Recognizing the Best in County Government Programs!

Virginia Association of Counties
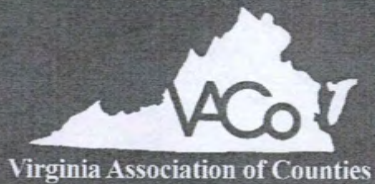
2014 Achievement Awards

Call for Entries
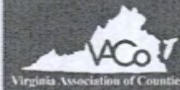
2014 VACo Achievement Awards

Deadline: June 2, 2014

Application Form

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 2, 2014.**

Program Information

Locality **Chesterfield County Virginia**

Program Title **County-wide Inspection Project**

Program Category **Community & Economic Development**

Contact Information

Name **Jonathan P. Davis**

Title **Director**

Department **Real Estate Assessments**

Complete Mailing Address **6701 Mimms Loop, Chesterfield, VA 23832**

Telephone # **(804) 748-1321**   Fax # **(804) 717-6278**

E-mail **Assessor@chesterfield.gov**

Signature of county administrator or chief administrative officer

Name **James J. L. Stegmaier**

Title **County Administrator**

Signature *James J. L. Stegmaier*

County-wide Inspection Project Overview
Chesterfield County, Virginia
Real Estate Assessments

The International Association of Assessing Officers (IAAO) guidelines recommend that all properties need to be inspected every four to six years. Assuming that most new construction is identified through building permits, a physical re-inspection of the property including an on-site verification of the property characteristics should be conducted in that four to six year period. Periodic field inspections help ensure that property characteristics data, maintained by our office, are complete and accurate.

The Department of Real Estate Assessments has over 120,000 parcels; 107,362 of them improved with residential structures. Due to the large number of properties needing to be inspected and the limited number of staff available to complete those inspections, the department needed to develop a program to accomplish the IAAO recommended six year inspection cycle. Budget constraints prevented the hiring of additional staff to meet the required six year cycle. Therefore, existing technology as well as new technology needed to be explored in order to accomplish the task with existing personnel

The Department of Real Estate Assessments is now on track to achieve the goal of inspecting all improved residential properties in a six year cycle. Our property records are now more up-to-date and thus more accurate, resulting in assessments that reflect 100 percent of fair market value. The implementation of the inspection program has allowed the department to save revenue, increase the accuracy of the property records and equitably assess properties throughout in the county.

County-wide Inspection Project
Chesterfield County, Virginia
Real Estate Assessments

1. Abstract of the Program

Virginia state code mandates, "annual assessments….shall be made at 100 percent
of fair market value." In order to achieve 100 percent of fair market, all property
records must have accurate data. Following an analysis, it was discovered that
most of the property records had inspection dates of 10 years or older. Dated
inspections, along with the fact that some additions/improvements are done
without the proper permits, increased the probability of inaccurate property record
information.

In addition to the State Code of Virginia, the International Association of
Assessing Officers (IAAO) guidelines recommend that all properties need to be
inspected every four to six years. Assuming that most new construction is
identified through building permits, a physical re-inspection of the property
including an on-site verification of the property characteristics should be
conducted in that four to six year period. Periodic field inspections help ensure
that property characteristics data, maintained by our office, are complete and
accurate.

As an alternative to physical inspections, or field inspections, IAAO states that
many jurisdictions use digital imaging technology tools to supplement field re-
inspections for existing improvements. Digital imaging technology, or in our case
Pictometry, is used with the provision that our initial field inspections are

completed in a timely manner and that an effective system of building permits or other methods of routinely identifying physical changes is in place. In addition, a process was instituted to digitally scan all building plans for new construction and additions. Easy access to the scanned images made the process more efficient by reducing man-hours in the field measuring structures.

Our Pictometry software shows all four sides of the structure as well as a bird's-eye view. The clear image, along with the zoom capability, is clear enough to ascertain the various characteristics of a house, such as siding, decking versus patio, or roofing material. Employees are also able to clearly measure the width, length, and height of each structure with a high degree of accuracy.

2. The Problem/ Need for the Program

Chesterfield County is the third largest county in Virginia according to the 2010 U.S. Census; approximately 446 square miles. The county is a diverse community ranging from rural to suburban to urban. Completing a six year inspection cycle in a county this size and diverse can be very challenging.

The Department of Real Estate Assessments has over 120,000 parcels; 107,362 of them improved with residential structures. Due to the large number of properties needing to be inspected and the limited number of staff available to complete those inspections, the department needed to develop a program to accomplish the IAAO recommended six year inspection cycle. Budget constraints prevented the

hiring of additional staff to meet the required six year cycle. Therefore, existing technology as well as new technology needed to be explored in order to accomplish the task with existing personnel.

3. Description of the Program

The ultimate goal of this process is to inspect all improved residential properties every six years in order to maintain accurate property record information. In 2008, our office began digitizing all building plans. In conjunction with the Building Inspections Department, employees scanned residential plans (new construction and building additions) as well as commercial construction. We are now able to better determine the inside features, dimensions or quality of any new structures and additions, whereas for the most part, we do not have access to the inside of buildings.

Document imaging software was installed on each appraiser's computer in 2009, providing access to all of the scanned building plans submitted to the Building Inspection Department by the builders. As a result, the appraiser is now able to save approximately 30 percent of time in the building permit process by eliminating measurements in the field for new construction and additions.

Pictometry system was also installed in 2009 to provide the appraisers with digital images of existing properties that could be compared to the current property

record information. It became a valuable tool to inspect more properties than was physically possible in the past.

4. Use of Technology

The technology that the department incorporated in this inspection process was Pictometry and the Enterprise Document Imaging System. These tools have proven extremely beneficial to this process. Each has allowed the department to accomplish more work with fewer staff. The high resolution oblique image available in Pictometry provides the appraisers with digital images of existing properties that can be compared to the current property record information from the office. (See Exhibit #1, Page 8)

The Enterprise Document Imaging System allows the appraisers to extract the measurements and attributes from the scanned building plans. As a result, the processing time for the new construction and addition permits has decreased significantly. (See Exhibit #2, Page 9)

5. The Cost of the Program

Pictometry: Initial cost of $250,000. Purchased by Chesterfield County and utilized by Planning, Police, Fire, Real Estate, County Attorney, Environmental Engineering, Building Inspection, etc.

Scanner: $6,500

Training: Two staff sessions included in the cost of software package.

6. The Results/Success of the Program

The results of the inspection program have been substantial since beginning in 2009. Since then, we have inspected 92,980 properties; 42,091 were inspected by on-site visits and 50,899 were inspected by aerial photos, or Pictometry. (See Exhibit #3, Page 10) Of those inspections, their assessments increased by a total of over $60M. The value changes included large increases such as garages, additions or pools that were built by the homeowners unbeknownst to us. Also, the value change may have been small from just a simple patio or deck.

The Department of Real Estate Assessments is now on track to achieve the goal of inspecting all improved residential properties in a six year cycle. Our property records are now more up-to-date and thus more accurate, resulting in assessments that reflect 100 percent of fair market value. The implementation of the inspection program has allowed the department to save revenue, increase the accuracy of the property records and equitably assess properties throughout in the county.

The new technology has allowed the department to eliminate nine full time

positions (See Exhibit #4, Page 11) and five vehicles, resulting in a combined

total

annual savings of over $250,000 each year since 2009. In addition, there has been

a reduction of over 84,000 miles in vehicle usage.

7. Worthiness of an Award

The county-wide inspection project provided the department with the opportunity

to incorporate new methodologies that significantly improved the efficiency and

productivity of the property inspection process. Pictometry images have allowed

staff to have a clear view of the entire property to identify any changes. The

scanned building plans provide staff with accurate dimensions and the inside

layout of the improvement thereby considerably reducing the data entry time. (See

Exhibit #5, Page 12) As a result of the increase in productivity, the number of

parcels assigned to each appraiser for annual revaluation has increase from 8,200

to 13,000. (See Exhibit #4, Page 11)

The improvement in the processes allowed the department to eliminate nine full

time positions from FY10 thru FY13. In addition, there was a considerable

reduction in the use of the county vehicles which allowed the department to

eliminate five vehicles from its inventory.

The improvements made in the inspection process will benefit the department and Chesterfield County for years to come. The department's goal of inspecting properties every six years will be accomplished with fewer staff and resources resulting in lower future costs.

In order to be *Exemplary Stewards of the Public Trust and a Model for Excellence in Government,* it is essential that our department maintain accurate property record information and produce assessments that represent 100 percent of market value in a cost effective and efficient manner. We are now in a much better position to carry out this objective.

Chesterfield County's standing as a *First Choice Business Community* relies on improving processes and policies such as this county-wide inspection process.
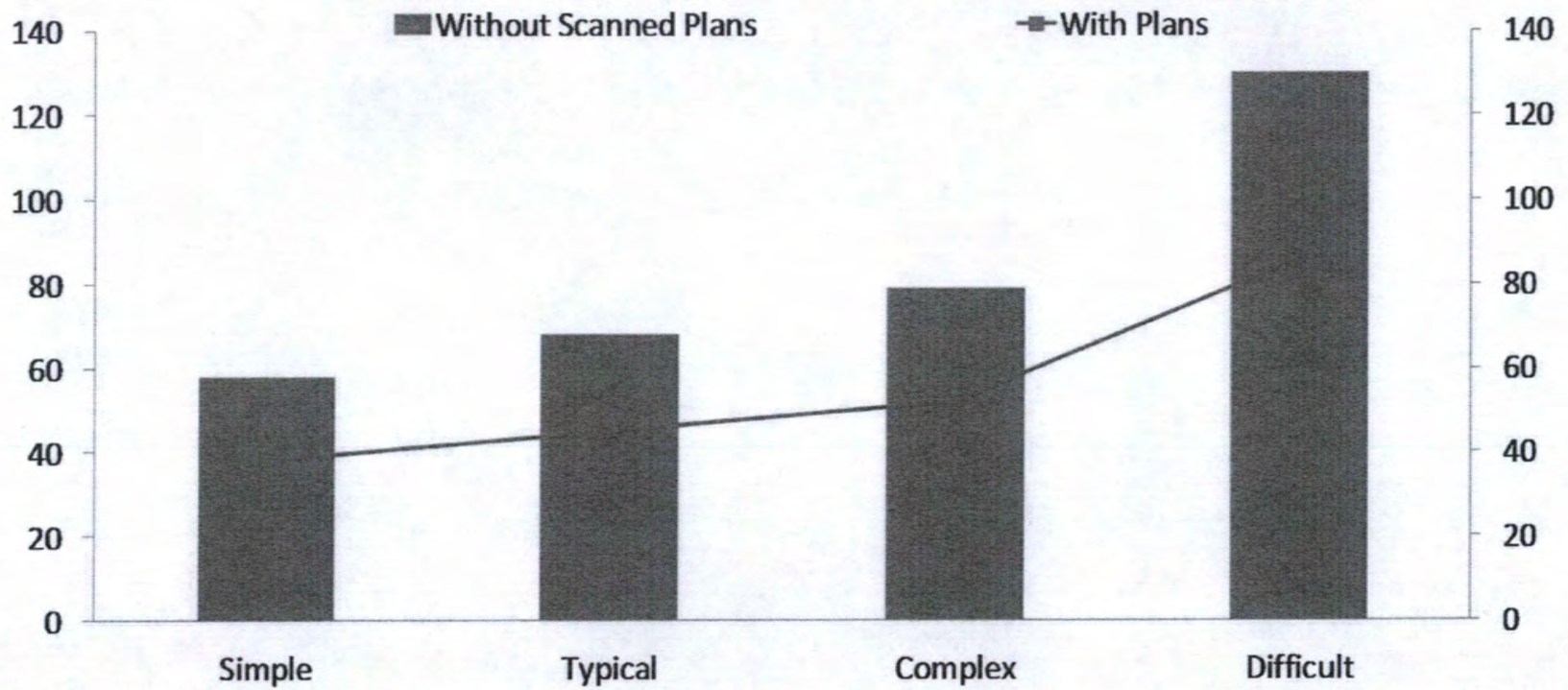
Pool Identified by Digital Aerial Software

Buildings from Pictometry photo is compared to the property record

Exhibit #1

Page 8

Exhibit #2

Average Processing Time in Minutes per New Construction

Exhibit #3

2009 to 2014 Property Inspections

Legend

Pictometry Inspections - 50,899
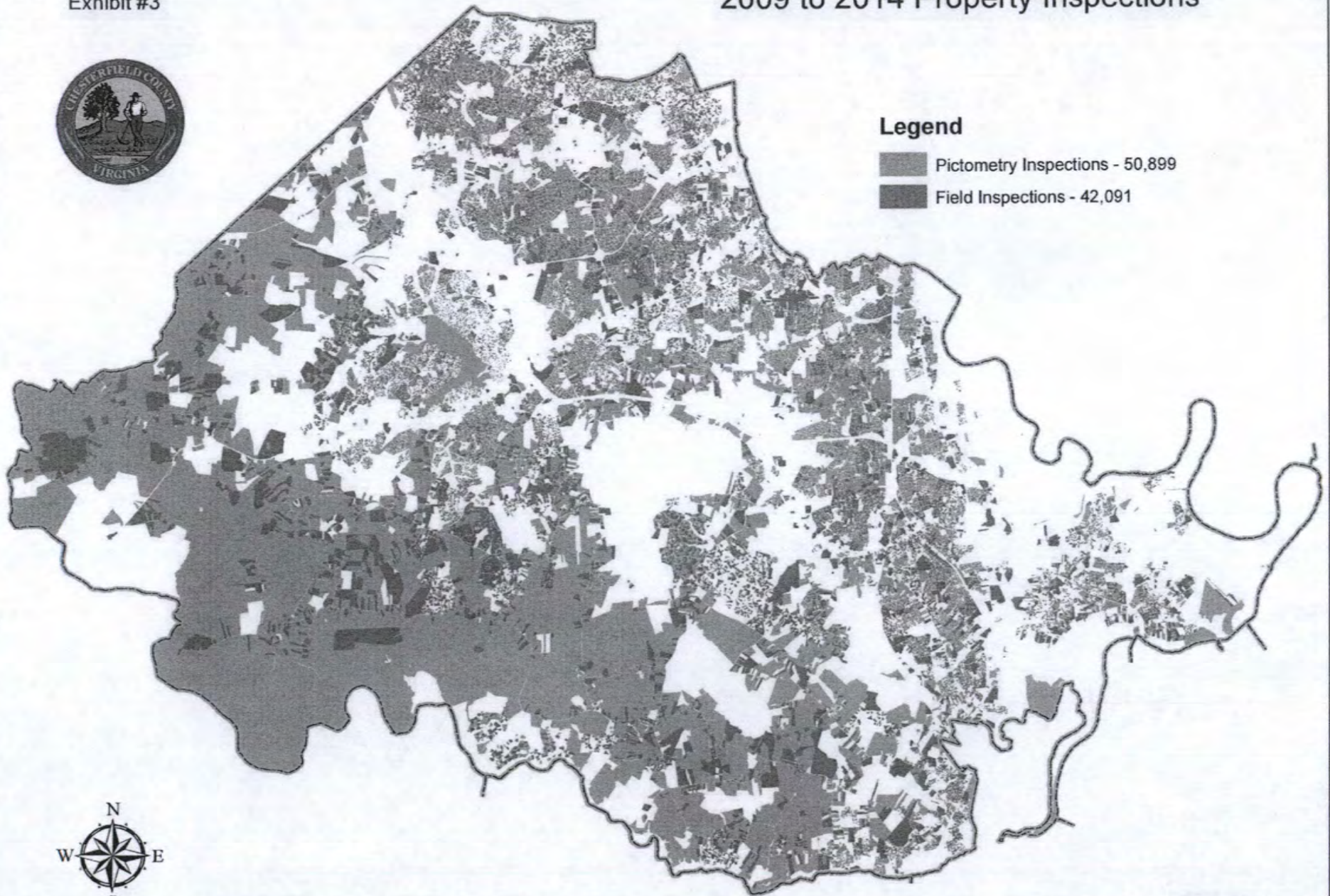
Field Inspections - 42,091

Exhibit #4

Parcels per Appraiser Assignment and Reduction in full time Employees (FTE)

Exhibit #5

Scanned Building Plan

FOUNDATION/BASEMENT PLAN
SCALE 1/8"=1'-0"