contains a section covering Prudence & Ethical Standards. The clause states simply that officers and employees will not engage in nor give the appearance of engaging in personal business activity that could conflict with proper execution of the investment policy and procedures, or which could impair their ability to make impartial investment decisions. Since this is an investment management function in an increasingly complex financial landscape, it would be prudent to move beyond self-regulation and make this section more robust by specifically addressing topics such as Fiduciary Responsibility; Conflicts of Interest; Personal Trading; Personal Accounts at Financial Institutions and Gifts and Entertainment. Typically, employees provide account brokerage account statements and certify compliance annually in writing to their employers.	
3h	Internal Control – The Investment Policy contains a section entitled Internal Controls. This section calls for GRU to have sufficient internal controls regarding certain key points and contemplates that compliance with these requirements should be evidenced by appropriate documentation. Our review disclosed that no particular individual document, or group of documents, that is currently designed to satisfy this requirement. Management should implement a process that addresses the relevant points included in the Investment Policy and documents the required compliance.	



4. A review of the Investment and Debt Committee Quarterly Report identified three areas that require clarity or improvement around the cash and duration components of the GRU Portfolio. (Medium Risk)

#### Observation

The GRU Portfolio (total cash plus investments) amounted to \$222 million at December 31, 2016. Cash was \$57 million (26%) leaving the investment portion ("Invested Component") of the portfolio at \$165 million (74%). The Investment and Debt Committee Quarterly Report uses two short term government bond indices as its benchmark comparisons for determining portfolio performance. The Investment and Debt Committee Quarterly Report only compares the performance of the Invested Component of the portfolio to the benchmark, ignoring the cash component from the calculation. The decision to hold a certain level of cash is generally regarded as a portfolio management decision, and the return on the cash component is generally included in the portfolio performance yield that is then compared to a benchmark.

The Investment and Debt Committee Quarterly Report (as of December 31, 2016) shows that the Average Maturity of the GRU Portfolio is 2.00 years (without regard to cash holdings). Analysis of the portfolio holdings shows that a total of \$67 million in bonds have a legal maturity date that is greater than 2 years from the reporting date (December 31, 2016). Included in this population of greater than 2 year maturities are \$41 million of bonds that are callable and may not reach their legal maturity should interest rates decline and the bonds are called by the issuer. Significantly, the callable bonds represent 61% of the bonds that are primarily contributing to the reported 2.00 year Average Maturity of the Portfolio.

Given these observations, the reported Average Maturity of the GRU Portfolio is likely to be less than the reported 2 year level, potentially altering the expected performance of the portfolio should interest rates decline.

#### Recommendations

Item	Description
4a	It is recommended that GRU determine a method of capturing the amount of "cash drag" that should be used to reduce investment yields prior to comparing them to benchmarks.
4b	The Average Maturity data point would be presented in a more accurate manner by estimating the likelihood that the bonds will be called and reflecting this in average maturity reported.
4c	Management should clarify as to whether bank deposits are included as a portfolio component in Exhibit A of the Investment Policy and should be subject to the indicated limit if they are.



# V. Risk Ratings Defined

#### **LOW RISK**

Issue(s) identified are immaterial and can be corrected in the normal course of business

#### **MEDIUM RISK**

Issue(s) were identified that if not corrected within a reasonable period of time could expose the business to financial loss and/or reputation/legal damages

#### **HIGH RISK**

Issue(s) noted have significant impact on the business and require more urgent remedial action. The issue(s) identified could result in severe financial loss and/or reputation/legal damages



#### **APPENDIX A – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN**

#### Audit Issue 1:

Segregation of duties within the Treasury function requires strengthening. The Treasury Manager is responsible for executing investment purchase transactions, recording these transactions in GRU systems, and has primary account authority over the third party custodian. The current structure does not maximize the Segregation of Duties concept that is a key principle of internal controls to prevent/detect errors, omissions or fraud. There is also a high degree of Key Person Risk to GRU if the Treasury Manager were suddenly unavailable to perform the existing function. (High Risk)

Item	Recommendation	Concurrence, Action Plan, and Proposed Completion Date
1a	Consider shifting, at least partially, the security selection and individual purchase function to an investment management firms through the use of high quality mutual funds that are consistent with the Investment Policy and GRU's liquidity requirements.	1a. Management does not concur that shifting security selection and individual purchase functions to a third party investment firm would on balance be a beneficial alternative. While it would reduce a portion of the Treasury Manager's responsibilities, the increased cost, diminished control over portfolio decisions, and impact on the ability to be nimble in our management of the portfolio outweighs the associated benefits. Management acknowledges that as with many entities of GRU's size, segregation of duties is an issue in the Treasury function. As noted in the summary of findings, GRU began to address this issue well prior to the inception of the audit. In January of 2017 an Analyst was added to the Treasury Division, and in April of 2017 a senior management position was added with oversight responsibility for the Treasury Division. Management will continue to monitor and evaluate the appropriate level of resources to be allocated to the Treasury function.  It is important to note that the Treasury Manager records transactions in GRU's debt and treasury management systems, not in the general ledger accounting records. Accounting completes these transactions in the general ledger and also reconciles total cash and investment balances outside of the treasury management functions.
1b	Each phase of the new trade process should be captured via supporting documentation which is then aggregated with the daily investment sheet and passed to a second person for a completeness review (including limit testing against the portfolio regarding the impact of the new trade). The Rates and Investments Director should then eventually sign-off on the daily investment sheet	1b. Supporting documentation is currently aggregated for each new trade. We concur that testing against portfolio limit parameters should be included. Securing a sign-off on the investment packet by the Rates and Investment Director was instituted prior to the inception of audit fieldwork.



	package.	
1c	Post-trade copies of sub-ledger reports should be retained so that compliance with portfolio limits can be substantiated on dates that are not quarter-end or month-end dates.	1c. The majority of our trades consist of rolling investments which have matured into the same class of investment, therefore having little or no impact on compliance with policy limits. When anomalies in the portfolio occur such as the introduction of cash through a bond issuance, policy limit compliance tests are conducted as the trades are made. Going forward, compliance with portfolio limits will be confirmed as trades are consummated once the implementation of Portfolio Risk Analyzer is completed in SAP.
1d	The Treasury Manager compiles the quarterly report that goes to the Investment and Debt Committee. The financial data used to prepare the report are obtained from the sub-ledger system (controlled by the Treasury Manager). The integrity of the report would be strengthened if GRU were to transfer certain report preparation tasks to Accounting or have Accounting certify (notate) that the presented data is consistent with the General Ledger and that they have independently reconciled to the Custodian's records. Accounting should also have direct access to all custodian reports and have read-only access to the sub-ledger system in order to compile and reconcile financial data with complete independence.	1d. Accounting currently has access to custodial reports and reconciles them to the general ledger. This is further evidenced through the sign-off of the minutes of the quarterly Investment and Debt Committee minutes by the Finance and Accounting Director. That being said, management will institute a process whereby Accounting notates, through a reference in the meeting minutes that they concur that the data presented in the quarterly report that goes to the Investment and Debt Committee is consistent with the general ledger.
1e	Validation of portfolio limit compliance should always be performed by a person not involved in the actual purchase of the investment transactions. The Treasury Analyst or the Rates and Investments Director may be best to perform this task.	1e. Portfolio limit compliance will be performed by an individual not involved in the actual purchase of the investments.
1f	Management has properly taken the position that all investment purchases should be settled via the "Delivery versus Payment" method with each of its two custodian banks. Under this method, funds are only released from GRU's account when the matching security CUSIP has been delivered electronically to the custodian account. The legal documents that support these relationships should be updated to clarify GRU's intent that the foregoing is the only settlement method permitted under the relationship.	If. GRU's Investment Policy explicitly states that all securities purchased by GRU will be done via delivery vs. payment. The custodian is in possession of GRU's Investment Policy and as part of their contractual relationship with GRU commits that they have read the policy and will comply with its requirements. That being said, the Custodial Agreement does not contain explicit language stating that security purchases will be handled exclusively by the delivery vs payment method. Management will work with the custodian to insert such language in the Custodian Agreement.
1f	Consider cross training other individuals on the current Treasury Manager's responsibilities to ensure the ability	1g. The cross training process was initiated prior to the inception of this audit. Management will continue to cross train individuals to the extent



	to continue the position's activities should the Treasury	practical.
	Manager leave GRU or transfer to another area.	



#### APPENDIX A - MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

#### Audit Issue 2:

The portfolio management reporting process requires strengthening. Portfolio management reporting should be more frequent and timely to ensure that senior management is made aware of any key portfolio developments that are occurring, including the status of compliance with portfolio limits. This will enable senior management to apply their knowledge and question results that may appear to be inconsistent with expectations. Currently, the formal reporting on the portfolio takes place on a quarterly basis. (High Risk)

Item	Recommendation	Concurrence, Action Plan, and Proposed Completion Date
2a	Design a short form report that covers existing positions, new trades, yields, liquidity and limits without commentary that is distributed after each new trade or at least on a weekly basis. This short form report should be distributed to at least the first level of senior management, the Rates and Investments Director. Doing so will establish the key element of management oversight at the earliest possible point in time.	2a. Management concurs and will design and implement a short form report.
2b	The data required for the Investment and Debt Committee Quarterly Report is compiled monthly but only distributed to senior finance management on a quarterly basis. We recommend issuing a condensed version of the report for each interim month in order to allow senior management to be in a position to add oversight to the control of the investment portfolio at an earlier point in time.	2b. Staff has always prepared a monthly report and it has been available in the Treasury Division electronic folder. Management concurs that the report should be distributed on a monthly basis and this procedure will be implemented.



#### APPENDIX A - MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

#### Audit Issue 3:

Periodic Review and Approval – The Investment Policy should be reviewed, updated and approved by the CFO on an annual basis. GRU should use this as an opportunity to revisit the policy and make any changes needed to continue meeting its investment needs and update names, titles and responsibilities of individuals performing the Investment Process that may have changed or become outdated. After approval by the CFO, the approved policy document should then be submitted to the Board of Directors.

Item	Recommendation	Concurrence, Action Plan, and Proposed Completion Date
3a	Periodic Review and Approval – The Investment Policy should be reviewed, updated and approved by the CFO on an annual basis. GRU should use this as an opportunity to revisit the policy and make any changes needed to continue meeting its investment needs and update names, titles and responsibilities of individuals performing the investment process that may have changed or become outdated. After approval by the CFO, the approved policy document should then be submitted to the Board of Directors.	3a. Management concurs. The current Investment Policy has been signed off effective October 1 for approval by the Chief Financial Officer (CFO). The Investment Policy document will be reviewed on an annual basis and approved by the CFO. If changes are proposed, the Policy document will be submitted to the City Commission for review and approval.
3b	Delegated Authority – The Investment Policy, or an appropriate written supplement, should be specific as to the individuals in the organization that have received delegated authority from the CFO as permitted under the policy. This section should also include any appropriate transaction limits for the individual. For example, Treasury Manager can execute purchases up to \$10 million with any purchase above that amount pre-approved by the Rates and Investments Director. The annual Investment Policy update should also include the then current list of approved trading counterparties. Further, the Internal Control section of the Investment Policy (Page 11) allows the CFO to accept bank receipts in lieu of securities as collateral for short term cash loans (repo). Given the current Segregation of Duties that exist in this process, this provision should be removed from the Investment Policy as it increases the potential for loss due to errors, omissions or fraud.	3b. Management concurs. Language will be added providing specifics as to individuals that receive delegated authority under the Policy, and the current list of approved trading counterparties will be added. The language related to allowing acceptance of bank receipts in lieu of securities as collateral for short term cash loans is legacy language and has not been utilized. This provision will be removed from the Policy.
3c	Suitability of Assets – The current version of the Investment Policy permits the purchase of Structured Notes and Private Placements, as long as allowed tenor and credit criteria are met. Language should be added to the Investment Policy that, notwithstanding any other terms of the Investment Policy, states that investments that contain any speculative elements, such as leverage or exposure to non-interest rate returns, are not allowed.	3c. Management concurs. GRU does not hold speculative investments or securities employing leverage. Language will be added stating that investments using leverage or linked securities that have the principal value or interest rate tied to anything not specifically allowed as permissible investments under this Policy are prohibited.



#### APPENDIX A – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Item	Recommendation	Concurrence, Action Plan, and Proposed Completion
		Date
3d	Cash Flow Requirements – The Investment Policy requires that "the maturity schedule of the portfolio will provide sufficient liquidity to meet the budgeted operating and capital requirements and to meet other cash requirements, which might reasonably be expected." At present, the cash requirements are monitored informally, and are not subject to any readily available quantification sources. At a minimum, the Investment and Debt Committee Quarterly Report should include an estimate of future cash flow requirements and compare it to the	3d. The quarterly report to the Investment and Debt Committee currently includes estimates of future cash flows for the restricted funds for which such forecasts are essential, such as the Construction Fund and UPIF.
2-	currently presented schedule of asset cash flows.	2- 14
3e	Investment Objectives (Yield): One of the stated objectives of the Investment Policy is that the investment program will seek to provide returns commensurate with risk limitations and liquidity needs identified by the program. Our review of the Investment and Debt Committee Quarterly Report shows that GRU constructs the risk profile of the portfolio given management's view of the current interest rate environment. In order to strengthen the accountability and transparency of the portfolio management, GRU should calculate a "maximum return model" portfolio allowable under the terms of the Investment Policy and then reflect the management decision to not carry risk at that level.	3e. Management believes that there is limited benefit to construction of a maximum return model whose only objective is to demonstrate opportunity cost related to the development and implementation of an appropriately conservative investment program.
3f	Impairment/Downgrade/Default — The existing language in the Investment Policy only requires GRU to take action on an underperforming security if an event of default has actually occurred. It would be prudent to have a policy that requires management to take preventative actions in case a security loses a particular rating or is producing substandard returns subject to final decision by the CFO.	3f. Management concurs. GRU follows the practice of actively monitoring investments in our portfolio for potential impairment and takes action accordingly. Specific language will be added to the Policy requiring management review and consideration of preventative action for securities which suffer rating impairment or demonstrate significant underperformance.



#### APPENDIX A – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

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3g	Code of Ethics/Personal Trading — The Investment Policy contains a section covering Prudence & Ethical Standards. The clause states simply that officers and employees will not engage in nor give the appearance of engaging in personal business activity that could conflict with proper execution of the investment policy and procedures, or which could impair their ability to make impartial investment decisions. Since this is an investment management function in an increasingly complex financial landscape, it would be prudent to move beyond self-regulation and make this section more robust by specifically addressing topics such as Fiduciary Responsibility; Conflicts of Interest; Personal Trading; Personal Accounts at Financial Institutions and Gifts and Entertainment. Typically,	3g. While management maintains that the current ethics language in the Investment Policy is sufficient we will review augmenting the Policy with language on fiduciary responsibility, conflicts of interest, and personal trading. Annual compliance certification language will be added. However, management contends that provision of employee brokerage account statements is neither appropriate nor beneficial.
	Personal Trading; Personal Accounts at Financial Institutions and Gifts and Entertainment. Typically, employees provide account brokerage account statements and certify compliance annually in writing	
	to their employers.	
3h	Internal Control – The Investment Policy contains a section entitled Internal Controls. This section calls for GRU to have sufficient internal controls regarding certain key points and contemplates that compliance with these requirements should be evidenced by appropriate documentation. Our review disclosed that no particular individual document, or group of documents, that is currently designed to satisfy this requirement. Management should implement a process that addresses the relevant points included in the lawsetment Policy and documents the required	3h. Management concurs. GRU has an internal control framework in place, and we will implement a documentation process that addresses relevant points included in the Investment Policy to evidence this framework.
	the Investment Policy and documents the required compliance.	



#### APPENDIX A - MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

#### Audit Issue 4: A review of the Investment and Debt Committee Quarterly Report identified three areas that require clarity or improvement around the cash and duration components of the GRU Portfolio. (Medium Risk) Recommendation Concurrence, Action Plan, and Proposed Completion It is recommended that GRU determine a method of 4a. Management concurs. A method for calculating the capturing the amount of "cash drag" that should be reduction on investment yields associated with cash in the used to reduce investment yields prior to comparing portfolio will be developed and reported in addition to an them to benchmarks. invested balance yield comparison with benchmarks. 4b The Average Maturity data point would be presented 4b. As indicated in the Recommendation, calculating an in a more accurate manner by estimating the adjusted maturity point based on the likelihood that a likelihood that the bonds will be called and reflecting holding will be called is an estimate at best. It is this in average maturity reported. management's position that the incremental benefit from such an estimation process is outweighed by the time and effort required to produce the estimate. 4c Management should clarify as to whether bank 4c. There are a number of factors, both internal to the deposits are included as a portfolio component in operations of the utility as well as externally driven by Exhibit A of the Investment Policy and should be market forces, that influence the amount of cash held by subject to the indicated limit if they are. Management will review and clarify whether bank deposits should be included as a portfolio component in the Investment Policy limits in Exhibit A and if so what that appropriate portfolio percentage should be.