

# DISTRICT OF COLUMBIA OFFICE OF THE INSPECTOR GENERAL

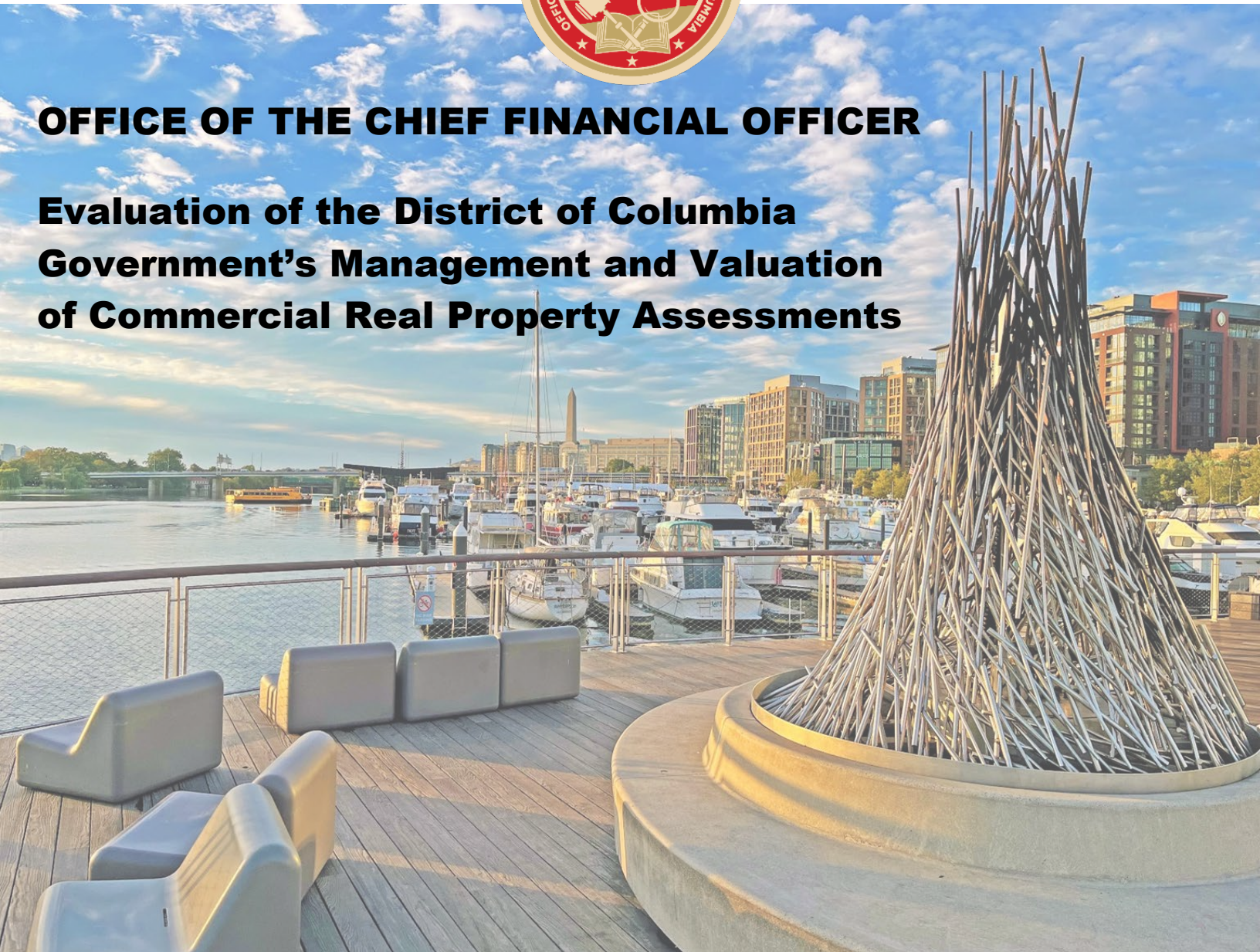
OIG Project No. 22-1-25AT

November 2022



## **OFFICE OF THE CHIEF FINANCIAL OFFICER**

### **Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments**



#### *GUIDING PRINCIPLES*

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*TRANSPARENCY \* CONTINUOUS IMPROVEMENT \* EXCELLENCE*

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- promote economy, efficiency, effectiveness, and accountability;
- inform stakeholders about issues relating to District programs and operations; and
- recommend and track the implementation of corrective actions.

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Accountability \* Integrity \* Professionalism  
Transparency \* Continuous Improvement \* Excellence



**GOVERNMENT OF THE DISTRICT OF COLUMBIA**  
**Office of the Inspector General**

**Inspector General**



November 30, 2022

Glen Lee  
Chief Financial Officer  
Office of the Chief Financial Officer  
The John A. Wilson Building  
1350 Pennsylvania Avenue N.W., Suite 203  
Washington, D.C. 20004

Dear Chief Financial Officer Lee:

Enclosed is the Independent Auditor's final report entitled, *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments*, that Crowe, LLP (Crowe) submitted as part of the Office of the Inspector General's (OIG) contract for the Audit of the Commercial Real Property Assessment Process at the Office of Tax and Revenue (OIG No. 22-1-25AT).

Pursuant to D.C. Code § 47-821(e)(4), the OIG contracted with Crowe to conduct this evaluation. This report contains 33 recommendations directed to the Office of the Chief Financial Officer (OCFO) for its actions. If implemented, the recommendations will help improve OCFO's appraisal practices and its human capital development and management processes.

The Independent Auditors provided OCFO with the draft report on October 5, 2022, and received its responses on November 22, 2022. We appreciate that OCFO officials began addressing some of the findings immediately upon notification during the audit. During the evaluation, the Independent Auditors received OCFO's views on their observations, recommendations, and conclusions in writing. The Independent Auditors incorporated OCFO's views in the draft report if supported by sufficient and appropriate evidence. The Independent Auditors concluded in the Management Response section of the report on page 4 that "OCFO's November 22, 2022, response did not provide additional evidence to support its disagreements. Based on OCFO's response, we re-examined our facts and conclusions and determined that the draft report is fairly presented. OCFO's responses to the draft report are included in their entirety at Appendix B."

Chief Financial Officer Lee  
Evaluation of the District of Columbia Government's  
Management and Valuation of Commercial Real  
Property Assessments  
Final Report OIG No. 22-1-25AT  
November 30, 2022  
Page 2 of 3

We appreciate the cooperation and courtesies extended to our staff during this audit. If you have any questions concerning this report, please contact me or Fekede Gindaba, Assistant Inspector General for Audits, at (202) 727-9770.

Sincerely,

*Lee M. Hart*

for Daniel W. Lucas  
Inspector General

DWL/fg

Enclosure

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# Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments

October 4, 2022



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## Executive Summary

### WHY WE DID THIS EVALUATION

The District of Columbia Office of the Inspector General (OIG) engaged Crowe, LLP (Crowe) to conduct an independent evaluation of the Office of Tax and Revenue (OTR) for the purpose of examining the District's management and valuation of commercial real property assessments, as D.C. Code § 47-821(e) requires. The objectives and scope included the following:

1. An evaluation of the commercial real property assessment process during Fiscal Year (FY) 2019 through FY 2021 against an objective set of criteria such as the Uniform Standards of Professional Appraisal Practice (USPAP);
2. An evaluation of the organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions;
3. An examination of hiring practices, including whether the human resources rules and regulations to which the Office of the Chief Financial Officer (OCFO) is subject, hinder or enhance the ability of the OTR to attract, develop, and retain a well-qualified workforce; and
4. A review of the prior year recommendations for improving the commercial real property assessment functions within OTR.

Commercial real property assessment is a significant undertaking within the operations of OTR. Designing an organizational structure with appropriate qualified staff, workload levels, training, and professional development helps to ensure the commercial real property assessment process is effective. It is important for OTR to continually improve its processes and procedures to provide the level of service necessary for the property owners in the District to fulfill their tax obligations and for OTR to enforce accountability over the assessments.

Through the assessment process, OTR determines the real property tax base for each of the approximately 23,432<sup>1</sup> commercial properties in the District. The Real Property Tax Administration (RPTA), a unit within OTR, is charged with assessing the values of these properties. Within RPTA, the management and evaluation of the commercial real property assessments is conducted by the Real Property Assessment Division (RPAD). RPAD collects information regarding commercial real properties in the District and determines the annual tax base for each property.

Requirements for assessments can be found in the District of Columbia Code, Title 47, Taxation, Licensing, Permits, Assessments, and Fees. Annual assessments are undertaken in accordance with Title 47 of the Code by RPAD. Assessments are documented in various information systems maintained by RPAD, including the Computer Assisted Mass Appraisal (CAMA) system, Modernized Integrated Tax System (MITS), geographic information system (GIS) and other technology.

Assessments are subject to appeals and must be filed on or before April 1 by the submission of an application to RPTA. Information about the appeals process can be found on OTR's website with fillable forms and FAQs.

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<sup>1</sup> D.C. OFFICE OF THE CHIEF FINANCIAL OFFICER, OFFICE OF REVENUE ANALYSIS, D.C. TAX FACTS, <https://cfo.dc.gov/node/1606201> (last visited Sept. 8, 2022) (Sum of Class 2 Property at 52).



## WHAT WE FOUND

**Assessment Process.** RPAD made improvements to the commercial real property assessment process since the last evaluation performed in 2017.<sup>2</sup> Specifically, RPAD has developed and implemented detailed policies and operational procedures to address prior issues regarding land valuation, apartment valuations, and possessory interest related property areas. RPAD also implemented MITS, which resulted in an improved control environment by incorporating review and approval mechanisms, establishing a repository for supporting documentation, and supporting essential functions of tax administration and compliance.

Even though certain improvements were made, RPAD needs improvements to align property market values and the use of complete and current data for the appraisals to conform with professional standards. The International Association of Assessing Officers (IAAO), Standard on Ratio Studies states that the median sales ratio must be between 90 (90%) to 1.10 (110%) of the overall level of appraisal to be representative of actual property sales, or market values. Our independently performed ratio study for the period of 2019 through 2021, indicated that the District's overall median ratio for all commercial real property was .886 (88.6%), which is below the acceptable IAAO standard. We noted that RPAD's overall valuation of the District's commercial real property was \$101,764,748,946<sup>3</sup> for tax year 2022. However, using the same ratio, we calculated \$114,858,633,122, as the District's overall value for tax year 2022, which indicates RPAD may have undervalued the District's overall commercial real property by 12.9% for tax year 2022.

The undervaluation occurred because (1) RPAD's ratio study included 2 years of sales, versus 3 years, as recommended by the IAAO, Standard on Ratio Studies, (2) RPAD was not inspecting all properties on a regular or scheduled basis to ensure the most up to date information was consistently used during the property appraisal process, and (3) the most current income and expense (I&E) data was not used for the annual reassessment process.

**Organizational Structure, Human Resource Measures, and Staff Development.** The Office of the Chief Human Resources Officer (OCHRO), within OCFO has supported the assessment process and made certain improvements since the last evaluation performed in 2017. Specifically, OCHRO has documented personnel policies and procedures, which have been helpful to organizational managers, increased staffing, which has helped address organizational workload issues, and established human resources metrics in the 2017-2021 Strategic Plan.

However, our evaluation determined that (1) continuous improvement initiatives were limited as employee and management feedback was not tracked and analyzed to ensure staff performance improvement; (2) staff qualifications were not monitored or evaluated, at least annually, to ensure all staff are appropriately trained, qualified, and certified; (3) a process for self-improvement, professional goals, and career opportunities has not been established to ensure staff development; (4) performance metrics were not regularly reviewed to ensure organizational alignment, identify potential improvement areas, and remove barriers to effective human resources management processes; and (5) compensation expertise was not engaged to ensure relevant compensation data was considered when market-pricing commercial appraiser positions to remain competitive with the labor market.

These five conditions occurred primarily because of a lack of Human Resource (HR) Business Partner support responsible for the coordination of HR strategic objectives such as developing staff, tracking and reporting metrics, and providing assistance to maximum staff effectiveness in support of the appraisal processes.

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<sup>2</sup> The 2017 evaluation was a follow up to a 2012 evaluation.

<sup>3</sup> D.C. OFFICE OF THE CHIEF FINANCIAL OFFICER, OFFICE OF REAL PROPERTY ASSESSMENT DIVISION, 2022 BASE CHANGE COMMERCIAL (CLASS 2), [https://otr.cfo.dc.gov/sites/default/files/dc/sites/otr/release\\_content/attachments/TY\\_2022\\_Commercial\\_Base\\_Statistics\\_Data.pdf](https://otr.cfo.dc.gov/sites/default/files/dc/sites/otr/release_content/attachments/TY_2022_Commercial_Base_Statistics_Data.pdf) (last visited Sept. 8, 2022).

**Status of Prior Year Findings and Recommendations.** We found that 35 of 53 prior year recommendations included in two reports have not been implemented, primarily due to a lack of action from management.

The OIG Project No. 16-1-14AT report included 37 recommendations. The progress status for the remediation efforts are as follows:

1. 12 recommendations have been implemented and require no additional follow up.
2. 9 recommendations had corrective actions taken but are still open or partially open.
3. 16 recommendations had no action taken and remain open.

The OIG Project No. 16-1-14AT(a) report included 16 recommendations, and the progress status for the remediation efforts are as follows:

1. 6 recommendations have been implemented and require no additional follow up.
2. 10 recommendations remain open.

The status of prior findings and recommendations are included in [Section 4](#) of this report.

## WHAT WE RECOMMEND

We are offering 43 total Recommendations within our report for each of the objectives and scope areas described above.

To help RPAD address the undervaluation of commercial real property and improve the accuracy of commercial property values, we made 16 recommendations, which included adopting a global review process for ratio study results and using at least 3 years and preferably 5 years of commercial property sales in valuation and sales ratio studies. Detailed observations and recommendations on the assessment process can be found in [Section 1](#) of this report.

To help OCHRO to address the five conditions described above, we made 17 recommendations, which included expanding HR Business Partner support, reinstating a monetary award, developing formal policies and procedures for tracking and monitoring recommendations, implementing an annual review of the staff's qualifications, and retaining a compensation consulting firm. Detailed observations and recommendations on the organizational structure, human resource measures and staff development can be found in [Section 2](#) and [Section 3](#) of this report.

The remaining 10 open recommendations relate to the OIG Project No. 16-1-14AT(a) report and are included in [Table 4](#) of this report.

## MANAGEMENT RESPONSE

During the evaluation, we received OCFO's views on our observations, recommendations, and conclusions in writing. We incorporated OCFO's views in our draft report if supported by sufficient and appropriate evidence. OCFO's November 22, 2022, response did not provide additional evidence to support its disagreements. Based on OCFO's response, we re-examined our facts and conclusions and determined that the draft report is fairly presented. OCFO's responses to the draft report are included in their entirety at Appendix B.



# Introduction

## Background

The focus of the evaluation is the District's management and valuation of commercial real property assessments. The District assesses and collects commercial real property tax under the provisions of District of Columbia Official Code, Title 47, Taxation, Licensing, Permits, Assessments, and Fees ("the Code").

There are four classes of real property in the District of Columbia. Class 1 is residential real property including multifamily. Class 2 is commercial and industrial real property including hotels and motels. Class 3 is vacant real property. Class 4 is vacant blighted property.<sup>4</sup>

Due to logistical and resource constraints, RPTA employs mass appraisal techniques to assess the value of each commercial property for tax purposes. Commercial real property taxes are a significant source of revenues for the District. Consequently, the assessment process occupies a place of strategic importance to the District's OCFO.

A tax year runs from October 1 to September 30. For the current tax year (2022), the assessment date was January 1, 2021. Properties are classified for purposes of taxation. The classes and their current tax rates are:

1. Residential (including apartments), which are taxed at a rate of \$0.85 per \$100 of assessed value;
2. Commercial, which are taxed at a rate of \$1.65 per \$100 of assessed value for the first \$5 million of value and a rate of \$1.77 per \$100 of assessed value for values between \$5million and \$10 million and a rate of \$1.89 per \$100 on any remainder;
3. Vacant, which are taxed at a rate of \$5.00 per \$100 of assessed value; and
4. Blighted, which are taxed at a rate of \$10 per \$100 of assessed value.<sup>5</sup>

Our review focused on the assessment of Class 2 property (commercial), of which there are approximately 23,432 commercial properties valued at \$203,617,295,410 as of tax year 2021.<sup>6</sup> The District assessed gross tax revenues of approximately \$3.582 billion<sup>7</sup> for these commercial real properties. There are special provisions for the assessment of mixed-use properties that were included in our population under review. The Department of Consumer and Regulatory Affairs (DCRA), not RPAD, is responsible for classifying properties as vacant or blighted, and as such, are not included in our review.

According to D.C. Law 18-223, the District of Columbia Fiscal Year 2011 Budget Support Act of 2010, Title VII, Subtitle S, Real Property Assessments Improvement Act of 2010 (the Act) (codified at D.C. Code §§ 47-821(e)-(f) (Lexis current through Aug. 8, 2022)) requires the D.C. Office of the Inspector General to arrange for an independent audit of the Office of Tax and Revenue for the purposes of examining the District's management and valuation of commercial real property assessments.

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<sup>4</sup> D.C. OFFICE OF THE CHIEF FINANCIAL OFFICER, OFFICE OF TAX AND REVENUE, REAL PROPERTY TAX RATES AND BILLING FAQs, [HTTPS://OTR.CFO.DC.GOV/NODE/384102](https://otr.cfo.dc.gov/node/384102), (last visited Sept. 17, 2022).

<sup>5</sup> D.C. OFFICE OF THE CHIEF FINANCIAL OFFICER, OFFICE OF TAX AND REVENUE, REAL PROPERTY ASSESSMENT DIVISION, COMMERCIAL PROPERTY ASSESSMENT MARKET ANALYTICS FOR THE DISTRICT OF COLUMBIA, [https://otr.cfo.dc.gov/sites/default/files/dc/sites/otr/publication/attachments/TY\\_2022\\_Market\\_Analytics\\_Book.pdf](https://otr.cfo.dc.gov/sites/default/files/dc/sites/otr/publication/attachments/TY_2022_Market_Analytics_Book.pdf).

<sup>6</sup> D.C. Tax Facts, *supra* note 1 at 52.

<sup>7</sup> *Id.* (Sum of Class 2 Gross Tax Revenue).

## Scope, Objectives, and Methodology

The District of Columbia OIG engaged Crowe to conduct an independent evaluation of the Office of Tax and Revenue for the purpose of examining the District's management and valuation of commercial real property assessments during FY 2019 thru FY 2021, as D.C. Code § 47-821(e) requires.

As part of our evaluation, the objectives included:

1. An evaluation of the commercial real property assessment process;
2. An evaluation of the organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions; and
3. An examination of hiring practices, including whether the human resources rules and regulations to which the Office of the Chief Financial Officer (OCFO) is subject, hinder or enhance the ability of the OTR to attract, develop, and retain a well-qualified workforce.
4. A review of the prior year recommendations for improving the commercial real property assessment functions within OTR.

Crowe conducted this evaluation using several techniques, including requesting and reviewing documentation and organizational assets from the Real Property Assessment Division and the Office of Human Resources within the OCFO, conducting virtual and in-person interviews with RPAD and HR leadership and business process owners, conducting an independent ratio study, and reviewing internal control test processes and documentation.

In performing the documentation review, Crowe requested an initial set of files, reports, and data using a secure transfer portal to obtain agency files. Requests for documentation were sent to the RPAD Chief Appraiser, Real Property Assessment Manager, and the Chief Appraiser's staff assistant to respond to or delegate assignments for requested items. The requests that relate to the human resources function were directed to the Executive Director of Human Resources in the OCFO. Items included in the requests included:

- Reports in response to DC Code 47-823(c) for FY 2019, 2020, and 2021;
- Assessment data from FY 2019, 2020, and 2021;
- Sales data from FY 2015-2020;
- Commercial real property assessment processes, policies, and procedures;
- RPAD and HR Organizational charts;
- Staffing data;
- Compensation data;
- Recent workload statistics and studies;
- Key performance indicators and status from FY 2019, 2020, and 2021;
- Training and onboarding plans for new hires and current staff, including cross training;
- HR strategy document;
- Hiring policies, processes, and procedures;
- Retention policies, processes, and procedures;
- Candidate pools and applications;
- Employee turnover data;
- Compensation market pricing information;
- Prior reports in response to DC Code 47-821(e) such as OIG Project No. 16-1-14AT;
- Status, agency responses, or action plans for prior recommendations from the 2017 report;
- The Master Agreement Between the American Federation of State and Municipal Employees, District Council 20, AFL-CIO, and the Government of the District of Columbia;
- The OCFO HR Policies and Procedures Manual;
- 2017-2021 Strategic Plan for the OCFO;
- Parcel and property counts by the commercial unit;

- Appeals volume by level of appeal for each commercial unit in FY 2019, 2020, and 2021;
- Summary of internal controls and related tests that apply to RPAD;
- Assessment calendar and summary of key dates for RPAD; and
- Summary of the RPAD personnel qualifications.

Crowe conducted more than 20 interviews or meetings with personnel in OCFO relating to each objective defined in the evaluation scope, including the Executive Director of Human Resources in OCFO, and leadership and key personnel in the Real Property Assessment Division, including the Chief Appraiser, Real Property Assessment Manager, unit supervisors.

We also conducted walk-throughs and tested the design of internal controls regarding the commercial appraisal process identified from our interviews and review of the policies and procedures in place. Additionally, we requested and reviewed the OTR/RPTA risk control matrices and Risk Control Matrix test tasks for fiscal years 2019, 2020, and 2021 performed by the Office of the Chief Financial Officer.

In addition to our evaluation of processes, a detailed sales ratio study was conducted in order to evaluate the appraisal performance of the FY 2021 commercial property values. This sales ratio study was conducted independently and in conjunction with the IAAO Standard on Ratio Studies. Five years of valid, arm's-length commercial property sales were used in this analysis, and these were trended to January 1, 2020. In this sales ratio study, both appraisal level and appraisal uniformity were evaluated across various stratification schemes. Statistics were calculated and confidence intervals were used to compare to IAAO-recommended standard ranges for those statistics. Sales ratio study results were synthesized into a set of recommendations.

We presented our results during an exit meeting with the Chief Financial Officer (CFO) on July 26, 2022. We provided the presentation with our results to the CFO subsequent to the meeting. We received no further evidence from the CFO to contradict the validity of the observations we identified in our procedures.

We conducted our evaluation in accordance with Association of International Certified Professional Accountants (AICPA) Consulting Standards, which require communication about the scope of the engagement and the intended use of our report. This engagement did not constitute a financial audit, performance audit, review, or attestation engagement in accordance with standards established by the American Institute of Certified Public Accountants and/or Government Auditing Standards. Our report is solely intended as an evaluation of the Office of Tax and Revenue for the purpose of examining the District's management and valuation of commercial real property assessments. We have no obligation to perform any services beyond those described in our report. If we were to perform additional services, other matters might come to our attention that may affect our analysis and related conclusions. This engagement was not planned or conducted in contemplation of reliance by any other party and is not intended to benefit or influence any other party other than the District of Columbia Government. Therefore, items of possible interest to a third party may not be specifically addressed or matters may exist that could be assessed differently by a third party.

## Criteria

Crowe identified and utilized the following relevant industry standards in its assessment of the Office of Tax and Revenue. Crowe also evaluated processes and current practices against the existing OCFO strategic plan and RPAD Standard Operating Procedures and related internal controls.

- International Association of Assessing Officers (IAAO) Standard on Mass Appraisal of Real Property
- IAAO Standard on Ratio Studies
- IAAO Standard on Professional Development

- USPAP Standard 5
- USPAP Standard 6
- American Productivity and Quality Center (APQC)
- People Capability Maturity Model (People-CMM)
- RPAD Standard Operating Procedures

The criteria listed above was used as a basis for the evaluation. We did not identify requirements in the Code requiring the use of the standards listed above, rather the criteria are recognized by the industry for use in assessment of commercial properties.



## Objective 1 Evaluation of the Management and Valuation of the Commercial Real Property Assessment Process

We evaluated the commercial real property assessment process in two phases:

- I. Conducted a ratio study or data analysis to provide a statistical review of appraisal performance over sales that occurred from January 1, 2015 to December 31, 2019.

Our independently performed ratio study for the period of 2019 through 2021, indicated that the District's overall median ratio for all commercial real property was .886 (88.6%), which is below the acceptable IAAO standard. We noted that RPAD's overall valuation of the District's commercial real property was \$101,764,748,946<sup>8</sup> for tax year 2022. However, we calculated \$114,858,633,122, as the District's overall value for tax year 2022, which indicates RPAD undervalued the District's overall commercial real property by 12.9% for tax year 2022.

- II. Evaluated the operational processes conducted by the Real Property Assessment Division (RPAD).

Some operational processes that contributed to the undervaluation of commercial real property are (1) RPAD's ratio study included 2 years of sales, versus 3 years, as recommended by the IAAO, Standard on Ratio Studies, (2) RPAD was not inspecting all properties on a regular or scheduled basis to ensure the most up to date information was consistently used during the property appraisal process, and (3) the most current income and expense (I&E) data was not used for the annual reassessment process.

In this section below, we discuss our observations, conclusions, and 16 recommendations related to Ratio Studies and Operational Processes.

### Phase I: Ratio Study Data Analysis Review

Our independent sales ratio study was conducted in compliance with the IAAO Standard on Ratio Studies according to the project scope of work. The underlying premise of completing an appraisal for the purpose of establishing a tax base is twofold:

1. To determine that appraisals are accurate when compared to market transactions.
2. To determine that the extension and collection of taxes are uniformly distributed as prescribed by law, rule, or regulation (e.g., ad valorem).

A sales ratio study helps measure the degree of accuracy and uniformity present in a set of appraised values. The purpose of a sales ratio study is to evaluate appraisal performance. Sales ratio studies are one of a jurisdiction's most important performance analysis tools.

A sales ratio is the appraised value of a property divided by its sale price. For example, a sales ratio of 1.05 means that the appraised value is 5% higher than the sale price. Appraised values are an estimate of market value. Sale prices that have come from arm's length sales valid for analysis and that have also been recorded appropriately are the "most objective estimates of market value"<sup>9</sup> and are used as the basis for evaluating appraisal performance in a sales ratio study. Ratio studies analyze a set of sales

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<sup>8</sup> 2022 Base Change Commercial Class 2, *supra* note 3.

<sup>9</sup> IAAO Standard on Ratio Studies, Section 2.1, [https://www.iaao.org/media/standards/Standard\\_on\\_Ratio\\_Studies.pdf](https://www.iaao.org/media/standards/Standard_on_Ratio_Studies.pdf).

ratios to determine the degree to which the appraised values accurately and uniformly reflect market value. All appraisal estimates of market value are inherently subject to a degree of statistical error depending on several factors such as the accuracy of available property data and the skill of the appraiser or model developer. A population is the entire set of properties defined by a set of criteria, and a sample is a subset of properties which is drawn from a given population. For the purposes of a sales ratio study, a sales sample is drawn from the population of all properties by the fact that the property sold in a given time window and meets all other data constraints and filters. A foundational principle of ratio studies is that conclusions can be made about the appraisal performance for the population of properties using the sales sample.

The subject of this review is the set of Fiscal Year 2021 appraised values of commercial properties produced by the Office of Tax and Revenue, RPAD with a market effective date of January 1, 2020, for valuation. RPAD staff validated sales for analysis, which occurred in the time window of January 1, 2015, to December 31, 2019, resulting in a sample of 1,106 sales. The final appraised values used in this sales ratio study were determined after most formal appeals had been resolved. This sales ratio study was conducted according to the April 2013 IAAO Standard on Ratio Studies.

The overall median ratio for all commercial property was statistically significantly outside the acceptable range of .90 to 1.10, which indicates class 2 properties are being under appraised. The coefficient of dispersion also fell outside the acceptable range of 5 to 15, which means that class 2 properties were not being equitably appraised. The only measure that fell within IAAO standards was the coefficient of price related bias (PRB), which indicates a lack of vertical inequity.<sup>10</sup>

We have included the results of our ratio study throughout our observations to provide context as to the effectiveness of the operational processes; full details of the ratio study, can be found in [Appendix A](#).

## Phase II: Operational Process Review

We also conducted a review of the operational processes conducted by the RPAD when completing their assessments. This included a review of the policies and procedures that govern the assessment process, interviews with key staff members of the commercial department, and gaining an understanding of the systems utilized by the appraisers to facilitate the assessment process. The results of each of those assessment activities were compared to the relevant IAAO and USPAP standards to identify gaps in the procedures regarding industry best practices. Those gaps then became the basis upon which recommendations were developed. To assist the reader and help identify the progress made since the 2017 evaluation, we completed our operational review utilizing the areas of the commercial real property assessment process as identified in the previous 2017 report, as indicated below.

- A. Property Attribute Data Collection and Maintenance
- B. Sales Data Acquisition and Processing
- C. Income and Expense (I&E) Data and Processing
- D. Mass Appraisal Modeling and Valuation Approach
- E. RPTA Ratio Studies
- F. Communications
- G. Appeals Defense

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<sup>10</sup> "Vertical inequity exists when the ratio of assessed value to sale value changes over the value of properties generally, and it can be either regressive (where low-value homes are regularly assessed at greater ratios to the sale price than the high-value homes in the sample) or progressive (the opposite phenomenon)." Justin M. Carter, M.A., *Methods for Determining Vertical Inequity in Mass Appraisal*, FAIR + EQUITABLE MAGAZINE 3 (2016).

## A. Property Attribute Data Collection and Maintenance

One of the most important aspects of the assessment function is the collection, maintenance, analysis and use of data. The Appraiser is responsible for compiling, organizing, and maintaining data on their assigned areas. The factors and trends are considered by the Appraiser and may be noted in the CAMA Record, on area maps, neighborhood profile folders, work papers, etc. The data can be used to:

- a) update records
- b) compare the physical and economic characteristics of similar and dissimilar properties
- c) establish cost of construction of typical buildings
- d) measure the difference in cost of construction between buildings of different types
- e) determine market rentals for the various types of buildings in different locations
- f) develop appropriate units of comparison
- g) estimate the market value of each property in a uniform and equitable manner
- h) support the assessed value by using market evidence

**Observation:** RPAD did not have formal policies and procedures or a plan in place for periodically inspecting commercial properties to verify property characteristics were complete and accurate in accordance with standards and leading practices.

Crowe reviewed the RPTA Standard Operating Procedures documents and conducted interviews with the Chief Appraiser and Commercial Unit Supervisors to review existing plans for periodically inspecting properties to confirm or update property characteristics. RPTA policies and procedures were compared to Section 3.3.4 of the IAAO Standard on the Mass Appraisal of Real Property, which states: "Assuming that most new construction activity is identified through building permits or other ongoing procedures, a physical review including an on-site verification of property characteristics should be conducted at least every 4 to 6 years. Reinspection should include partial remeasurement of the two most complex sides of improvements and a walk around the improvement to identify additions and deletions."

During our interviews with OTR staff, we were informed that due to the significant numbers of appeals, Covid-related protocols, and reduced staffing, RPAD was prevented from performing periodic onsite inspections. However, OTR staff did perform inspections for properties sold or appealed via Pictometry's<sup>11</sup> aerial photographs and other available property data.

Upon review of RPAD's Standard Operating Procedures and Appraiser Reference Materials and through discussion with Supervisory Appraisers, we determined that RPAD did not have a plan in place for periodically inspecting commercial properties to verify property characteristics were complete and accurate. The District has systems in place to monitor sales, assessment appeals, and building permit activity and Commercial Units will schedule on-site inspections if any of those events are triggered. RPAD did not have formal policies or procedures that outline how the reinspection of commercial properties will be conducted outside of existing triggers, and the Commercial Units did not have a current practice of periodically reinspecting commercial properties unless a sale, appeal, or building permit has been identified. During interviews, Supervisory Appraisers and the Real Estate Assessment Manager identified internal plans to establish plans to periodically inspect commercial properties at least every 3 years, but these plans are not yet implemented.

**Recommendation 1:** We recommend that RPAD management develop a plan for periodically inspecting properties so there is reasonable assurance that property characteristics data are up to date. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 2.

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<sup>11</sup> Pictometry is a patented aerial survey technique for producing oblique georeferenced imagery showing the fronts and sides of buildings and locations on the ground. See Eagleview Technologies, Inc. website, <https://www.eagleview.com/solar/pv-magazine-eagleview-time-savings-aerial-imagery> (last visited Nov.29, 2022).

## B. Sales Data Acquisition and Processing

The sales verification process is the first step in the revaluation cycle. Sales data is collected from multiple sources including the Recorder of Deeds (ROD), Pictometry or CoStar,<sup>12</sup> Internet or contact with the parties to the sale. The process is designed to produce a database of information containing recent sales of property in the District of Columbia that accurately reflect market activity. The information generated through this process is used as the basis for calibrating the mathematical models within the CAMA software for residential properties and as part of the market analysis for commercial properties.

The sales verification process is guided by RPTA Assessment Division's Standard Operating procedures. On a monthly basis, Sales Verification Questionnaires are distributed to new owners and collected and logged by an assessment technician. A Sales Verification Report is printed by an assessment technician, which is used to verify the validity of a sale. An appraiser utilizes verification questionnaires, verification reports, maps, and other relevant information to commence field inspections. Appraisers organize relevant documents, confirms details of the sales and corrects and populates the Sales Verification Report. Appraisers are also to assign an acceptance code. There are 19 acceptance codes with nine codes that apply to single- property sales and nine codes that apply to multi-parcel sales plus one code that applies to tax sales. Only two codes, codes 01 and 09, apply to usable single-property sales, where 01 is for improved property sold at an arms-length and 09 applies to usable land sales. RPAD did not use different acceptance codes for modeling and ratio studies, which would provide better data for use in modeling and ratio studies.

**Observation:** RPAD did not update their acceptance codes as recommended in OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017). Specifically, RPAD did not reconfigure the CAMA system to begin recording sale qualifications with respect to sales-ratio study purposes as well as validations with respect to modeling purposes in accordance with best practices. Additionally, sales acceptance codes were not used consistently to properly track sales, which results in future inability to use data for appraisals and ratio studies.

Using one code for ratio studies (sale qualifications) and one for sale validations is important because some sales may not be usable in a ratio study even though it can be used in an appraisal. OTR's CAMA System allows for the use of two codes. It was also noted that the codes were not used consistently, especially code 07, which is the code for speculative and according to OTR's procedures is to be used if the "sale is unqualified; the prime motivation of the purchaser is a quick profit through resale before or after renovation". However, the use of code 07 is often difficult to determine without documented evidence of speculation on the part of the purchaser, thus the code may be incorrectly used.

**Recommendation 2:** We recommend that RPAD reconfigure the CAMA system to begin recording sale qualifications with respect to sales-ratio study purposes as well as validations with respect to modeling purposes. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 3.

**Recommendation 3:** We recommend that RPAD not use code 07 unless there is convincing documentation that the sale was "speculative." This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 4.

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<sup>12</sup> Costar is the largest commercial real estate information and analytics provider with over 6.9 million commercial real estate records across different asset types, markets and countries available. Details include information on amenities, floor plans, 3D models, tenants, vacant space, prior transactions, ownership. CoStar website, <https://www.costar.com/products/costar-properties>.

### C. Income and Expense (I&E) Data and Processing

Income and Expense Data consists of all the economic data pertaining to those properties similar or comparable to the properties under consideration. I&E data is essential to the valuation of commercial properties, particularly income-producing properties. Owners of commercial properties are required to furnish the Assessment Division with I&E information on an annual basis. CAMA provides the structure to complete the valuation of commercial properties in an orderly and systematic process.

**Observation:** Commercial income and expense information is not available to RPAD in a timely manner to provide relevant information in the assessment process.

In accordance with the D.C. Code, tax year 2022 assessments for both residential and commercial property must reflect a valuation date of January 1, 2021 (D.C. Code § 47-802(8)) and notices must be mailed by March 1, 2021 (D.C. Code § 47-824(a)). However, Income and Expense (I&E) submissions were not due until April 15, 2021. This observation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)*.

In response to the auditors in 2017, RPAD stated that their “efforts to stream-line the I&E filing process is one part of a multi-part effort to allow RPAD to utilize the most timely income and expense information in its valuations. The other aspects to implementing this initiative involve gaining support from the commercial community and acquiring legislative authority to change the assessment calendar. The latter two efforts are underway; however, they are beyond the control of the division.” See OIG Report No. 16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments*, Appendix A, Recommendation 8.

Modifications to current legislation regarding the I&E submission deadline have been proposed but have yet to be enacted.

**Recommendation 4:** We recommend that RPAD seek to require I&E submissions before the assessment notice deadline by seeking the appropriate legislative remedy. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 8.

### D. Mass Appraisal Modeling and Valuation Approach

Appraisal Units (Residential A, B, C & Commercial A, B & C) are responsible for valuing all properties located in the District of Columbia for ad valorem tax purposes. The estimate of market value of real property in the District of Columbia constitutes the basis for revenue generated by property tax. RPAD maintains considerable documentation on the methods used to appraise property, as well as actual valuation rates and adjustments. Procedures commonly used in the valuation of commercial properties include: the CAMA; preparation of maps; classification of properties by major category and use type; collection and analysis of general, specific, and comparative data; the analysis of property types; developing units of comparison; grouping this data via the CAMA system or spreadsheets; and developing and applying appropriate mass appraisal models.

RPAD generally uses three approaches to value: the cost approach; the sales comparison approach; and the income approach, in accordance with professional standards and best practices. The cost approach is applied to most properties, the sales comparison approach is used to appraise land, and the income approach is primarily used for commercial properties

**Observation:** Ratio Studies prepared by RPAD were not properly conducted and were not included as a part of the valuation process, which may have led to appraised values significantly below market value. We conducted a ratio study over sales for the calendar years 2015-2019. The overall median sales ratio we computed was .886 and was statistically significantly less than .90, the lower bound of the acceptable range as laid out in the IAAO Standard on Ratio Studies (Part 1, Section 9.1). The table below identifies the property strata in this ratio study that have median sales ratios statistically significantly less than .90 (see Table 1, below).

**Table 1: Property Strat with Median Sales Statistically Significant Less than .90**

Property Type – Submarket Area Combination	Property Type Grouping
Capitol Hill – Residential Multi-Family	Industrial
Capitol Hill – Retail	Retail
Georgetown – Retail	Special Purpose
Northeast – Commercial Specific Purpose	Commercial Specific Purpose
Northeast – Industrial	
Northeast – Retail	
Old City #2 – Residential Multi-Family	Submarket Area
Old City #2 – Retail	Georgetown
Southeast – Retail	Northeast
Uptown East – Retail	Old City #2
Uptown West – Residential Multi-Family	Uptown East
Uptown West – Retail	Uptown West

In addition, although the rest of the strata do meet the IAAO standard, they were usually lower than 1.00. The following are all true and illustrate the point:

- All of the property type grouping strata have median sales ratios statistically significantly less than 1.00.
- All of the submarket area strata have median sales ratios below 1.00 and all but one of those medians are statistically significantly less than 1.00.
- All but three of the property type groupings – submarket combination strata have median sales ratios below 1.00.

Therefore, there was a general pattern where appraised values tend to be set under the market value by varying degrees. The ratio study concludes that appraisal levels are statistically significantly below .90 for some strata and for the commercial properties overall and that there are varying appraisal levels between strata indicating a lack of uniformity. The results indicate a lack of a properly-conducted model quality assurance process during the valuation phase using ratio studies Section 9.1 of Part 1 of the IAAO Standard on Ratio Studies, which states:

In analyzing appraisal level, ratio studies attempt to measure statistically how close appraisals are to market value (or to a required statutory constraint that can be expressed as a percentage of market value) on an overall basis. While the theoretically desired level of appraisal is 1.00, an appraisal level between 0.90 and 1.10 is considered acceptable for any class of property. However, each class of property must be within 5 percent of the overall level of appraisal of the jurisdiction. .... Both criteria must be met.

If the appraised values coming from the commercial models are being properly evaluated using ratio studies on a global basis and various internal stakeholders regularly review results together, then these inequities would have been discovered and should have been corrected prior to the certification of the assessment roll. The lack of uniformity indicates that certain groups of commercial properties tend to be valued at different percentages of market value. The lack of uniformity may be due to one or more of the following reasons:



- Valuation models may be configured with parameters designed to generate more conservative appraised values than are warranted by the market.
- Valuation practices may be untethered from actual market sales data.
- Sales used in the commercial valuation process may not be adjusted appropriately for time.

**Recommendation 5:** Crowe recommends that RPAD implement a global review process for ratio study results. These ratio studies should be properly conducted and included as a part of the valuation process. Final appraised values should not be approved until quality standards are met. Key internal stakeholders and valuation team leaders should regularly review market movements and ratio study results together. RPAD should examine every step of the commercial valuation process for the various property types and sub-market areas to look for components, practices, and factors that may lead to appraised values that are below market value.

**Observation:** Certain property strata types were appraised less uniformly than standards recommend. Although most strata have a Coefficient of Dispersion<sup>13</sup> (CODs) within the standard range, several did not. This problem was not pervasive and was isolated to only a few areas and property type groupings. The strata with uniformity results that miss the standard range are listed as follows:

- Industrial (28.8%)
- Commercial Specific Purpose (25.1%)
- Old City #2 (25.8%)
- Northeast (18.9%)
- Capitol Hill – Residential Multi-Family (27.9%)
- Northeast – Commercial Specific Purpose (56.3%)
- Northeast – Industrial (21.8%)
- Old City #2 – Retail (24.0%)
- Old City #2 – Office (36.9%)

These areas raise the overall COD to 16.4%, which is also statistically significantly outside of the standard range of 5% to 15%, as detailed in Part 2, Section 11.1.1 of the IAAO Standard on Ratio Studies. The appropriate standard range for the COD is based on the type of property and other factors. This study primarily covers income-producing properties in a large jurisdiction with high property density. Therefore, the COD standard used in this study was the 5% to 15%. In addition, confidence intervals or statistical tests were used to make statistical conclusions about the compliance with these standards. The IAAO Standard on Ratio Studies states the following in Section 9.1.2 of Part 1 on page 18:

The purpose of confidence intervals and similar statistical tests is to determine whether it can be reasonably concluded that the appraisal level differs from the established performance standard in a particular instance. A conclusion of noncompliance requires a high degree of confidence; thus, a 90 percent (two-tailed) or 95 percent (one-tailed) confidence level should be used, except for small or highly variable samples.

Upon review of the Standard Operating Procedures, Market Analytics and Pertinent Data Books and through interviews with the Standards & Exemptions Unit, we determined that RPAD has sufficient processes in place to support the valuation of retail properties, including adequate data analysis and modeling capabilities, and appropriately utilizes industry publications and resources to support modeling and analysis. Although appraisal staff are following proper procedures, the value conclusions reached remain below an acceptable level for market value estimates.

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<sup>13</sup> Coefficient of dispersion is simply the ratio of the standard deviation to the mean.

**Recommendation 6:** Crowe recommends that RPAD do a thorough review of data quality, valuation practices, and valuation models in the identified strata. Specifically:

- a) We recommend that RPAD further improve the valuation of office buildings by reviewing property data for accuracy and consistency and by building data analysis skills. Because capitalization rates are so critical to value determination and office sales are relatively scarce, office sales should be thoroughly researched, and consideration should be given to expanding sample sizes through use of prior year sales time-adjusted to the valuation date. Again, building data analysis skills will help, and continuing to check capitalization and other income rates with those reported in industry publications and services will provide additional support. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 11.
- b) We recommend that RPAD develop and vet a plan for valuing retail properties at market value consistent with other properties in the District. This could be accomplished by phasing in increases over a 2- or 3-year period. The plan should include consideration of whether:
  - i. The nine market areas used for offices are adequate for retail properties. Although the situation may well be different in the District, retail market areas or neighborhoods usually follow traffic corridors more than offices do. Again, while this may well not apply in the District, it would be prudent to consider whether retail areas should be defined separately from office areas.
  - ii. Additional space types, easily accommodated in the CAMA system, would be helpful. One example is restaurants. Current rent tables provide a separate rate for restaurant spaces but do not distinguish between fast-food and full-service restaurants. Although appraisers can apply adjustments for "tenant appeal," standardizing rates creates consistency and lessens the need for individual property adjustments. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 12.
- c) We recommend that RPAD develop additional mass appraisal tools for valuing industrial properties. Income rates could be developed and entered in CAMA, and sales-based models could be developed. As with other commercial properties, considering prior year sales (appropriately adjusted to the valuation date) could help improve sample sizes. Values should be based on whichever valuation approach works best, or the appraiser could enter an override value. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 13.

**Observation:** RPAD did not have formal procedures to govern practices regarding valuing air rights. Air rights are the property interest in the space above a specified land area or between specified elevations. The District currently has over 500 recorded air rights. Crowe reviewed RPAD Standard Operating Procedures to determine if the updated procedure manual included a section for the assessment of air rights. Upon review of the Standard Operating Procedures and Appraiser Reference Materials, RPAD has not developed procedures around air rights. RPAD is currently identifying appropriate procedures for air rights. This observation is partially repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017). The 2017 report also reported that possessory interest should also be governed by procedures and RPAD developed procedures to address possessory interest. We found that OTR developed and implemented possessory interest policies and standard operating procedures since 2017.

**Recommendation 7:** We recommend that RPAD adopt procedures for valuing air rights and add them to the ARM and/or Employee Handbook. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 10.

## E. RPTA Ratio Studies

Appraisers use ratio reports to test the results of the valuation models. This analysis starts with a performance analysis (ratio study) comparing current assessments to current market sales and is used to test the quality of existing assessments before conducting a revaluation. The Standards & Exemptions (S&E) Unit is responsible for developing uniform standards, policies and procedures, and guidelines that govern the assessment of taxable and exempt property in the District of Columbia. This unit conducts performance analysis of the work of the RPAD including sales-ratio studies and collects and evaluates data on market conditions, including construction, rental, mortgage and other data and trends. RPAD typically prepares ratio studies on an annual basis.

**Observation:** RPAD only included one year's worth of sales in its valuations and sales ratio studies, therefore, it did not have sufficient numbers of sales of commercial properties included in each property type grouping strata to provide the most accurate valuations.

To value property, either directly related to valuation or involving model quality assurance through sales ratio studies, it is essential to have enough sales that are valid for analysis. We noted that not enough sales exist in each property type grouping strata to only use one year's worth of sales. Table 2, (following page) shows the average number of yearly valid, arm's-length sales by property type grouping from 2015 through 2019.

**Table 2: Average Number of Sales Per Year By Property Type**

Property Type Grouping	Average Number of Sales Per Year from 2015 to 2019
Commercial Specific Purpose	14.2
Industrial	8.8
Office	44.0
Residential Multi-Family	64.0
Residential Transient	5.0
Retail	75.6
Special Purpose	9.6

Only three out of seven property type groupings had at least twenty valid sales on average per year: Office (44.0), Residential Multi-Family (64.0), and Retail (75.6) properties. Time adjustments are often used as a technique to incorporate more sales by adjusting sale prices to a common date, usually the effective date of the reassessment, and should be properly derived using statistical modeling analysis. We also noted that the RPTA Sales Ratio Report for FY2019 did not use multiple years of sales or time adjustments. Best practices identified in *Fundamentals of Mass Appraisal* states that "As noted, sales data are needed in all three valuation approaches, especially in the sales comparison approach, and for sales ratio studies. The reliability of any valuation model or sales ratio study depends on the quantity and

quality of its data.”<sup>14</sup> Additionally, the *Fundamentals of Mass Appraisal* states: “Adjusting sale prices for changes in market conditions, which are reflected by changes in price levels over time, can be an effective way of increasing the number of sales available for use in mass appraisal models and ratio studies and increasing the accuracy of the analyses.”<sup>15</sup>

The IAAO Standard on Ratio Studies Section 6.4 of Part 1, *Remedies for Inadequate Samples*, states: “Small samples should be enlarged if the assessor desires to increase the reliability of statistical measures.” As of the end of FY 2021, there were 19,941 active improved real commercial parcels in the District of Columbia. This number of commercial properties did not produce a sufficient number of valid, arm's length sales in a single year to use in valuation and sales ratio studies for each property type grouping. Low sale counts make it harder to value property accurately and uniformly. It is more difficult to keep appraised values up with the market when sales are not adjusted for time. In an upward trending market, for example, not adjusting for time will make sales ratios appear higher than they are and has the potential to cause one to conclude erroneously that an appraisal level complies with the standard.

**Recommendation 8:** Crowe recommends that RPAD use at least 3 years and preferably 5 years of commercial property sales in valuation and sales ratio studies. Statistical modeling should be used to produce time trends that adjust all sales to the effective date of the reassessment.

**Observation:** RPAD did not report ratio study statistics based on assessed values at the time of sale resulting in a potential distorted view of the assessment performance.

A key use of ratio studies includes the measurement and evaluation of the uniformity of the appraisals to evaluate the performance of the assessments. The ratio study statistics reported by RPAD could include properties at the actual sales price resulting in appraisals appearing more uniform than actual, this practice is often referred to as “sales chasing”. The inclusion of actual sales prices can occur based on the timing of the preparation of the ratio study.

The IAAO Standard on Ratio Studies Part 1, Section 4.5, *Sample Representativeness*, states:

If parcels that sell are selectively reappraised based on their sale prices and if such parcels are in the ratio study, uniformity inferences will not be accurate (appraisals appear more uniform than they are). In this situation, measures of appraisal level also will not be supportable unless similar unsold parcels are appraised by a model that produces the same overall percentage of market value (appraisal level) as on the parcels that sold. Assessing officials must incorporate a quality control program; including checks and audits of the data, to ensure that sold and unsold parcels are appraised at the same level.

**Recommendation 9:** We recommend that RPAD begin reporting ratio study statistics with respect to assessed values on the roll at the time of sale rather than, or in addition to, assessed values anticipated to be enrolled later, as are currently reported. This recommendation is repeated from OIG Report No. 16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 16.

**Observation:** RPAD did not compute nor report ratio statistics by property type and market area in order to ensure reliable statistics to measure appraisal performance.

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<sup>14</sup> ROBERT GLOUDEMANS AND RICHARD ALMY, *FUNDAMENTALS OF MASS APPRAISAL* 69 (2011).

<sup>15</sup> *Id.* at 147.

IAAO Standard on Ratio Studies, Part 1, Section 3.7 states: “A ratio study cannot provide perfect information about appraisal performance. Lack of sufficient sales, outliers, or overrepresentation of one geographic area or type of property can distort results.” Additionally, IAAO Standard on Ratio Studies, Part 1, Section 4.5 states: “In general, a ratio study is valid to the extent that the sample is sufficiently *representative* of the population.” In the ratio studies published by RPAD, commercial properties were reported by residential neighborhood, and there were insufficient commercial sales to provide reliable ratio statistics to measure appraisal performance.

Crowe reviewed Standard Operating Procedures, Appraiser Reference Materials, Market Analytics Books, Pertinent Data Books, and published ratio study reports by RPAD from FY19, FY20, and FY21, conducted interviews with the Chief Appraiser and personnel from the Standards & Exemptions Unit, and performed an independent ratio study of commercial properties using sales and assessment data provided by RPAD to determine if the division had sufficient sales data and evaluate and report commercial property ratio statistics.

Currently, the published ratio study reports ratio statistics for commercial properties by the 40 residential neighborhoods in the District. RPAD did not report ratio statistics according to the commercial sub-markets that it used in its valuation models. Additionally, with a small sample of commercial sales each year, stratifying sales across 40 residential neighborhoods resulted in sample sizes that were insufficient to provide reliable conclusions on appraisal performance for commercial properties. RPAD can address this by reducing the number of strata used in reporting, expanding the sample size by including additional years of sales, or both, to improve both adequate sample sizes and representative results in reporting

**Recommendation 10:** We recommend that RPAD transition to computing and reporting ratio statistics by property type and market area. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 17.

**Observation:** RPAD did not use standards based trimming rules while performing ratio studies to appropriately exclude outliers of property sales or transfer data.

IAAO Standard on Ratio Studies Appendix B, Section B.3 states:

Once outliers have been identified and scrutinized and any errors resolved, the next step is to exclude those that may unduly influence calculated statistical measures. For this reason, it is acceptable to trim outliers identified by recognized procedures (for cautionary notes on trimming small samples, see Tomberlin [2001] and Hoaglin, Mosteller, and Tukey [1983]. An example of such trimming is found in Table B-2. However, trimming of outliers using arbitrary limits, for example, eliminating all ratios less than 50 percent or greater than 150 percent, tends to distort results and should not be employed.

Crowe reviewed the Standard Operating Procedures and conducted interviews with the Chief Appraiser and personnel in the Standards & Exemptions unit to determine the methods for trimming outliers while performing ratio studies. Upon review, we noted that ratio study results were reported without documenting or disclosing whether outliers have been excluded or trimmed from the ratio study. Implementation of standards based trimming rules will provide more confidence to the users of the ratio study.

**Recommendation 11:** We recommend that RPAD begin to adopt a standard-accepted trimming rule while performing ratio studies in accordance with Appendix B of the IAAO Standard on Ratio Studies rather than the arbitrary ratio boundaries of 0.40 to 1.60 presently employed. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 18.

**Observation:** We reviewed the reporting statistical metrics used by OTR against best practices and noted the following:

IAAO Standard on Ratio Studies Part 1, Section 3.2.1 states in part:

Data analysis has been made easier through computerization. Although every study does not require the same level of statistical detail, each ratio study should include measures of appraisal level, appraisal uniformity, and statistical reliability. Graphs, charts, or other pictorial representations can be useful tools for showing distributions and patterns in the data. There is no model ratio study design that can serve all jurisdictions or all situations equally well. Informed, reasoned judgment and common sense are required in the design of ratio studies.

OTR's current ratio studies present standard metrics such as the median, COD and reported price-related differential. However, improvements can be made in the ratio studies by reporting confidence limits on important statistics regarding the appraisals. Additionally, reporting Price-Related Bias (PRB) provides a measure that is more meaningful and less sensitive to extreme prices or ratios. Graphical presentations can also be useful to provide illustrations of trends, data patterns, and key statistics in an easier to understand format than simply providing numerical information.

**Recommendation 12:** We recommend that RPAD take steps to compute and, when appropriate, publish confidence intervals for important statistics. This would enable readers to judge whether an apparent success or failure is more likely to reflect a fluke of small samples rather than a real problem with the appraisals. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 19.

**Recommendation 13:** We recommend that RPAD begin to compute and, when appropriate, publish PRBs. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 20.

**Recommendation 14:** We recommend that RPAD begin to produce statistical graphics to facilitate quick comprehension of patterns not immediately observable from numeric tables. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 21.

## F. Communications

The Code (§ 47-820, § 47-823, and § 47-824) provides requirements related to the publication and inspection of information for the public. Both the Pertinent Data and Market Analytics Books are comprehensive compendiums of appraisal data for the District of Columbia. The Pertinent Data and Market Analytics Books contain all the base data utilized within the CAMA system for a given tax year. These are the figures initially utilized to develop valuations of commercial properties within the mass appraisal income model.

**Observation:** RPTA did not produce a mass appraisal report based on ARM in accordance with standards to provide more public access to the creditability of the assessments.

Crowe evaluated if publication of Appraiser Reference Materials, Market Analytics, and Pertinent Data books were in-line with standards and leading practices. RPTA should carefully review Standard 6 regarding its certification requirements to ensure it complies with that Standard. Standard 6 contains the required contents of an acceptable report. Those standards should be incorporated into the current report along with the required certification. Crowe has reviewed the RPTA Sales Ratio Report for FY 2019, a public-facing sales ratio study report that is produced yearly. In terms of commercial properties, this report did not adhere to some best practice standards outlined in the IAAO Standard on Ratio Studies.



The following problems existed:

- The report did not give specific guidance on the appropriate standard range for the COD, making it unclear how compliance decisions were reached.
- Commercial properties were only evaluated with respect to the median sales ratio in the IAAO standard compliance grid. A separate compliance grid for commercial properties should be used to include the median sales ratio, the coefficient of dispersion, and a measure of vertical equity such as the Coefficient of PRB. The PRB is preferred to the PRD because it is a superior statistic in most respects.

**Recommendation 15:** We recommend that RPTA produce a USPAP-compliant mass appraisal report based on the ARM. The report would blend procedural narratives with statistical data on valuation parameters such as rents, expense ratios, and capitalization rates. The aim is to make public more evidence of the credibility of assessments. The recent additions related to residential and residential land valuation provide a template for changes that would be desirable in the discussion of commercial valuation procedures. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 22.

## G. Appeals Defense

The Appeals and Litigation Unit (A&L) assists with matters dealing with appeals and litigation in the RPAD. The unit ensures all forms and information submitted by petitioners meet the requirements set forth by the OTR; the Official Code of the District of Columbia (DC); and the DC Municipal Regulations. Once valuations have been made, the property owner may appeal the valuation. Assessments are subject to appeals and must be filed on or before April 1 by the submission of an application to RPTA. Information about the appeals process can be found on OTR's website with fillable forms and FAQs.

The A&L within Appeals Defense (AD) is responsible for assisting in the managing of all real property appeals processes (First Level, then RPTAC, and finally D.C. Superior Court); providing support services for property owners seeking appeals; and providing support and guidance to AD Appraisers and Supervisors.

First-level appeals begin in mid-April and usually are heard by June.


**Observation:** While improvements have been made to defend against appeals, further legislative changes would improve how RPTA handles assessments under appeal.

Crowe reviewed the Standard Operating Procedures and interviewed the Chief Appraiser and the Appeals & Litigation Unit Supervisor about first level, RPTAC, and Superior Court appeals relating to commercial real property assessments. RPAD updated their policy and procedures in 2020 and incorporated all three levels of the appeal process into the MITS system, however, RPAD is seeking legislative changes for the 3rd level appeals.

**Recommendation 16:** We recommend that efforts continue to improve how RPTA defends assessments under appeal. This can be done by:

- Continuing to monitor the quality of its valuation performance as it already does via its appeals tracking system, recognizing that a superior measure of performance is found in assessment to sales price ratio studies.
- Augmenting its efforts to manage its appeal/litigation management system, with attention not only to monitoring conditional liabilities and calendar related workflows, but also to the management of related documents and professional services.

- Considering whether to advocate for a redress in the appeal incentives from a game-theoretic perspective, either by advocating for an increase in the cost to property owners of filing an appeal, perhaps on a recurring basis to spur their prompt resolution, or by adopting social pressures rather than, or in addition to, economic incentives to address the situation. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 23.



## Objective 2 - Evaluation of the organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions

Our evaluation has determined that (1) continuous improvement initiatives were limited as employee and management feedback was not tracked and analyzed to ensure staff performance improvement; (2) staff qualifications were not monitored or evaluated, at least annually, to ensure all staff are appropriately trained, qualified, and certified; (3) a process for self-improvement, professional goals, and career opportunities has not been established to ensure staff development; (4) performance metrics were not regularly reviewed to ensure organizational alignment, identify potential improvement areas, and remove barriers to effective human resources management processes; and (5) compensation expertise was not engaged to ensure relevant compensation data was considered when market-pricing commercial appraiser positions to remain competitive with the labor market.

In this section below, we discuss our observations, conclusions, and nine recommendations related to:

- A. Human Resource Support
- B. Organizational Strategy, Structure and Leadership
- C. Workload Statistics and Measurements
- D. Staff Development and Training
- E. Staff Qualifications
- F. Compensation Requirements

## A. Human Resource Support

The HR department, positioned as Executive Support in the OCFO organizational chart, plays a vital role in accomplishing the OCFO's strategic goal to "Develop, Attract, and Retain High Quality Employees." The OCFO strategic plan states that "[a]n improvement-focused culture requires that the OCFO constantly review their organizational processes, procedures and systems to increase their overall efficiency, with the goal of continually increasing their effectiveness as an agency and the satisfaction levels of both customers and employees." *Id.* at 6. We interviewed individuals from the RPTA and OCHRO to evaluate the assistance provided by HR to support RPTA in its ability to complete the commercial real property assessment process.

**Observation:** A Human Resource Business Partner was not supporting organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development OTR functions.

During our interviews, the OCHRO informed us that an HR Business Partner position was assigned to support OTR leaders as they perform organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions. We noted that the Office of Human Resources organizational chart provided, dated March 1, 2021, did not include a HR Business Partner position.

The Chief Appraiser and Supervisory Appraisers we interviewed informed us they consider the RPTA Program Analyst as their contact person for HR policies, processes, and practices. The Program Analyst noted her primary role is providing HR support, including coordinating the new hire orientation process (e.g., new hire entry badge, system access) with HR and IT.

The Chief Human Resources Officer noted the Program Analyst is not a trained HR professional or Business Partner, nor is her position within the OCFO HR organization.

According to the People Capability Maturity Model (People-CMM), "[p]rocess Areas at the Optimizing Level focus on continually improving the organization's capability and workforce practices."<sup>16</sup> The Organizational Performance Alignment process area provides the following criteria:

- (Purpose/Goal) The purpose of Organizational Performance Alignment is to enhance the alignment of performance results across individuals, workgroups, and units with organizational performance and business objectives. Goal 1: The alignment of performance among individuals, workgroups, units, and the organization is continuously improved.<sup>17</sup>  
(Practice 1) Workgroups continuously improve the alignment of performance among individuals and across the workgroups.<sup>18</sup>  
(Practice 2) Units align performance among individuals, workgroups, and other entities within the unit.<sup>19</sup>  
(Practice 3) The organization aligns performance across units and with the organization's business objectives.<sup>20</sup>

The 2017-2021 Strategic Plan for the Office of the Chief Financial Officer (OCFO) provides the following criteria:

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<sup>16</sup> CARNEGIE MELLON SOFTWARE ENGINEERING INSTITUTE, PEOPLE CAPABILITY MATURITY MODEL (P-CMM) 549 (VERSION 2.0 JULY 2001).

<sup>17</sup> *Id.* at 583-584.

<sup>18</sup> *Id.* at 588.

<sup>19</sup> *Id.* at 590.

<sup>20</sup> *Id.* at 593.

- Strategic Initiative 8 implement a culture of continuous improvement based on employee-driven process improvement teams
- Strategic Initiative 18 review and update performance management systems and recruitment strategies to align with culture of continuous improvement program
- (Strategic Objective 25) Partner with OCFO business and practice leaders to conduct an assessment of OCFO's organizational units to ensure that structure are properly aligned to successfully carryout the agency's role and strategic objectives and to achieve the vision of being a "best-in-class" financial organization.

Organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions are considered OTR's responsibility, rather than shared or supported roles and responsibilities. Limited HR Business Partner guidance and assessment support reduces opportunities to share effective OCFO HR practices, and plan and implement OTR continuous improvement initiatives. It may also result in functional misalignment and reduce OTR contributions to the office's role and strategic objectives.

Additionally, RPTA has not established any organizational level performance or strategic benchmarks, metrics, or indicators to manage organizational performance or its human resources functions.

The Chief Appraiser and Supervisory Appraisers did not receive HR Business Partner support to review and update performance management systems and recruitment strategies and ensure alignment with the continuous improvement culture.

**Recommendation 17:** Crowe recommends expanding HR Business Partner support of OTR's organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions.

**Recommendation 18:** Additionally, we recommend that RPTA adopt measures to link operational activities to its organizational strategic plan and mission. In addition, key human resources metrics, such as Yield Ratios (ratio of offers to acceptance, interview-to-offer ratio, invitations-to-interview ratio, advertisements, or contacts-to-applicant ratio), should be established. RPTA personnel should compile an effective set of financial measures and operational measures (on customer satisfaction, internal processes, and the RPTA's innovation and improvement activities) that will put RPTA's strategy and vision at the center of its operations. This tool would drive its personnel to adopt behaviors and invest in actions that are critical to arrive at strategic and operational goals and align them toward an overall vision. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 32.

**Observation:** Monetary awards were not used to recognize Commercial Appraiser performance or workplace contributions. The monetary award component of the OCFO's Incentive and Performance Recognition Awards Program was suspended during the pandemic. The Chief Appraiser and Commercial Supervisors informed us that per OCFO policy, OTR staff were not eligible for monetary OCFO Incentive and Performance Recognition Awards Program recognition when they exceeded performance expectations or contributed to an effective and efficient workplace. Instead, OTR employees were recognized for exceeding performance expectations and contributing to an effective and efficient workplace with compensatory time off, or career ladder promotions.

The Performance Management process area of the People-CMM<sup>21</sup> provides the following criteria:

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<sup>21</sup> People-CMM *supra* note 16 at 179.

- Purpose: The purpose of Performance Management is to establish objectives related to committed work against which unit and individual performance can be measured, to discuss performance against these objectives, and to continuously enhance performance.<sup>22</sup>
- Goal 4 – Outstanding performance is recognized or rewarded.<sup>23</sup>
- (Practice 13) Guidelines for recognizing or rewarding outstanding performance are developed and communicated.<sup>24</sup>
- (Practice 14) Recognition or rewards are made on an appropriate basis as events occur that justify special attention.<sup>25</sup>

The OCFO Policies and Procedures Manual (Rev. April 2015) Section 1104: Incentive and Performance Recognition Awards, provides the following criteria:

- 1104.1: The OCFO's Performance Recognition Awards Program recognizes employees who have exceeded performance expectations and contributed to an effective and efficient workplace.
- 1104.2 Monetary Awards
  - Sustained Superior Performance (SSP) Award
  - Special Act Award
  - CFO Award

As a result of the COVID-19 pandemic, OCFO paused its awards program and did not recognize or reward OCFO staff as events occurred that justified special attention. OCFO employees may not have felt recognized for exceeding performance expectations or contributing to an effective and efficient workplace, which may have led to unwanted turnover or lost productivity.

**Recommendation 19:** Crowe recommends reinstating the monetary award component of the OCFO Incentive and Performance Recognition Award Program and training the Chief Appraiser and Supervisory Appraisers to recognize and reward these contributions.

## B. Organizational Strategy, Structure and Leadership

We assessed OCHRO and OTR management's ability to effectively support RPTA's organizational strategy and structure. This includes reviewing the staffing levels, organizational structure of RPTA, and the ability of the personnel in leadership positions to promote, communicate, and deliver upon that strategy.

**Observation:** RPAD did not effectively track or monitor the implementation status of recommendations from prior reports relating to D.C. Code § 47-821. RPAD also did not proactively update documentation of recommendations to reflect the current status of implementation of corrective actions.

The COSO Internal Control – Integrated Framework Principle #17 states: "The organization evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, as appropriate."

RPAD did not have procedures in place to track or monitor the implementation status of recommendations from prior reports. As a result, RPAD may not be implementing corrective actions as indicated in their management responses to prior findings.

**Recommendation 20:** RPAD should develop formal policies and procedures to assign responsibility for tracking and monitoring the implementation status for recommendations.

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<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 180.

<sup>24</sup> *Id.* at 201.

<sup>25</sup> *Id.* at 203.



**Observation:** RPTA has not developed quality assurance procedures to assist in improving its commercial property assessments. Although RPTA has made strides in its quality assurance practices, including the hiring of a Real Property Assessment Manager who is in the process of developing training and quality assurance mechanisms, the results of our ratio study indicate that commercial properties are still being undervalued.

**Recommendation 21:** We recommend that RPTA establish an Office of Quality Assurance, Best Practices, and Innovation to: (a) conduct random and regular independent assessments of quality in all core processes; (b) assess performance against best practices; (c) study the commercial real property assessment practices of state and local government entities across the United States; and (d) engage in process innovation to enhance service delivery. This Office should report directly to the Director of RPTA and report yearly to the District's CFO. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 28.

### C. Workload Statistics and Measurements

This included the review of tools and templates available to the RPTA staff to help assess the impact of the workload level on performance of appraisers, employee morale, or the quality of assessments. The goal was to identify if a workload measurement system existed to evaluate the efficiency and effectiveness of the assessment process. We also assessed if organizational level performance or strategic benchmarks, metrics or indicators were utilized to manage organizational performance or its human resources functions.

**Observation:** RPAD did not monitor performance against key performance measures on a regular basis to determine whether they were meeting performance indicators.

The *COSO Internal Control – Integrated Framework Principle #14* states that “[t]he organization internally communicates information, including objectives and responsibilities for internal control necessary to support the functioning of internal control.” Additionally, the *COSO Internal Control – Integrated Framework Principle #16* states that “[t]he organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning.”

We identified key performance indicators included in the OCFO Strategic Plan for FYs 2017-2021 and noted the following that applied to the assessment process:

- Ratio of the value of assessment changes to value of assessments appealed will be less than 3%.
- Percentage of corrected property tax bills issued will be less than 3% (measured within 30 days of billing date).

We requested, but RPAD could not provide, support that they monitor their performance against key performance measures on a regular basis. We were provided a draft copy of the proposed KPIs and Performance Metrics for the Modernized Real Property Tax System, but support was not provided for the tracking or monitoring of the KPIs identified in the draft document.

As a result, RPAD and relevant stakeholders may not have the necessary information to properly evaluate the performance of the commercial real property assessment process.

**Recommendation 22:** RPAD monitor and retain documentation to support their progress against key performance indicators. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 30.

## D. Staff Development and Training

We reviewed the staff development performed and training programs available to the members of RPTA. This included reviewing available documentation on training programs and interviewing individuals throughout the department to assess their level of training and whether opportunities for advancement of skillsets existed. We assessed if a correlation between RPTA's training programs and its strategic needs was reflected in the OCFO's strategic plan.

**Observation 2022-19:** RPTA did not have a structured staff development and training program for its staff.

Although, we noted that improvements have been made in a structured needs assessment program, as outlined in Chapter IX of the OCFO Personnel Policies and Procedures Manual; we observed that the RPTA's training programs did not take into consideration the strategic needs identified in the OCFO's strategic plan.

We noted no clear criteria by which training effectiveness was to be measured. All these can result in a workforce that is ill equipped to accomplish the OCFO's strategic goals. However, we did note that a structured needs assessment program is documented in Chapter IX of the OCFO Personnel Policies and Procedures Manual.

**Recommendation 23:** We recommend that RPTA develop a structured staff development and training program that is based on the following:

- An organizational analysis; and
- A job analysis of KSA for each function.

Also, RPTA should clearly articulate training goals for each individual and establish criteria by which the effects of training can be measured. This recommendation is repeated from *OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 34.*

## E. Staff Qualifications

We requested and reviewed documentation related to the qualifications of the staff, including any certifications, to assess the ability of employees to effectively complete their duties and support RPTA's organizational strategy.

Good human resources process governance was observed through our review of the OCFO HR Policies and Practices Manual and our conversations with the OCHRO. While good governance is required to perform human resources processes effectively, optimizing and improving process effectiveness based on developing well-understood metrics and implementing the continuous improvement practices noted can improve the OTR stakeholder experience.

Our recommendations focus on understanding and improving the OTR stakeholder experience (ex. Chief Appraiser and Supervisory Appraisers) as they perform critical people-related functions, expanding periodic and event-driven feedback about functional alignment, improve efficiency and effectiveness, and collaborate on continuous improvement initiatives. These activities will also facilitate their personal and professional development.

**Observation:** We noted that RPAD did not have a system or plan in place to track certification or continuing education requirements. Furthermore, RPAD did not actively monitor staff qualifications.

We requested a listing of RPAD staff and their associated years of experience, certifications held, training received, and appraiser licenses. Additionally, we interviewed staff and requested support for training provided. An initial listing provided indicated that only 3 of 39 positions identified as grade 13 or above reflected that a certification has been earned. Of those 39 positions, we also noted that only 17 were

identified as having acquired a license or designation. After communication of our observation, an updated listing was provided by the Chief Appraiser, dated June 6, 2022, that indicated 30 appraisers had received one of three designations (Certified District Assessor, District Assessment Specialist II, and District Assessment Specialist I). Neither listing provided identified trainings received or indicated that continuing education requirements were being tracked.

The IAAO *Standard on Professional Development - Certification and Licensing Principles*, Standard 3 states:

- Assessment jurisdictions benefit when they have knowledgeable and adequately trained personnel to preserve the public's trust; therefore, it is of the utmost importance.
- Credentialing bodies provide validity to appraisers' work and hold members accountable.

The IAAO *Standard on Professional Development - Continuing Education Principles*, Standard 4 states: "Education guidelines must clearly describe the minimum continuing education requirements for individuals employed in various positions in an assessment office".

As a result, RPAD personnel may not be following certification continuing education requirements. Additionally, RPAD staff may not receive training on updated best practices in the appraiser industry.

**Recommendation 24:** We recommend that RPAD implement the following:

- A review of the staff qualifications be performed in accordance with IAAO standards. This review should be performed on an annual basis.
- A training program be developed to ensure all staff are appropriately trained, qualified, and certified.

## F. Compensation Requirements

We requested documentation related to the hiring process and conducted interviews with human resource personnel and RPTA individuals to determine the ability of the organization to attract, develop, and retain a well-qualified workforce. As part of that goal, HR should evaluate whether or not appropriate compensation is being offered to ensure they are attracting well-qualified staff.

**Observation:** External compensation expertise was not considered when Commercial Appraiser compensation was benchmarked against market data.

OCFO HR staff determined market prices for jobs using a point factor system and collected data using internal surveys and from contacts at comparable local government entities.

Compensation Goal 1 of the People Capability Maturity Model (People-CMM)<sup>26</sup> provides the following criteria:

- *Goal - Compensation strategies and activities are planned, executed, and communicated.*<sup>27</sup>
- *(Practice 10) Responsible individuals periodically review compensation packages for those whose compensation they administer to ensure they are equitable and consistent with the organization's compensation policy, strategy, and plan.*<sup>28</sup>
- *(Practice 11) Action is taken to correct inequities in compensation or other deviations from the organization's policy, strategy, and plan.*<sup>29</sup>

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<sup>26</sup> People-CMM supra note 16.

<sup>27</sup> *Id.* at 226.

<sup>28</sup> *Id.* at 239.

<sup>29</sup> *Id.* at 239.

Compensation Goal 4 of the People Capability Maturity Model (People-CMM) provides the following criteria:

- *(Goal 4) Compensation practices are institutionalized to ensure they are performed as managed processes.*<sup>30</sup>
- *(Ability 2) Adequate resources are provided for compensation activities.*<sup>31</sup>
- *(Measurement 3) Aggregate trends in compensation activities and decisions are measured and reviewed on a recurring basis.*<sup>32</sup>

The commercial appraiser compensation market pricing was limited to data from public sector organizations. The salaries of longer service Commercial Appraisers may be below current market compensation, creating compensation inequities and unwanted turnover risk.

Current Commercial Appraisers may consider employment at non-government entities that offer higher base salary compensation and incentive plan eligibility. Commercial Appraiser compensation market trends beyond comparable local jurisdictions were not considered.


**Recommendation 25:** Crowe recommends retaining a compensation consulting firm with public and private sector and/or commercial appraisal compensation expertise to ensure relevant compensation data is considered when market-pricing commercial appraiser positions.

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<sup>30</sup> People-CMM *supra* note 16 at 226.

<sup>31</sup> *Id.* at 229.

<sup>32</sup> *Id.* at 241.



## Objective 3 – Examination of hiring practices, including whether the human resources rules and regulations to which the Office of the Chief Financial Officer is subject, hinder or enhance the ability of the Office of Tax and Revenue to attract, develop, and retain a well-qualified workforce

Our evaluation has determined that (1) employee feedback has not been solicited periodically to ensure best practices for hiring are used; (2) specific hiring metrics and scorecards have not been developed to regularly analyze and act on employee and management onboarding; and (3) feedback for the hiring process has not been established to ensure hiring practice optimization.

In this section below, we discuss our observations, conclusions, and eight recommendations related to:

- A. Job Descriptions
- B. Succession and Contingency Plans
- C. Hiring Processes

## A. Job Descriptions

We requested documentation related to job postings and interviewed individuals from RPTA and OCHRO to evaluate whether the job descriptions hindered or enhanced the ability of the Office of Tax and Revenue to attract a well-qualified workforce.

**Observation:** Commercial appraiser certification and equivalent work experience hiring policies were unclear.

We were informed that the commercial appraiser work experience certification policies were unclear during our stakeholder interviews. RPAD staff did not appear to be aware of HR's role in reviewing qualifications and equivalencies.

Several positions were deficient as indicated below:

- The Commercial Appraiser DS 1171 13 job description did not include appraiser certification requirements, nor work experience certification equivalency language.
- The Commercial Appraiser DS 1171 12 job description included required appraiser certification requirements, but not work experience certification equivalency language.

The Staffing process area of the People Capability Maturity Model (People-CMM)<sup>33</sup> provides the following criteria:

- *(Goal 3) Staffing decisions and work assignments are based on an assessment of work qualifications and other valid criteria.*<sup>34</sup>
- *(Practice 10) A selection process and appropriate selection criteria are defined for each open position.*<sup>35</sup>

The Master Agreement Between the American Federation of State and Municipal Employees, District Council 20, AFL-CIO and the Government of the District of Columbia in Article 25 provides the following criteria:

*"Each employee within the unit shall receive a copy of his/her current job description upon request. When an employee's job description is changed, the employee and the Union shall be provided a copy of the new job description."*<sup>36</sup>

The Commercial Appraiser position descriptions were inconsistent. As a result, the Commercial Appraiser grade 12 or 13 job candidates with certification equivalent work experience may not be referred to OTR or recommended for hire by the Chief Appraiser and Supervisory Appraisers.

**Recommendation 26:** Crowe recommends clarifying the equivalent work experience policy for commercial appraiser hiring decisions by adding consistent work experience equivalency language to Commercial Appraiser grade 12 and 13 job descriptions and informing the appropriate HR and OTR practice stakeholders. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 35.

**Recommendation 27:** We also recommend the OCFO provide the revised job descriptions to commercial appraisers, as required by the Master Agreement noted in the Criteria. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's*

<sup>33</sup> People-CMM *supra* note 16 at 109.

<sup>34</sup> *Id* at 111.

<sup>35</sup> *Id* at 124.

<sup>36</sup> Master Agreement Between the American Federation of State, County and Municipal Employees, District Council 20, AFL-CIO and the Government of the District of Columbia, art. 25 (effective through Sept. 30, 2010).



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Recommendation 35.

## **B. Succession and Contingency Plans**

We requested documentation to support whether RPTA and OCHRO had plans in place in the case of employee turnover or unexpected difficulties arose.

**Observation:** The 2017 evaluation noted that that RPTA did not have written succession and contingency plans for the key roles of Director and Chief Appraiser. During discussions with OCHRO, we noted that OCHRO reported that informal succession planning is ongoing, however formal succession plans were not in place due to a concern about preselection.

The OTR organizational structure did not include adequate leadership development positions for Supervisory Appraisers to prepare for the Chief Appraiser position. The OTR organization chart indicated that the Chief Assessor has nine direct reports: 9 RPAD Units (i.e., 3 residential, 3 commercial, 1 A&L, 1 S&E, 1 Maps & Title). The Real Estate Assistant Manager was a staff role without any direct appraiser reports.

There were no management positions between the Supervisory Appraiser and Real Estate Assessment Manager Grade 14 positions and the Chief Appraiser Grade 15 position. Such management positions can provide opportunities for leadership development of the OTR staff.

The previous Deputy Chief Appraiser position was eliminated after the Chief Appraiser was promoted to his current position, and all Supervisory Appraisers report to the Chief Appraiser.

**Recommendation 28:** We recommend that RPTA design, document, and implement effective succession and contingency plans. This will ensure seamless continuity of RPTA strategy and operations in the event of an unanticipated vacancy in either role. The succession plans should be approved by senior management. To ensure accountability, responsibility for this key program should be embodied within the position description for each role. Key metrics should be designed to periodically monitor and evaluate the program. This recommendation is repeated from *OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 36.

**Recommendation 29:** Additionally, Crowe recommends that the OCHRO develop a written succession plan for the Chief Appraiser position and reinstating the Deputy Chief Appraiser and/or creating a Commercial Unit Manager role to provide additional leadership development opportunities for Supervisory Appraisers and reduce the number of direct reports to the Chief Appraiser. This recommendation is substantially similar and repeated from *OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 27.

**Recommendation 30:** We also recommend that an organizational structure impact analysis be conducted when appropriate to ensure the OTR organization structure is aligned to OCFO 2017-2021 Strategic Plan revisions when the plan is updated. This recommendation is repeated from *OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 24.

## **C. Hiring Processes**

We requested documentation related to the hiring process and conducted interviews with human resource personnel and RPTA individuals to determine the ability of the organization to attract, develop, and retain a well-qualified workforce. We also assessed whether coordination and feedback occurred

between the RPTA and OCHRO to improve upon the hiring processes.

**Observation:** Chief Appraiser and Supervisory Appraiser feedback was not used to improve hiring practices. Based on our interviews with HR and RPAD staff, we noted that hiring practice feedback and improvement recommendations were not solicited from OTR hiring practice stakeholders, such as the HR Business Partner, on a periodic or event-driven basis. The Chief Appraiser and Supervisory Appraisers did not participate on recruitment strategy or hiring practice continuous improvement teams. Additionally, we noted that the Chief Appraiser and Unit A, B, and C Supervisors also did not periodically review hiring practice activities, periodic and event-driven HR Key Performance Indicator (KPI) results. The OTR HR Business Partner only reviews hiring activities and HR KPIs with the RPTA Director. HR KPIs did not include hiring practice effectiveness or stakeholder satisfaction metrics. Sponsorship of continuous hiring practice improvements may be limited if stakeholder insights and data analytics are not solicited, analyzed, or periodically reviewed by executive management.

OTR stakeholder opinions on performance management systems, recruitment strategies, and working conditions did not influence the prioritization and planning or continuous improvement initiatives.

The 2017-2021 Strategic Plan for the OCFO includes the following criteria:

- Strategic Initiative 8 Implement a culture of continuous improvement based on employee-driven process improvement teams.
- Strategic Initiative 18 Review and update performance management systems and recruitment strategies to align with culture of continuous improvement program.

The Communication and Coordination process area of the People-CMM<sup>37</sup> provides the following criteria:

- (Practice 4) Individuals' opinions on their working conditions are sought on a periodic and event-driven basis.<sup>38</sup>
- (Verification 2) Executive management periodically reviews the Communication and Coordination activities, status, and results; and resolves issues.<sup>39</sup>

The 2017-2021 Strategic Plan for the Office of the Chief Financial Officer (OCFO) provided this Office of Human Resources (HR) Key Performance Indicator criteria:

- (1) Request to fill positions within 10 business days of vacancy[;]
- (2) Post positions with certified position descriptions with 5 business days of receipt[;]
- (3) Submit qualified candidates to hiring manager at least 5 business days after first screening date[;]
- (4) Interview all candidates within 30 working days of receiving list of qualified candidates[;]
- (5) Conduct pre-screening and extend offer to selected candidate within 10 business days of agency notification[.]

**Recommendation 31:** Crowe recommends implementing an HR Business Partner driven process to gather and analyze OTR hiring practice stakeholder feedback on a periodic and event-driven basis. We also recommend adding hiring practice effectiveness and stakeholder experience HR KPIs.

**Observation:** Recently hired employee feedback was not used to improve onboarding practices.

Recently onboarded employees, the Chief Appraiser, and the Supervisory Appraisers were not asked for feedback about employee onboarding results and experiences, nor were they asked for their onboarding practice, policy, and process feedback and improvement recommendations.

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<sup>37</sup> People-CMM *supra* note 16 at 141.

<sup>38</sup> *Id.* at 150.

<sup>39</sup> *Id.* at 158.

OTR is responsible for managing employee onboarding, and HR did not audit or confirm if key job elements and performance measures were discussed and understood. However, HR did monitor Individual Performance Plan completion at 30-, 60-, and 90-day intervals. Additionally, HR KPIs did not include onboarding effectiveness or stakeholder experience metrics.

The American Productivity and Quality Center (APQC) provides the following criteria:

- (Measure 7.3.1) an organization should manage employee orientation and deployment
- (Measure 7.3.1.1.) an organization should create/maintain an employee onboarding program to evaluate the effectiveness of the employee onboarding program

The OCFO Personnel Policies and Procedures Manual, Chapter IX. Performance Management Program provides:

903.1 Within thirty (30) days of hire, the appropriate supervisor shall discuss key job elements and performance measures with each employee and develop an Individual Performance Plan (IPP).

The 2017-2021 Strategic Plan for the Office of the Chief Financial Officer (OCFO) provides the following criteria:

- Strategic Initiative 8 Implement a culture of continuous improvement based on employee-driven process improvement teams.
- Strategic Initiative 14 Enhance existing employee development opportunities to ensure that our human capital has the critical skills to succeed in OCFO's SMARTER culture.
- Strategic Initiative 18 Review and update performance management systems and recruitment strategies to align with culture of continuous improvement program.
- Strategic Initiative 25 Partner with OCFO business and practice leaders to assess OCFO's organizational units to ensure that structure are properly aligned to successfully carryout the agency's role and strategic objectives and to achieve the vision of being a "best-in-class" financial organization.

Feedback about the recently onboarded employee experience was not used to identify, prioritize, or improve onboarding hiring practices, policies, or processes. Recently hired employees are more likely to leave an organization than longer service employees, therefore unwanted turnover and lost productivity may occur if an onboarding experience does not adequately prepare them for success.

**Recommendation 32:** Crowe recommends gathering and analyzing OTR hiring practice stakeholder feedback regarding fostering vital interpersonal relationships and information networks, providing a sense of organizational culture, and determining how well employees understand their new jobs and related expectations on a periodic and event-driven basis. We also recommend HR KPIs include hiring practice effectiveness and stakeholder experience metrics.

**Observation:** Human Resource Business Partner support of OTR hiring practices needs improvement. We understand that the HR Business Partner position, an employee with HR experience and available to coordinate between OTR and the OCHRO, was to be assigned to support OTR HR functions. The OTR hiring practice stakeholders we interviewed informed us that they did not receive hiring practice support from a Human Resources Business Partner.

Hiring process responsibilities (other than reviewing HR pre-screened candidate profiles) has been delegated to the Chief Appraiser and the Supervisory Appraisers. As a result, limited HR Business Partner hiring practice guidance and assessment support reduces opportunities to share effective HR hiring practices, provide hiring and selection guidance, and plan and execute continuous improvement initiatives.

The Chief Appraiser and the Commercial Supervisors were not continuously improving their candidate selection capabilities, which may result in poor hiring decisions that reduce productivity and risk unwanted turnover.

The Staffing process area of the People Capability Maturity Model (People-CMM)<sup>40</sup> provides the following criteria:

- Goal 1 - Individuals or workgroups in each unit are involved in making commitments that balance the unit's workload with approved staffing.<sup>41</sup>
- *(Practice 1) Responsible individuals plan and coordinate the staffing activities of their units in accordance with documented policies and procedures*<sup>42</sup>
- *(Practice 3) Individuals and workgroups participate in making commitments for work they will be accountable for performing*<sup>43</sup>
- *(Practice 4) Each unit documents work commitments that balance its workload with available staff and other required resources.*<sup>44</sup>

Staffing Goal 3 of the People Capability Maturity Model (People-CMM) provides the following criteria:

- Goal 3 - Staffing decisions and work assignments are based on an assessment of work qualifications and other valid criteria.<sup>45</sup>
- *(Practice 15) Representative members of a unit participate in its staffing activities.*<sup>46</sup>
- *(Ability 3) Individuals performing staffing activities receive the preparation in methods and procedures to perform their responsibilities.*<sup>47</sup>

Staffing Goal 5 of the People Capability Maturity Model (People-CMM) provides the following staffing practice (including prescreening and onboarding) criteria:

- Goal 5 - Staffing practices are institutionalized to ensure they are performed as managed processes.<sup>48</sup>
- *(Commitment 3) An organizational role(s) is assigned responsibility for assisting and advising units on staffing activities and procedures.*<sup>49</sup>
- *(Measurement 1) Measurements are made and used to determine the status and performance of staffing activities.*<sup>50</sup>
- *(Verification 1) A responsible individual(s) verifies that staffing activities are conducted according to the organization's documented policies, practices, and procedures, and where appropriate, plans [ ] and addresses non-compliance.*<sup>51</sup>

**Recommendation 33:** Crowe recommends expanding HR Business Partner responsibilities to include guidance and support of OTR hiring practices. We also recommend monthly reviews of current and projected hiring needs, hiring process status, HR KPI results, potential improvements, lessons learned, and identification and resolution of current or emerging hiring practice issues. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 37.

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<sup>40</sup> People-CMM *supra* note 16 at 109.

<sup>41</sup> *Id.* at 111.

<sup>42</sup> *Id.* at 116.

<sup>43</sup> *Id.* at 118.

<sup>44</sup> *Id.* at 119.

<sup>45</sup> *Id.* at 111.

<sup>46</sup> *Id.* at 130.

<sup>47</sup> *Id.* at 116.

<sup>48</sup> *Id.* at 111.

<sup>49</sup> *Id.* at 145.

<sup>50</sup> *Id.* at 137.

<sup>51</sup> *Id.* at 138.



## Objective 4 – Review of Prior Recommendations

Objective four required us to follow up on the prior recommendations included in the 2017 evaluation of OTR's commercial real property assessment process (OIG Project No. 16-1-14AT) as well as a review of the internal controls (and OIG Project No. 16-1-14AT(a)). Please see sections below for the results of our follow up.

### A. OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017)

In 2017, OIG Project No. 16-1-14AT ("prior report") was issued in accordance with D.C. Code 47-821(e) and provided recommendations over the District's Office of Tax and Revenue (OTR) operations in the form of Opportunities for Improvement. During the current evaluation of OTR, Crowe considered the status of the prior recommendations. Upon review of the current responses, for those recommendations that RPTA deemed implemented, we performed procedures to determine the implementation of the recommendations.

A total of 37 Opportunities for Improvement were noted in the 2017 Report. We noted that 12 recommendations were considered closed and the remaining 25 were considered as repeated. A summary of the status of those Opportunities for Improvement are as follows in Table 3 (next page).

**Table 3: Table of Recommendations: Objective 4, Review of Prior Recommendations, OIG Project Report No. 16-1-14AT**

Report	Finding	Recommendation	Agency Response	Current Status
OIG Report No.16-1-14AT (Issued April 10, 2017)	Information on the location and land parcel characteristics that is maintained includes the SSL, address, area (in square feet), use (coded), zoning, appraiser defined neighborhood, and other delineated areas. In principle, these characteristics are sufficient for the valuation of urban land. In practice, there are opportunities for improvement. Currently, a single set of neighborhoods is used for all types of commercial properties.	1. We recommend that RPAD evaluate whether the current nine market areas are appropriate in the valuation of the types of commercial properties, as discussed later. A general issue is whether the areas are large enough to produce reliable samples of sales and I&E reports.	Agreed	Closed
	The volume of appeals has prevented RPAD from carrying out regular field canvasses as standards recommend.	2. We recommend that RPAD management develop a plan for periodically inspecting properties so there is reasonable assurance that property characteristics data are up-to-date.	Agreed	Open
	RPAD has established 19 acceptance codes. There are nine codes that apply to single-property sales and a corresponding nine codes that apply to multi-parcel sales. (The treatment of multi-parcel sales as potentially usable is an improvement since AGJD's 2012 review of commercial assessment procedures.) RPAD should reconfigure the CAMA system to begin recording sale qualifications with respect to sales-ratio study purposes as well as validations with respect to modeling purposes.	3. We recommend that RPAD reconfigure the CAMA system to begin recording sale qualifications with respect to sales-ratio study purposes as well as validations with respect to modeling purposes.	Disagreed	Open
	The motives of a buyer are difficult to discern uniformly, and a low price is not necessarily evidence of undue speculation. Almost all purchases involve some degree of speculation about the wisdom of the purchase. Code 04 (unusual) is a broad category; many assessment districts would have separate codes for each category. RPAD should not use code 07 unless there is convincing documentation that the sale was "speculative."	4. We recommend that RPAD not use code 07 unless there is convincing documentation that the sale was "speculative."	Disagreed	Open



Report	Finding	Recommendation	Agency Response	Current Status
	While RPAD has taken strong steps to improve I&E forms and processing, additional improvements can be made.	5. We recommend that submitted I&E forms be reviewed by RPAD before they are sent for keying. Forms that are returned blank or largely incomplete should be returned to taxpayers for completion. Additionally, RPAD staff should screen completed forms and mark them as usable, questionable, or unusable. There is no point in keying unusable responses, although they could still be scanned for documentation purposes. Just as sales are screened prior to valuation analysis, income data should be screened, particularly given the fact the RPAD relies principally on the income approach for valuing commercial properties.	Agreed	Closed
	We note that RPAD's organization chart includes a vacant I&E auditor position intended to fill the present void.	6. We recommend strongly that the I&E auditor position be filled by a competent, conscientious person with knowledge of I&E data.	Agree	Closed
	Under current legislative code, TY 2018 assessments for both residential and commercial property must reflect a valuation date of January 1, 2017 (§ 47-802 (8)) and notices must be mailed by March 1, 2017 (§ 47-824 (a)). Yet I&E submissions are not due until April 15, 2017. This makes it impossible to use I&E data reflective of calendar 2016 in developing TY 2018 values.	7. We recommend that I&E processing be further improved.	Agree	Closed
	I&E submissions are not currently required before the assessment notice deadline.	8. We recommend that RPAD seek to require I&E submissions before the assessment notice deadline.	Agree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	While not as important in the District as in jurisdictions that rely more heavily on the cost approach, there is room for improving land appraisal by leveraging land residuals (sales prices for improved properties less improvement values) and conducting mass appraisal oriented analysis analogous to those used to develop income rates (particularly capitalization rates which also rely on sales). In any case, a goal should be to update land values annually along with other valuation rates.	9. We recommend that RPAD update land values more regularly and refine the valuation approach. Consideration should be given to assigning responsibility for land valuation to a single appraiser/analyst in each commercial unit, or assigning the responsibility entirely to the new commercial unit (the "C" team). One procedural refinement would be to increase sample sizes through land residuals derived from recent improved sales. Part of this effort could be a general reconsideration of commercial market areas. The basic question is whether the existing nine areas serve all types of commercial properties well.	Agree	Closed
	The appraisal of possessory interests and air rights are not addressed in either the ARM or the Employee Handbook.	10. We recommend that RPAD adopt procedures for valuing possessory interests and air rights and add them to the ARM and/or Employee Handbook.	Agree	Open
	Because capitalization rates are so critical to value determination and office sales are relatively scarce, office sales should be thoroughly researched and consideration should be given to expanding sample sizes through use of prior year sales time-adjusted to the valuation date. RPAD should further improve the valuation of office buildings by reviewing property data for accuracy and consistency and by building data analysis skills.	11. We recommend that RPAD further improve the valuation of office buildings by reviewing property data for accuracy and consistency and by building data analysis skills. Because capitalization rates are so critical to value determination and office sales are relatively scarce, office sales should be thoroughly researched and consideration should be given to expanding sample sizes through use of prior year sales time-adjusted to the valuation date. Again, building data analysis skills will help, and continuing to check capitalization and other income rates with those reported in industry publications and services will provide additional support.	Agree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	Retail properties remain undervalued compared to other properties in the District.	<p>12. We recommend that RPAD develop and vet a plan for valuing retail properties at market value consistent with other properties in the District. This could be accomplished by phasing in increases over a two or three year period.</p> <p>The plan should include consideration of whether:</p> <ul style="list-style-type: none"> <li>• The nine market areas used for offices are adequate for retail properties. Although the situation may well be different in the District, retail market areas or neighborhoods usually follow traffic corridors more than offices do. Again, while this may well not apply in the District, it would be prudent to consider whether retail areas should be defined separately from office areas.</li> <li>• Additional space types, easily accommodated in the CAMA system, would be helpful. One example is restaurants. Current rent tables provide a separate rate for restaurant spaces but do not distinguish between fast food and full service restaurants. Although appraisers can apply adjustments for "tenant appeal," standardizing rates creates consistency and lessens the need for individual property adjustments. In any case, retail properties warrant special attention in the march to appraise all properties in the District equitably at market value. We believe that, as with office properties, the CAMA system provides an effective mechanism for generating accurate and equitable values. As noted, the CAMA system allows users to vary vacancy rates (along with rent rates) by market area, and analyses should be conducted to determine whether it would be appropriate to do so. Varying vacancy rates by market area could improve valuation equity while relieving appraisers of the need to apply as many individual property adjustments. Although Version 7 of CAMA has the ability to apply per square foot (rather than percentage) adjustments for expenses, we see no merit in doing so since per square foot adjustments require more frequent updating than percentage adjustments.</li> </ul>	Agree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	Industrial properties are individually appraised largely based on an Evaluation of I&E responses and available sales (cost values are also computed and considered). Values are usually entered into the CAMA system as appraiser "override" values. Ringing them into the mass appraisal fold would help ensure objectivity and consistency. RPAD should develop additional mass appraisal tools for valuing industrial properties.	13. We recommend that RPAD develop additional mass appraisal tools for valuing industrial properties. While we have no issue with the appraisal approaches used for industrial properties, we recommend that, like most other properties in the District, they be appraised largely on a mass appraisal basis. Income rates could be developed and entered in CAMA, and sales-based models could be developed. As with other commercial properties, considering prior year sales (appropriately adjusted to the valuation date) could help improve sample sizes. Values should be based on whichever valuation approach works best, or the appraiser could enter an override value. Procedures related to the valuation of industrial properties should be included in the Employee Handbook and/or ARM.	Agree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	The apartment valuation methodology serves the District well. While we have no recommendations for specific changes, there are a few areas in which further improvements might be possible.	<p>14. We recommend that RPAD evaluate whether improvements in rent table structures, market areas, and the treatment of reserves for replacement are feasible.</p> <p>We wonder whether the 40 distinctions in rent rate tables are productive; that is, whether the required data is fully known and consistently applied. By way of contrast, we note that the apartment I&amp;E mailer only provides for six unit types (efficiency, 1-bedroom, 2-bedroom, 2-bedroom + den, 3-bedroom, and 3-bedroom +den) plus an "Other (list)" category. Although we do not recommend that income rent tables be similarly collapsed, we think it would be helpful to discuss the issue and either affirm the present categories or simplify them going forward. As with other categories of commercial property, consideration should also be given to whether the nine market areas originally based on CoStar office submarkets are still relevant to apartments or whether the residential neighborhoods assigned to apartment market areas should now be refined (we do not suggest that this is necessarily the case—only that it be reviewed and considered).</p>	Agree	Closed

Report	Finding	Recommendation	Agency Response	Current Status
	Documentation of appraisal procedures and practices are not kept current and consistent across property types when appropriate.	15. We recommend that RPAD strive to keep documentation of appraisal procedures and practices current and consistent across property types when appropriate. Updating appraisal documentation is always a challenge as valuation processes are improved. Although both the ARM and Employee Handbook provide relevant, well-written explanations and instructions, we do recommend that a conscious effort be made to keep them current and consistent. While the current Employee Handbook reflects the incorporation of office buildings into the Vision income tables for TY 2017, the ARM are written specifically for apartments and do not appear to have been similarly updated.	Agree	Closed
	Opportunity for further improvement exists in the current ratio studies. The ratios, thus, are open to what is colloquially known as “sales chasing”—treating recently sold properties differently than properties that were not sold recently, thereby presenting a distorted picture of the assessment performance on the totality of properties, sold and unsold.	16. We recommend that RPAD begin reporting ratio study statistics with respect to assessed values on the roll at the time of sale rather than, or in addition to, assessed values anticipated to be enrolled later, as are currently reported.	Agree	Open
	RPAD should begin reporting ratio study statistics with respect to assessed values on the roll at the time of sale rather than, or in addition to, assessed values anticipated to be enrolled later, as are currently reported.	17. We recommend that RPAD transition to computing and reporting ratio statistics by property type and market area.	Agree	Open
	The available commercial property sales sample sizes in each residential neighborhood are rarely adequate to permit conclusions about whether an acceptable job is being done.	18. We recommend that RPAD begin to adopt a standard-accepted trimming rule rather than the arbitrary ratio boundaries of 0.40 to 1.60 presently employed.	Disagree	Open
	RPAD indicated that due to the limited number of qualified sales, RPAD is still unable to compute and report ratio statistics by property type and market area.	19. We recommend that RPAD take steps to compute and, when appropriate, publish confidence intervals for important statistics. This would enable readers to judge whether an apparent success or failure is more likely to reflect a fluke of small samples than a real problem.	Agree	Open



Report	Finding	Recommendation	Agency Response	Current Status
	Ratio study results are reported without revealing that the validated sales have been trimmed of so-called "outliers" and "extremes," leaving the reader to conclude that the report represents the results obtained from all sales judged to have been valid indicators of market value.	20. We recommend that RPAD begin to compute and, when appropriate, publish PRBs.	Disagree	Open
	While current ratio studies report standard metrics, most notably the median and coefficient of dispersion (COD), the utility of the reports could be enhanced by including additional analytics, particularly confidence limits and the coefficient of price-related bias (PRB), which is superior to the presently reported price-related differential (PRD). RPAD has not adopted a standard-accepted trimming rule rather than the arbitrary ratio boundaries of 0.40 to 1.60 presently employed.	21. We recommend that RPAD begin to produce statistical graphics to facilitate quick comprehension of patterns not immediately observable from numeric tables.	Disagree	Open
	RPTA does not produce a USPAP-compliant mass appraisal report based on the ARM.	22. We recommend that RPTA produce a USPAP-compliant mass appraisal report based on the ARM. The report would blend procedural narratives with statistical data on valuation parameters such as rents, expense ratios, and capitalization rates. The aim is to make public more evidence of the credibility of assessments. The recent additions related to residential and residential land valuation provide a template for changes that would be desirable in the discussion of commercial valuation procedures.	Agree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	<p>Appeals beyond RPTAC to the judicial system have generated a troublingly high backlog of approximately 2,000 cases, especially in comparison to the rate at which such cases are tried each year, which is in the single digits. The burgeoning litigation backlog of level-3 (i.e., judicial) appeals is troubling both in view of the accumulated potential liability for refund requirements, plus tax base loss and in view of the demands associated with managing the process. Efforts should continue to improve how RPTA defends assessments under appeal.</p>	<p>23. We recommend that efforts continue to improve how RPTA defends assessments under appeal. This can be done by:</p> <ul style="list-style-type: none"> <li>• Continuing to monitor the quality of its valuation performance as it already does via its appeals tracking system, recognizing that a superior measure of performance is found in assessment to sales price ratio studies;</li> <li>• Augmenting its efforts to manage its appeal/litigation management system, with attention not only to monitoring conditional liabilities and calendar related workflows, but also to the management of related documents and professional services; and</li> <li>• Considering whether to advocate for a redress in the appeal incentives from a game-theoretic perspective, either by advocating for an increase in the cost to property owners of filing an appeal, perhaps on a recurring basis to spur their prompt resolution, or by adopting social pressures rather than, or in addition to, economic incentives to address the situation.</li> </ul>	Agree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	RPTA did not possess or operate on an explicit, discrete, and coherent organizational strategy. RPTA management operates on unwritten operational and tactical plans that are not clearly aligned with the OCFO's strategic objectives and initiatives.	24. We recommend that RPTA develop and implement a clear, bold, and pragmatic organizational strategy through an annual strategic planning process. This strategy should clearly articulate clear choices (what to pursue and what to not, what capabilities and assets to leverage) in operational and tactical terms - in the shape of goals, objectives, policies and procedures- on how to execute the OCFO's strategic objectives and initiatives. RPTA should then continuously assess whether the organizational structure is capable of effectively supporting the execution of this strategy. The strategy should be continuously iterated through the use of a well-defined feedback loop to adapt and ensure alignment with the OCFO's strategic objectives and initiatives in the face of exogenous regulatory, technological, economic, and demographic changes. An organizational structure impact analysis should then be conducted in the event of a recalibration of the organizational strategy.	Disagree	Open
	The Standards and Services unit lacks a written charter. Consequently, there appears to be a lack of clarity with respect to the unit's position in the organizational structure and its reporting relationships.	25. We recommend that RPTA develop a written charter for the Standards and Services Unit and optimally position this unit, taking into account RPTA's organizational strategy.	Disagree*	Closed
	There is inadequate oversight over RPTA's CAMA functions. RPTA should organize the CAMA function into a separate unit. The unit should be adequately staffed. Additionally, RPTA should assign leadership responsibilities for the unit to the current CAMA manager, who should report to the Deputy Chief Appraiser.	26. We recommend that RPTA organize the CAMA function into a separate unit. The unit should be adequately staffed. Additionally, RPTA should assign leadership responsibilities for the unit to the current CAMA manager, who should report to the Deputy Chief Appraiser.	Disagree*	Closed
	The current reporting structure has resulted in very few opportunities for leadership development that is critical to ensure a seamless transition when supervisory positions become vacant.	27. We recommend that RPTA reconfigure reporting relationships within the commercial units by assigning oversight responsibilities of Staff Appraisers and Assessment Technicians to both Supervisors and Senior Appraisers.	Disagree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	RPTA currently lacks independent quality assurance mechanisms to drive excellence in its assessments. Most quality reviews are limited to Supervisory level reviews.	28. We recommend that RPTA establish an Office of Quality Assurance, Best Practices and Innovation to: (a) conduct random and regular independent assessments of quality in all core processes; (b) assess performance against best practices; (c) study the commercial real property assessment practices of state and local government entities across the United States; and (d) engage in process innovation to enhance service delivery. This office must report directly to the Director of RPTA and report yearly to the District's CFO.	Disagree	Open
	When vacancies unexpectedly arise in the commercial unit, work is impacted adversely owing to a combination of RPTA's specialization of assessments functions and the realities of the labor market.	29. We recommend that RPTA cross-train assessors in both commercial and residential assessments. This will enhance job enrichment and ensure that the workforce is flexible, agile, and able to effectively deal with uncertainties.	Disagree*	Closed
	RPTA collects workload data with respect to number of assessments and appeals. There are no credible mechanisms to capture and measure data that link the work of non-appraiser personnel to these two activities.	30. We recommend that RPTA develop and implement a credible workload measurement system to evaluate the efficiency and effectiveness of the assessment process.	Disagree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	<p>The Office of the Chief Human Resources Officer (OCHRO) has not developed strategic (3-5 year outlook) and operational (outlook of one year or less) human resources plans. The absence of a strategic human resources plan can result in wide gaps between human resources practices and the OCFO's strategic plan thereby undermining OCFO's overall efforts to achieve its strategic goals and that of RPTA.</p>	<p>31. We recommend that OCHRO develop a strategic human resources plan that addresses the needs of RPTA. The plan should:</p> <ul style="list-style-type: none"> <li>• Assess current human resources capacity;</li> <li>• Forecast human resources requirements;</li> <li>• Perform a gap analysis; and</li> <li>• Develop and document a human resources strategic plan to support the OCFO's strategic plan and the RPTA's organizational and operational strategies. This strategy should include the following: <ul style="list-style-type: none"> <li>• Restructuring strategies;</li> <li>• Training and development strategies;</li> <li>• Recruitment strategies;</li> <li>• Hiring strategies;</li> <li>• Outsourcing strategies; and</li> <li>• Collaboration strategies.</li> </ul> </li> </ul> <p>We also recommend that RPTA adopt an operational human resources plan that incorporates the following activities:</p> <ul style="list-style-type: none"> <li>• Forecasting labor demand;</li> <li>• Estimating labor supply from existing employees or the external labor market; and</li> <li>• Crafting an appropriate response depending on whether (a) labor demand exceeds labor supply, (b) labor supply exceeds labor demand, and (c) labor demand equals labor supply.</li> </ul>	Disagree*	Closed

Report	Finding	Recommendation	Agency Response	Current Status
	RPTA has not established any organizational level performance or strategic benchmarks, metrics or indicators to manage organizational performance or its human resources functions.	32. We recommend that RPTA adopt measures to link operational activities to its organizational strategic plan and mission. In addition, key human resources metrics, such as Yield Ratios (ratio of offers to acceptance, interview-to-offer ratio, invitations-to-interview ratio, advertisements or contacts-to-applicant ratio), should be established. No set of performance measures or benchmarks are as effective as a balanced scorecard, which is designed to provide a fast and comprehensive view of an organization's business. RPTA personnel should compile an effective set of financial measures and operational measures (on customer satisfaction, internal processes, and the RPTA's innovation and improvement activities) that will put RPTA's strategy and vision at the center of its operations. This tool would drive its personnel to adopt behaviors and invest in actions that are critical to arrive at strategic and operational goals and align them toward an overall vision.	Disagree	Open



Report	Finding	Recommendation	Agency Response	Current Status
	The RPTA has not organized, formalized, and documented its employee development program.	<p>33. We recommend that RPTA organize, formalize, and document its employee development program. This should consist of the following phases:</p> <ul style="list-style-type: none"> <li>• <b>Assessment:</b> This includes identifying an employee's strengths and weaknesses to help employees choose a career that is realistically obtainable and represents a good fit; and to determine the weaknesses they need to overcome to achieve their career goals. Assessment can be achieved through employee self-assessment by way of skills assessment exercises, an interest inventory, and values clarification; and organizational assessment through situational exercises, such as interviews, in-basket exercises, business games, promotability forecasts, that would allow RPTA to identify people who appear to have high advancement potential.</li> <li>• <b>Direction:</b> This phase involves determining the type of career that employees want and the steps they must take to realize their career goals. This should be based on a thorough assessment of the current situation. Two key ways to achieve this are individual career counseling and information services, such as skills inventories, career paths and a career resource center.</li> <li>• <b>Development:</b> This phase is meant to foster growth and self-improvement necessary to move up in RPTA and involves taking actions to create and increase skills to prepare for future job opportunities. This can be achieved through programs such as mentoring, coaching and job rotation, which includes: project rotation, partial rotation, cross-functional rotation, temporary rotations, and interdepartmental mentoring.</li> </ul>	Disagree*	Closed

Report	Finding	Recommendation	Agency Response	Current Status
	There exists no written and structured employee development plan. The primary purpose of which should be to develop and train the replacements for current RPTA supervisors, managers, and leaders.	34. We recommend that RPTA develop a structured training program that is based on the following: <ul style="list-style-type: none"><li>• An effective assessment of individual needs;</li><li>• An organizational analysis; and</li><li>• A job analysis of KSA for each function.</li></ul> Also, RPTA should clearly articulate training goals for each individual and establish criteria by which the effects of training can be measured.	Disagree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	Job descriptions are not accurately reflected in the related vacancy notices.	<p>35. We recommend that RPTA undertake a detailed job analysis prior to crafting position descriptions for vacancy notices. An effectively conducted job analysis will help the human resources department to: generate a higher-quality pool of job applicants by making it easy to target and screen qualified job applicants, and to make selection choices, determine training needs, and compare the relative worth of each job's contributions to RPTA's overall performance, which can be key determinants of the job's pay level. This analysis should include the following:</p> <ul style="list-style-type: none"> <li>• Task inventory analysis: This involves interviews, surveys, and preparing a knowledge, skills, and abilities matrix.</li> <li>• Critical incident techniques: This is where supervisors and other employees generate behavioral incidents of job performance. This step involves identifying the major dimensions of a job, generating critical incidents of behavior that represent high, moderate, and low levels of performance on each dimension and ensuring that these incidents are viewed the same way by other employees.</li> <li>• Position analysis questionnaire: This involves determining the degree to which 194 different job elements are involved in performing a particular job.</li> <li>• Functional job analysis: This is a technique that mobilizes information on certain aspects of the job, including: <ul style="list-style-type: none"> <li>• The effect the job incumbent has on other people, data, and things;</li> <li>• Methods and techniques the job incumbent uses to perform the job;</li> <li>• Equipment used by the job incumbent; and</li> <li>• Materials and services produced by the job incumbent.</li> </ul> </li> </ul>	Disagree	Open

Report	Finding	Recommendation	Agency Response	Current Status
	RPTA does not have written succession and contingency plans for the key roles of Director and Chief Appraiser.	36. We recommend that RPTA design, document, and implement effective succession and contingency plans. This will ensure seamless continuity of RPTA strategy and operations in the event of an unanticipated vacancy in either role. The succession plans should be approved by senior management. To ensure accountability, responsibility for this key program should be embodied within the position description for each role. Key metrics should be designed to periodically monitor and evaluate the program.	Disagree	Open
	RPTA has experienced significant delays in finding permanent placements for key positions. The Agency's hiring practices may be divorced from market realities and therefore reactive rather than proactive.	37. We recommend that the OCFO undertake a comprehensive review of its hiring practices and processes with respect to RPTA. Deficiencies that may be inducing these delays should thereafter be addressed. OCFO should design and implement a recruiting and hiring strategy that is proactive and anticipatory - one that will effectively and continuously support the Agency's mission in the face of uncertainty.	Disagree	Open

*\*Although some recommendations were initially disagreed with during the 2017 management response period, based on our work and actions taken since the 2017 report, we deemed the recommendation closed.*

## B. OIG Project Report No. 16-1-14AT(a), *Internal Controls Over the District's Commercial Real Property Assessment Process*, April 2017

In 2017, OIG Project No. 16-1-14AT(a) ("prior report") was issued and provided recommendations over the District's Office of Tax and Revenue (OTR) internal controls over the Commercial Real Property Assessment process in the form of findings. During the current evaluation of OTR, Crowe considered the status of the prior recommendations. Upon review of the current responses, for those recommendations that RPTA deemed implemented, we performed procedures to determine the implementation of the recommendations.

A total of 16 Opportunities for Improvement were noted in the 2017 Report. We noted that 6 recommendations were considered closed and the remaining 10 were considered as open. A summary of the status of those Opportunities for Improvement are as follows in Table 4 (next page).

**Table 4: Table of Recommendations: Objective 4, Review of Prior Recommendations, OIG Project Report No. 16-1-14AT(a)**

Report	Finding	Recommendation	Agency Response	Current Status
OIG Report No.16-1-14AT(a) (Issued April 10, 2017)	The 2017 report noted that regular or periodic self-assessments of internal control risks underlying the commercial real property assessment process are not conducted by the Real Property Tax Administration (RPTA).	<p>1. We recommend that RPTA embark on a comprehensive and iterative process of identifying and analyzing risks (including internal controls risks) to achieving its objectives pertaining to the commercial real property assessment process. This process should include the following:</p> <ul style="list-style-type: none"> <li>• specifying suitable objectives;</li> <li>• risk identification; and</li> <li>• risk analysis as a basis for determining how to manage risks. This must include the following: <ul style="list-style-type: none"> <li>– assessing the likelihood or frequency of the risk occurring;</li> <li>– assessing the significance of the risk; and</li> <li>– evaluating actions that should be undertaken to manage the risk.</li> </ul> </li> </ul> <p>The assessment should include:</p> <ul style="list-style-type: none"> <li>• assessing risk at RPTA and the commercial assessment unit levels;</li> <li>• analyzing internal and external factors and their impact on achievement of objectives;</li> <li>• estimating the potential significance of identified risks and determining how to respond to them; and</li> <li>• involving appropriate levels of management.</li> </ul>	Agreed	Open

Report	Finding	Recommendation	Agency Response	Current Status
	The 2017 report noted that RPTA does not assess the quality of internal controls over the commercial real property assessment process over time.	2. We recommend that RPTA design and implement effective ongoing evaluations, separate evaluations, or a combination of the two. In determining whether separate evaluations are needed, RPTA management should consider the nature of changes occurring within the organization and their associated risks and the competence and experience of personnel implementing controls, as well as the results of ongoing monitoring. Ultimately, management must use judgement in deciding how often separate evaluations are necessary to have reasonable assurance that the system of internal control is operating effectively. The greater the effectiveness of ongoing monitoring, the lesser is the need for separate evaluations. We consider a combination of separate and ongoing monitoring evaluations to be optimal to ensure that controls remain effective over time.	Agreed	Open
	The 2017 report noted that no periodic fraud risk assessments of the commercial real property assessment process are performed.	3. We recommend that RPTA conduct periodic comprehensive fraud risk assessments to identify various ways in which fraud and misconduct can occur. It must assess specific areas where fraud might exist and the likelihood of its occurrence and potential impact. This should include considering how employees might circumvent or override controls intended to prevent or detect fraud as part of the identification and evaluation of entity-wide fraud controls. A consideration of the incentives, pressures, and opportunities to commit fraud and attitudes or rationalizations to justify the fraudulent actions should also be undertaken as part of this process.	Disagreed	Open



Report	Finding	Recommendation	Agency Response	Current Status
	The 2017 report could not verify whether the tax roll within CAMA contained all commercial properties in the District. In our attempt to verify whether RPTA “mass-appraised” all commercial properties in the District, we requested, but did not receive, documentation in support of RPTA’s claim that periodic reconciliations between the GIS cadaster (which reveals all commercial properties in the District) and the tax roll within CAMA are undertaken to ensure the tax roll’s accuracy and completeness. A close inspection of RPTA’s policies did not reveal any formal requirement to undertake a reconciliation between the GIS cadaster and the tax roll in CAMA. RPTA management claim to perform this reconciliation, but there is no evidence that they do.	4. We recommend that RPTA formulate a written policy that requires a periodic reconciliation between the GIS Cadaster and CAMA’s tax roll as a mechanism to ensure the accuracy and completeness of the tax roll. These reconciliations should be reviewed periodically by a supervisor and evidence of that review should be maintained. Documentation supporting these reconciliations should be maintained to meet future audit data needs.	Agreed	Closed
	The 2017 report found evidence of review and approval procedures within the key area of roll correction, but these procedures are not addressed in the Policies and Procedures Manual updated October 4, 2015.	5. We recommend that review and approval procedures within the roll correction process be incorporated within RPTA’s standard operating policies and procedures.	Agreed	Closed
	The 2017 report noted that permit data received from DCRA is scrubbed by a CAMA Specialist prior to inputting the data into CAMA. During the data scrub, the CAMA Specialist amends or removes data that, in the Specialist’s judgment, is unlikely to materially impact the pertinent commercial properties’ assessed values. Data that is judgmentally discerned to be incorrect, incomplete, improperly formatted, or duplicated is also cleansed. We found no evidence that a Supervisor or another appraiser reviewed the scrubbing of data prior to incorporating the cleansed data into CAMA. Also, data input into CAMA is not reconciled with data received from DCRA.	6. We recommend that: • A Supervisor or another appraiser perform a review of the scrubbed data to ensure that only data that doesn’t meet the criteria established by the code is omitted and that no unjustifiable manipulation of data occurred. Evidence of this review should be maintained. • RPTA periodically perform a reconciliation of data input into CAMA with data sourced from DCRA.	Agreed	Open
	In the 2017 Report, in the review of 45 sales transactions, we saw no documentary evidence that verification procedures performed included determining whether the sales transaction occurred at arms-length. In addition, RPTA’s policies and procedures contained no guidelines on how an appraiser can determine whether a sale occurred at arms-length.	7. We recommend that RPTA establish an effective mechanism to determine whether the sales transactions occurred at arms-length. Evidence of this evaluation should be retained in related files for an appropriate period of time.	Agreed	Closed

Report	Finding	Recommendation	Agency Response	Current Status
	We noted that RPTA relies exclusively on its CAMA Manager to execute all of its complex functions in relation to the CAMA software application. This individual is RPTA's sole repository of advanced skills in operating and using the software application. All other persons who interact with the software, including the CAMA Manager's immediate supervisor, demonstrate only a basic level of proficiency with respect to the software. They may, therefore, be unable to execute these complex functions in the absence of the CAMA Manager.	8. We recommend that RPTA train at least two (2) other individuals, including the CAMA Manager's immediate supervisor, to achieve an advanced level of proficiency in the navigation and use of the software application. This will ensure effective supervision of the CAMA Manager's work and also preserve continuity of key functions at all times.	Agreed	Closed
	We noted that RPTA does not verify the continuing validity of a property's exempt status, nor does it verify owner-reported mixed use ratios.	9. We recommend that RPTA periodically verify the status of exempt properties and mixed-use properties ratios.	Agreed	Open

Report	Finding	Recommendation	Agency Response	Current Status
	We noted that OCFO has not established a comprehensive security management program to comply with FISMA, NIST 800-12 and FISCAM A.1.1.1 requirements. The security management program in place presently is not comprehensive, current or adequately documented.	<p>10. We recommend OCFO develop and document in a single document a security plan for CAMA that includes:</p> <ul style="list-style-type: none"> <li>• Application identification and description;</li> <li>• Application risk level;</li> <li>• Application owner;</li> <li>• Identification of person responsible for the security of the application;</li> <li>• Application interconnections/information sharing;</li> <li>• Description of all of the controls in place or planned, including how controls are implemented or planned to be implemented as well as special considerations;</li> <li>• Approach and procedures regarding security design and upgrade;</li> <li>• Process for developing security roles;</li> <li>• General security administration policies, including ongoing security role maintenance and development;</li> <li>• Identification of sensitive transactions in each functional module;</li> <li>• Identification of high risk segregation of duty cases;</li> <li>• Roles and responsibilities of the security organization supporting the system with adequate consideration given to segregation of duties;</li> <li>• Security testing procedures;</li> <li>• Coordination with entity-wide security policies;</li> <li>• Procedures for emergency access to the production system, including access to update programs in production, direct updates to the database, and modification of the system change option;</li> <li>• System parameter settings compliant with entity-wide agency policies; and</li> <li>• Access control procedures regarding the use of system delivered critical user ID, etc.</li> </ul>	Disagreed*	Closed

Report	Finding	Recommendation	Agency Response	Current Status
	In our efforts to validate CAMA's most recent security assessment to determine whether or not the security assessment is up-to-date, appropriately documented, approved by management, and supported by testing, we noted that the OCFO did not adequately document its security assessment to comply with FISCAM, FISMA and NIST requirements or implement a Plan of Action or identify milestones to resolve any weaknesses or threats to system security.	11. We recommend that the OCFO appropriately document RPTA's CAMA security assessment in accordance with the requirements of NIST 800-53/A and FISCAM AS-1.2.1. The assessment should be approved by management and supported by rigorous testing.	Agreed	Open
	We noted that OCFO does not have an adequate and properly documented contingency plan for CAMA that meets NIST 800-34 requirements. This includes a policy statement and methodology; conducting a business impact analysis (BIA); identifying preventive controls; creating contingency strategies; planning testing, conducting training and exercises; and contingency plan maintenance, etc.	12. We recommend that OCFO develop and implement a comprehensive contingency plan for CAMA in accordance with the requirements of NIST 800-34.	Disagreed*	Closed
	We noted that RPTA predominantly uses the Income Method to assessing commercial properties. This approach entails the use of income and expenditure data reported by taxpayers. We saw no evidence that RPTA verifies this data by auditing pertinent accounting records and source documents from the taxpayer even though such verification may be necessary in some cases.	13. We recommend that: <ul style="list-style-type: none"> <li>• RPTA verify the Income and Expense forms submitted by taxpayers by obtaining taxpayer accounting records and source documentation. Evidence of such verification should be retained for an appropriate period of time; and</li> <li>• Independent audits of Income and Expense statements be conducted annually on a sample basis.</li> </ul>	Disagreed	Open
	We noted that RPTA utilizes income and expense data that is two (2) years old in its assessments for any given year. This data may not be reflective of current market realities. For example, tax year 2017 assessments are based on tax year 2014 income and expense data.	14. We recommend that RPTA streamline the income and expense reporting and analysis process to ensure current assessments are based on prior year income and expense data.	Agreed	Open
	We noted that RPTA's Appeals and Litigation Unit has been served two "show cause" orders by a D.C. Superior Court Judge due to a significant backlog in RPTA filing settlement memoranda with respect to mediated commercial real property appeals.	15. We recommend that RPTA staff the Appeals and Litigation Unit adequately to: <ul style="list-style-type: none"> <li>(a) Ease the current workload; and</li> <li>(b) Expedite the filing of outstanding settlement memoranda.</li> </ul>	Agreed	Open

Report	Finding	Recommendation	Agency Response	Current Status
	We noted that there is an inherent risk in the assessment process, spawned by a clear misalignment between RPTA's current personnel-related budget and level of staffing, and RPTA's core mission of conducting effective assessments. This misalignment is largely driven by structural challenges represented by the District's appeals legislation. According to RPTA's personnel, 65% or more of an appraiser's time on average is expended on defending assessments in the face of appeals filed by property owners. Consequently, merely 35% or less of an appraiser's time, on average, is devoted to an appraiser's core duty of assessing commercial properties and conducting commercial property inspections.	16. We recommend that RPTA achieve a better alignment between its level of staffing and its core mission, or engage in negotiations with the District Council to engineer a change to existing appeals legislation designed to deter frivolous appeals.	Disagreed	Open

*\* Although some recommendations were initially disagreed with during the 2017 management response period, based on our work and actions taken since the 2017 report, we deemed the recommendation closed.*

## Appendix A – Evaluator’s Analysis of Assessment Performance via Ratio Studies

The subject of this review is the set of Fiscal Year 2021 appraised values of commercial properties produced by the Office of Tax and Revenue, Real Property Assessment Division (RPAD). These values were as of the market effective date of January 1, 2020. RPAD staff validated sales for analysis, which occurred in the time window of January 1, 2015 to December 31, 2019, resulting in a sample of 1106 sales. The final appraised values used in this sales ratio study were determined after most formal appeals had been resolved. This report details the project methodology as well as all project findings. This sales ratio study was conducted according to the current IAAO Standard on Ratio Studies (IAAO 2013).

### Standards

This sales study relies upon the technical standards promulgated by the International Association of Assessing Officers in the Standard on Ratio Studies (IAAO 2013). These standards set professional standards for appraisal level and uniformity that recognize there is some degree of imperfection in appraised values. The following standards are used in this sales ratio study:

The IAAO Standard on Ratio Studies states that the median sales ratio be between 90% and 110% and that the median for each class of property must be within five percentage points of the overall level of appraisal. Section 9.1 of Part 1 states:

In analyzing appraisal level, ratio studies attempt to measure statistically how close appraisals are to market value (or to a required statutory constraint that can be expressed as a percentage of market value) on an overall basis. While the theoretically desired level of appraisal is 1.00, an appraisal level between 0.90 and 1.10 is considered acceptable for any class of property. However, each class of property must be within 5 percent of the overall level of appraisal of the jurisdiction (see Section 9.2.1 in this part). Both criteria must be met.

The appropriate standard range for the COD is based on the type of property and other information. See table 5 on the following page summarizing these standard ranges. This study primarily covers income-producing properties in a large jurisdiction with high property density. Therefore, the COD standard used in this study is 5% to 15%.

**Table 5. Ratio Study Uniformity Standards Indicating Acceptable General Quality**

<b>Type of property—General</b>	<b>Type of property—Specific</b>	<b>COD Range*</b>
<i>Single-family residential (including residential condominiums)</i>	<i>Newer or more homogeneous areas</i>	<i>5.0 to 10.0</i>
<i>Single-family residential</i>	<i>Older or more heterogeneous areas</i>	<i>5.0 to 15.0</i>
<i>Other residential</i>	<i>Rural, seasonal, recreational, manufactured housing, 2–4-unit family housing</i>	<i>5.0 to 20.0</i>
<i>Income-producing properties</i>	<i>Larger areas represented by large samples</i>	<i>5.0 to 15.0</i>
<i>Income-producing properties</i>	<i>Smaller areas represented by smaller</i>	<i>5.0 to 20.0</i>
<i>Vacant land</i>		<i>5.0 to 25.0</i>
<i>Other real and personal property</i>		<i>Varies with local conditions</i>

\*CODs lower than 5.0 may indicate sales chasing and non-representative samples.

The IAAO Standard on Ratio Studies states that the PRB must be between -0.10 and 0.10, although -0.05 to 0.05 is recommended. In particular, Part 1, Section 9.2.7 states:

The PRB provides a measure of price-related bias that is more meaningful and less sensitive to extreme prices or ratios. As a general matter, the PRB coefficient should fall between -0.05 and 0.05. PRBs for which 95% confidence intervals fall outside of this range indicate that one can reasonably conclude that assessment levels change by more than 5% when values are halved or doubled. PRBs for which 95% confidence intervals fall outside the range of -0.10 to 0.10 indicate unacceptable vertical inequities.

## Ratio Study Design and Procedures

### Data Used

Sales ratio studies utilize appraisal data and sale data. In this study, appraisal data included post-appeal total assessed values and property descriptive information for commercial properties, with commercial properties being identified by a commercial flag variable. Appraisal data was from FY 2021, with an effective appraisal date of January 1, 2020. Sale data included property description information, sale dates, sale prices, and sale validity codes. In addition, data was obtained that described how use codes (property types) should be mapped into use code groups and how neighborhoods should be mapped into submarket areas. The sales and assessment files were merged, and then the use code mapping and the neighborhood mapping files were merged into the main file in order to obtain use code groups and submarket areas for each sale. This sales ratio study included multiple parcel sales. For these sales, the total assessed value was summed up over the constituent parcels. The use code and neighborhood for these sales was chosen to be that of the highest-valued parcel in the transaction.

### Filters

The following filters were applied to the merged data file:

- Sales Validity Code must be either “01”, “M1”, “09”, or “M9.”
- Property must be active as of the date the commercial file was extracted (DEL\_CODE = “N”)
- The estimated use code at time of sale must be equal to the use code as of the date the commercial file was extracted.
- Use Code group must be either “Office”, “Retail”, “Residential Multi-Family”, “Residential Transient”, “Special Purpose”, “Commercial Specific Purpose”, or “Industrial”.



- Total Assessed Value must be greater than zero.
- Sale must have occurred between January 1, 2015, and December 31, 2019.

#### Time Trending

Five years of sales were used in order to expand the number of sales available for stratification. Time trends were computed by property type grouping and were used to adjust sales to the appraisal date of January 1, 2020. The adjusted sale prices were used in the calculation of the ratio study statistics.

#### Stratification

Sales ratios were stratified by property type grouping, submarket area, and the combination of property type and submarket area.

#### Outlier Trimming

Sales ratio outliers were trimmed for each stratification scheme by stratum using the log-adjusted 3\*IQR method. The log-adjusted version of the standard 3\*IQR method makes the distribution of ratios more symmetric prior to the calculation of the trimming bounds so that sales are not overly trimmed from the top of the sales ratio distribution. Sale prices were examined globally to see if they qualified as value outliers, but none were found.

#### Statistics Calculated

The median sales ratio serves as the statistic used to measure appraisal level. The coefficient of dispersion (COD) serves as the statistic used to measure general appraisal uniformity. The coefficient of price-related bias (PRB) serves as the statistic used to measure the degree of vertical inequity. This study computes 90% two-sided confidence interval bounds for all statistics and uses them to determine compliance with IAAO Standards. Confidence intervals are not calculated unless there are at least 10 sales in a given stratum and point estimate statistics are not calculated unless there are at least 5 sales in a given stratum. Median sales ratios are also compared between strata to look for potential non-uniformity.

#### Overall Statistics

The overall median sales ratio, COD, and PRB are calculated based on weighting the trimmed sales sample by the property type group counts for all commercial properties. If a property type grouping was over/under-represented in the sales sample, then those sales are proportionally down/up weighted in the calculation of the overall statistics. The outlier trimming was done by property type grouping and then the remaining sales were aggregated to arrive at the overall trimmed sample of sales used to calculate the overall weighted statistics.

#### Caveats

There are several caveats in this analysis:

- The appraisal data file is extracted at the latest date to capture all FY 2021 post-appeal assessment changes, but it is possible that some values were still under appeal.
- Because this study uses post appeals values, it effectively is evaluating both the assessment system and the appeals system.
- The use code at time of sale in the data provided was estimated as closely to the sale date as possible.
- Because of the degree of stratification employed and the scope of work identified for this project, a sales sample representativeness analysis was not conducted. All sales were used with equal weight in the analysis.

- Because of the scope of work identified for this project, an analysis of selective reappraisal was not conducted. However, it is recommended that such internal or external reviews in the future include such an analysis.

## Results

On the following pages, we have included tables that summarize the results of our statistical analysis.

- Table 6 below provides summary statistics for all property types included in our ratio study.
- Figure 1 on the next page provides the median sales ratio for commercial properties by property type group.
- Figure 2 details the coefficient of dispersion for commercial properties by property type group.
- Figure 3 details the coefficient of price-related bias for properties by property type group.
- Table 7 provides the summary statistics by property type groupings.

**Table 6. Overall Statistics for All Property Types in Ratio Study**

<i>Property Type Grouping</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
<i>Overall</i>	1106	1051	87.3	88.6	89.7	15.3	16.4	17.5	-0.014	-0.008	-0.002

## Conclusions

- The overall median sales ratio is 88.6%, which is statistically significantly below 90%, falling below the IAAO standard range of 90% to 110% for the appraisal level. (See [Recommendation 5](#))
- The overall COD is 16.4%; this COD is statistically significantly above 15%, falling outside the IAAO standard range of 5% to 15%. (See [Recommendation 6](#))
- The overall PRB is -0.008; this falls within in the IAAO standard range of -0.10 to 0.10.

Figure 1.

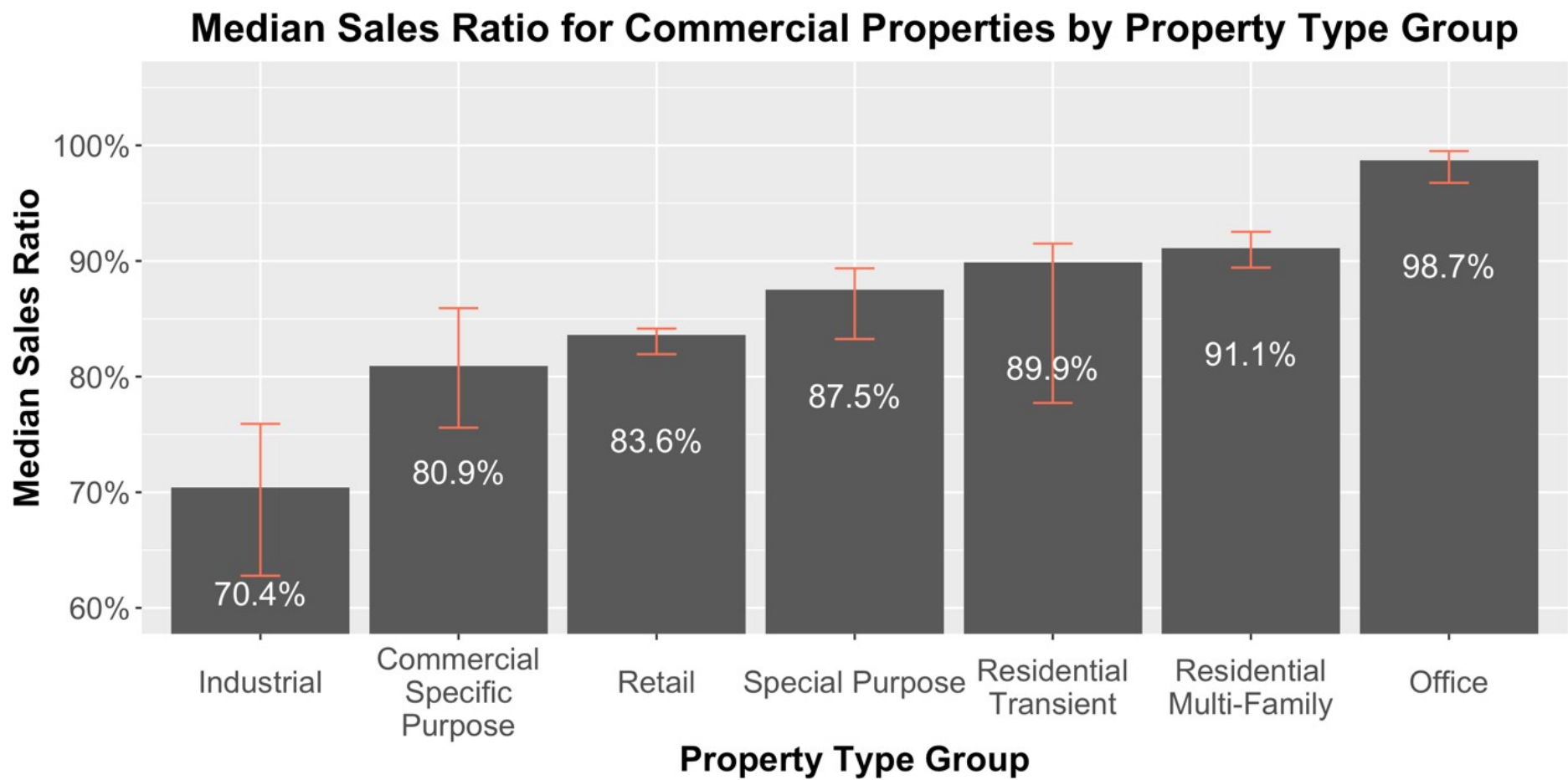


Figure 2.

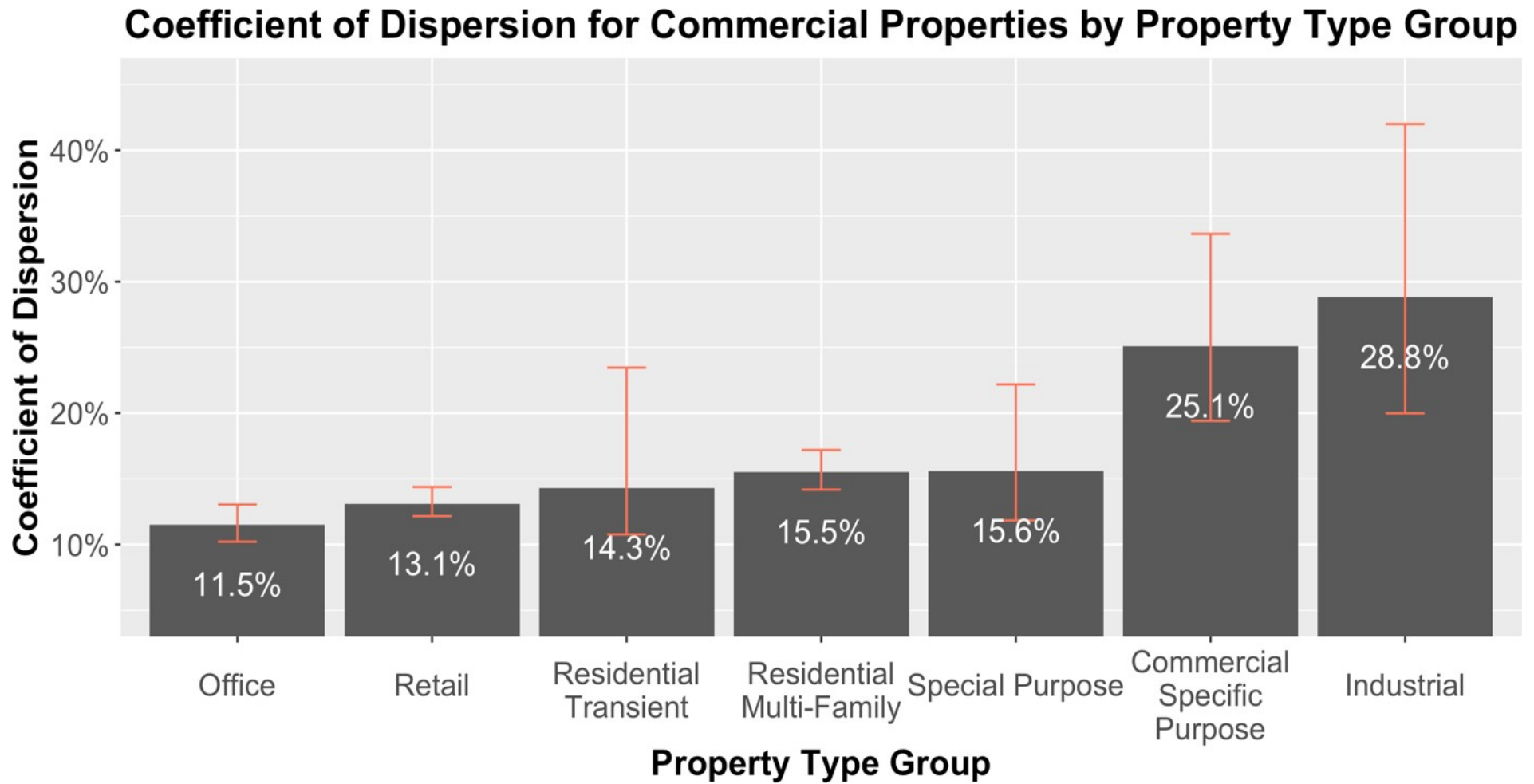


Figure 3.



**Table 7:** Summary Statistics by Property Type Grouping

<i>Property Type Grouping</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
<i>Commercial Specific Purpose</i>	71	66	75.6	80.9	85.9	19.4	25.1	33.6	-0.038	0.010	0.058
<i>Industrial</i>	44	44	62.8	70.4	75.9	20.0	28.8	42.0	-0.148	-0.066	0.016
<i>Office</i>	220	206	96.8	98.7	99.5	10.2	11.5	13.0	-0.013	-0.007	-0.001
<i>Residential Multi-Family</i>	320	314	89.4	91.1	92.5	14.2	15.5	17.2	-0.041	-0.030	-0.020
<i>Residential Transient</i>	25	23	77.7	89.9	91.5	10.8	14.3	23.5	-0.049	-0.019	0.011
<i>Retail</i>	378	357	81.9	83.6	84.2	12.2	13.1	14.4	-0.027	-0.016	-0.004
<i>Special Purpose</i>	48	41	83.2	87.5	89.4	11.8	15.6	22.2	-0.023	0.013	0.049

### Conclusions

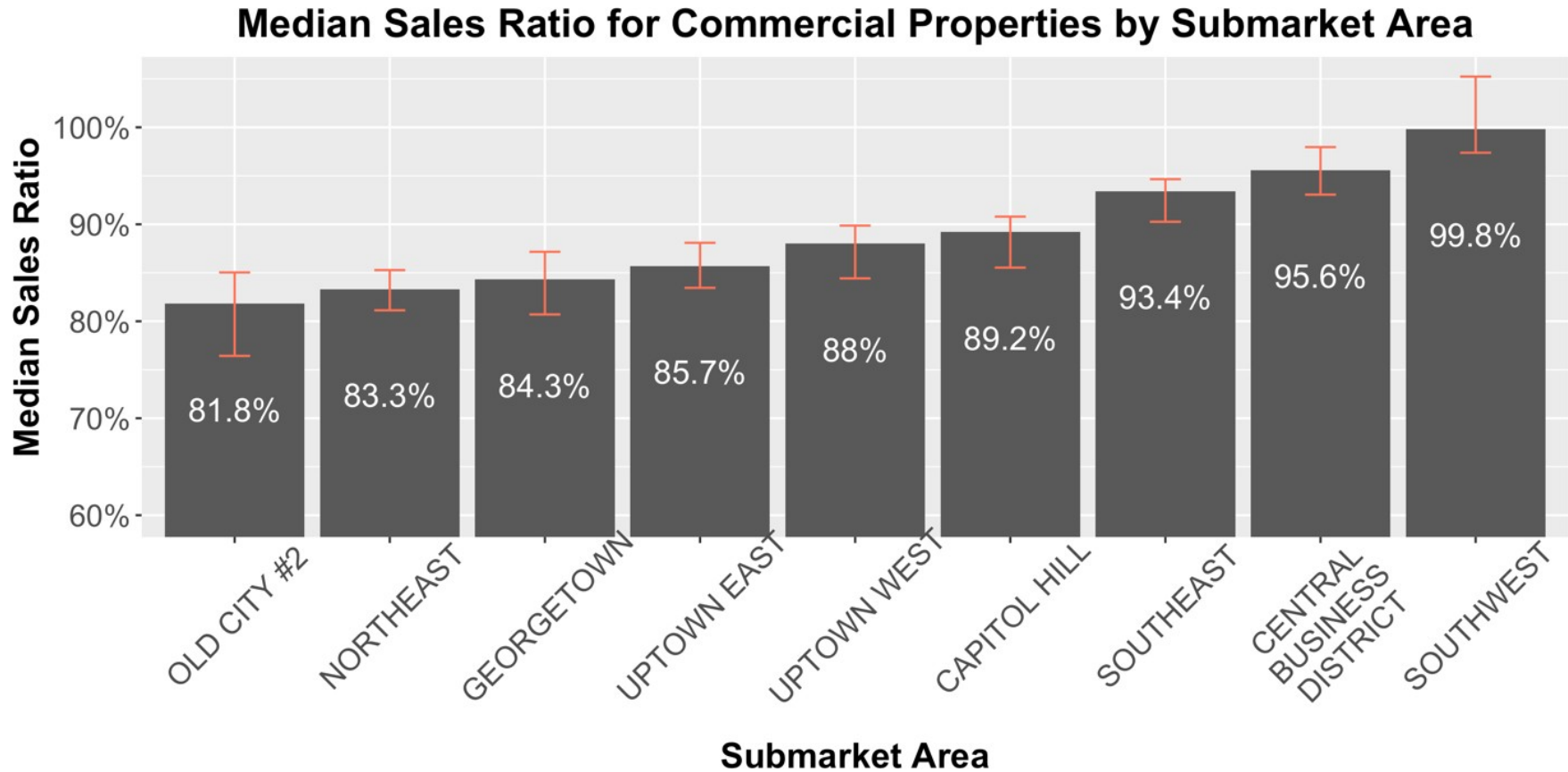
- Industrial, Retail, Special Purpose, and Commercial Specific Purpose properties all have median sales ratios statistically significantly below 90%, falling below the IAAO standard range of 90% to 110% for the appraisal level. It should be noted that the median sales ratio for industrial properties is 70.4%. (See [Recommendation 5](#))
- All CODs fall within the IAAO standard range of 5% to 15% when considering the confidence intervals, except for industrial (28.8%) and commercial specific purpose (25.1%) properties which have CODs statistically significantly above 15%. (See [Recommendation 6](#))
- There is a wide disparity between the median sales ratios across the property type groups, most notably demonstrated between Industrial (70.4%) and Office properties (98.7%). This degree of difference shows a lack of uniformity between property type groupings. (See [Recommendation 5](#))
- The Retail, Comm Specific Purpose, Industrial, and Office property type groups are not within five percentage points of the overall median sales ratio (88.6%), further indicating a lack of uniformity between property type groups. (See [Recommendation 5](#))
- All PRBs fall within the IAAO standard range of -0.10 to 0.10.



Submarket Area

In Figure 4 below, we provide additional statistical results from our ratio study related to the median sales ratio for commercial properties by submarket area. On the following page, Table 8 provides the summary level statistics by submarket area.

Figure 4.



**Table 8.** Summary Statistics by Submarket Area

<i>Sub-market Area</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
<i>CAPITOL HILL</i>	144	137	85.5	89.2	90.8	14.4	16.6	19.9	-0.017	-0.001	0.015
<i>CENTRAL BUSINESS DISTRICT</i>	154	143	93.1	95.6	98.0	10.3	11.8	13.9	-0.016	-0.007	0.001
<i>GEORGETOWN</i>	54	53	80.7	84.3	87.2	9.9	12.0	15.0	-0.016	0.005	0.025
<i>NORTHEAST</i>	135	128	81.1	83.3	85.3	16.0	18.9	22.7	-0.03	-0.006	0.019
<i>OLD CITY #2</i>	110	106	76.4	81.8	85.0	21.4	25.8	32.6	-0.028	0.004	0.037
<i>SOUTHEAST</i>	201	194	90.3	93.4	94.6	12.7	14.3	16.5	-0.031	-0.015	0
<i>SOUTHWEST</i>	13	10	97.4	99.8	105.2	3.6	6.6	14.4	-0.036	0.016	0.068
<i>UPTOWN EAST</i>	207	201	83.4	85.7	88.1	13.9	15.3	17.1	-0.015	0.001	0.017
<i>UPTOWN WEST</i>	88	83	84.4	88.0	89.9	11.2	13.2	16.3	-0.027	-0.008	0.01

### Conclusions

- Properties in the Georgetown, Northeast, Old City #2, Uptown East, and Uptown West Submarkets have median sales ratios statistically significantly below 90%, falling below the IAAO standard range of 90% to 110% for the appraisal level. (See [Recommendation 5](#))
- All submarket area CODs fall within the IAAO standard range of 5% to 15% when considering the confidence intervals except for Old City #2 (25.8%) and Northeast (18.9%) which have CODs statistically significantly above 15%. (See [Recommendation 6](#))
- There is approximately an 18-percentage point difference between the median sales ratios for Old City #2 (81.8%) and Southwest (99.8%). This degree of difference shows a lack of uniformity between geographic areas, although it is likely that most of this problem is simply due to the previously described non-uniformity between the appraisal level in some of the property type groupings. (See [Recommendation 5](#))
- All PRBs fall within the IAAO standard range of -0.10 to 0.10.

### Property Type Grouping and Submarket Area

As discussed earlier, only strata with at least five sales are displayed and conclusions are only made about strata with at least ten sales.

Table 9 below details the full results of our statistical analysis for each sub-market area.

**Table 9.** Detailed Ratio Study Results by Sub-market Area.

<i>Sub-market Area</i>	<i>Property Type Grouping</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
<i>CAPITOL HILL</i>	Commercial Specific Purpose	11	11	75.3	82.9	91.3	8.9	11.5	17.6	-0.032	0.003	0.037
<i>CAPITOL HILL</i>	Office	36	33	98.9	100.6	103.0	7.2	9.7	13.8	-0.028	-0.013	0.002
<i>CAPITOL HILL</i>	Residential Multi-Family	16	16	67.3	81.0	89.4	17.1	27.9	52.3	-0.151	-0.044	0.064
<i>CAPITOL HILL</i>	Retail	72	68	81.3	84.4	87.2	11.4	13.9	17.3	-0.075	-0.031	0.013
<i>CAPITOL HILL</i>	Special Purpose	5	5		82.6			34.8			-0.235	
<i>CENTRAL BUSINESS DISTRICT</i>	Commercial Specific Purpose	7	7		70.6			23.3			0.287	
<i>CENTRAL BUSINESS DISTRICT</i>	Office	120	114	94.3	97.6	99.3	8.8	10.3	12.3	-0.01	-0.002	0.006
<i>CENTRAL BUSINESS DISTRICT</i>	Residential Transient	12	10	73.5	87.7	91.6	6.0	8.9	17.8	-0.046	-0.011	0.024
<i>CENTRAL BUSINESS DISTRICT</i>	Retail	13	13	74.9	95.6	99.0	14.4	20.4	34.8	-0.129	-0.063	0.004
<i>GEORGETOWN</i>	Residential Multi-Family	6	6		93.4			17.2			0.343	

<i>Sub-market Area</i>	<i>Property Type Grouping</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
GEORGETOWN	Retail	38	38	78.5	84.0	87.2	8.8	10.7	13.9	-0.021	0.006	0.032
NORTHEAST	Commercial Specific Purpose	22	22	53.8	79.6	86.9	34.5	56.3	106.5	-0.489	-0.151	0.187
NORTHEAST	Industrial	32	32	57.2	65.3	71.3	18.5	21.8	28.5	-0.031	0.018	0.067
NORTHEAST	Residential Multi-Family	20	20	81.2	85.8	97.6	11.4	16.3	24.0	-0.06	-0.012	0.036
NORTHEAST	Retail	45	41	81.3	83.9	86.7	6.2	8.0	10.9	-0.059	-0.033	-0.007
NORTHEAST	Special Purpose	12	9		91.4			4.6			-0.012	
OLD CITY #2	Commercial Specific Purpose	6	6		83.4			12.8			-0.006	
OLD CITY #2	Office	19	19	85.0	100.0	114.6	28.1	36.9	57.6	-0.079	-0.001	0.076
OLD CITY #2	Residential Multi-Family	25	23	75.9	78.6	86.3	11.6	14.4	18.2	-0.044	-0.019	0.007

<i>Sub-market Area</i>	<i>Property Type Grouping</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
<i>OLD CITY #2</i>	Residential Transient	6	6		95.8			36.8			0.22	
<i>OLD CITY #2</i>	Retail	51	51	66.7	73.2	82.1	17.9	24.0	30.8	-0.162	-0.084	-0.005
<i>SOUTHEAST</i>	Commercial Specific Purpose	6	5		69.8			18.5			-0.125	
<i>SOUTHEAST</i>	Residential Multi-Family	158	154	93.6	94.9	96.3	10.9	12.4	14.3	-0.04	-0.025	-0.01
<i>SOUTHEAST</i>	Retail	25	22	79.4	81.5	84.6	6.3	8.6	12.7	-0.058	-0.027	0.004
<i>SOUTHEAST</i>	Special Purpose	10	9		79.6			20.8			0.043	
<i>SOUTHWEST</i>	Office	9	9		100.0			4.3			0.013	
<i>UPTOWN EAST</i>	Commercial Specific Purpose	10	9		92.3			18.3			-0.052	
<i>UPTOWN EAST</i>	Industrial	6	6		75.6			13.7			-0.125	

<i>Sub-market Area</i>	<i>Property Type Grouping</i>	<i>Count Before Trim</i>	<i>Count After Trim</i>	<i>Median LCL</i>	<i>Median</i>	<i>Median UCL</i>	<i>COD LCL</i>	<i>COD</i>	<i>COD UCL</i>	<i>PRB LCL</i>	<i>PRB</i>	<i>PRB UCL</i>
<i>UPTOWN EAST</i>	Office	7	7		90.8			17.7			-0.054	
<i>UPTOWN EAST</i>	Residential Multi-Family	67	67	86.4	91.0	91.5	13.6	16.2	20.7	-0.036	0.002	0.039
<i>UPTOWN EAST</i>	Retail	105	101	80.9	82.9	85.7	11.5	13.1	15.2	-0.018	0.005	0.028
<i>UPTOWN EAST</i>	Special Purpose	11	9		86.8			7.2			0	
<i>UPTOWN WEST</i>	Office	22	22	90.6	99.0	99.6	8.5	11.3	17.3	-0.053	-0.02	0.013
<i>UPTOWN WEST</i>	Residential Multi-Family	25	24	73.8	81.7	87.1	10.8	15.5	25.1	-0.01	0.032	0.073
<i>UPTOWN WEST</i>	Retail	29	26	80.1	84.8	88.1	7.6	10.1	14.6	-0.067	-0.006	0.055
<i>UPTOWN WEST</i>	Special Purpose	7	6		88.2			9.8			-0.052	



## Conclusions

- The following strata have median sales ratios statistically significantly below 90%, falling below the IAAO standard range of 90% to 110% for the appraisal level: Capitol Hill – Residential Multi-Family, Capitol Hill – Retail, Georgetown – Retail, Northeast – Commercial Specific Purpose, Northeast – Industrial, Northeast – Retail, Old City #2 – Residential Multi-Family, Old City #2 – Retail, Southeast – Retail, Uptown East – Retail, Uptown West – Residential Multi-Family, and Uptown West – Retail. (See [Recommendation 5](#))
- It is worth noting that of these strata with low median sales ratios, several are below 80%: Northeast – Commercial Specific Purpose (79.6%), Northeast – Industrial (65.3%), Old City #2 – Residential Multi-Family (78.6%), and Old City #2 – Retail (73.2%). (See [Recommendation 5](#))
- All CODs fall within the IAAO standard range of 5% to 15% when considering the confidence intervals except for Capitol Hill – Residential Multi-Family (27.9%), Northeast – Commercial Specific Purpose (56.3%), Northeast – Industrial (21.8%), Old City #2 – Retail (24.0%), and Old City #2 – Office (36.9%) which have CODs statistically significantly above 15%. (See [Recommendation 6](#))
- All PRBs fall within the IAAO standard range of -0.10 to 0.10.

## Appendix B – Management Responses

The following pages are the responses provided by the Office of the Chief of Financial Officer on November 22, 2022.

**GOVERNMENT OF THE DISTRICT OF COLUMBIA**

OFFICE OF THE CHIEF FINANCIAL OFFICER



**Glen Lee**

Chief Financial Officer

November 22, 2022

Daniel Lucas  
Inspector General  
Office of the Inspector General  
717 14<sup>th</sup> Street, NW, 5<sup>th</sup> Floor  
Washington, DC 20005

**Re: Independent Auditor's Draft Report on the Audit of the Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (OIG No. 22-1-25AT)**

Dear Mr. Lucas:

Attached are the Office of the Chief Financial Officer's responses to the recommendations identified in the Independent Auditor's draft report entitled, *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments*, submitted by Crowe LLP (OIG No. 22-1-25AT).

If you have any questions, please contact Timothy Barry, Executive Director, Office of Integrity and Oversight, at 442-6433.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Glen Lee', written over a light blue horizontal line.

Glen Lee

Attachment

cc: Keith Richardson, Deputy CFO, Office of Tax and Revenue  
Timothy Barry, Executive Director, Office of Integrity and Oversight

## **AGENCY'S RESPONSE TO THE DRAFT REPORT**

**Recommendation 1:** We recommend that RPAD management develop a plan for periodically inspecting properties so there is reasonable assurance that property characteristics data are up to date. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 2.

**RESPONSE:** RPAD concurs. RPAD management is developing a 3-year plan to conduct field inspections of all commercial properties in the District of Columbia. RPAD will produce the plan **by January 6, 2023**. The field inspections will start **on March 1, 2023**. RPAD is always striving to improve the quality of our property attribute data. The division will procure Mobile Assessment Technology that uses iPad field devices for this purpose. These tablets will have all the capability of replicating CAMA records along with oblique image libraries, sketching and image capture. Deployment is expected in the Spring of 2023. This will ensure complete coverage of the inventory. This initiative will be in addition to the fieldwork conducted because of sales and supplemental assessments.

**Recommendation 2:** We recommend that RPAD reconfigure the CAMA system to begin recording sale qualifications with respect to sales-ratio study purposes as well as validations with respect to modeling purposes. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 3.

**RESPONSE:** RPAD disagreed with this recommendation in 2016 and continues to disagree. The division's primary use with respect to sale information is to help analyze and develop the appropriate capitalization rates for the various types and classes of commercial properties where the income approach to value is employed as the primary indication of value. We collect and qualify as much data as possible to ensure our analysis reflects the activity in the market. However, the number of sales of various types of commercial properties rarely meet levels that would allow for meaningful assessment to sales ratio studies.

RPAD considers all appraiser-qualified sales suitable for both modeling and sales-ratio studies. RPAD sees no substantial benefit to reconfiguring our systems to support validating sales differently for the two different purposes. Sales are so rare and so critical to the income approach analysis that RPAD goes to great lengths to thoroughly research a sale before it must be disqualified.

**Recommendation 3:** We recommend that RPAD not use code 07 unless there is convincing documentation that the sale was "speculative." This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 4.

**RESPONSE:** RPAD stats show that in the last five years 147 (3%) of 4,761 commercial sales are coded 07. There are many legitimate reasons for an appraiser to code a sale 07, and RPAD does not believe it is an issue that warrants attention. The "speculative" code is defined as, "Sale

is unqualified; the prime motivation of purchaser is quick profit through resale either before or after renovation. While these types of transactions tend to be below market value, they may represent market value and may be coded 01 (market), provided that the physical attributes of the sale represent the condition at the time of the sale, and the assessor believes the transaction represents an arms-length sale. When the property characteristics have changed subsequent to the sale, the sale must be unqualified.”

When an appraiser selects this code, he or she is convinced that the sale is speculative. This is easily made manifest when: 1) the property has a renovation permit associated with it, or, 2) the appraiser notes on-going construction, or, 3) the property characteristics in our records have recently been improved on the property, or, 4) the property located in a neighborhood experiencing transition, or, 5) the buyer is a known speculator.

**Recommendation 4:** We recommend that RPAD seek to require I&E submissions before the assessment notice deadline by seeking the appropriate legislative remedy. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 8.

**RESPONSE:** This recommendation was also cited as Recommendation 8 in the first performance audit dated September 30, 2012. We concur with this recommendation. Our efforts to stream-line the I&E filing process is one part of a multi- part effort to allow RPAD to utilize the timeliest income and expense information in its valuations. The other aspects to implementing this initiative involve gaining support from the commercial community and acquiring legislative authority to change the assessment calendar. The latter two efforts are underway; however, they are beyond the control of the division.

**Recommendation 5:** Crowe recommends that RPAD implement a global review process for ratio study results. These ratio studies should be properly conducted and included as a part of the valuation process. Final appraised values should not be approved until quality standards are met. Key internal stakeholders and valuation team leaders should regularly review market movements and ratio study results together. RPAD should examine every step of the commercial valuation process for the various property types and sub-market areas to look for components, practices, and factors that may lead to appraised values that are below market value.

**RESPONSE:** RPAD adheres to appraisal industry standards and best practices and adopted IAAO standards in the assessment process in the District of Columbia. However, these IAAO standards are advisory, and the adaptation is not “one-size-fits-all”. RPAD agrees that a formal review process that enhances the existing valuation process benefits the assessment division's overall goal. Therefore, the RPAD leadership team will begin to conduct a quarterly review of sales and other market and submarket valuation matrices starting April 1, 2023. The results of the reviews will guide the annual reassessment exercise adopted for the three levels of property assessment appeals when necessary.

**Recommendation 6:** Crowe recommends that RPAD do a thorough review of data quality, valuation practices, and valuation models in the identified strata. Specifically:

- a) We recommend that RPAD further improve the valuation of office buildings by reviewing property data for accuracy and consistency and by building data analysis skills. Because capitalization rates are so critical to value determination and office sales are relatively scarce, office sales should be thoroughly researched, and consideration should be given to expanding sample sizes through use of prior year sales time-adjusted to the valuation date. Again, building data analysis skills will help, and continuing to check capitalization and other income rates with those reported in industry publications and services will provide additional support. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 11.

**RESPONSE:** RPAD partially agrees with this recommendation. We recently hired a second market analyst. The impetus for this was to strengthen RPAD data analysis capabilities. The market analysts working as a team can now research, evaluate taxpayer submissions, and distill credible data conclusions.

RPAD conducts monthly sales verification by direct contact with the parties to the sales transaction. In addition, RPAD uses other resources to assist in sales and data verifications. "Building data analysis skill" is ambiguous. It insinuates a lack of skills rather than recognizing that RPAD market analysts carry out their functions appropriately, evidenced by the work product manifested in published data and reports.

RPAD typically uses the most current year to develop our capitalization rates when sales are adequate and consistent with industry practices. However, when the number of sales is determined to be inadequate to develop reliable market capitalization rates, we will expand our sales to include time-adjusted sales over a period of up to two years. Additionally, we generally rely more on survey data when sales are scarce.

- b) We recommend that RPAD develop and vet a plan for valuing retail properties at market value consistent with other properties in the District. This could be accomplished by phasing in increases over a 2- or 3-year period. The plan should include consideration of whether:
  - i) The nine market areas used for offices are adequate for retail properties. Although the situation may well be different in the District, retail market areas or neighborhoods usually follow traffic corridors more than offices do. Again, while this may well not apply in the District, it would be prudent to consider whether retail areas should be defined separately from office areas.

**RESPONSE:** RPAD disagrees with this recommendation. The District of Columbia does not have retail destinations independent of the existing/identified nine commercial markets. While it

is true that retail market areas usually follow traffic- pattern or pedestrian-friendly/walkable street fronts, the uniqueness of the commercial markets in the District of Columbia is that neighborhoods with high retail corridors are within these commercial markets. Therefore, RPAD does not need to segregate the retail submarket further from the existing commercial market or the “office market,” according to the auditors.

- ii) Additional space types, easily accommodated in the CAMA system, would be helpful. One example is restaurants. Current rent tables provide a separate rate for restaurant spaces but do not distinguish between fast-food and full-service restaurants. Although appraisers can apply adjustments for "tenant appeal," standardizing rates creates consistency and lessens the need for individual property adjustments. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 12.

**RESPONSE:** RPAD continues to focus on identifying those value characteristics that the market deems significant and appropriate in establishing accurate values across property types and sub-categories. For example, RPAD believes that the current retail model captures all sub-categories of retail properties in the CAMA valuation model. However, RPAD’s commitment is to continue to find better ways to develop property assessments in the District of Columbia. If in the future, a specific sub-category of properties lends itself to a separate or unique valuation model, RPAD will revise its current model to accommodate those sub-categories.

**Recommendation 7:** We recommend that RPAD adopt procedures for valuing air rights and add them to the ARM and/or Employee Handbook. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 10

**RESPONSE:** Air rights are unique, and the industry has yet to fully settle how best to value them, except in general terms. RPAD air rights valuation is an apportionment of the total fee value of the property. To streamline the air rights valuation process, RPAD developed a value allocation worksheet to apportion the total fee simple property value to all lots, including air rights lots that constitute the property. In addition, RPAD trained commercial appraisers on how to use the worksheet for value allocation. The division concurs with the recommendation to document this valuation approach even when RPAD continues to refine the valuation approach. However, we are reluctant to publish anything prematurely without thorough and complete vetting.

The Almy, Glaudemans, and Denne auditors admit, in the 2012 audit, that this is a challenging endeavor. OTR will, however, ensure that the topics are formally addressed and documented in our ARM and Employee Handbook for the TY 2025 reappraisal. The International Association of

Assessing Officers (IAAO) does not have a standard on valuation of air rights. Any publication on valuation of air rights will be unique to the District of Columbia.

**Recommendation 8:** Crowe recommends that RPAD use at least 3 years and preferably 5 years of commercial property sales in valuation and sales ratio studies. Statistical modeling should be used to produce time trends that adjust all sales to the effective date of the reassessment.

**RESPONSE:** RPAD market analysis for commercial valuation already considers three years of sales. RPAD recognizes that the “time-trend” or adjustment is rooted in prediction based on an observed pattern that even when limited sales may compel the use of multiple years, the time-trend may be opposed to the current or existing market reality at the time of reassessment. The volatility of the commercial real estate market in recent years, particularly in the District of Columbia, requires statistical modeling that better reflects current market conditions. Therefore, RPAD will continue to consider three-year sales; all or most weight will be on the most recent year leading to the reassessment because of the market dynamics in the District of Columbia.

**Recommendation 9:** We recommend that RPAD begin reporting ratio study statistics with respect to assessed values on the roll at the time of sale rather than, or in addition to, assessed values anticipated to be enrolled later, as are currently reported. This recommendation is repeated from OIG Report No.16- 1-14AT Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 16.

**RESPONSE:** RPAD disagreed with this recommendation in 2016 and continues to disagree. Ratio studies are conducted for a variety of purposes. In this context, the ratio report measures assessment quality by looking at the most recent reassessment program and comparing the results of that effort to actual market conditions. It is contrary to the purpose of the report to use current year values when the intent is to demonstrate the proposed year assessment quality. The introduction to the report clearly states that OTR uses the proposed year reassessments compared to the 12 months of sales immediately preceding the valuation date. Please note that the Assessor Reference Materials (ARM) includes a section where proposed assessments are compared to both current and proposed year values. Additionally, RPAD management annually uses internal "going-in" ratio reviews to compare values to the current market in the District of Columbia and determine the need to adjust values up or down.

**Recommendation 10:** We recommend that RPAD transition to computing and reporting ratio statistics by property type and market area. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government’s Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 17.

**RESPONSE:** RPAD will explore this recommendation by running internal ratio studies with an internal managerial review. The internal ratio study review shall be reported to RPTA



leadership on October 15, 2023. Individual property ratio statistics would be the most beneficial way to report commercial ratio statistics, but in many cases, this is impractical, at least in RPAD's experience. The qualified sales of commercial properties are limited, whereby in many cases, the sample sizes need to be more substantial to provide meaningful statistical inferences. See table below:

Tax Year	Qualified Sales			
	Office	Apartme nt	Retail	Hotel
2019	22	60	79	8
2020	26	60	96	9
2021	20	43	101	6
2022	5	51	71	6

**Recommendation 11:** We recommend that RPAD begin to adopt a standard-accepted trimming rule while performing ratio studies in accordance with Appendix B of the IAAO Standard on Ratio Studies rather than the arbitrary ratio boundaries of 0.40 to 1.60 presently employed. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 18

**RESPONSE:** As discussed in our response to recommendation #3, our primary use of qualified commercial property sales is to help develop and support the various matrices and capitalization rates used in the income approach to valuation. RPAD contends that our established trim range is not arbitrary and, most importantly, is sufficiently large, and few if any, ratios are excluded. Only the most extreme outliers are excluded in this trimming range, as would be appropriate. The trimming range and its use in our study remained consistent over the years. RPAD does not intend to modify this methodology.

**Recommendation 12:** We recommend that RPAD take steps to compute and, when appropriate, publish confidence intervals for important statistics. This would enable readers to judge whether an apparent success or failure is more likely to reflect a fluke of small samples rather than a real problem with the appraisals. This recommendation is repeated from OIG Report No.16-1-14AT *Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017)* Recommendation 19.

**RESPONSE:** RPAD agrees that the confidence interval would be a good test to ensure the reliability of median calculation. It is easily developed from modern statistical software packages. RPAD published the confidence intervals in the ratio study report following the OIG Report No. 16-1-14AT. RPAD plans to continue publishing the statistical confidence interval in subsequent ratio studies report.

**Recommendation 13:** We recommend that RPAD begin to compute and, when appropriate, publish PRBs. This recommendation is repeated from *OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 20.

**RESPONSE:** The price-related differential (PRB) is currently measuring vertical inequity. The price-related bias test is one of several additional tools to measure this bias. In our experience, adequate sales exist in our residential inventory to make a price-bias test meaningful when values are generated from our CAMA system, which applies RPAD's sales-calibrated cost approach. For example, "economies of scale" may cause or introduce systemic errors in CAMA valuation models. However, in the valuation of commercial properties, where the income approach is the primary indicator of value, those limitations rarely, if ever, occur. As a result, the marginal square foot of rentable area is identical to the first square foot.

Commercial properties are much more heterogeneous than residential properties, making interpreting a price-related bias (PRB) test challenging. Therefore, we must see the merit of computing the PRB for the commercial property before publishing it in the ratio study report.

**Recommendation 14:** We recommend that RPAD begin to produce statistical graphics to facilitate quick comprehension of patterns not immediately observable from numeric tables. This recommendation is repeated from *OIG Report No.16-1- 14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 21.

**RESPONSE:** RPAD includes a histogram depicting the distribution of ratios for all residential properties in the District. This chart quickly illustrates both the assessment level and the ratios' dispersion as measured by the standard deviation. RPAD will display a similar chart for the ratios of all commercial properties in its following ratio study report. In addition, RPAD will further review data that lends itself to meaningful statistical charts for internal managerial review. The charts will feature in the TY 2024 ratio studies scheduled for publishing October 2023.

**Recommendation 15:** We recommend that RPTA produce a USPAP-compliant mass appraisal report based on the ARM. The report would blend procedural narratives with statistical data on valuation parameters such as rents, expense ratios, and capitalization rates. The aim is to make public more evidence of the credibility of assessments. The recent additions related to residential and residential land valuation provide a template for changes that would be desirable in the discussion of commercial valuation procedures. This recommendation is repeated from *OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments* (Issued April 10, 2017) Recommendation 22

**RESPONSE:** The information discussed in the recommendation, such as statistical data on valuation parameters such as rents, expense ratios, capitalization rates, and the like, are contained in the division's Pertinent Data Book and Market Analytics Book. The Pertinent Data

Book and Market Analytics Book are available to the public on OTR's website at no charge. RPAD shall conduct more research to determine how the ARM can further comply with USPAP requirements.

**Recommendation 16:** We recommend that efforts continue to improve how RPTA defends assessments under appeal. This can be done by:

- Continuing to monitor the quality of its valuation performance as it already does via its appeals tracking system, recognizing that a superior measure of performance is found in assessment to sales price ratio studies.
- Augmenting its efforts to manage its appeal/litigation management system, with attention not only to monitoring conditional liabilities and calendar related workflows, but also to the management of related documents and professional services.
- Considering whether to advocate for a redress in the appeal incentives from a game-theoretic perspective, either by advocating for an increase in the cost to property owners of filing an appeal, perhaps on a recurring basis to spur their prompt resolution, or by adopting social pressures rather than, or in addition to, economic incentives to address the situation. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 23

**RESPONSE:** The appeals tracking is fully operational in MITS. MITS has capabilities to track calendar workflow and archive documents. In addition, MITS can monitor conditional liabilities, workflow, and the storage/archiving of all appeal-related papers and various communications and interactions of all the professionals involved in managing the appeal/litigation process. Any effort to disincentivize recurring and nuisance appeals requires legislative changes or enactment.

**Recommendation 17:** Crowe recommends expanding HR Business Partner support of OTR's organizational structure, workload statistics, performance measures, compensation requirements, staffing levels, training, qualifications, and staff development functions.

**RESPONSE:** We disagree with the auditor's assessment. The Office of Tax and Revenue (OTR) is currently supported by a designated HR Business Partner that is the point of contact for all HR related matters. The HR Business Partner meets with OTR leadership and management on a consistent basis to ensure the agency has the talent and resources to achieve its business goals. In weekly meetings, leadership is apprised of any relevant information related to HR processes and/or policy interpretations, and given the opportunity to discuss any talent management needs such as compensation requirements, staffing levels, training, qualifications, etc.

**Recommendation 18:** Additionally, we recommend that RPTA adopt measures to link operational activities to its organizational strategic plan and mission. In addition, key human resources metrics, such as Yield Ratios (ratio of offers to acceptance, interview-to-offer ratio, invitations-to-interview ratio, advertisements, or contacts-to-applicant ratio), should be established. RPTA personnel should compile an effective set of financial measures and operational measures (on customer satisfaction, internal processes, and the RPTA's innovation and improvement activities) that will put RPTA's strategy and vision at the center of its operations. This tool would drive its personnel to adopt behaviors and invest in actions that are critical to arrive at strategic and operational goals and align them toward an overall vision. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 32

**RESPONSE:** We disagree with the auditor's assessment. RPAD's position is that the Yield Ratios should be separate and distinct from the strategic and operational goals of the division. While those goals can include assuring that quality candidates are selected, any metrics related to the recruitment and hiring process are not within the purview of RPAD. The division is committed to establishing quantifiable strategic and operational goals for FY23. These will be completed by the end of the first quarter.

**Recommendation 19:** Crowe recommends reinstating the monetary award component of the OCFO Incentive and Performance Recognition Award Program and training the Chief Appraiser and Supervisory Appraisers to recognize and reward these contributions.

**RESPONSE:** The OCFO has implemented several monetary systems to reward the ongoing contributions of OCFO employees. We implemented an annual award ceremony in which all staff's contributions are recognized and selected staff are awarded monetary compensation. The OCFO was unable to host its annual event due to the operational and financial impact of the global COVID pandemic. However, we were able to offer a one-time bonus of 3.5% to recognize staff performance in FY22. Additionally, staff consistently receive career-ladder promotion opportunities allowing them to receive a grade promotion and pay increase when meeting performance expectations. All employees are awarded within grades increases either annually or bi-annually, and management is also allowed to reward performance by offering Tangible Item Awards (gift certificates, discounted parking, or transportation reimbursement) and Time Off Awards.

**Recommendation 20:** RPAD should develop formal policies and procedures to assign responsibility for tracking and monitoring the implementation status for recommendations.

**RESPONSE:** RPAD will develop a standard monitoring and tracking of the implementation of recommendations agreed to within this OIG Audit No. 22-1-25AT. RPAD plans to track the implementation quarterly and formerly report the status and progress to RPTA leadership starting April 3, 2023.

**Recommendation 21:** We recommend that RPTA establish an Office of Quality Assurance, Best Practices, and Innovation to: (a) conduct random and regular independent assessments of quality in all core processes; (b) assess performance against best practices; (c) study the commercial real property assessment practices of state and local government entities across the United States; and (d) engage in process innovation to enhance service delivery. This Office should report directly to the Director of RPTA and report yearly to the District's CFO. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 28.

**RESPONSE:** We strongly disagree with the auditor's assessment of RPAD having no quality assurance mechanism and believe that it indicates a lack of understanding of how RPAD operates within the District. RPAD consistently adheres to IAAO standards and practices to maintain best practices in carrying out its assessment duties. In 2019, IAAO awarded the District of Columbia Certificate of Excellence in Assessment Administration. The certificate is how IAAO recognizes governmental units and individuals involved with property assessments that integrate industry best practices.

Unlike the States Assessment Administrations, which have oversight over County Assessment offices, The District of Columbia is an "all-in-all" assessment jurisdiction; that is, the administration and oversight of the assessment office in the District is the responsibility of the Government of the District of Columbia. In addition, under the auspices of the Office of the Inspector General, an independent best practice review is conducted regularly to ensure that RPAD stays abreast and adheres to practices reflecting acceptable methodologies and industry standards in property assessment. Such a review has just occurred. In addition to the OIG's review, OCFO Risk Officer has established periodic risk controls and evaluation of RPAD functions. The OIG audit and the Risk Officer control tests are direct oversight of RPAD's business functions independent of RPAD. Also, the OCFO's Office of Integrity and Oversight conducts periodic audits of the assessment division to ensure the unit's adherence to its written policies and procedures.

Furthermore, extensive internal and external appraiser training and the Assessment Education Certification Program (AECF) provides all appraisers with industry best practices. These combined efforts ensure that RPAD focuses on quality in its assessments and service delivery. Unfortunately, the auditors ignored these facts.

**Recommendation 22:** RPAD monitor and retain documentation to support their progress against key performance indicators. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 30.

**RESPONSE:** RPAD has defined its key performance indicators (KPI) as part of OTR's technology enhancement initiatives. The KPIs for the commercial units currently utilizes Excel as a tracking mechanism. KPIs are reported to RPTA leadership monthly. RPAD is working with technical experts within IT to implement tracking, monitoring, and reporting of KPIs in MITS.

**Recommendation 23:** We recommend that RPTA develop a structured staff development and training program that is based on the following:

- An organizational analysis; and
- A job analysis of KSA for each function.

Also, RPTA should clearly articulate training goals for each individual and establish criteria by which the effects of training can be measured. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 34

**RESPONSE:** We partially disagree with the auditor's assessment. The OCFO currently conducts a job analysis before posting of all vacant positions and recruitments are based on the knowledge, skills and abilities (KSA) to successfully perform the function of the position. Additionally, OCFO annually develops and updates Individual Development Plan for each of its employees which outlines the employee's career goals and determines a path to advancement. The OCFO also offers targeted job specified training, as well as other development courses to allow employees to gain expertise and advance in their careers.

**Recommendation 24:** We recommend that RPAD implement the following:

- A review of the staff qualifications be performed in accordance with IAAO standards. This review should be performed on an annual basis.
- A training program be developed to ensure all staff are appropriately trained, qualified, and certified.

**RESPONSE:** Currently, There are required IAAO courses that candidates must complete in order to qualify for each position within the assessment unit. Candidates selected for hire must meet a minimum qualification requirement, which includes completion of various IAAO or equivalent courses, prior to being extended an offer of employment with the OCFO.

Additionally, A training and certification program along with a cross-training program was developed in 2016, but was halted during the pandemic (see attachments). The training program incorporated IAAO standards for certification. We will reinstate the program, updating the requirements, by the 3rd quarter of FY23.



**Recommendation 25:** Crowe recommends retaining a compensation consulting firm with public and private sector and/or commercial appraisal compensation expertise to ensure relevant compensation data is considered when market-pricing commercial appraiser positions.

**RESPONSE:** We disagree with the auditor's assessment. The Office of Human Resources regularly conducts job pricing by comparing market pay and internal pay through the analysis of position requirements. We use reputable compensation surveys and other compensation information resourced directly from competitors. Further, our ongoing review of compensation data of applicants is used to ensure that we are maintaining an appropriate pricing level for these positions.

**Recommendation 26:** Crowe recommends clarifying the equivalent work experience policy for commercial appraiser hiring decisions by adding consistent work experience equivalency language to Commercial Appraiser grade 12 and 13 job descriptions and informing the appropriate HR and OTR practice stakeholders. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 35.

**RESPONSE:** We disagree with the auditor's assessment. The Office of Human Resources worked in collaboration with the assessment administration to conduct a job analysis for the Commercial Appraiser position. That collaboration effort resulted in the development of a position description and minimum qualifications that are used and reviewed prior to beginning any recruitment search. We have not found that applicants are having difficulty with the language used when advertising for our position openings: "Four (4) years of progressive experience performing related duties and responsibilities such as: assessing the market value and conducting inspections of residential and/or commercial properties; collecting/analyzing data on new and unique properties with complex characteristics; reviewing appraisal reports to ensure property values are estimated accurately and objectively; resolving property value problems; and providing training to lower level staff. In addition, successfully completing IAAO courses 101, 102, 112, and 300 or equivalent is required."

**Recommendation 27:** We also recommend the OCFO provide the revised job descriptions to commercial appraisers, as required by the Master Agreement noted in the Criteria. This recommendation is repeated from OIG Report No.16-1- 14AT Evaluation of the District of Columbia Government's

**RESPONSE:** The Office of Human Resources will ensure that employees within RPTA are issued a current copy of their position description within thirty days of the issuance of these responses.

**Recommendation 28:** We recommend that RPTA design, document, and implement effective succession and contingency plans. This will ensure seamless continuity of RPTA strategy and operations in the event of an unanticipated vacancy in either role. The succession plans should be approved by senior management. To ensure accountability, responsibility for this key program should be embodied within the position description for each role. Key metrics should

be designed to monitor and evaluate the program periodically. This recommendation is repeated from OIG Report No.16- 1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 36.

**RESPONSE:** We accept this recommendation, with the exception of the succession plan program being “embodied within the position description for each role”, and this effort is underway. The Office of Human Resources has updated position descriptions and has created associated minimum qualifications for all positions within RPTA. Further, a recruitment strategy for unanticipated vacancy's within RPTA is in place. We have identified specific recruitment resources to target appropriate applicants, we have established pipelines of passive candidates, and have a dedicated sourcing support that partners with RPTA's assigned OHR Business Partner to ensure the onboarding of appropriate staff as quickly as possible.

**Recommendation 29:** Additionally, Crowe recommends that the OCHRO develop a written succession plan for the Chief Appraiser position and reinstating the Deputy Chief Appraiser and/or creating a Commercial Unit Manager role to provide additional leadership development opportunities for Supervisory Appraisers and reduce the number of direct reports to the Chief Appraiser. This recommendation is substantially similar and repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 27

**RESPONSE:** We disagree with the auditor's assessment that there limited leadership development opportunities. RPAD previously added two new units to the existing four appraisal units. The impetus for the additional units was [in part] to establish property type specialization for each appraisal unit; allow unit supervisors to have better oversight of unit activities by reducing the number of direct reports from initial average of ten staff to now average of six staff. Supervisory appraisers are working managers. They are responsible for administrative and technical operations of the unit. Senior Appraisers provide guidance and training to staff appraisers but are not responsible for their administrative supervision. Lastly, please see our response to recommendation #28.

**Recommendation 30:** We also recommend that an organizational structure impact analysis be conducted when appropriate to ensure the OTR organization structure is aligned to OCFO 2017-2021 Strategic Plan revisions when the plan is updated. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 24.

**RESPONSE:** Like in the past, the OCFO will ensure that RPTA's operations and tactical plans align with the OCFO's strategic objectives and initiatives when the plan is updated.



**Recommendation 31:** Crowe recommends implementing an HR Business Partner driven process to gather and analyze OTR hiring practice stakeholder feedback on a periodic and event-driven basis. We also recommend adding hiring practice effectiveness and stakeholder experience HR KPIs.

**RESPONSE:** We disagree with the auditor's assessment. The OCFO currently has an HR Business Partner driven process that gathers and analyzes OTR stakeholder feedback on a consistent basis. OTR leadership meets weekly with a designated HR Business Partner to discuss the agency's recruitment and staffing levels, talent management processes, and hiring feedback to provide OTR with the most highly qualified candidates. In addition, a Key Performance Indicator (KPI) metrics report has been developed, which is used by the respective HR Business Partner to inform all OTR recruitment and hiring actions. This process ensures OTR is consistently provided with prompt and efficient HR service delivery related to hiring.

**Recommendation 32:** Crowe recommends gathering and analyzing OTR hiring practice stakeholder feedback regarding fostering vital interpersonal relationships and information networks, providing a sense of organizational culture, and determining how well employees understand their new jobs and related expectations on a periodic and event-driven basis. We also recommend HR KPIs include hiring practice effectiveness and stakeholder experience metrics.

**RESPONSE:** We disagree with the auditor's assessment. The OCFO has implemented several processes to ensure all employees are provided with a seamless onboarding experience. We have implemented a New Hire Orientation process that ensures all new hires understand the history of the OCFO, our organizational culture and SMARTER values, as well as relevant information related to their jobs. Feedback is solicited via a New Hire Orientation survey and is assessed to continuously improve HR service delivery and the employee experience. In addition, OHR conducts 30-, 60-, and 90-day check-in sessions with all new staff to ensure a smooth transition and to assist in data driven decision making.

**Recommendation 33:** Crowe recommends expanding HR Business Partner responsibilities to include guidance and support of OTR hiring practices. We also recommend monthly reviews of current and projected hiring needs, hiring process status, HR KPI results, potential improvements, lessons learned, and identification and resolution of current or emerging hiring practice issues. This recommendation is repeated from OIG Report No.16-1-14AT Evaluation of the District of Columbia Government's Management and Valuation of Commercial Real Property Assessments (Issued April 10, 2017) Recommendation 37.

**RESPONSE:** We disagree with the auditor's assessment. OHR not only reviews RPTA's current and future needs monthly, but we hold weekly meetings with the administration to assess their ongoing needs, identify opportunities for improvement, and solicit feedback. We are proactive in our approach as it relates to RPTA's recruiting and hiring as we have established recruitment sources, developed a pipeline of potential candidates, and have established relationships with the organizations such as the Appraiser Institute and International Association of Assessing Officers.

## Appendix C – Acronym List

A&L	Appeals and Litigation
APQC	American Productivity and Quality Center
ARM	Appraiser Reference Materials
BRPAA	Board of Real Property Assessments and Appeals
CAMA	Computer-Assisted Mass Appraisal
Commercial	Class 2 Property
CFO	Chief Financial Officer
COD	Coefficient of Dispersion
Crowe	Crowe, LLP
DC	District of Columbia
DCRA	Department of Consumer and Regulatory Affairs
FY	Fiscal Year
GIS	Geographic Information System
HR	Human Resources
I&E	Income and Expense
IAAO	International Association of Assessing Officers
KPI	Key Performance Indicator
KSA	Knowledge, Skills, and Abilities
MIT	Modernized Integrated Tax System
OCFO	Office of the Chief Financial Officer
OCHRO	Office of the Chief Human Resources Officer
OIG	Office of the Inspector General
OTR	Office of Tax and Revenue
People-CMM	People Capability Maturity Model
PRB	Price-Related Bias
PRD	Price-Related Differential
ROD	Recorder of Deeds
RPAD	Real Property Assessment Division
RPTA	Real Property Tax Administration
RPTAC	Real Property Tax Appeals Commission
S&E	Standards and Exemption
SSL	Square-Suffix-Lot
TY	Tax Year
USPAP	Uniform Standards of Professional Appraisal Practices



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