



## Chesterfield County, Virginia Internal Audit

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**GREG L. AKERS**  
Director

**DATE:** November 21, 2017

**TO:** Joseph P. Casey, Ph.D.  
County Administrator

**FROM:** Greg L. Akers  
Director of Internal Audit

**SUBJECT:** Building Inspection Code Compliance Audit

The Office of Internal Audit completed an audit of Building Inspection Code Compliance, and the final report is attached.

We would like to thank Rick Witt and his staff for their cooperation and assistance during this audit.

Attachment

Copy: Bill Dupler, Deputy County Administrator for Community Development  
Rick Witt, Building Official  
Ron Clements, Assistant Building Official  
James F. Lane, Ed.D., School Superintendent  
Audit and Finance Committee



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# Building Inspection Code Compliance

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November 21, 2017



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# Highlights

Internal Audit Report to the Board of Supervisors/School Board

## Why We Did This Review

Internal Audit conducted this review as part of our FY17 audit plan approved by the County Administrator and School Board Superintendent.

The audit focused on reviewing Building Inspection records for accuracy and compliance. Our objectives were to:

- Test inspection performance for Virginia Uniform Statewide Building Code compliance.
- Review expenditures for compliance with policies and procedures.
- Assess Department self-sufficiency.
- Report results to management.

## What We Recommend

We recommended internal control improvements over:

- Documenting quality assurance procedures for residential and commercial inspections.
- Implementing a system control to prevent premature re-inspection fee assessments.
- Ensuring employees using wireless devices or data services complete the Wireless Device Awareness Policy.



For more information, please contact  
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# Building Inspection Code Compliance



## What We Found

### Background

The Building Inspection (BI) Department has three strategic functions: public safety, community development, and property maintenance. The Department accomplishes these functions through three core programs:

- Permit Program – review and permit application approval and plans for compliance with pertinent code, laws, and ordinances.
- New Construction Inspection Program – performs inspections during building construction to verify code and approved plan compliance.
- Property Maintenance Program – performs existing structure inspections to ensure Virginia Property Maintenance Code and County ordinance compliance.

### Commendations

We commend BI for:

- Performing minimum required inspections prior to Certification of Occupancy issuance for residential projects tested.
- Properly approving and completing required inspections for completing a final inspection for final inspections tested.
- Verifying certification status compliance including required continuing education for the 31 inspection staff with no exceptions.
- Ensuring expenditures were created and approved by authorized employees, had adequate supporting documentation, complied with County policies and procedures, were for legitimate County business, and there were no duplicate payments or split purchases.

### Re-inspection Fees

2,940 FY16 re-inspections were subject to a fee:

- Internal Audit tested 5 of 151 waivers and noted proper support.
- Assessed fees (\$57 each) totaling \$158,973 were re-computed and agreed to FY16 general ledger revenue for 2,789 re-inspections.
- Internal Audit tested 20 of 2,789 re-inspections for assessment accuracy and noted 1 inspection assessed prematurely. We extended testing and noted an additional premature assessment instance. Implementing a system control to prevent re-inspection fee assessment prior to the third visit can prevent billing mistakes.

### Quality Assurance Program

BI's quality assurance program does not have documented procedures. Developing a policy that documents management quality assurance review process will provide the department with residential and commercial quality review goals.

### Wireless Devices

A test of 36 employees with wireless devices revealed that 35 of 36 have not completed Wireless Device Awareness Training. All employees using wireless devices are required to complete Wireless Device Awareness Training.

### Budget Monitoring Process

BI's cost recovery monitoring processes help the department measure performance related to the budget.

Management concurred with 4 of 4 recommendations to be implemented from October 5, 2017 to December 11, 2017.

We appreciate the cooperation received from management and staff while conducting this audit.

# INTRODUCTION

## BACKGROUND

The Building Inspection Code Compliance audit was a regularly scheduled audit on the FY17 audit plan approved by the County Administrator and School Superintendent. The Building Inspection Department has three strategic functions: public safety, community development, and property maintenance. The Department accomplishes these functions through the implementation of three core programs:

- Permit Program – review and permit application approval and plans for compliance with pertinent code, laws, and ordinances.
- New Construction Inspection Program – performs inspections during building construction to verify code and approved plan compliance.
- Property Maintenance Program – performs existing structure inspections to ensure Virginia Property Maintenance Code and County ordinance compliance.

## OBJECTIVES

Objectives of the audit were to:

- Test inspection performance for Virginia Uniform Statewide Building Code compliance.
- Review expenditures for compliance with policies and procedures.
- Assess Department self-sufficiency.
- Report results to management.

## SCOPE

Our audit work covered processes and transactions in FY16 and current operating environment.

We considered the following code, policies, and procedures during our audit:

|  |   |
|--|---|
| Accounting 1-1: Travel                                 | Accounting 1-5: Bill Approval, Documentation, and Payment   |
| Accounting 1-15: Purchasing Card Policy                | HRM 6-14: Employee Recognition Program                      |
| IST 7-11: Wireless Device Policy                       | Purchasing 12-1: Authority and Responsibility               |
| Purchasing 12-3: Purchasing Cycle                      | Purchasing 12-7: Delegated Purchasing Authority             |
| Purchasing 12-9: Blanket Purchase Orders               | Purchasing 12-10: Small Purchase Procedures                 |
| 13VAC5-21: Virginia Certification Standards            | 13VAC5-63: Virginia Uniform Statewide Building Code (VUSBC) |
| County Code Part II: Chapter 5 - Buildings             | Code of Virginia, Sec. 36-97 – 36-119.1                     |
| Building Inspection 1-006: Career Development Programs |   |

We conducted this performance audit in accordance with generally accepted government auditing standards. Those 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. Richard Slate, Staff Auditor, performed the audit work. Chesterfield County Internal Audit is a department within the organization of Chesterfield County/Schools.

## **METHODOLOGY**

Detailed information regarding the methodology can be found in the individual findings listed in the report. Our methodology included the following:

- Selecting permit samples and testing compliance with VUSBC to determine required inspections were performed.
- Verifying employee certification information with Virginia Department of Housing and Community Development.
- Reviewing BI quality assurance program to verify documented procedures exist.
- Performing an analytical review of expenditure data, testing a sample of non-payroll and non-capital expenditures including travel and credit card purchases, and reviewing for compliance with County Administrative Policies and Procedures.
- Inspecting BI cost recovery monitoring processes to determine if fee structure helps recover related inspection costs and perform limited cost recovery benchmarking to Henrico and Hanover.

## **INTERNAL CONTROL CONCLUSION**

According to Government Auditing Standards, internal controls, in the broadest sense, encompass the agency's plan, policies, procedures, methods, and processes adopted by management to meet its mission, goals, and objectives. Internal controls include the processes for planning, organizing, directing, and controlling program operations. It also includes systems for measuring, reporting, and monitoring program performance. An effective control structure is one that provides reasonable assurance regarding:

- Efficiency and effectiveness of operations;
- Accurate financial reporting; and
- Compliance with laws and regulations.

Based on the results and findings of the audit test work, auditors concluded that internal controls were in place and there were minimal findings to question their ability to assist management in meetings its mission, goals, and objectives. Recommendations specific to improving these controls can be found in detail further in the audit report.

## **CLOSING**

We would like to thank Rick Witt, Ron Clements, and Building Inspection staff for their cooperation and assistance during the course of this audit.

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Commendations

(Point Sheet C-1.4)

#### **CRITERIA:**

In order to issue a certificate of occupancy (CO) for residential new construction, a minimum number of inspections must be performed and approved. 13VAC5-63-130 Section 113.3 of the Uniform Statewide Building Code (USBC) identifies the minimum inspections that shall be conducted by the building official when applicable to the construction or permit. These include the following inspections:

- Footing excavations and reinforcement material for concrete footings prior to the placement of concrete.
- Foundation systems during phases of construction necessary to assure compliance with this code.
- Preparatory work prior to the placement of concrete.
- Structural members and fasteners prior to concealment.
- Electrical, mechanical and plumbing materials, equipment and systems prior to concealment.
- Energy conservation materials prior to concealment.
- Final inspection.

13VAC5-63-130 Section 113.8 of the USBC requires a final inspection be conducted, upon completion of a building or structure and before the issuance of a certificate of occupancy to ensure, to ensure that any defective work has been corrected and that all work complies with the USBC and has been approved.

Section 5-2 of the *Code of the County of Chesterfield* states, “The building official and all other employees of the local building department who administer, supervise and enforce the Virginia Uniform Statewide Building Code shall be certified in accordance with the Virginia Certification Standards.”

The Virginia Department of Housing and Community Development (VDHCD) provides certification and training as mandated by the Virginia Certification Standards (VCS 13 Virginia Administrative Code 5-21). The VDHCD requires all certificate holders to maintain their certifications by attending ongoing/periodic training and continuing education. Each certificate holder is responsible for obtaining and submitting 16 hours of continuing education every 2 years.

Building Inspection policy BI-01-006 – Career Development Programs identifies the qualifications for the initial hiring and continued employment of inspectors. It states that certification within 18 months is a requirement for continued employment.

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Commendations

(Point Sheet C-1.4, Continued)

#### **CRITERIA (continued):**

County Administrative Policy (CAP) 1-5: Accounting – Bill Approval, Documentation, and Payment outlines the procedures for bill approval, documentation, and payment for goods or services. The policy includes the following requirements: maintaining supporting documentation for all expenditures, using proper procedures and tax exemptions, and creating and approving invoices through authorized personnel. It also describes the policy against split purchases and duplicate payments.

CAP 12-7: Purchasing – Delegated Purchasing Authority outlines the procedures for delegated purchasing authority for transactions of \$5,000 or less. The policy includes, but is not limited to, the following requirements: using departments/schools shall not split orders to keep the dollar level of several orders below \$5,000 to avoid sending a requisition to Purchasing.

#### **CONDITION(S):**

There were 1,110 new residential construction projects that received COs in FY16. Internal Audit tested 25 and found the minimum required inspections were performed prior to issuance of the CO.

There were 15,708 final inspections conducted in FY16. Internal Audit tested 25 and found all required inspections were properly approved and completed before completing a final inspection, and all final permits were fully supported.

We verified certification status compliance including required continuing education for the 31 inspection staff with no exceptions.

The following audit testing was performed for FY16 with immaterial, if any, discrepancies noted:

- All invoices were created and approved by the appropriate individuals.
- A sample of 25 non-payroll expenditures had adequate supporting documentation, complied with County policies and procedures, and were for legitimate County business.
- No duplicate payments and split purchases were found.
- All non-cash awards complied with County policies and procedures.

#### **CAUSE(S):**

- Inspection staff completed all required inspections prior to the issuance of a CO.
- Building Inspection staff satisfy certification and continuing education requirements.
- Building Inspection staff performed expenditure related tasks appropriately by following administrative policies and procedures.

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Commendations

(Point Sheet C-1.4, Continued)

#### **EFFECT(S):**

- The minimum required inspections were performed on projects prior to the issuance of a CO.
- Inspectors obtaining certifications and meeting continuing education requirements ensures compliance with standards and provides assurance that quality inspections were performed.
- Complying with administrative policies and procedures helps the County achieve its goal of being a model for excellence in government.

#### **COMMENDATION(S):**

We commend Building Inspection Department management for ensuring all:

- Minimum required inspections were conducted prior to the issuance of a CO for items tested.
- Staff are aware and meeting certification and continuing education requirements.
- Expenditures were created and approved by authorized employees, had adequate supporting documentation, complied with County policies and procedures, were for legitimate County business, and there were no duplicate payments or split purchases.

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Re-inspection Fees

(Point Sheet C-1.2)

#### **CRITERIA:**

Section 5-5 of the Code of the County of Chesterfield states every applicant must pay set fees before Building Inspection issues a building permit. The permit fees vary based on the type and scope of the project. The first inspection and one re-inspection are included in the permit fee. However, third and subsequent inspections for the same defect require a re-inspection fee, \$57 per instance as defined by code. Re-inspection fees help cover inspection costs and encourage first-time readiness for inspections.

#### **CONDITION(S):**

2,940 FY16 re-inspections were subject to a fee (i.e. third or subsequent inspection for the same defect). We tested re-inspections to determine if the fees were accurate and charged on the third or subsequent visit:

- Fees were waived for 151 re-inspections (5%). We tested 5 noting proper support for fee waiver.
- Internal Audit recomputed assessed fees for the remaining 2,789 re-inspections at \$57 each totaling \$158,973; which was consistent with FY16 general ledger revenue.
- We selected 20 assessed fees to determine accuracy and verify payment. All tested were accurate except one was for a first re-inspection that should not have required a fee. Based on this exception, we extended testing to identify all re-inspection fees assessed prior to the third visit. We noted only one additional instance where a re-inspection fee was prematurely assessed.

#### **CAUSE(S):**

Re-inspection fees were properly assessed. However, the system allows assessing a re-inspection fee on a project before the third visit and there were two instances where this occurred.

#### **EFFECT(S):**

Two customers were charged a re-inspection fee prematurely.

#### **RECOMMENDATION(S):**

We recommend the Building Inspection Department management:

1. Consider implementing a system control to prevent re-inspection fee assessment prior to the third visit for the same defect.
2. Refund the two customers (\$57 each) for re-inspections that should not have required a fee.

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Re-inspection Fees

(Point Sheet C-1.2, Continued)

#### **MANAGEMENT'S RESPONSE(S):**

- 1. Concur. Ron Clements, Assistant Director is responsible for implementing by November 15, 2017. A computer system feature to prevent re-inspection fee assessment prior to the third visit is not possible. New system configurations are not permitted in our current system (POSSE) due to development of the new Community Development enterprise land management computer system (ELM), which will replace POSSE. The new ELM system will not support such a feature due to technical limitations of the software product selected for ELM.*
- 2. Concur. Becky Summers, Customer Operations Administrator and Donna Ross, Sr. Account Clerk are responsible for implementing by November 13, 2017. The two customer's re-inspection fees have been refunded as of November 13, 2017. (Note: The refund for 20160422-074 was processed on November 13, 2017 and refund for 20160310-017 was completed by October 5, 2017).*

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Quality Assurance Program

(Point Sheet C-1.3)

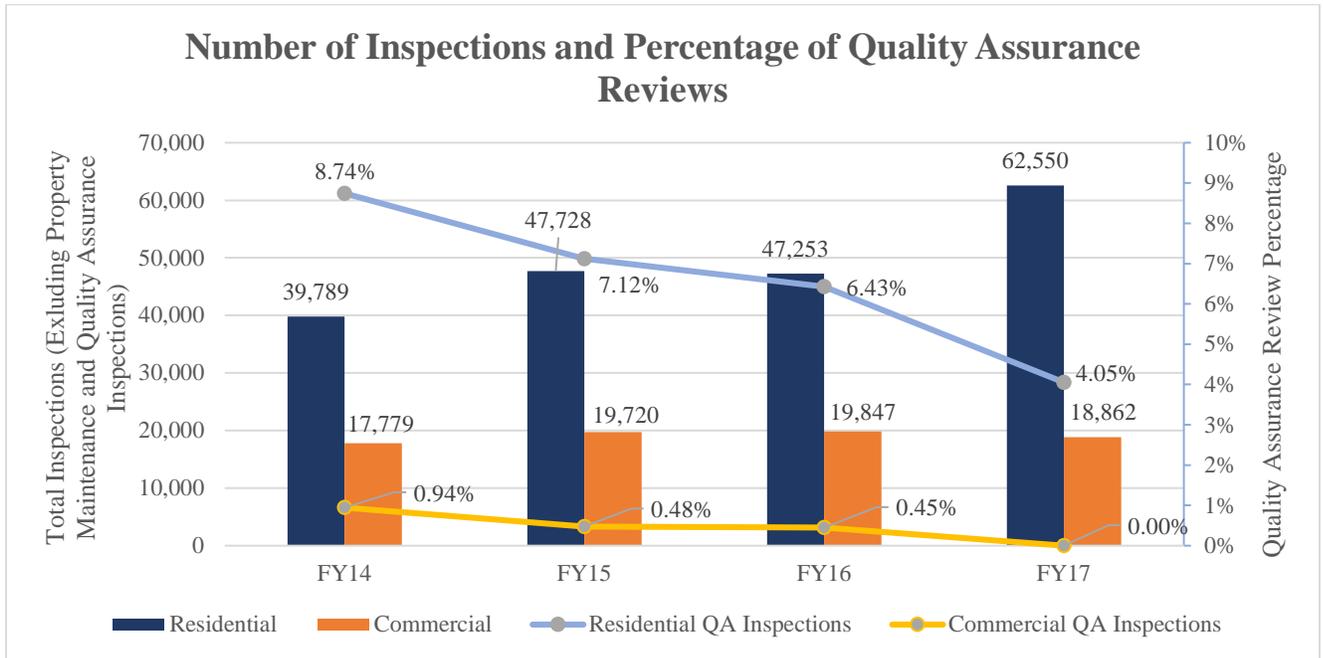
#### **CRITERIA:**

Quality control processes help ensure services adhere to defined requirements, document management's monitoring of employee performance, and provide staff with feedback.

#### **CONDITION(S):**

Internal Audit reviewed Building Inspection's (BI) quality control process and determined that BI management performs quality assurance reviews for residential and commercial staff inspections. BI supervisors select a sample of inspections to reperform as a quality assurance review. Any exceptions are reported to the customer and the review results are also compiled into a monthly defect report for staff as a training tool. The quality assurance review procedures are not documented; however, BI management's goal is to perform for 4% of all BI staff inspections (excluding property maintenance).

Internal Audit reviewed the department's FY14 to FY17 quality assurance review data illustrated on the chart below. Residential quality assurance review volume exceeded the 4% goal however the percentage of commercial reviews was below the 4% goal. There were no commercial quality assurance reviews during FY17.



## FINDINGS, RECOMMENDATIONS, RESPONSES

### Quality Assurance Program

(Point Sheet C-1.3, Continued)

#### **CAUSE(S):**

BI exceeded residential inspections quality assurance goals; however, there is no established goal monitoring for commercial inspections.

#### **EFFECT(S):**

BI met quality assurance goals for residential but not for commercial.

#### **RECOMMENDATION(S):**

3. We recommend Building Inspections Department develop a policy that documents management quality assurance review process, including volume percentage goals for residential and commercial inspections.

#### **MANAGEMENT'S RESPONSE(S):**

3. *Concur. Ron Clements, Assistant Director, is responsible for implementing by November 22, 2017. Quality control (QC) is a regular part of the commercial inspection supervision process; however, the commercial inspection process does not lend itself to the standard QC tracking and documentation process in our computer system (POSSE). The QC tracking process in our computer system was designed based on the residential inspection process where most inspections are completed in one day and the inspections are consistent from job to job. Commercial inspections can have many parts to the overall inspection, performed over weeks or months, and the jobs themselves vary greatly. The commercial QC process is based on a project management model that is not well integrated with the QC tracking system in POSSE. We will develop a process to document commercial inspection quality control, and we will develop an overall QC policy for both residential and commercial inspection programs.*

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Wireless Devices

(Point Sheet C-1.1)

#### **CRITERIA:**

County Administrative Policy (CAP) 7-11: IST - Wireless Devices Policy establishes procedures and responsibilities for the acquisition and use of County-issued and personal wireless devices. The policy states “all employees who have access to or are using a wireless device for County business are required to sign the Wireless Technology Usage Agreement.” Once an employee has approval for the use of a wireless service they will be directed to a training class for wireless technology awareness. Completion of the training class is mandatory for employees using County-issued or personal wireless devices for County business purposes.

#### **CONDITION(S):**

Wireless data services are provided to 36 employees. We reviewed all wireless expenditures for FY17 (as of March 31, 2017) and tested for compliance with CAP 7-11, and the following was noted:

- 35 of 36 employees have not taken the Wireless Device Awareness Training class.

#### **CAUSE(S):**

Building Inspection management does not have a process to monitor compliance and the employees were unaware of the requirement to complete the Wireless Device Awareness Training.

#### **EFFECT(S):**

- Employees have not received the training prescribed by the Wireless Usage Agreement form.
- Employees may not be aware of restrictions and potential risks of wireless devices.

#### **RECOMMENDATION(S):**

4. We recommend Building Inspection ensure any employee who has approval for a wireless device or service complete the Wireless Device Awareness Training.

#### **MANAGEMENT'S RESPONSE(S):**

4. *Concur. Pat Kindervater, Administrative Supervisor is responsible for implementing by December 11, 2017. All employees utilizing county issued or personal wireless devices to conduct county business shall receive Wireless Device Awareness Training. In addition, the training requirement has been added to our departmental orientation checklist.*

## FINDINGS, RECOMMENDATIONS, RESPONSES

### Budget Monitoring Process

(Point Sheet C-1.5)

#### **CRITERIA:**

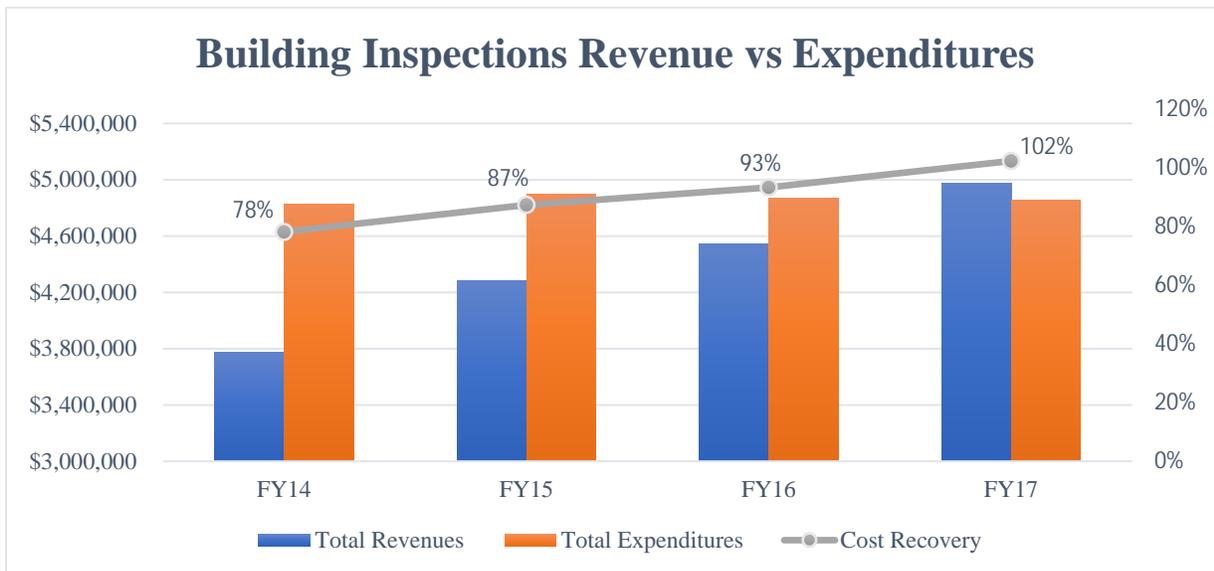
Building Inspection (BI) has a fee structure to help recover related inspection costs. Department management has a goal to reduce need for general fund dollars.

#### **CONDITION(S):**

BI monitors residential and commercial inspection data and determines cost per inspection on an annual basis. The department reviewed fee amounts in FY17 which resulted in no permit fee changes. Permit fees were last changed in FY06.

BI has had 60 full time employees from FY14 to FY16 and were approved for 1 additional full time employee in FY17. Inspection volume increased from 67,100 to 81,412 during FY16 to FY17. The increasing inspection volume has resulted in revenue growth over the last four fiscal years. Permit and inspection volume may vary over time based on economic conditions.

Internal Audit reviewed the department's FY14 to FY17 revenues and expenditures data illustrated on the chart below.



Internal Audit also reviewed the FY18 budget for Hanover and Henrico noting a budgeted cost recovery of 87% and 78%, respectively. The Chesterfield Building Inspection department is budgeted for an 87% cost recovery which is similar to neighboring localities.

#### **CAUSE(S):**

BI has established a process to monitor inspection volume and cost recovery.

#### **EFFECT(S):**

Building Inspection's cost recovery monitoring processes help the department measure performance related to the FY budget.