

**Performance Audit:
Renew Atlanta
Roadway
Resurfacing**

November 2017

**City Auditor's Office
City of Atlanta**

File #17.02



CITY OF ATLANTA

City Auditor's Office
Amanda Noble, City Auditor
404.330.6750

November 2017

Performance Audit:

Renew Atlanta Roadway Resurfacing

What We Found

We reviewed Oracle records, Project Control Board documentation, and Renew Atlanta's internal financial records for roadway resurfacing projects performed under two contracts from July 2015 through January 2017. Fifty-six out of eighty-four streets (67%) lack the required documentary approval of baseline budgets and schedules by the Project Control Board. The Project Control Board has seen no closeout documentation for any completed resurfacing projects. As a result, the Project Control Board has incomplete or incorrect information on the money budgeted and spent and on the status of projects.

Five resurfaced streets never appeared on a purchase order and did not have funds encumbered in Oracle to pay for the work. Insufficient funds were encumbered for an additional group of streets because of similarly named projects, one of which never appeared before the Project Control Board. Three more streets had insufficient funds encumbered for an increased scope of work. As a result, encumbered funds were about \$1 million less than the value of the work performed.

We examined additional records relating to a sample of 33 streets, representing about \$3 million paid to contractors. Line items totaling about \$1 million in that sample lacked sufficient documentation to support the amounts billed. We did note improvement in documentation supporting line items billed under the second contract, once the full Renew Atlanta program management team was in place.

The city overpaid for traffic control and mobilization. Under the contracts, the city should make only one mobilization payment for projects in close proximity on the same purchase order.

Controls are in place to mitigate many risks. However, the Renew Atlanta program management plan relies on a document management and information technology system for the implementation of controls and for internal communication. Renew Atlanta does not currently have such a system in place.

Why We Did This Audit

We undertook this audit to assess the roadway resurfacing projects performed for the Renew Atlanta Infrastructure Bond Program. We assessed both compliance with the terms of the contract, including the appropriateness of billings and supporting documentation for quantities billed, and the city's management of the contract and the resurfacing projects. We selected this project based on factors including number of bids, amount spent, and geographic distribution of projects throughout the city.

What We Recommended

To ensure the Project Control Board has current information on the money budgeted and spent, the program management officer and project managers should:

- Present required documents to the Project Control Board for authorization, including preliminary design and closeout project implementation plans.

To ensure sufficient funds are encumbered to pay for authorized work and maintain financial information, the Renew Atlanta project controls and finance teams should:

- Develop a process to ensure that funds are encumbered in Oracle before contractors begin work or complete an increased scope of work.
- Regularly reconcile Oracle budgets and encumbrances, Project Control Board documents, and internal financial documentation.

To ensure that payments to contractors are appropriate and allowable, Renew Atlanta management should:

- Require the contractor to generate and maintain all required documentation, including support for invoices
- Work with the Department of Law to pursue cost recovery for potential overpayments

To ensure integrity of information, Renew Atlanta management should:

- Work with Atlanta Information Management to implement an electronic document management system

For more information regarding this report, please use the "contact" link on our website at www.atlaudit.org

Summary of Management Responses

Recommendation #1: We recommend that the program management officer and project managers present preliminary design PIPs for all projects, including new projects and ongoing or finished projects.

Proposed Action: We are currently addressing the deficiencies in FC-6945 and FC-8831. **Agree**

Timeframe: September 2017

Recommendation #2: We recommend that the program management officer and project managers report variances over the threshold defined by the program management plan to the Project Control Board.

Proposed Action: We are currently addressing deficiencies in FC-6945 and FC-8831. **Agree**

Timeframe: September 2017

Recommendation #3: We recommend that the program management officer and project managers present closeout PIPs for completed projects.

Proposed Action: Once projects have completed the project closeout process, PIPs will be presented to the Project Control Board as per the PMP. **Agree**

Timeframe: September 2017

Recommendation #4: We recommend that the Renew Atlanta project controls and finance teams develop a process to ensure that, after Project Control Board authorization, procurement creates a purchase order, funds are encumbered in Oracle, and Renew Atlanta issues a written notice to proceed before contractors begin work or complete an increased scope of work.

Proposed Action: Program Controls and Finance will work closely with the Program Management Officers to ensure sufficient internal controls. These controls are dynamic in nature and we are constantly working to improve our processes and procedures. **Partly Agree**

Timeframe: December 2017

Recommendation #5: We recommend that the Renew Atlanta project controls and finance teams regularly reconcile Oracle budgets and encumbrances, Project Control Board documents, and internal financial documentation.

Proposed Action: Project Controls and Finance have established a standing weekly review meeting that includes PMOs to ensure operation and fiscal coordination. **Agree**

Timeframe: October 2017

Recommendation #6:	We recommend that the construction manager take steps to ensure that the contractors are generating and maintaining all documentation required by the contracts.	
Proposed Action:	Renew Atlanta will continue to require documentation from each contractor as per each contract.	Agree
Timeframe:	September 2017	
Recommendation #7:	We recommend that the construction manager continue to require sufficient supporting documentation as a precondition for payment, as has been done on work performed more recently.	
Proposed Action:	Renew Atlanta will continue to require sufficient supporting documentation as a precondition for payment.	Agree
Timeframe:	September 2017	
Recommendation #8:	We recommend that Renew Atlanta management work with the Department of Law to pursue cost recovery for potential overpayments to contractors.	
Proposed Action:	Renew Atlanta worked with the Department of Procurement and Department of Law to address this item. After presenting the circumstances, Law concluded the City had the right to approve and issue payment to the contractor for these specific instances. Therefore, the City did not overpay the contractor and cost recovery is not warranted for these specific occurrences. However, in the isolated instances where mobilization should not have applied, costs will be recovered from the funds currently being withheld in retainage.	Partly Agree
Timeframe:	October 2017	
Recommendation #9:	We recommend that Renew Atlanta management work with Atlanta Information Management to complete implementation of an electronic document management system and ensure that that system contains all necessary documentation.	
Proposed Action:	The Renew Atlanta Program Team will implement an electronic document management system once legislation is approved by City Council. Legislation language and the vendor package are in Department of Procurement to route for Department of Law's approval.	Agree
Timeframe:	December 2017	



CITY OF ATLANTA

AMANDA NOBLE
City Auditor
anoble@atlantaga.gov

CITY AUDITOR'S OFFICE
68 MITCHELL STREET SW, SUITE 12100
ATLANTA, GEORGIA 30303-0312
<http://www.atlaudit.org>
(404) 330-6452
FAX: (404) 658-6077

AUDIT COMMITTEE
Marion Cameron, CPA, Chair
Cheryl Allen, PhD, CPA
Daniel Ebersole

November 6, 2017

Honorable Mayor and Members of the City Council:

We undertook this audit to assess the roadway resurfacing projects performed for the Renew Atlanta Infrastructure Bond Program. We assessed both compliance with the terms of the contract, including the appropriateness of billings and supporting documentation for quantities billed, and the city's management of the contract and the resurfacing projects. We selected this project based on factors including number of bids, amount spent, and geographic distribution of projects throughout the city. The general manager's response is appended to the report.

The Audit Committee has reviewed this report and is releasing it in accordance with Article 2, Chapter 6 of the City Charter. We appreciate the courtesy and cooperation of city staff throughout the audit. The team for this project was Matthew Ervin, Amber Hart, Rebecca Robinson, and Brad Garvey.

Amanda Noble
City Auditor

Marion Cameron
Chair, Audit Committee

Renew Atlanta Roadway Resurfacing

Table of Contents

Introduction	1
Background	1
Audit Objectives	2
Scope and Methodology	3
Findings and Analysis	5
Controls to Keep Projects On-Time and On-Budget Did Not Always Function as Intended....	5
Project Control Board Authorization Missing or Incomplete	5
Inconsistencies in Financial Documentation Diminish Clarity and Lead to Unfunded Work	7
Improved Controls Are Mitigating Risks, But Lack of Documentation of Early Work Allowed Overpayment and Potential Noncompliance	10
Missing Documentation Increases Risk	10
Controls Are in Place to Mitigate Field Supervision and Office Practices Risks	13
Recommendations	17
Appendix	19

List of Exhibits

Exhibit 1: Process Flowchart for Requisition Request.....	6
Exhibit 2: Council District 11 Project Group Approvals and Encumbrances	9
Exhibit 3: Identical Billings in Council District 11	12
Exhibit 4: Map of Streets with Mobilization Lump Sum Payments Made Under FC-6945, Grouped by PO	14

Introduction

City Council passed resolution 15-R-3343, which requires the City Auditor to establish a capital project and construction audit function to monitor the Renew Atlanta Infrastructure Bond program over its five-year lifespan, issuing reports at regular intervals. The first report focused on contract terms, which establish controls in the contract environment. The second report focused on the design of internal controls in the Renew Atlanta program. This report focusing on roadway resurfacing projects is the third in the series.

We undertook this audit to assess the roadway resurfacing projects performed for the Renew Atlanta Infrastructure Bond Program. We assessed both compliance with the terms of the contract, including the appropriateness of billings and supporting documentation for quantities billed, and the city's management of the contract and the resurfacing projects. We selected this project based on factors including number of bids, amount spent, geographic distribution of projects throughout the city, and information learned from our regular attendance at Renew Atlanta management meetings.

Background

The city identified a more than \$1 billion backlog of transportation and facility projects as of January 2015. To begin to address this backlog, the city held a vote to authorize bonds to fund about a quarter of the work. Citizens voted in favor of the \$250 million Renew Atlanta Infrastructure Bond on March 17, 2015. Transportation projects, including bridge and sidewalk repair and reconstruction, account for \$184.1 million (74%) of the \$250 million. Facility projects, such as renovation and repair of municipal facilities and recreation centers, account for \$65.9 million (26%) of bond funds. The city intends to use the \$250 million to attract state and federal grants and other funding sources to help address the remaining backlog.

The projects are split into citywide projects and local projects for council districts. Citywide projects total nearly \$182.6 million (73%); local projects account for the remaining \$67.4 million (27%), with approximately \$5.6 million planned for each council district. Renew Atlanta broke ground on its first project in late July 2015.

One of the main elements of the Renew Atlanta program is roadway resurfacing. Of the citywide money for transportation projects, the

city allocated over \$27 million for roadway resurfacing. In addition, some councilmembers have chosen to spend some of their local funds on resurfacing projects.

The scope of this audit included 84 streets resurfaced under two contracts. The first, FC-6945, was originally used by the Department of Public Works for roadway resurfacing. This contract was with Stewart Brothers, Inc. In July 2015, the city amended the contract to add \$10 million to this contract specifically for Renew Atlanta roadway resurfacing. The second contract, FC-8831, was effective as of August 11, 2016. The city executed this second contract for over \$14 million dollars with a joint venture of Stewart Brothers, Inc. and HEH Paving, Inc. Under the contract, the city issues task orders with defined scopes of work.

The current Renew Atlanta management team was not yet in place when the roadway resurfacing program began. The Department of Public Works managed many of the initial resurfacing projects included in the scope of this audit.

The Renew Atlanta management team adopted a Program Management Plan, which detailed the design of the internal control system for Renew Atlanta. Among other things, the Program Management Plan called for the creation of a Project Control Board to authorize Renew Atlanta projects at key milestones, in order to provide oversight and control of project and program level budgets and schedules. Our July 2016 audit found that the Program Management Plan addressed the primary components required for an effective system of internal control.

Audit Objectives

This report addresses the following objectives:

- Is the Renew Atlanta program management team managing the roadway resurfacing projects according to the Program Management Plan and best practice?
- Were the payments made by the Renew Atlanta Program to the roadway resurfacing contractors appropriately supported and allowable under the contract?

Scope and Methodology

We conducted this audit in accordance with generally accepted government auditing standards. We reviewed roadway resurfacing projects undertaken for the Renew Atlanta Infrastructure Bond Program under its two resurfacing contracts, FC-6945 and FC-8831, from July 2015 through January 2017.

Our audit methods included:

- reviewing the contracts
- interviewing Renew Atlanta and other city staff
- reviewing Oracle task and sub-task budgets, commitments (encumbrances), and expenditures
- reviewing financial documents obtained from Renew Atlanta
- determining, by monetary unit sampling of projects (tasks and sub-tasks) defined in Oracle, a sample of 33 streets, in order to cover at least 20% of the amount paid for streets paved under FC-6945 and the entire amount paid for streets paved under FC-8831 (17 streets with work done under FC-6945 and 16 streets with work done under FC-8831)
- reviewing construction and oversight supporting documents obtained from Renew Atlanta related to our sample of 33 streets
- reviewing quality control and safety documents obtained from the contractor related to our sample of 33 streets
- reconciling financial information obtained from Oracle, Renew Atlanta, and the contractor

Generally accepted government auditing standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Findings and Analysis

Controls to Keep Projects On-Time and On-Budget Did Not Always Function as Intended

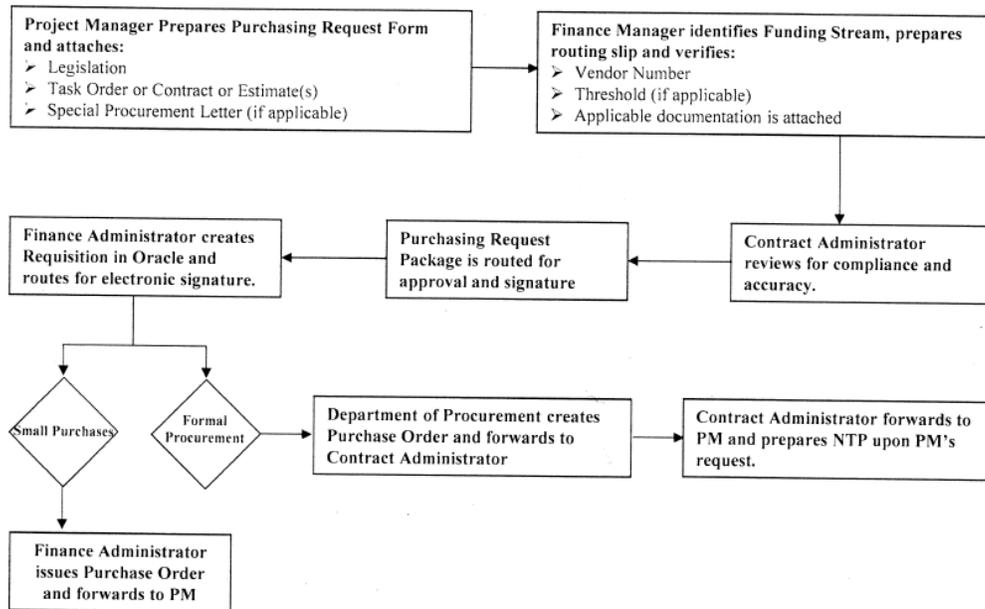
The Renew Atlanta program management plan requires Project Control Board authorization at key stages of projects to assure that projects are funded appropriately and have well-defined baselines to facilitate tracking schedules and budgets. To provide this assurance, the Project Control Board should have up-to-date information on the money budgeted and spent under the Renew Atlanta Infrastructure Bond. Fifty-six out of eighty-four streets (67%), however, lack the required documentary approval of baselines, making control of project and program level budgets and schedules more difficult. In several cases, the Project Control Board has approved a budget (which is recorded in Oracle), but no purchase order has been created to reflect the approved budget. As a result, insufficient money was encumbered to pay for the work.

Project Control Board Authorization Missing or Incomplete

The city should complete several steps to authorize work before construction begins on a project. The program management officer and project manager should bring the project before the Project Control Board; that body approves the project's baseline budget and schedule, allowing for control of project and program level budgets and schedules. Renew Atlanta sends a requisition request to the Department of Procurement, which issues a purchase order. The purchase order encumbers money in Oracle, the city's financial system of record, setting aside funds to pay the contractor. Renew Atlanta then issues a notice to proceed (NTP)—officially letting the contractor know that work may begin. Exhibit 1 illustrates some of these steps.

In many of the roadway resurfacing projects performed for the Renew Atlanta program, the city did not complete one or more steps of this process. For 56 out of 84 streets, the program management officer and project manager never presented required baseline documentation to the Project Control Board. Staff has presented no closeout documentation to the Project Control Board for completed resurfacing projects.

Exhibit 1: Process Flowchart for Requisition Request



Source: Renew Atlanta project management training materials

Fifty-six resurfacing projects were missing specific Project Control Board authorizations. Renew Atlanta’s program management plan requires that the Project Control Board approve a PIP (project implementation plan) for each project to provide a baseline budget and schedule to enable control of the project. The Project Control Board should review and approve the PIP once preliminary design is complete. The program management plan requires retroactive approval of PIPs for projects that began prior to the board’s creation. Additionally, a PLIP (program level information package) summarizes the projects and budgets in each bond program (e.g., roadway resurfacing). Under the first resurfacing contract, out of 65 streets with work in place, 37 lacked a PIP and 8 lacked a budgeted PLIP line; 4 had neither. Under the second resurfacing contract, there was no Project Control Board documentation (PIP or PLIP) for either of the two issued task orders, which covered 19 streets in our scope.

The program management plan also requires that the Project Control Board approve a PIP for each project upon its completion. There have

been no closeout PIPs for any roadway resurfacing projects. Without these closeout PIPs, the Project Control Board does not have up-to-date information on funds available to allocate to remaining projects.

Finally, the program management plan requires the program management officer to approve variances to schedule or budget over 5% from the baseline for high-risk projects or over 20% from the baseline for low- or medium-risk projects, and to present such variances to the Project Control Board. The program management officer approved an increase to the budget of one street, Hapeville Road, by \$45,000 from a baseline budget of \$176,008.36. Since this is just over a 25% variance—over the 20% threshold for low- or medium-risk projects—the program management officer should have presented this variance to the Project Control Board. However, this change never appeared before the Project Control Board, and the roadway resurfacing PLIP still shows a budget for Hapeville Road of \$176,008.36.

When the Project Control Board lacks up-to-date information on the money budgeted and spent or on the status of projects, its ability to oversee and act as the final approval authority for Renew Atlanta projects is limited. We recommend that the program management officer and project managers present preliminary design PIPs for all projects, including new projects and projects that have already begun or finished, as required by the program management plan. We recommend that the program management officer and project managers report variances over the threshold defined by the program management plan to the Project Control Board. We recommend that the program management officer and project managers present closeout PIPs for completed projects, so that the Project Control Board has the most up-to-date information on the money spent under the Renew Atlanta program.

Inconsistencies in Financial Documentation Diminish Clarity and Lead to Unfunded Work

In several cases, the Project Control Board has approved a budget and staff has recorded the budget in Oracle, but no purchase order has been created to reflect the approved budget. As a result, encumbered funds were about \$1 million less than the value of the work performed. In other cases, inconsistencies among the city's financial system of record (Oracle), Renew Atlanta's internal financial documents, and Project Control Board documents diminish clarity in the information used in decision-making.

The city encumbered insufficient funds to pay for work performed by contractor. Before work begins on a project, procurement should create a purchase order, after which the city issues a notice to proceed. As a part of this process, money is encumbered in Oracle. Five streets—10th Street, Roxboro Road, Fairburn Road, Collier Drive, and Bohler Road—did not appear on any purchase order and had no written notice to proceed issued. Of these five, the Project Control Board approved PIPs for three, and Renew Atlanta entered the approved budgets into Oracle. However, as none of these had a purchase order, no money was encumbered in Oracle to pay for these streets. The contractor stated that city managers issued verbal notices to proceed in the field.

The Project Control Board approved PIPs for two groups of streets in council district 11—Group 11A (budget of \$250,000) and Group 11B (budget of \$500,000). Group 11A comprised three streets in the Regency Park subdivision and two other streets in council district 11. Group 11B comprised five additional streets in Regency Park. Procurement created a purchase order, and the city issued a notice to proceed, for Group 11A, and it appears in Oracle with an encumbrance of \$250,000. Group 11B, however, as approved by the Project Control Board, never appeared on a purchase order or notice to proceed; the city created a purchase order and encumbered just over \$1.4 million in Oracle for a different set of streets in the Guilford Forest subdivision labeled Group 11B. The program management officer and project manager never brought a PIP for Guilford Forest to the Project Control Board. Therefore, Project Control Board documentation does not recognize the existence of two different groups of streets labeled “Group 11B.” Subsequent documentation lists all ten streets from the Project Control Board- approved Groups 11A and 11B as Group 11A. The value of the work performed by the contractor on these ten streets was greater than the \$250,000 encumbrance, so insufficient funds were available to pay for the total value of the work performed on all ten streets. Of the ten streets now listed as Group 11A, the city has only paid for six. A visual accounting of the approved documentation for these grouped projects appears in Exhibit 2.

Exhibit 2: Council District 11 Project Group Approvals and Encumbrances

Project Group	PCB Approved Budget	PO Line Total	Oracle Encumbrance
Group 11A (including Regency Park, 3 streets)	\$250,000	\$250,000	\$250,000
Group 11B, PCB (Regency Park, 5 streets)	\$500,000	N/A	N/A
Group 11B, Oracle (Guilford Forest)	N/A	\$1,400,116.25	\$1,400,116.25

Source: Auditor analysis of Renew Atlanta and Oracle records

The values of work in place were greater than the amounts of the encumbrances on three other streets. The Project Control Board authorized increasing the budgets for Hightower Road, Jefferson Street, and Cleveland Avenue; in each case Renew Atlanta increased the budgeted amount in Oracle to match the approved amount. However, none of the three had a revised or new purchase order, so the Oracle encumbrances never reflected the approved higher budgets. Since the city cannot pay more than has been encumbered in Oracle, Renew Atlanta did not pay the full amount for the value of the work performed.

In each of these cases, the city had encumbered less money than required for the contractor to complete the scope of work. For five streets, no funds had been encumbered; for others, a higher budget was approved by the Project Control Board and entered into Oracle, but the full amount approved was never encumbered. We recommend that Renew Atlanta develop a process to ensure that, after the Project Control Board has approved the budget for a project, procurement creates a purchase order, funds are encumbered in Oracle, and Renew Atlanta issues a written notice to proceed before contractors begin work or complete an increased scope of work.

Inconsistent records diminish usefulness of financial information used in decision-making. For example, two projects—English Circle and West Kildare Avenue—were on the Renew Atlanta project list, and had money encumbered in Oracle. These projects were later canceled, but \$104,772.87 remains encumbered in Oracle.

Seven streets resurfaced early in the Renew Atlanta program had inconsistent records of amounts spent. Though the total of the amount spent on all seven streets is the same in Renew Atlanta’s internal financial documentation and in Oracle, the allocation of money spent on each of the seven streets was inconsistent. A revised purchase order was issued moving the money among these line items; the

reasons for this remain unclear. More recently, Renew Atlanta has adjusted its financial records so that these amounts now reconcile to Oracle.

Each of these examples indicates a risk that the information used by decision-makers may not match the city's financial system of record. We recommend that Renew Atlanta regularly reconcile Oracle budgets and encumbrances, Project Control Board documents, and internal financial documentation.

Improved Controls Are Mitigating Risks, But Lack of Documentation of Early Work Allowed Overpayment and Potential Noncompliance

Renew Atlanta has strengthened enforcement of contract provisions since the implementation of its program management structure, but we identified gaps in required quality control documentation available from the contractor even in the later contract. Of approximately \$3 million paid on the 33 streets we sampled, line items representing about \$1 million lacked sufficient documentation to support the amounts billed. Most of this work was completed under the first contract before the Renew Atlanta program structure was fully in place. Additionally, the city overpaid the contractor for mobilization and traffic control on work completed under both contracts.

While controls appear to be in place to mitigate additional risks related to project management, the lack of an electronic information and document management system will continue to pose risk until the new system is operational.

Missing Documentation Increases Risk

Lack of documentation increases risk of noncompliance with contract provisions and risk of overpayment for work performed. The two resurfacing contracts we reviewed require the contractor to provide the city documentation of compliance with safety and quality control provisions, as well as any supporting documentation necessary to justify the quantities billed on pay applications. This documentation is a part of the specifications and requirements on which the contractors bid. The unit-price payments the city has made to the contractors cover its preparation and maintenance as required by the contract. When this documentation is missing or unavailable, the city may not have access to information needed to ensure that the contractor has complied with contract provisions.

Contractor did not provide project-specific documentation required by contract. We requested and reviewed contractor documents related to Renew Atlanta paving work conducted in 2016 to assess compliance on a sample of 33 streets. According to records, 12 of 15 safety talks occurred prior to the execution of the second project. Four of these records specified individual streets; the remaining records provided no street or project-specific information. While we could associate records of required quality control to individual projects conducted under the second contract, we were unable to do so with our sample of streets from the first contract due to how documentation was organized. Records such as those related to traffic control were missing for both contracts. We recommend that Renew Atlanta take steps to ensure that the contractors are generating and maintaining all documentation required by the contracts.

The city made payments to the contractor without sufficient documentation of quantities. Out of approximately \$3 million paid on the 33 streets that we sampled, line items representing about \$1 million lacked sufficient supporting documentation. These were almost all for work performed earlier in the program under the first contract— only three line items representing under \$3,600 of work lacked supporting documentation under FC-8831. Seventeen streets in our sample were resurfaced under the first resurfacing contract (~\$1.6 million paid), FC-6945, and the remaining sixteen streets were resurfaced under the second contract, FC-8831 (~\$1.4 million paid). We noted a significant improvement in documentation supporting line items billed under the second contract.

The Renew Atlanta contracts reference Georgia Department of Transportation specifications for the measurement of tack coat for payment. The measured volume of tack coat should be corrected for temperature to ensure a consistent method of measurement. Documentation of quantities of tack coat indicates that volumes were corrected for temperature for the streets of the Guilford Forest subdivision, but none of the other streets we sampled had support that the correction was applied. Furthermore, the correction formula tends to result in partial gallon quantities, whereas many of the quantities paid on streets, especially early in the Renew Atlanta program, were whole gallon amounts, likely indicating that the correction factor was not applied. This is a relatively small amount of money, but is another example of a potential overpayment made due to a lack of supporting documentation for quantities billed.

By paying invoices unsupported by sufficient documentation of quantities early in the Renew Atlanta program, the city ran the risk of potential overpayment for work. We recommend that Renew Atlanta

continue to require sufficient supporting documentation as a precondition for payment, as it has done on work performed more recently under the second resurfacing contract.

Identical billings for different streets indicate possible error. Renew Atlanta records show identical billings on two pairs of streets in Council District 11. One pair of streets, Glenhurst Lane and East Court Drive, had no documentation to support any of the line items paid. The other pair, Park Center Drive and Straton Trace, had documentation for the quantities billed, but those quantities did not match the asphalt truck tickets. The city actually paid for only one of these two streets, due to the insufficient encumbrance. Exhibit 3 shows the tons of asphalt, square yards of area milled, and gallons of tack coat billed for these four streets.

Exhibit 3: Identical Billings in Council District 11

Street	Tons Asphalt	Sq. Yds. Milled	Gal. Tack Coat
East Court Drive	245.28	2,637.36	297
Glenhurst Lane	245.28	2,637.36	297
Park Center Drive	163.52	1,758.24	198
Straton Trace	163.52	1,758.24	198

Source: Auditor analysis of Renew Atlanta records

The city overpaid for traffic control and mobilization. Mobilization is movement of personnel, equipment, supplies, and incidentals to the project site. On three streets, the city paid double the normal lump sum payment for mobilization and triple the normal lump sum payment for traffic control.

The first resurfacing contract stated that the city would only make one lump sum payment of \$6,250 for mobilization for projects on the same purchase order located within a 3,000-foot radius of one another. Additionally, the city would not pay anything for mobilization when the aggregate value of projects within a 3,000-foot radius was over \$250,000. Under these contract provisions, the city should not have paid \$175,000 of the \$318,750 in mobilization lump sum payments that the city paid under the contract. The second contract expands the radius to two miles, but otherwise the mobilization clauses are similar. The city has made two mobilization lump sum payments of \$6,250 each under this contract, for the Guilford Forest subdivision and for Harbin Road. Since each of these projects had a value of over \$250,000, neither mobilization payment was required by the contract. Due to the relatively large amount of these overpayments, we recommend that Renew Atlanta work with the Department of Law to pursue cost recovery from the contractors.

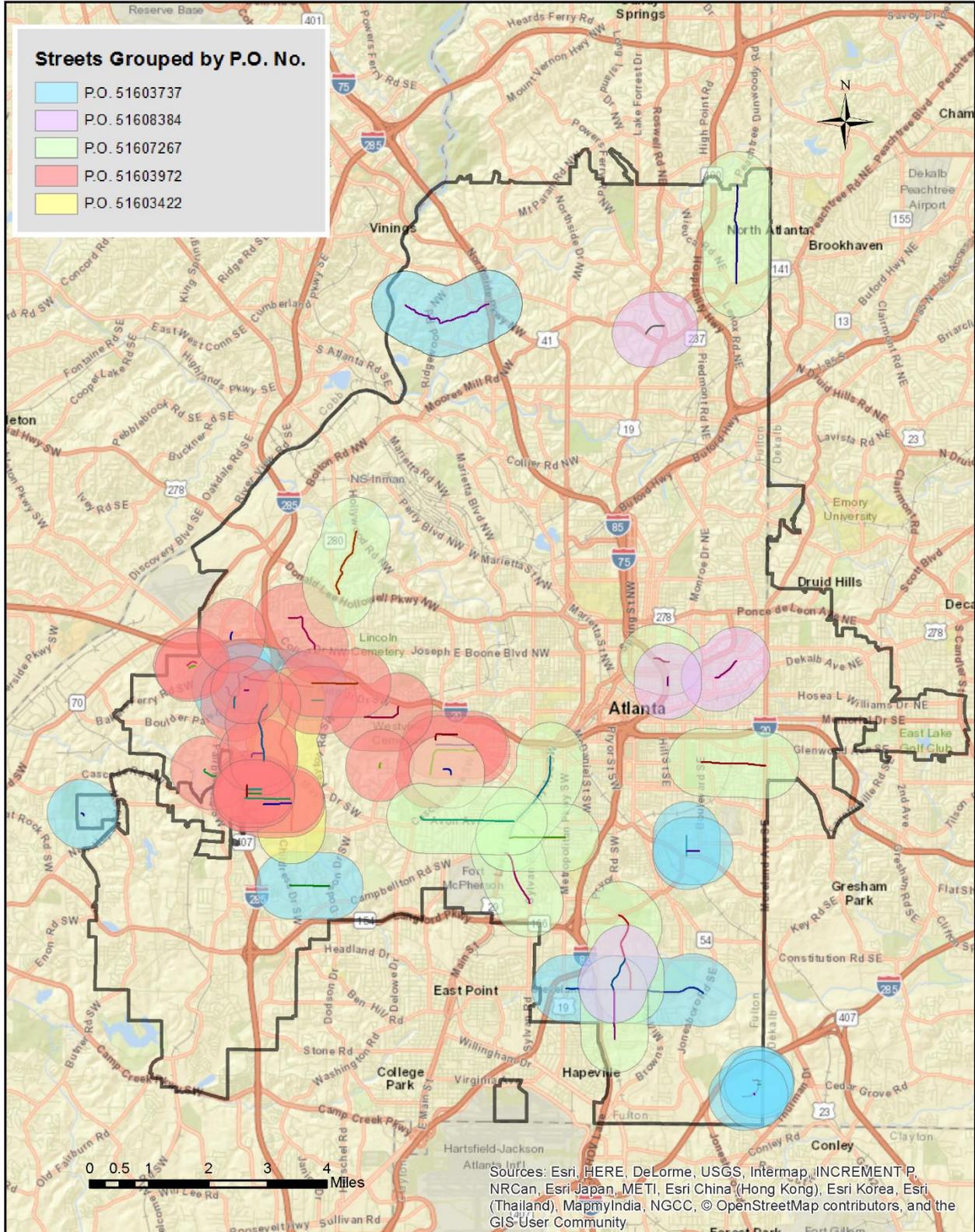
Exhibit 4 shows a map of streets for which the city made a mobilization lump sum payment under FC-6945, color-coded by purchase order, along with a 3000-foot radius around each street. Some overlapping areas can clearly be seen—for example the four streets in the Villages of Oakshire neighborhood in the southeast corner of the city.

Controls Are in Place to Mitigate Field Supervision and Office Practices Risks

We identified some Renew Atlanta project management practices that could introduce risks; however, controls are in place to mitigate these risks. Renew Atlanta depends on field inspectors for on-site verification of work, but inherent fraud risks are mitigated because Renew Atlanta subjects inspectors' reports to multiple layers of review. Renew Atlanta did not have a detailed standard operating procedures manual in place, but has now adopted one. Risks due to the lack of an electronic information and document management system remain relevant, though Renew Atlanta is developing such a system for future use.

Renew Atlanta methods of field supervision introduce some risks; mitigating controls appear to be in place and functioning. The Renew Atlanta senior field inspector appoints field inspectors to specific projects. Renew Atlanta field inspectors are at the site of construction whenever the contractor is working, and verify the work done at the site. Inspectors perform oversight tasks, including taking progress photos, verifying measurements of quantities, and collecting asphalt truck tickets. Up to two to three inspectors cover a project, depending on the scope of work. Inspectors remain assigned to a project for its duration, which can improve efficiency and effectiveness of oversight. Lack of independent verification of inspectors' work can introduce risk. Nevertheless, the use of original documentation such as asphalt truck tickets, review of inspection reports for reasonableness and completeness, and further managerial review of quantities before payment all serve to mitigate any risks introduced by this practice.

Exhibit 4: Map of Streets with Mobilization Lump Sum Payments Made Under FC-6945, Grouped by PO



Source: Auditor analysis; sources listed on the map

Standard operating procedures mitigate risk; document management needs improvement. Renew Atlanta has adopted a standard operating procedures manual, which contains detailed policies and procedures to implement the control system design laid out by the program management plan. While this manual is currently in effect, Renew Atlanta was operating without this manual in place until April 2017. Detailed, written policies and procedures are a key type of control.

The Renew Atlanta program management plan relies on a document management and information technology system for the implementation of controls and for internal communication. The system described in the program management plan is ORION, which was in place before the Renew Atlanta program management team was hired. However, Renew Atlanta staff did not maintain data and update records in ORION; project managers no longer use ORION. Renew Atlanta management has decided to move toward a new document management system, eBuilder, which is currently under development. In the meantime, Renew Atlanta seems to be relying, at least in part, on hardcopy files. This lack of a document management solution impairs ease of communication, introduces the risk of permanent destruction of records, and reduces the feasibility of using automated controls. We recommend that Renew Atlanta complete implementation of an electronic document management system and ensure that that system contains all necessary documentation.

Recommendations

In order to ensure the Project Control Board has current information on the money budgeted and spent and the status of projects, the program management officer and project managers should:

1. Present preliminary design PIPs for all projects, including new projects and ongoing or finished projects
2. Report variances over the threshold defined by the program management plan to the Project Control Board
3. Present closeout PIPs for completed projects

In order to ensure sufficient funds are encumbered to pay for authorized work, and that the information used by decision-makers matches the city's financial system of record, the Renew Atlanta project controls and finance teams should:

4. Develop a process to ensure that, after Project Control Board authorization, procurement creates a purchase order, funds are encumbered in Oracle, and Renew Atlanta issues a written notice to proceed before contractors begin work or complete an increased scope of work
5. Regularly reconcile Oracle budgets and encumbrances, Project Control Board documents, and internal financial documentation

In order to ensure that payments made to contractors are appropriate and allowable, the construction manager should:

6. Take steps to ensure that the contractors are generating and maintaining all documentation required by the contracts
7. Continue to require sufficient supporting documentation as a precondition for payment, as has been done on work performed more recently

In order to ensure that payments made to contractors are appropriate and allowable, Renew Atlanta management should:

8. Work with the Department of Law to pursue cost recovery for potential overpayments to contractors

In order to ensure integrity of information, Renew Atlanta management should work with Atlanta Information Management to

9. Complete implementation of an electronic document management system and ensure that system contains all necessary documentation.

Appendix

Report # 17.02	Report Title: Renew Atlanta Roadway Resurfacing	Date: Nov 2017
-----------------------	--	-----------------------

Recommendation 1:
 We recommend that the program management officer and project managers present preliminary design PIPs for all projects, including new projects and ongoing or finished projects.

Comments: The PMO and their respective project managers currently present Preliminary Design PIP's for all projects. Renew Atlanta manages task orders under Contract FC-8831, however, the Department of Public Works managed many of the initial resurfacing projects included in the scope of this audit. In order to facilitate and implement construction as expediently as demanded, the program used existing resurfacing contracts in place by the City. At the onset of the Program, there were no set procedures established yet. Projects were required to be built without necessary controls in place. Upon implementing the controls, it was difficult to go backwards to ensure compliance with those procedures. For legacy projects and/or those that were managed and/or implemented by others, this proved even more challenging.

Proposed Action: We are currently addressing the deficiencies in FC-6945 and FC-8831.	Implementation: Month Year Sep 2017
Person Responsible: PMOs and PMs	Agree

Recommendation 2:
 We recommend that the program management officer and project managers report variances over the threshold defined by the program management plan to the Project Control Board.

Comments: The majority of the Program cost and schedule variances are within the thresholds of the Project Management Plan (PMP). Hapeville Road is a resurfacing project under Contract FC-6945 and it was not retroactively brought before the Project Control Board.

Proposed Action: We are currently addressing the deficiencies in FC-6945 and FC-8831.	Implementation: Month Year Sep 2017
Person Responsible: PMOs and PMs	Agree

<p>Recommendation 3: We recommend that the program management officer and project managers present closeout PIPs for completed projects.</p>	
<p>Comments: The Program Management Officer and their respective Project Managers currently present closeout PIP's for completed projects. Industry standards dictate field work completed does not equate to project closeout. Close Out PIPs are not to be brought to the PCB until all the required closeout paperwork has been received from the contractor and all the project's financial transactions have cleared the system.</p>	
<p>Proposed Action: Once projects have completed the project closeout process, PIP's will be presented to the Project Control Board as per the PMP.</p>	<p>Implementation: Month Year Sep 2017</p>
<p>Person Responsible: PMOs and PMs</p>	<p>Agree</p>
<p>Recommendation 4: We recommend that the Renew Atlanta project controls and finance teams develop a process to ensure that, after Project Control Board authorization, procurement creates a purchase order, funds are encumbered in Oracle, and Renew Atlanta issues a written notice to proceed before contractors begin work or complete an increased scope of work.</p>	
<p>Comments: After PCB authorization approved PLIP's are forwarded to the Renew Finance Team. Once contracts and/or task orders have been executed, purchase orders and Notice to Proceeds follow.</p>	
<p>Proposed Action: Program Controls and Finance will work closely with the Program Management Officers to ensure sufficient internal controls. These controls are dynamic in nature and we are constantly working to improve our processes and procedures.</p>	<p>Implementation: Month Year Dec 2017</p>
<p>Person Responsible: Finance Manager and Program Controls Manager</p>	<p>Partly Agree</p>

Recommendation 5: We recommend that the Renew Atlanta project controls and finance teams regularly reconcile Oracle budgets and encumbrances, Project Control Board documents, and internal financial documentation.	
Comments: Although there will always be a slight variance in reporting on the PLIP and PIP as well as entries in Oracle due to the timing of events and meetings, it is the goal of this Program to minimize these as much as possible. Basic controls have been established for the Program through the Program Management Plan.	
Proposed Action: Project Controls and Finance have established a standing weekly review meeting that includes PMO's to ensure operational and fiscal coordination.	Implementation: Month Year Oct 2017
Person Responsible: Finance Manager and Program Controls Manager	Agree
Recommendation 6: We recommend that the construction manager take steps to ensure that the contractors are generating and maintaining all documentation required by the contracts.	
Comments: Renew Atlanta currently requires contractors to submit documentation in order to maintain compliance with contract documents. Renew Atlanta manages task orders under Contract FC-8831, however, the Department of Public Works managed many of the initial resurfacing projects under FC-6945. For projects managed by other departments Renew Atlanta has requested required documentation, however, it has been challenging to obtain for legacy projects.	
Proposed Action: Renew Atlanta will continue to require documentation from each contractor as per each contract.	Implementation: Month Year Sep 2017
Person Responsible: Construction Director	Agree

<p>Recommendation 7: We recommend that the construction manager continue to require sufficient supporting documentation as a precondition for payment, as has been done on work performed more recently.</p>	
<p>Comments: Construction monitoring currently includes collecting tickets, preparing daily reports showing detailed measurements, pictures, and other pertinent information, performing material testing to ensure compliance with the submittals and industry standards, and obtaining daily reports from contractors. These documents are reviewed for consistency with our daily reports. Payment verification is based upon these record documents and field verified measurements. Renew Atlanta manages task orders under Contract FC-8831, however, the Department of Public Works managed many of the initial resurfacing projects under FC-6945.</p>	
<p>Proposed Action: Renew Atlanta will continue to require sufficient supporting documentation as a precondition for payment.</p>	<p>Implementation: Month Year Sep 2017</p>
<p>Person Responsible: Construction Director</p>	<p>Agree</p>
<p>Recommendation 8: We recommend that Renew Atlanta management work with the Department of Law to pursue cost recovery for potential overpayments to contractors.</p>	
<p>Comments: There are specific instances where multiple payments were approved by the City and paid to the contractor for mobilization and traffic control. The contractor acted under the direction of the City, demobilizing and remobilizing within the various project locations. Circumstances surrounding these City directives was beyond the contractors control. Therefore, the requested payments were approved and issued to the contractor for each of the specific instances. Subsequently, it was necessary to install traffic control multiple times. Also, there were specific instances where roads were not assigned at the same time so the radius areas as noted by audit (even though they appear overlapping), would not have occurred concurrently and payment for mobilization and traffic control was approved.</p>	
<p>Proposed Action: Renew Atlanta worked with the Department of Procurement and Department of Law to address this item. After presenting the circumstances, Law concluded the City had the right to approve and issue payment to the contractor for these specific instances. Therefore, the City did not overpay the contractor and cost recovery is not warranted for these specific occurrences. However, in the isolated instances where mobilization should not have applied, costs will be recovered from the funds currently being withheld in retainage.</p>	<p>Implementation: Month Year Oct 2017</p>
<p>Person Responsible: Construction Director</p>	<p>Partly Agree</p>

Recommendation 9:

We recommend that Renew Atlanta management work with Atlanta Information Management to complete implementation of an electronic document management system and ensure that that system contains all necessary documentation.

Comments: Renew Atlanta maintains hard copies and electronic records for the Program.

Proposed Action: The Renew Atlanta Program Team will implement an electronic document management system once legislation is approved by City Council. Legislation language and the vendor package are in Department of Procurement to route for Department of Law's approval.

Implementation:

Month Year

Dec 2017

Person Responsible: General Manager

Agree