



**A Report to the
Audit Committee**

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Audit of the Assessor of Property

June 24, 2014

Metropolitan
Nashville
Office of
Internal Audit

EXECUTIVE SUMMARY

June 24, 2014



Why We Did This Audit

The audit was conducted because property valuation has a significant impact on the \$895 million in annual property taxes. It has been seven years since the last audit was conducted by our office.

What We Recommend

The Assessor's Office should establish procedures and responsibility for conversion to digital mapping practices should be formalized.

Formalize procedures for reconciling the Final Assessment Roll transfer to the Metropolitan Trustee's *Manatron* computer system.

Application controls related to *AssessPro* also require enhancement.

AUDIT OF THE ASSESSOR OF PROPERTY

BACKGROUND

The Assessor of Property has a duty to discover, list, classify, and value all property within the jurisdiction of Davidson County. This includes real property and personal property. The Office of Internal Audit contracted with *Experis® Finance Tax Division* to supplement the analysis of best practices and procedures for the appraisal process (see Appendix A).

OBJECTIVES AND SCOPE

The objectives of the audit were to determine the following:

- Procedures for the general appraisal process were adequately designed and effectively implemented.
- Information technology system controls safeguard the integrity of assessment information.
- Labor and operational expenditures complimented the Assessor's Office mission.

The audit scope included July 1, 2011, through October 31, 2013.

Scope Limitation: The Office of Internal Audit was unable to conduct a review of personal property tax compliance procedures due to confidentiality restrictions delineated in Tennessee Code Annotated § 67-5-402.

Exhibit 1 - Assessor's Office Expenses

	2013	2012	2011
Payroll	\$5,386,461	\$5,227,014	\$5,497,876
Non-Payroll	1,013,465	892,879	856,224
Internal Service Fees	676,988	743,758	793,392
Four Percent	5,180	130,576	98,775
Total Expenditures	\$7,082,094	\$6,994,227	\$7,246,267

Source: *EnterpriseOne Financial System*

KEY OBSERVATIONS

The Assessor's Office procedures and policies met or exceeded prevailing professional property assessment standards. However, Planning Department's standards are used for digital mapping. These standards are not always aligned with the Assessor's Office mapping standards and can cause added work when differences impact assessment calculations. There was no formalized process for reconciling the Assessor's Office Property's Final Assessment Roll transfer to the Metropolitan Trustee's *Manatron* computer system. Also, a formal staff succession plan should be developed and computer security controls need improving.

GOVERNANCE

The Assessor of Property is an elected official, chosen by the citizenry, who serves a four-year term before the reelection process begins again. Functionally, Tennessee state law and the Tennessee Board of Equalization set forth various guidelines, policies, rules, and manuals governing local assessment operations and mandate training requirements for assessment officials. All appraisals performed are subject to appeal via an independent Metro Nashville Board of Equalization. In certain instances appeals may be made directly to the Tennessee Board of Equalization.

FINANCIAL HIGHLIGHTS

Exhibit 2 - Metropolitan Nashville Property Assessed Value

Fiscal Year	2013	2012
<u>Real Property</u>		
Total Parcels- Realty	238,113	237,626
Appraised Value	\$11,877,136,516	\$11,847,282,828
<u>Personal Property</u>		
Accounts on Roll	23,073	21,429
Appraised Value	\$928,784,082	\$915,167,902

Source: Assessor's Office AssessPro System and Metro Nashville Comprehensive Annual Financial Report

Exhibit 3 - Top Five Vendors for 27 Months Ending September 30, 2013

Vendor	Amount	Purpose
Tax Management Associates	\$ 705,000	Personal property tax audit assurance.
Pictometry International Corporation	702,450	Aerial imaging of real property.
Axis Direct	185,942	Mailing services.
Patriot Properties	181,000	Software.
Causeway Data Communications	108,450	Software.

Source: EnterpriseOne Financial System

OBJECTIVES AND CONCLUSIONS

1. *Were the processes and controls pertaining to the general appraisal process adequately designed and effectively implemented?*

Generally yes. The Assessor's Office procedures and policies met or exceeded prevailing professional property assessment standards. However, the reconciliation between the Assessment Roll and Tax Roll could be enhanced as well as the approval process for those properties classified as exempt that are not reviewed by the State Board of Equalization (see Observations B and C). Also, responsibility, policy, and procedures related to the use of digital mapping should be formalized (see Experis Finance Recommendations A and C).

2. *Were controls pertaining to information technology systems in place, adequately designed, and operating effectively?*

Generally no. Control enhancement opportunities pertaining to access to the *AssessPro* database, and the ability to change variables within the system which could affect the value of individual properties without detection or an audit trail are needed (see Observation A).

3. *Were Assessor's Office expenditures prudent, reasonable, and in accordance with the Metropolitan Procurement Code and other Financial Policies?*

Yes. The Assessor's Office expenditures were prudent, reasonable, and in accordance with the Metropolitan Government Procurement Code and other applicable Financial Policies.

4. *Were leave balances being properly accrued, requested, approved, recorded, and tracked? Were payroll expenditures real, for work actually performed, complete, and accurately stated?*

Yes. Leave balances and payroll expenditures for the Assessor's Office were properly accrued, requested, approved, recorded, and tracked.

AUDIT OBSERVATIONS

The Committee of Sponsoring Organizations of the Treadway Commission, Internal Control – Integrated Framework, Control Environment component recommends management and the board of directors establish mechanisms to communicate and hold individuals accountable for performance of internal control responsibilities and implement corrective action as necessary. The audit observations listed are offered to assist management in fulfilling their internal control responsibilities, as well as align the department with prevalent business practices and information security standards.

Observation A: Application Controls over AssessPro

The system employed by the Assessor's Office, *AssessPro*, was installed and has been in use since 2000. The version in use is two generations behind the most current version available. *AssessPro* user logical access controls were not implemented effectively to ensure data integrity. For example:

Application Controls

- *AssessPro* users were setup with a server login, a database owner group membership, and an application role. This setting granted the user access from the back end which allows direct updates to system tables.
- No audit trail was setup to monitor activities on the server and in the database.
- Data, log, and backup were all setup in the same location.

User Account Management

- Eleven terminated employees still had their Active Directory accounts active. Three of the eleven accounts had active *AssessPro* access and also had virtual private network access. One out of these three was turned into a vendor status account. The Assessor's Office had changed the password for these accounts, effectively disabling the accounts at the time employee terminated employment. Records available for review did not reveal any abnormal activities from these three accounts.

- Nineteen terminated employees had active accounts with rights greater than read only. Nine active employees had duplicate accounts.
- Nine generic ID's were active, including an "sa" account with all permissions and an "apprazer" account with permission to delete activities, record cards, and other data. Seven other accounts had read only rights.
- Twelve accounts were not associated with anyone listed in the employee roster from *EnterpriseOne* (these accounts do not include the accounts created for tablets).

Recommendations for the management of the Assessor's Office to:

Application Controls

- 1) Seek vendor consultation on disabling the "Allow direct updates to system tables" setting and upgrading the SQL database to a version later than 2005. These later versions provide an application login feature which can eliminate the need to setup user accounts with any database role. User authentication should only be performed at the application level, not the server and/or database level.
- 2) Separate the database administration and application administration. Database administrators should not be granted access to assessment data. Application administrators should not be assigned any database roles. All administrators' activities should be monitored and reviewed.
- 3) Establish database level audit trails to capture sensitive and critical activities. Procedures should be established to systematically review audit results, document any anomalies, and record investigation results.

User Account Management

- 4) Establish on-boarding/off-boarding procedures to ensure appropriate access rights are assigned to new hires and removed for terminated employees. Network access should be removed immediately when an employee is terminated. Review all user accounts to ensure there are no active accounts for terminated employees.
- 5) Establish the business needs for using remote access to the system through virtual private networks or other means. If no off-site work is needed, remote access should not be granted or granted with read-only permission.
- 6) Develop a policy to limit users who do not need a constant connection, such as vendors. Grant remote access only for the time period needed and remove promptly after required work is completed.
- 7) Disable the default administrative account "sa" and remove all generic accounts.

Observation B: Formal Reconciliation of the Assessment Roll and the Tax Roll

The Assessor's Office and Trustee's Office states they perform an informal, undocumented reconciliation to ensure that all parcels and related assessed amounts are completely and accurately transferred from the Assessor to the Trustee. However, there was no documentation to show that any reconciliation had actually occurred, that the results were equivalent, or that the reconciliation was reviewed and approved by each of the two elected officials.

Recommendation for the management of the Assessor's Office to:

Jointly work with the Trustee's Office to develop and implement a formal reconciliation process to be performed each time the assessment roll is transferred to the Trustee's Office.

Observation C: Formal Approval of all Exempt Properties

Some parcels were classified as exempt that were neither governmental entities nor exemptions approved by the State Board of Equalization. In each instance noted, the exempt status appeared appropriate. A more formal approval process would reduce the risk of properties being improperly classified as exempt.

Recommendations for the management of the Assessor's Office to:

1. Implement a formal approval process for all exempt parcels not approved by the State Board of Equalization or granted by title (government). Segregation of duties controls would be enhanced if this approval was performed by someone independent of the Assessor's Office.
2. Conduct periodic reviews of exempt properties to help provide assurance that exempt properties within the AssessPro system are properly classified.

GOVERNMENT AUDITING STANDARDS COMPLIANCE

We conducted this compliance 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 observations and conclusions based on our audit objectives.

METHODOLOGY

To accomplish our audit objectives, we performed the following steps:

- Interviewed key personnel within the Assessor’s Office.
- Reviewed and analyzed documentation for compliance with the Tennessee Code Annotated, Metropolitan Nashville Code of Laws, and other applicable laws, regulations, and policies.
- Evaluated internal controls currently in place.
- Considered risk of fraud, waste, and abuse.
- Considered information technology risks.

AUDIT TEAM

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APPENDIX A. BEST PRACTICE AND PROCEDURE ANALYSIS

- Experis Finance Report Starts on the Next Page -

June 24, 2014

Prepared for:

**Metropolitan Nashville
Government**



**Experis[™]
Finance**

**Audit Report
Property Tax Assessor's Review**

Executive Summary and Scope

Experis was engaged by the internal audit function of the Metropolitan Nashville Government (“Metro Nashville”) to perform an analysis of best practices and procedures for the general appraisal process and communications of related assessments in Davidson County. As part of this analysis, Experis evaluated the level of awareness for overall assessment of operations, appraisal techniques and the impact of existing procedures on the property tax function. Experis observed and reviewed overall interdepartmental cooperation, staffing levels, parcel tracking samples, mass appraisal techniques and data transfer efficiency. This analysis also included a review of property tax incentives to ascertain the availability and transparency of best practices and procedures regarding payments in lieu of taxes.

Experis requested and gathered a variety of information including written procedures for their sales ratio studies (including a copy of the 2012 Sales Ratio Analysis Study) and valuations along with a reappraisal flowchart. Experis reviewed written guidelines on Davidson County’s four (4) year appraisal cycle with supporting evidence of site inspections and on-site review during appraisals. Other specific information gathered and reviewed is detailed in Appendix A.

Organizational Structure

Experis requested and was provided an updated organizational chart for the Assessor’s Office. At present, there are approximately seventy (70) associates in the Assessor’s Office, of which there are seventeen (17) active and credentialed appraisers. Davidson County adheres to the industry standards for professional accreditation for its appraisers as outlined by the International Association of Assessing Officers (“IAAO”). Continuing education is a requirement for appraisers to maintain their certifications and a tracking sheet for the department’s appraisers and their continuing education was reviewed. Based on comparable metropolitan areas, the size and number of appraisers along with their respective credentials appear to be in line with other jurisdictions of the same relative size.

Organizational Credentials - Certificate of Excellence in Assessment Administration

As noted above, Davidson County adopts the professional standards dictated by the International Association of Assessing Officers (“IAAO”). The IAAO is a nonprofit, educational, and research association maintaining some 7,400 members worldwide from governmental, business, and academic communities. The IAAO key objective is that *“It promotes education in property appraisal, assessment administration, and property tax policy through professional development, education, research, and technical assistance”*.

For 2012, the Davidson County Assessor’s Office applied and was awarded the Certificate of Excellence in Assessment Administration (“CEAA”) from the IAAO. This Award means that prior and present efforts demonstrate excellence by Davidson County to enhance best practices in appraisal and internal controls related to best practice standards. In order to receive this professional Certificate, the awards committee assigns an independent grader and panel to determine if a given jurisdiction and applicant meets the criteria outlined in the assessment practices guide. (www.iaao.org)

A typical application for this award is submitted in writing by the jurisdiction’s in-house staff. The independent grader evaluates appropriate procedures and questions by “pass” or “fail” basis. A score of 80 percent or higher must be received for each relevant chapter. The CEAA committee makes a final determination in granting the Certificate. The IAAO committee assigns a mentor who supports the jurisdiction to successfully complete the submission and meet prescribed objectives. Many of the objectives include meeting general practice and appraisal guidelines and showing proper continuing education for two-thirds (2/3) of the professional staff. The present standard is for staff to average at least fourteen (14) hours training and education for each appraisal professional for the selected year of compliance.

Professional Accreditation

Davidson County Assessor’s Office does meet industry standards of the IAAO for properly educating and certifying staff. Several staff members have participated in appraisal coursework by the IAAO and/or received specific certifications. These certifications were documented and a representative sample of actual certificates was reviewed. Common certifications are either the Tennessee Master Assessor or the Tennessee Certified Assessor which is awarded by the State Board of Equalization. The Tennessee Master Assessor requires the individual to have at least four (4) years of full-time experience in the field of property appraisal. Individual must pass IAAO coursework such as course #112 and #312 or must be a certified real estate appraiser through the state of Tennessee Real Estate Appraisal Commission with a minimum of two (2) years of full-time experience in the field of ad valorem taxation. Individual must receive a passing grade on Tennessee Assessment Law and Appraisal Fundamentals or hold an IAAO designation such as Cadastral Mapping Specialist (CMS), Personal Property Specialist (PPS), Assessment Administration Specialist (AAS), Residential Evaluation Specialist (RES), or Certified Assessment Evaluator (CAE)

The Tennessee Certified Assessor designation requires the individual to have at least two (2) years full-time experience and satisfy IAAO course requirements such as Course #300, #400, and #600. They must receive a passing grade on USPAP – Uniform Standards of Professional Appraisal Practice – professional ethics examination. Individuals must also have a passing grade on a narrative demonstration of the appraisal report related to residential property meeting IAAO requirements and a passing grade on the exam through the Division of Property Assessments. Finally, participants must also receive a passing grade on a case study examination offered by the division of property assessments addressing approaches to value.

The Davidson County Assessor’s staff average years of experience surpasses industry standards with most staff having a minimum of ten (10) years of assessment experience and many individuals having more than twenty-five (25) years of property tax assessment experience. These characteristics suggest a willingness to invest in staff training and maintain a high retention level of qualified employees. The only area of concern noted is the aging workforce with a number of appraisers scheduled to retire over the next five (5) to ten (10) years with replacement appraisers having much less experience overall and specifically in Davidson County.

Exempt Properties

The Assessor’s Office tracks the exemption from taxation of certain qualifying parcels and identifies exemptions through standard field reviews, title reviews, and application filings. Data is entered, maintained, and updated in the Computer Assisted Mass Appraisal (“CAMA”). Many exemptions are state law and coded in the system which does have error controls to prevent mistakes. Experis reviewed a document listing of forty-five (45) exempt parcels with various exempt designations. The document identifies the proof of exemption and corresponding documentation as described below:

- Exemptions identified by deed such as government entity.
- Exemptions requiring applications such as religious or charitable exemptions.
- Code determination such as non-profit cemeteries.
- Record card and reviews such as open space, tenants in common, etc.

The process employed by Davidson County meets national standards published by the IAAO and therefore, poses minimal risk of error in the classification and tracking of exempt properties. Although the nature of the exemptions is specific to parcels, there are some additional factors that minimize the risk of misclassification including the following:

- Experience and qualifications of the present staff which exceeds industry standards,
- Frequency and the comprehensiveness of exemption reviews by multiple personnel which meet typical standards, and
- Existence of internal controls within the system will also enhance accuracy meets industry standards.

Parcel Mapping

Digital parcel mapping is becoming more common as an industry practice. Historical practice for mapping was orthophotography (aerial photos) which are used in conjunction with a variety of ground evidence such as fence lines, foliage, or roads. The Commission of Planning and Zoning within Davidson County is responsible for mapping of land parcels. The Assessor’s Office does not manage the function and relies on the accuracy of the Planning Commission. The IAAO publishes mapping standards in their “Standard on Digital Cadastral Maps and Parcels.” According to the IAAO, “...the assessor must retain the ultimate authority to inventory, create and define parcels and parcel identifies for property tax purposes.”

The procedures and best practices adopted by the Commission of Planning and Zoning are beyond the scope of this review. The Assessor’s Office can serve as a control when analyzing the mapping function and provide assistance where necessary and requested. In general, both in Tennessee and external to the state, mapping is the responsibility of each county’s assessor office. Therefore, the current process and practice in Davidson County for digital mapping is not typical to general industry standards and could indicate the possibility for risk of error. The Assessor’s Office collaboration with the Planning Commission in assigning qualified personnel to review parcel mapping is essential to minimize risk on assessments while meeting consistent appraisal standards. Pursuant to the State Division of Property

Assessments for Tennessee, “...area calculation is very important phase of the mapping and assessment process.”

Experis did review various departmental memorandum identifying parcel area studies where misalignment of parcels is identified. There was a pilot study by Smart Data Strategies, Inc. in 2012 which also concluded digital parcel lines did not match ground observations. Such discrepancies pose the question if it is in the best interest of the Assessor’s Office to be solely responsible for this function. Typically, an assessor’s office is much more likely to ensure standards meet appraisal and IAAO guidelines as a result of its staff training. Lack of consistency and collaboration between the Assessor’s Office and the Planning Commission could pose a risk where assessments are inaccurate or there is a potential for discrimination in recalculating an area of a parcel. Additionally, there is an impact risk on ad valorem tax revenues if assessments are deemed incorrect.

Mass Appraisal Techniques

The large volume of accounts in counties across the United States requires assessing jurisdictions to manage property tax functions efficiently. In order to process a large number of assessments, mass appraisal techniques are often used to expedite the process. These techniques are widely accepted tools of the trade. For instance, mass appraisal techniques can be used to estimate assessment values of each individual property where sales and other market data from several properties are used to compare and estimate values for other single specific properties.

These mass appraisal techniques, which consist of mathematical models, are the foundation of modern Computer Aided Mass Appraisal systems (CAMA). CAMA is used by nearly all assessors nationwide. The system collects and maintains the appraisal data. It is also used to assist in the mandated sales ratio study for which all counties must complete. CAMA functions as a statistical test to ensure the mass appraisal techniques used to derive values correlate with market value. Modeling techniques used by assessor’s offices include but are not limited to trend analysis and regression statistical analysis. They are recognized by appraiser organizations such as the IAAO and nationally recognized as accepted procedures for mass appraisals.

A county’s “sales ratio study” is submitted to and reviewed by the State Board of Equalization for approval. The goal and standard is for assessed values to correlate to the actual adjusted sales’ prices and to ensure uniformity and compliance with state assessment guidelines. Mass appraisal methodology uses similar concepts to arrive at fair market values as does individual appraisal. Although, the same approach to value principals are used, the application is different. Direct comparisons are used for individual appraisal whereas mass appraisal utilizes large sets and volume of data. Both techniques have the same intent in that it utilizes market information to estimate values of property.

Experis reviewed the most recent sales ratio study and other related studies indicated in this review for Davidson County. Experis also interviewed and found assessing personnel in the department to meet national standards in mass appraisal education. The techniques used by Davidson County follow the same nationwide techniques used by appraisal offices around the country. They are educated by and employ the same recommended IAAO procedures for mass appraisal techniques. Further, there are

controls in the property tax system as the Assessor’s Office is mandated to submit their sales ratio studies to the State Board to show compliance with state regulation. As Davidson County Assessor’s Office meets and follows the recommended appraisal standards and procedures, there are no additional recommendations in this area and current mass appraisal processes ensure assessment accuracy and minimal procedural risk.

Data Transfer Efficiency

National assessing standards consist of the property appraiser or assessor’s office notifying each taxing unit as to the value of the computed or official millage rate. “The property appraiser shall extend the taxes against the approved tax roll.” The final reconciled tax roll certified by the property appraiser to the tax collector indicates for each parcel at a minimum the final assessed value, exemptions if any, tax rate, and final taxes due.

It is the duty and responsibility of the tax collector to compile and furnish the final assessed value to the property owner. The information is transferred to the tax collector in a format from which tax notices or refunds may be produced for collection to the public. The tax collector prepares and mails to each taxpayer tax bills or refunds for each parcel. It is common practice to show transparency of tax value determination (assessor’s office) and tax administration (collector’s office).

Davidson County’s process is interactive with the public including on-line forms and systems which provide a given parcel’s tax information. This system also provides information for both departments and offers explanations of duties of collection of real, personal property, and public utility taxes. The Collector’s office administers state tax relief, tax deferral, and tax freeze programs as well as collecting and processing delinquent taxes. Experis determined based on interviews, documentation, and processes observed that Davidson County’s Assessor’s Office meets and follows the same national procedures that are typical between the departments of other jurisdictions.

Flood Analysis

Experis reviewed an analysis of sample locations (approximately 45-50 locations) regarding a significant flood event occurring in the County during calendar 2010. The analysis compared the sales price against the appraised value with considerations for damages and other resulting characteristics to the flood area. The report considers what given location sold for after repairs from flood damage against what properties sold for that did not have flood damage.

In such events, counties and local jurisdictions often use standard mass appraisal techniques to achieve uniformity in the overall assessment period. However, some exceptions may occur based on extraordinary factors that impact market value. Taxing jurisdictions may conduct field review and additional analysis to provide more clarity around the impact of such events. There is some risk to reasoning after repair value when the obsolescence occurs before the repair. As long as the repairs occurred before re-assessment, the analysis is meaningful. If repairs did not occur or were not sufficient then consideration of the impact should be included.

Taxpayers are often encouraged to submit information of individual circumstances to assist the appraisers and can pursue appeals to ensure such information is considered. From their perspective, Appraisers also must use the most recent and best available information when to enhance these mass appraisal techniques. Davidson County has a considerable on-line process and informal process that meets national standards.

Property Tax Exemptions and Incentives

By statute, Metro Nashville cannot “abate” taxes for private entities. Like many other jurisdictions, Metro Nashville does offer certain local and jurisdictional incentives known as “payment in lieu of taxes” or “PILOT” agreement. The Finance Department for Metro Nashville is responsible for financial administration of the PILOT program. A general flow of how PILOT agreements are initiated and implemented was observed by Experis along with an interview of this process to gain an understanding of the participation by the Assessor’s Office.

As noted, the general responsibility for PILOT agreements is outside the controls of the Assessor’s Office since the Finance Department through a memorandum of understanding with the Industrial Development Board is designated as the financial administrator of such benefit. While there is communication and collaboration between the departments, the Assessor’s Office must ensure that the agreements are represented in their system accurately on a consistent basis given the details of each agreement. This process of reconciliation between the inception of a PILOT by the Finance Department and the annual monitoring by the Assessor’s Office is presently a manual process.

Due to the unique nature of these types of tax “incentives” communication is essential among various departments as it relates to PILOT agreements. Experis recommends the Assessor’s Office continue its review the PILOTs on a regular cadence, perhaps making such reviews part of a quarterly process. Based on research and observation, Experis concludes that the general flow of the PILOT process, albeit manual, does meet key standards and practices indicating minimal risk for this area.

Summary and Recommendations

In summary, Experis can note the following areas of progress and concern, where most areas of concern are on a prospective basis related to the following areas: compliance risk, management risk and reputational risk.

A. Compliance Risk

Compliance risk focuses on a variety of areas such as weak internal controls, legislative changes, system changes and data integrity issues. Based on observation and review, our analysis determined that there is minimal risk given the current practices and procedures that are being used.

Experis recommendations for the management of the Assessor’s Office to minimize compliance risk by:

1. Securing and maintain more authority and responsibility for digital mapping practices.
2. Addressing going forward prospective concern regarding possible discrepancies between the new digital parcel area mapping practices versus the historical orthophotography.
3. Continuing its review of the PILOTs on a regular cadence, perhaps making such reviews part of a quarterly process.

B. Management Risk

Management risk includes areas such as changes in key personnel, lack of internal communication between various groups and newer or inexperience personnel. The Assessor’s Office has a tenured and well educated workforce with a sufficient number of appraisers for the size and scale of Davidson County. The primary area of concern is prospective in nature as Experis observed an aging workforce that will eventually need to be replaced over the next few years due to retirements.

Experis recommendation for the management of the Assessor’s Office to minimize management risk by:

Developing a more formal succession planning given the number of appraisers needed along with the projected retirement path and loss of historical knowledge that typically follows.

C. Reputational Risk

Reputational risk may encompass areas such as court hearings or litigation matters, political developments, leaks to the press and revenue authority investigations. Experis has noted that the Assessor’s Office risk from a reputational perspective is minimal at this point. However, as noted above and related to the compliance risk, the area of digital parcel mapping and related discrepancies will need to be addressed on a more comprehensive basis in order to ensure proper documentation of adjustments to parcels along with subsequent tax bills during the next assessment cycle.

Experis recommendation for the management of the Assessor’s Office to minimize reputational risk by:

Developing a more formal resolution and strategy for movement to digital parcel maps will contribute to more accuracy for the Davidson County constituency.

Appendix A

Metro Nashville Property Tax Consulting Work

Table of Contents- Documents Received /Reviewed

1 Summary of Documents Reviewed

- Written procedures for sales ratio studies, valuation, etc.
- Reappraisal flow chart
- Written guidelines on 4 year appraisal cycle with evidence of site inspection, on-site reviews during reappraisal
- Documents for internal procedures regarding maintenance and administration of GIS, Web Pro, etc.
- Summary of County Assessor’s functions and processes
- Documented process for new properties, permits, occupancy files
- Copy of 2012 Sales Ratio Analysis Study

2 DCCEAA Documents Reviewed(listed by Chapter)

Chapter 5 -Data Collection

- CH 5 DCCEAA Answers
- Ex. 5.1.1 Land Use Codes
- Ex. 5.1.2 Zoning District and Land Uses
- Ex. 5.1.3 Zoning Map
- Ex. 5.1.4 T.C.A. 67-5-601
- Ex. 5.4.1 KIVA
- Ex. 5.4.2. AssesPro_Permit
- Ex. 5.4.3 T.C.A. 67-5-603
- Ex. 5.4.4 T.C.A. 67-5-602
- Ex. 5.6.1 Appraisal Procedure
- Ex. 5.10.1 4th Quarter 09 Summary1
- Ex. 5.10.2 Income Works Davidson 2008 data summary

Chapter 6 -Land Valuation

- Ch. 6 DCPAO Answer
- Ex. 6.5.6 Prc9306409100
- Ex. 6.1.1 Davidson Co Appraisal
- Ex. 6.1.2. Neighbor Hood Map
- Ex. 6.1.3. Residential
- Ex. 6.1.4 Agricultural
- Ex. 6.1.5. Commercial
- Ex. 6.1.6 Industrial

Ex. 6.1.7. Apartment

Chapter 7 -Residential Property Valuation

CH 7 DCCEAA Answers

Ex. 7.5.1 RIG Report (Analysis)

Ex. 7.5.2 Before-after increases (RIG Report)

Ex. 7.5.1.1 Procedures for Sales Data Collection Work

Ex. 7.5.4.1 MS Base Rate 2009

Ex. 7.5.4.2 Condo Key Sheet

Ex. 7.5.7.1 Scatter Plots

Ex. 7.6.1 RZ-2009 Base Rate Spreadsheet

Chapter 8 -Commercial Property Valuation

CH 8 DCPAO Answers

Ex. 8.1.1 T.C.A. 56-5-601

Ex. 8.1.2 State Assessment Manual

Ex. 8.1.3 Standard On Mass Appraisal

Ex. 8.2.1. Letters Assigned to Apts.

Ex. 8.3.1. Income Works 2008 data

Ex. 8.3.2. 09 APT-INC Models

Ex. 8.4.1 Commercial Publications

Ex. 8.5.1 Web Extender Query

Ex. 8.5.2 Data Exportable Excel Spreadsheet

Ex. 8.5.3 Income Works 2008 data

Ex. 8.5.4 Income Works 2008 data

Ex. 8.6.1 Sale Questionnaire

Ex. 8.6.2. Sales Codes

Ex. 8.6.3 Benchmark Sales Data DR

Ex. 8.6.4 List of Current Depreciation

Ex. 8.6.5 Depreciation Spreadsheet

Ex. 8.7.1.1 Average Rate

Ex. 8.7.1.2 2009 S.F.V.I. codes & Price

Ex. 8.7.1.3 2009 XFSB Mobile Home

Ex. 8.8.1 Warehouse

Ex. 8.8.2. Economics

Ex. 8.8.3. Functional obsl

Ex. 8.8.4 Special obsl

Ex. 8.10.1 Model Selection

Chapter 9 -Sales Data, Ratio Studies, and Stratification

CH 9 DCCEAA Answers

Ex. 9.2.1 Sales Verification Questionnaire

Ex. 9.2.2 Procedures for Sales Data Collection and Verification

- Ex. 9.4.1. Sales Adjustment Report
- Ex. 9.4.2 Sales Adjustment Graph
- Ex. 9.5.1. Response Surface For Market Analysis
- Ex. 9.5.2 Appraisal Zones
- Ex. 9.5.3. Neighborhood Example
- Ex. 9.5.4 Sub-Neighborhoods example
- Ex. 9.5.5. PRC Market Area and Neighborhood
- Ex. 9.5.6. Sales Analysis By Neighborhood
- Ex. 9.6.21 Ration Studies
- Ex. 9.6.2 Sample data
- Ex. 9.10.1 Sample Reports
- Ex. 9.12.1. Change In Value Sold Not Sold
- Ex. 9.13.1. T.C.A. 67-1-202 Power and Duties
- Ex. 9.13.2. T.C.A. 67-5-1604 Appraisal ration studies
- Ex. 9.13.2. T.C.A. 67-5-1605 Appraisal ration studies
- Ex. 9.13.4 Ratio Studies
- Ex. 9.13.5.Overall Appraisal Ratios
- Ex. 9.13.6 T.C.A. 67-5-1606
- Ex. 9.13.7 2011 Annual Report
- Ex. 9.13.8 Davidson 2007 Ratio Study
- Ex. 9.13.9 2011 Davidson Ratio Study

APPENDIX B. MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

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METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

GEORGE L. ROOKER JR.
ASSESSOR



OFFICE OF THE ASSESSOR
REAL & PERSONAL PROPERTY

June 23, 2014

Mr. Mark Swann, Metropolitan Auditor
Office of Internal Audit
1417 Murfreesboro Pike
Nashville, Tennessee 37217

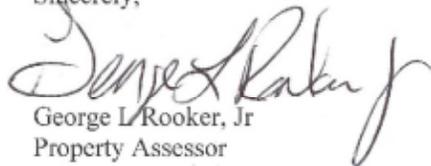
Re: Audit of the Assessor of Property

Dear Mr. Swann:

Please know that this office is in receipt of the Audit of the Assessor of Property and is satisfied with the audit work completed and the resulting recommendations. Most of the recommendations have been implemented or are being implemented and those remaining will be implemented as described in the attached Management Response and Corrective Action Plan.

In addition, please know that my staff and I enjoyed meeting and working with you, Mr. Bill Walker, Ms. Kimberly Smith, Mr. Qian Yuan, and Mr. Carlos Holt.

Sincerely,


George L. Rooker, Jr.
Property Assessor

APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
Office of Internal Audit Recommendations for management of the Assessor’s Office to:		
<p>A.1 - Seek vendor consultation on disabling the "Allow direct updates to system tables" setting and upgrading the SQL database to a version later than 2005. These later versions provide an application login feature which can eliminate the need to setup user accounts with any database role. User authentication should only be performed at the application level, not the server and/or database level.</p>	<p>Agree. The SQL database has been upgraded to 2008 and the Office has initiated discussions with its vendor on a solution to ensure that user authentication will be performed only at the application level.</p>	<p>December 2015.</p>
<p>A.2 - Separate the database administration and application administration. Database administrators should not be granted access to assessment data. Application administrators should not be assigned any database roles. All administrators' activities should be monitored and reviewed.</p>	<p>Agree. Metro ITS became the database administrator when the database was upgraded to SQL 2008 and AssessPro was upgraded to AssessPro 4.7.3. Metro ITS does not have access to assessment Data. The CAMA system vendor, Patriot Properties, is the application administrator. Patriot Properties has not been assigned any database roles. The Office has implemented a plan to monitor and review all administrator activities.</p>	<p>Complete.</p>
<p>A.3 - Establish database level audit trails to capture sensitive and critical activities. Procedures should be established to systematically review audit results, document any anomalies, and record investigation results.</p>	<p>Agree. The Office is working with Metro ITS and Patriot Properties to develop database level audit trails and procedures to systematically review audit results, document any anomalies, and record investigation results.</p>	<p>November 2014.</p>
<p>A.4 - Establish on-boarding/off-boarding procedures to ensure appropriate access rights are assigned to new hires and removed for terminated employees. Network access should be removed immediately when an employee is terminated. Review all user accounts to ensure there are no active accounts for terminated employees.</p>	<p>Agree. The Office will review and refine its on-boarding procedures to ensure that appropriate access rights are assigned to new hires. The Office will review and refine its off-boarding procedures to ensure that network access is removed immediately when an employee is terminated. The Office has conducted a review of all user accounts to ensure there are no active accounts for terminated employees.</p>	<p>July 2014.</p>

APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
<p>A.5 - Establish the business needs for using remote access to the system through virtual private networks or other means. If no off-site work is needed, remote access should not be granted or granted with read-only permission.</p>	<p>Agree. The Office will review its procedure to determine whether to grant remote access to the system through virtual private networks or other means. The Office does not currently intend to grant remote access with read-only permission. The Office reviewed current employees that have remote access and has implemented procedures to review remote access status quarterly.</p>	<p>July 2014.</p>
<p>A.6 - Develop a policy to limit users who do not need a constant connection, such as vendors. Grant remote access only for the time period needed and remove promptly after required work is completed.</p>	<p>Agree. The Office is working with Metro ITS to develop a policy and procedures to allow the Office to conveniently and timely enable remote access to users when needed and to disable remote access after required work is completed.</p>	<p>August 2014.</p>
<p>A.7 - Disable the default administrative account "sa" and remove all generic accounts.</p>	<p>Partially Agree. The Office is working with Patriot Properties to explore possible solutions to disable the default administrative account. The Office has disabled the one generic account that had permissions. The Office plans to maintain a generic read-only account for seasonal and/or temporary staff.</p>	<p>December 2015.</p>
<p>B - Jointly work with the Trustee's Office to develop and implement a formal reconciliation process to be performed each time the assessment roll is transferred to the Trustee's Office.</p>	<p>Agree. The Office is working with the Trustee's Office and Metro ITS to develop a more formal process to reconcile the annual pass of the assessment roll to the Trustee's Office.</p>	<p>September 2014.</p>

APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
<p>C.1 - Implement a formal approval process for all exempt parcels not approved by the State Board of Equalization or granted by title (government). Segregation of duties controls would be enhanced if this approval was performed by someone independent of the Assessor’s Office.</p>	<p>Partially Agree. The Office agrees that the process for administering the subject parcels should be more formal. However, it does not agree that someone independent of the Office should “approve” whether the tax liability of certain parcels, which are not exempt, is attributed to another parcel or parcels or should be attributed to an adjoining county. The Office agrees that it is prudent to have determinations it makes regarding property owned in common <u>reviewed</u> by an independent third party and plans to present them to the Metropolitan Board of Equalization for its review. In addition, the Office will develop a new coding system to more clearly designate the status of these properties.</p>	<p>Beginning tax year 2014 and ongoing.</p>
<p>C.2 - Conduct periodic reviews of exempt properties to help provide assurance that exempt properties within the AssessPro system are properly classified.</p>	<p>Agree. The Office has periodically reviewed exempt properties to determine whether they should continue to benefit from an exempt status. The Office intends to formalize the cycle(s) on which these reviews are performed and to improve the procedures and documentation.</p>	<p>October 1, 2014 and ongoing.</p>
<p>Experis recommendations for the management of the Assessor’s Office to minimize risk by:</p>		
<p>Experis A.1 - Securing and maintain more authority and responsibility for digital mapping practices.</p>	<p>Agree. Base map accuracy and timeliness is critical to the Office’s fulfilling its duties and responsibilities including: locating, identifying, inventorying, and appraising land. Accordingly, the Office seeks to have more authority and responsibility for digital mapping practices and intends to continue to engage in discussions to this end, including with the Planning Department, which currently creates and maintains the base maps.</p>	<p>November 2014.</p>

APPENDIX B – MANAGEMENT RESPONSE AND CORRECTIVE ACTION PLAN

Recommendations	Concurrence and Corrective Action Plan	Proposed Completion Date
<p>Experis A.2 - Addressing going forward prospective concern regarding possible discrepancies between the new digital parcel area mapping practices versus the historical orthophotography.</p>	<p>Agree. Area calculation is a very important phase of the mapping and assessment process and all methods of appraisal rely on the size of a parcel as a key element of value; thus the process should be systematic and accurate. The Office has communicated its concerns regarding this recommendation and intends to continue to engage in discussions regarding this recommendation.</p>	<p>November 2014.</p>
<p>Experis A.3 - Continuing its review of the PILOTs on a regular cadence, perhaps making such reviews part of a quarterly process.</p>	<p>Agree. The Office has been engaged with other entities involved with PILOT agreements to develop a plan for their administration. It is awaiting an anticipated proposal which should include a schedule.</p>	<p>October 2014.</p>
<p>Experis B - Developing a more formal succession planning given the number of appraisers needed along with the projected retirement path and loss of historical knowledge that typically follows.</p>	<p>Agree. The Office has engaged in informal succession planning and agrees that more formal planning may help ensure a successful transition as appraisal staff retires.</p>	<p>September 2014.</p>
<p>Experis C - Developing a more formal resolution and strategy for movement to digital parcel maps will contribute to more accuracy for the Davidson County constituency.</p>	<p>Agree. See Experis A.1 and A.3 above.</p>	<p>November 2014.</p>