Nassau County
Office of the Comptroller

Limited Review of the Department of Assessment

HON. GEORGE MARAGOS
Comptroller

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NASSAU COUNTY
OFFICE OF THE COMPTROLLER

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I. Objectives

Nassau County's ("County") property tax assessment system has been the subject of long standing criticism regarding the inaccuracy and equity of the tax roll, as well as for the expenses associated with the tax certiorari process. The Nassau County Department of Assessment ("Assessment") is responsible for property assessments that comply with the New York State Office of Real Property Services ("ORPS") requirements. The objectives of this "limited review" as outlined by County Executive Edward Mangano in appointing his Assessment Transition Team were to:

- determine the cause of the exemption error that caused the Theodore Roosevelt Executive and Legislative Building at 1550 Franklin Ave. to become taxable; and
- review the policies, procedures, and practices of Assessment for internal control and operational efficiencies.

In addition, the Comptroller also requested that the auditors determine if the valuation methodology used by Assessment to generate the 2013 tax roll produced accurate and equitable values.

II. Background

The Nassau County Charter charges the County Assessor with the responsibility of assessing all property situated in the County liable for taxation for state, town, school and/or special district purposes.[1] The County is one of two county level assessing units in the state. The Cities of Glen Cove and Long Beach and the villages are separate assessing units and can choose to adopt their own values rather than those established by the County. Most County taxing districts, such as the Towns of Hempstead, North Hempstead and Oyster Bay, most school districts, and local authorities such as fire, sewer, and water, use County values. (Some taxing districts, however, do not use County values; for example, the Glen Cove School District uses city assessments.)

In 1938, the County adopted a construction cost method for purposes of developing assessment values for land and buildings in Nassau County. Land values were reviewed and increased subsequently, in 1954 and 1964. In 1986, commercial properties, industrial properties, and apartments were revalued. In 1997, a complaint against the County was filed in New York State Supreme Court that claimed the County's residential property assessments were racially discriminatory in violation of Title VI and Title VIII of the federal Civil Rights Act of 1964, as

[1] Nassau County Charter §602.

amended.[2] The complainants requested a reassessment of Class I residential properties using fair market value, in accordance with Section 305 (2) of the New York State Real Property Tax Law (RPTL). On March 27, 2000, the Court entered a judgment approving a stipulation in which Nassau County agreed that it would update and modernize the assessment roll for Class I residential properties for use on January 1, 2003. The stipulation did not cover commercial properties; however the County decided to revalue commercial properties as well. Since that time, the County has performed annual reassessments.

The County performs "mass appraisal," which is defined by the Appraisal Standards Board as "The process of valuing a universe of properties as of a given date utilizing standard methodology, employing common data, and allowing for statistical testing."[3] In mass appraisals, computer models are developed which predict property values. The result should be assessments that are at the stated uniform percentage of value as of the valuation date of the assessment roll upon which the assessments appear, as confirmed by statistical testing following mass appraisal industry standards.

The County-wide 2003 reassessment process was outsourced to the Cole•Layer•Trumble Company ("CLT"), which was subsequently acquired by Tyler Technologies ("Tyler"). At that time, CLT was the oldest and largest mass appraisal firm and had been assisting governments with appraisal services since 1938. They had completed over 2,500 reassessment projects in the United States and Canada. They had conducted over 300 software installations throughout the United States. Today, CLT remains as a contractor to the County for assessment. The computer assisted mass appraisal ("CAMA"[4]) software supplied by CLT is known as the Integrated Assessment System ("IAS"). The IAS CAMA system maintains a database of property characteristics from which their appraised value estimates are developed. The system includes the valuation tables and algorithms to support the three approaches of value used: cost, market/comparable sales and income.

The Comptroller's May 13, 2003 audit report "Cole•Layer•Trumble Company: Countywide Reassessment Project"[5] stated that the mass appraisal results achieved by CLT were statistically tested for accuracy in accordance with the International Association of Assessing Officers ("IAAO") standards. Two of the critical tests performed included the calculation of the

[2] Coleman v. Seldin, 181 Misc. 2d 219 (N.Y. Sup. Ct. 1999).

[3] http://www.uspap.org/2010USPAP/USPAP/frwrd/definitions.htm.

[4] CAMA is defined by the International Association of Assessing Officers (IAAO) as "a system of appraising property, usually only certain types of real property, that incorporates computer supported statistical analyses such as multiple regression analysis and adaptive estimation procedure to assist the appraiser in developing value".

[5] http://www.nassaucountyny.gov/agencies/Comptroller/Docs/PDF/0503ReassessmentAudit.pdf, pages 7-8

coefficient of dispersion ("COD") and the price related differential ("PRD"). The results of the statistical testing revealed that reassessment was within the acceptable limits set by the IAAO and the New York State Office of Real Property Services ("ORPS"). The results of the statistical tests for Class 1 properties were also subject to the review of the court. It should be noted that ORPS continues to test the validity of assessments annually.

III. Potential County Liability

Until recently, according to the Nassau County Administrative Code ("Administrative Code") "…any deficiency existing or hereafter arising from a decrease in an assessment or tax.... or by reason of exemption or reductions of assessments shall be a County charge."[6] Under this guarantee, when a property owner successfully grieves an assessment and receives a reduction, the County refunds not only the overcharge of the County portion of the taxes, but also the overcharge of the town, school and special district taxes. For the 2008/09 tax year, the County's share of real estate taxes levied totaled $973,193,661 while town, school and special district taxes totaled $4,195,497,504.[7] Therefore, if a taxpayer is entitled to a refund of $5,000 in property taxes paid, the County is responsible for the entire amount even though it originally collected less than $1,000. In November 2010, this provision of the Administrative Code was amended by Local Law 18-2010 and this burden no longer falls entirely on the County's shoulders.

Property owners grieve the assessment of their properties through an administrative process with the Assessment Review Commission ("ARC"). Property owners not satisfied with the outcome at ARC may then seek judicial relief. The judicial process most often utilized by residential property owners is a Small Claims Assessment Review ("SCAR") proceeding. Non-residential challenges are handled through tax certiorari proceedings. Tax certiorari refunds, particularly those related to commercial properties, have long been recognized as significantly impairing the County's financial condition. For the five years from 2006 to 2010, tax certiorari expenditures were as follows:

[6] Nassau County Administrative Code § 6-26(b)(3)(c)
[7] Draft ARC Annual Report 2009-10, Taxes Levied in Nassau County 2008-09, page 7

Tax Certiorari Expenditures $ in Millions[8]			
		Financed from	
Year	Amount	Operating Funds	Bond Issuance
2006	$ 70.6	$ 70.6	$ 0.0
2007	$ 87.1	$ 87.1	$ 0.0
2008	$ 98.8	$ 40.0	$ 58.8
2009	$ 114.5	$ 50.0	$ 64.5
2010	$ 79.4	$ 36.9	$ 42.5
Total	$ 450.4	$ 284.6	$ 165.8

These expenditures do not include the debt service cost of outstanding debt issued to pay for refunds. As of December 31, 2010, the County's outstanding debt related to tax certiorari settlements was approximately $1.2 billion with a recorded liability of $152.3 million for future settlements and judgments.[9] A review of the ARC's 2009/10 Annual Report Draft shows that, over the years 1999-2008, approximately $1.225 billion was paid in refunds of which approximately $1.1 billion or 88% were paid to commercial property owners. The County's primary financial exposure for property tax refunds lies in the commercial properties. More than two-thirds of commercial parcel owners file for reductions. Statistics for the 2009/10 tax year were as follows:

Number of Commercial Parcels and Parcels Appealed 2009-2010 Tax year			
	Parcels on Tax Roll	Parcels Appealed	Percentage Appealed
Class 2 - Apartment	5,529	4,685	84.7%
Class 3 - Utility	1,754	455	25.9%
Class 4 - Other	19,602	13,334	68.0%
Totals	26,885	18,474	68.7%

[8] Comprehensive Annual Report ("CAFR") of the Comptroller for the Fiscal Years Ended December 31, 2006-2010. The amounts reflected in the table are presented on an accrual basis of accounting and totals include payments made each fiscal year and the change in the accruals for future settlement liabilities on open Writs.
[9] Comprehensive Annual Report of the Comptroller ("CAFR") for the Fiscal Year Ended December 31, 2010, Exhibit X-15, Note 16B.

IV. 2010 Assessment System Changes

On April 7, 2010, the County Executive issued Executive Order No. 6 – 2010 "Emergency Taxpayer Protection Order of 2010" that orders the reassessment of all parcels of real property on a four-year cyclical basis rather than on an annual basis. During the four-year cycle, adjustments may be made to the assessment roll in the event of a physical change to the property (such as additions and demolitions) in the event that a property owner brings a successful administrative or judicial challenge to the assessed value of the real property, and to reflect a change in property classification based upon property use, changes in exemptions and exemption eligibility. The tentative roll issued January 3, 2011 for the 2012/13 tax year represents a departure from the previous valuation methodology used by the Department of Assessment ("Assessment"). Assessment made a decision to no longer use Tyler's IAS system to value all properties. Instead, it used a hybrid of values determined by selecting the lowest value from an array of values including the 2012 tentative value, 2013 benchmarked value, 2012 floor value, ARC or other values determined through the appeal process.

V. Scope and Methodology

As noted in Section I above, the scope of our review was to:

- determine the cause of the exemption error that caused the Theodore Roosevelt Executive and Legislative Building at 1550 Franklin Ave. to become taxable;
- review the policies, procedures, and practices of Assessment for internal control and operational efficiencies; and
- determine if the valuation methodology used by Assessment for the 2013 tentative roll produced fair and equitable values.

To achieve this objective, we interviewed key members of Assessment's staff, including individuals in the Tax Exemption, Apportionment, Commercial, Residential and Valuation Divisions. We also obtained information from the Information Technology personnel assigned to Assessment which we used to perform our analysis. Discussions were held throughout this review with senior members of the Assessment Transition Team, including both the then Acting Assessor and the Chair.

VI. Summary of Significant Findings

There are significant operational weaknesses within the operations of Assessment which existed under prior Administrations and need to be corrected by current management. These include:

- A lack of policy and procedures manual to guide the day to day business operations of the department;
- A lack of an adequate system of internal controls which resulted in the County receiving a $1.2 million tax bill for the County Executive and Legislative Building;
- A lack of uniformity in the data collection process which can impact a fair appraisal;
- Inadequate segregation of duties, including a lack of supervisory review of data changes, and the practice of employees entering other employee's initials as both reviewer and approver;
- A lack of training on the mass appraisal system used by Assessment for rolls prior to the 2013 tentative roll;
- No process is in place to report and resolve system deficiencies; and
- Reductions in assessed valuation were not adequately documented.

We also reviewed the methodology implemented by Assessment for the 2013 tentative roll and found:

- Property valuations were determined by selecting the lowest value from an array of values;
- The valuation methodology used for the 2013 tentative assessment roll may not reduce grievances; and
- The new valuation methodology shifts class 1 total assessed valuation to mid-tier properties.

In addition, at the time of our fieldwork we found that the presumption of more accurate results from the new benchmarking methodology did not have support, had not been independently reviewed, staff appeared to have insufficient knowledge of the prior model and high-end residential valuations are inconsistent.

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The matters covered in this report have been discussed with the officials of the Department of Assessment during this review. On February 2, 2011 we submitted a draft report to the Department of Assessment for its comments. An exit conference was held on February 15, 2011 Based on the comments received on March 25, 2011, we submitted a revised draft to the Department of Assessment on May 2, 2011. The Department of Assessment's written comments and our responses to those comments are included as an appendix to this report.

Table of Contents

Section 1 – Assessment Department Operations

The following findings relate to operational weakness of the Department of Assessment (“Assessment”) which existed under prior Administrations and which needs to be addressed by current management.

Review Finding (1):

1.0 The Lack of Policy and Procedures Manuals Does Not Comply with ORPS Recommendation

Assessment does not have formal policy and procedure manuals to document its activities, policies and responsibilities.

Written policies and procedures are tools in an effective internal control environment. A management-approved policy and procedures manual should address significant activities, employee responsibilities, authorization levels and limits, control procedures, reporting responsibilities and performance standards. Policy and procedure manuals can also be helpful to a department in ensuring that the process is uninterrupted should an employee be absent for a lengthy period or retire.

The New York State Office of Real Property Services (“ORPS”) Valuation Standards, Section V states: “Documentation for a mass appraisal for ad valorem taxation should include property inventory records, valuation reports, data collection and valuation procedure manuals, statutes, rules and regulations and other references including valuation standards.”[10]

Policies and Procedures are especially important for a Department that depends on uniformity for creating an accurate assessment roll. Real Property Tax Law provides that all parcels within an assessing unit are assessed at a uniform percentage of current value.[11] Uniformity is dependent on applying the same standards to each property. Unless these standards are committed to writing, there is an increased risk that each employee will establish their own standards and that the standards will differ from employee to employee. For example, without written policies and procedures, there is a greater risk that two employees may inspect similar properties, but determine different grades of quality to the buildings, resulting in different values. The

[10] http://www.orps.state.ny.us/assessor/valuation/valstdsm.htm Section V
[11] RPTL Title 1 §305.2

promulgation and enforcement of policies and procedures is necessary to ensure that employees act uniformly in the valuation of each property.

During the course of our review in late 2010, we requested that Assessment provide copies of all written policies and procedures, but we were informed they do not exist. When we requested individual unit heads to provide copies of the unit's policies and procedures, none were provided. We found that some employees relied on handwritten notes they had made for themselves; in one unit, the supervisor was unaware that a subordinate had created her own procedures. These unofficial procedures are not an adequate substitute for an official policy and procedure manual for Assessment and are not sufficient to enable comprehensive supervisory review or to provide guidance in the absence of an employee.

1.1 The Lack of Adequate Internal Controls Resulted in a $1,277,502 Tax Bill for 1550 Franklin Avenue

As an example of significant errors that can occur as a result of lack of internal controls and policies and procedures was the $1,277,502 school tax liability incurred by the County because one of its properties was erroneously classified as taxable for the 2010/11 tax year. The property happened to be the Theodore Roosevelt Executive and Legislative Building at 1550 Franklin Avenue, which should have been wholly exempt from property taxes.

In previous years, the land was designated as section/block/lot ("S/B/L") 34/2/3 on Nassau County's tax maps and properly designated as fully exempt. The head of Assessment's Apportionment Unit told us that construction took place whereby a portion of the property was used to widen a roadway and therefore the old S/B/L 34/2/3 had to be apportioned and a new S/B/L 34/2/5 established to reflect the remaining land upon which the Theodore Roosevelt Executive and Legislative Building was situated. We were told that whenever lots are split, the old lot number is retired and new lot numbers are established to reflect the new boundaries.

The Apportionment Unit is comprised of one full time, and a second full time employee, who is currently only working part-time in the unit. Similar to other units within Assessment, the unit did not have any written policies and procedures or checklists to guide it in the completion of its tasks. Part of the Apportionment Unit's responsibility is to apportion the assessed values from the lot that is being retired to the successor lots. The unit head explained that there were two indicators in the system of exempt status; one is a "wholly exempt flag" and the other is an IAS/ADAPT Exemption Transaction Screen.[12] When an apportionment takes place, the system

[12] Integrated Assessment System (IAS)/ADAPT is the computer assisted mass appraisal (CAMA) system utilized by Assessment.

permits system data from the old S/B/L to be copied to the new S/B/L. The copied data includes the wholly exempt flag, but does not include the exemption designation in the IAS/ADAPT Exemption Transaction Screen. The exempt status designation in the IAS/ADAPT Exemption Transaction Screen must be input for the new S/B/L by the Exemptions Unit.

In order for the Exemptions Unit to designate the S/B/L as tax exempt, it must be provided with documentation by the Apportionment Unit. This documentation includes a change order, which should be submitted to the Exemptions Unit. The Apportionment Unit Head could find no evidence that the necessary documentation was provided to the Exemptions Unit. The Exemption Unit therefore had no knowledge of the exempt status of this new S/B/L. Had a written policy or checklist been used, the unit head may have realized that this procedure had been missed.

It should be noted that this reapportionment took place in 2007 during the Administration of the last elected Assessor for the tentative roll dated January 2, 2008. The S/B/L received an exemption for 2009/10 but did not receive the exemption for 2010/11. The exemption was recognized for 2009/10 because a legacy system used on the production of the roll for that year recognized the exemption flag as an indicator of exempt status. The exempt flag was removed by a Deputy Assessor, apparently without researching why the property was flagged as exempt. The IAS/ADAPT system, used to produce the 2010/11 roll, does not use the exemption flag field and since the new S/B/L was never designated as exempt, a tax bill was produced.

<u>Review Recommendations:</u>

Assessment should:

a) create and promulgate policy and procedure manuals outlining all activities, policies and responsibilities, as recommended by ORPS;
b) periodically review and update, as required, all policies and procedures outlined in the manuals;
c) revise the IAS system to permit the copying of exempt status from the retired lots to the newly established lots; and
d) run edits to ensure that exemptions are properly carried forward or eliminated from one roll to the next.

1.2 The Underlying Descriptions Used in Valuing Property May be Inaccurate

ORPS Valuation Standards state that: “Care must be taken not to commit either errors of omission or commission that significantly affects the appraisal. The valuation process should include numerous checks throughout the process to prevent errors that could significantly affect the value conclusion."[13] It also states "It is also critical that work should be reviewed for consistency and accuracy to prevent errors of commission. A perfect appraisal model using the appropriate techniques cannot accurately determine the value on a property represented incorrectly by the inventory data."[14]

The International Association of Assessing Officer's ("IAAO") Standard on Mass Appraisal of Real Property states "…the data collection program must incorporate a comprehensive quality control system with proper checks and audits…."[15] The Standard also states "A clear, thorough, and precise data collection manual should be developed, updated and maintained."[16] One of the functions lacking policies and procedures is data collection.

The data collected represents the physical and qualitative attributes that are used in the valuation process for calculations of income for commercial properties, calculation of values based on the cost method and selection of comparable residential properties.

We found that Assessment does not have a data collection manual as required by the IAAO. Both the Appraisal Arbitrator Supervisor and the Exemptions Supervisor told us that there was a lack of uniformity in the data collection process.

A senior member of the Valuation Standards Team informed us that data collection of physical and qualitative attributes, such as size, location, quality of materials must be revisited to tighten the data collection process. He stated "The tighter the data collection process, the better the valuation process will be."

The Exemptions Supervisor told us that judgmental factors such as building condition and property use are not clearly defined. An example he gave is that two assessors may examine the same property, but without clearly defined use codes, one may identify a property as mixed use, while another may identify it as retail. This may result in different valuations.

Much of the data in use was collected by temporary employees of the firm that performed Nassau County's 2003 valuation. An audit report issued by the Comptroller's Office on May 13, 2003 "Cole•Layer•Trumble Company: County-Wide Reassessment Project" pointed out serious deficiencies in the data collection process, including:

[13] http://www.orps.state.ny.us/assessor/valuation/valstdsm.htm#Avoiding Section II
[14] Ibid
[15] http://www.iaao.org/uploads/StandardOnMassAppraisal.pdf 3.3.2.1
[16] Ibid 3.3.2.3

- There was a lack of any interior inspections to verify information such as interior finish, heating systems, and functional utility. Public areas were not even inspected at large commercial properties that provide public access, such as shopping malls and multi-tenant office buildings. CLT's Data Verification Manual stressed the importance of data verification, stating: "A job poorly verified will more than likely end poorly. . . we cannot expect the output to be any better than the input."[17]

- "We were unable to assure ourselves as to the integrity of the conversion of Assessment's database to CLT's Integrated Assessment System. CLT did not maintain copies of the edits run and did not produce edit reports requested by us to review the conversion."[18]

The Commercial Supervisor informed us that he recognized that the data gathered by CLT was flawed and that much of it needs to be improved. He said that little was done to update and validate the data between the 2003 revaluation and the present. Instead, Assessment focused on "chasing permits". When building permits are issued, Assessment inspects the property to compare the physical changes to the properties to the changes detailed in the permits.

To correct the data gathered by CLT, the Commercial Supervisor decided to have his teams revisit all the properties, on a property type by property type basis. This project was interrupted due to work done on commercial sales to be used by the Valuation Standards Group for ratio studies.

We also found that there were no written procedures to investigate and correct possible inventory data errors brought to Assessment's attention by the Assessment Review Commission ("ARC"). ARC's Commercial-Industrial Appraiser-Assessor Supervisor informed us that as part of the grievance process, ARC is provided with information by property owners and appraisers that it then compares to Assessment's data. When discrepancies are noted, they bring them to the attention of Assessment by creating a file of corrections to be made to descriptive data and posting it on a drive shared with Assessment. ARC's Commercial-Industrial Appraiser-Assessor Supervisor said that the corrections are not made, explaining that he did not have access to the shared drive with ARC.

We asked Assessment's Commercial and Residential Supervisors what their procedures were to investigate and correct any discrepancies identified in ARC's file of corrections. The Commercial Supervisor told us that the data issues raised were addressed for commercial properties. The Residential Supervisor said that he did not have access to the file of data issues raised. He said that a Real Property Appraiser-Arbitrator Supervisor at ARC sent him a file

[17] Cole Layer Trumble Company Countywide Reassessment Project, page vi
[18] Ibid, page x

several months ago, but that he does not have access to the current file on the shared drive and has not taken action to obtain it.

It is apparent that Assessment does not have a fixed protocol to investigate and resolve the data discrepancies found by ARC.

Review Recommendations:

Assessment should:

a) establish procedures for investigating and correcting any data discrepancies brought to its attention by ARC. If ARC's information is wrong, Assessment should notify ARC so that it can make corrections in its database;
b) reinstitute the process of preparing guidelines for and re-inspecting all commercial properties; and
c) promulgate uniform data collection policies and procedures. One of the goals of these policies and procedures should be to reduce the subjectivity that might be applied by the data collectors. These procedures should address the weaknesses noted in CLT's data collection.

1.3 The Lack of Supervisory Review of Data Changes Increases the Risk of Discrepancies

A fundamental internal control is segregation of duties. Segregation of duties requires that the work performed by an employee carrying out a function be reviewed and approved by another employee. It is also fundamental that an audit trail be maintained to identify the employee performing the work and the employee reviewing the work, along with the dates that the tasks were performed. We found that the IAS system did not include a provision for these basic internal controls.

We found that certain employees have the ability to override information in the system and that these overrides were not reviewed or approved, nor did the system require review and approval before accepting the data changes. Data changes that affect value, or changes to the value field, may result in incorrect assessments. The Veterans Exemptions Supervisor II (who works in Assessment's Information Technology Unit), when questioned why the employee authorities in IAS did not include approval authority wrote: "Supervisory Approval is not required in IASW (IAS World)[19] for an edit to be made, validated or saved."

[19] IAS World is the web based version of IAS.

The Commercial Supervisor told us that approvals for transactions in his unit are sometimes entered as notations in a history field. However, he found that other employees were entering his initials as the reviewer and approver when, in fact, he had not performed a review and had not approved the transaction. He said that there had been no directive from management prohibiting this practice.

This lack of an approval path and the ability to enter other employee's initials may allow erroneous or unauthorized entries to be made and remain undetected. However, we found no evidence of fraud as a result of our testing.

Review Recommendations:

Assessment should:

a) prohibit employees from falsifying records by entering their supervisor's initials as the reviewer; and
b) establish requirements for the review and approval of transactions and modify the IAS system to record these activities.

1.4 Staff is Not Adequately Trained on the Use of the $50 Million Computerized Mass Appraisal System

The auditors' review process included interviews with unit heads to determine their concerns about Assessment's operations. We noted that several employees expressed concern about a lack of training, particularly on the use of the IAS system, and on cross training among employees. This lack of training makes Assessment more vulnerable in the absence of key employees and creates the risk that the department may not be utilizing the IAS system to its full capacity.

In response to a question about the VSS's expertise in the IAS valuation model, the Acting Assessor responded "It should be noted that there was very limited formalized training by CLT. It basically covered where the tables in the new ADAPT system were located. It did not cover how the data in the tables were derived, and we were not provided a work manual until October 29, 2010".

A report issued by the Department of Assessment in May 2009 states: "While Nassau County has paid over $50 million for the computer hardware and software programs needed to conduct computer-assisted mass appraisal (CAMA), the former Assessor[20] did not adequately enforce the terms of the agreement between the County and Cole-Layer-Trumble. Standard consulting deliverables such as system documentation and training manuals were never developed. There were services that were contracted and paid for but never implemented by the Department of Assessment. The transfer of knowledge about the new system from Cole-Layer-Trumble to Assessment's employees did not occur to the level that would allow them to use the system effectively without Cole-Layer-Trumble's help. The resulting lack of training left Assessment's staff unprepared to take full advantage of the new CAMA system."[21]

A Deputy Assessor provided an E-mail to illustrate management's lack of support in requiring CLT to provide training. She wrote to the former Chief Deputy Assessor for Valuation in response to a request for copies of notes, crib sheets and lists of steps for modeling procedures. The email stated that: "Tyler should be providing us with updated instructions for this updated valuation." The Chief Deputy Assessor for Valuation responded "It is a nice thought but somewhat unlikely".

The Deputy Assessor acknowledged that CLT gave classes when they were located in Mineola, but that employees need additional training because the classes were inadequate and poorly timed. The training was provided far in advance of the system rollout and knowledge was lost because employees were unable to use or practice what they learned when they returned to the workplace. She said that one result of lack of training is the inability of employees to run reports from the system. She said that there is a continued dependence on Tyler to run reports for Assessment.

We questioned the Deputy Assessor about an employee's assertion that IAS history fields showing the initials and dates of entries made are overwritten with the initials and dates of the employee who last makes an entry. The Deputy Assessor explained that the initials and dates of entry are maintained on the history screen and that the employee's misunderstanding of information available on the system was due to a lack of training.

The Exemptions Supervisor also expressed frustration with the level of training. He noted that instead of training employees how to make system changes, the former CLT employee who became Chief Deputy Assessor would "hard code" values as a shortcut. For example, the Unit needed to change a New York State exemption code, but could not make the change as the field was hardcoded in ADAPT. This left the unit reliant on the Chief Deputy Assessor to make changes.

[20] The last elected Nassau County Assessor

[21] Nassau County Assessment Administration System Review Analysis and Recommendations May 29, 2009, page 39

It is a serious failure of prior management that after years of knowing the problems with the core modeling systems and its use, the problems remain largely unresolved.

Review Recommendations:

Assessment should ensure that:

a) employees are properly trained in the use of the systems and models used by Assessment;
b) there is adequate cross training so that Assessment is not overly dependent on any one individual; and
c) Tyler has met all its contractual obligations with regard to providing training and systems documentation.

1.5 System Deficiencies Are Not Resolved in a Timely Manner

Our interview process also revealed that there was no effective process established to report systems deficiencies such as slow system response time and ensure that they are resolved. Assessment maintains a SharePoint site to post issues related to the IAS/ADAPT project. The Exemption Supervisor provided us with extracts from SharePoint, which showed that a number of key issues were marked closed; however he stated that the process is flawed because a former Chief Deputy Assessor marked off items as resolved without consulting with the employee who posted the deficiency issue and without the items being resolved.

System deficiencies include:

- The system does not permit the user to see options for entering business exemptions, including a notation that the exemption is not available because a jurisdiction has opted out of the business exemption. This feature was available in the previous version of IAS. In addition, the system did not calculate the final year of business exemptions correctly. The issue was marked with “cannot be done” and marked “closed” by the Tyler consultant as of May 2009. The issue remains outstanding.

- The system response time is inordinately slow which hampers productivity. In November 2010, the Exemption Supervisor demonstrated a system inquiry, which after 10 minutes had still not loaded. The Residential Supervisor told us that the ADAPT system was implemented before personal computer hardware was upgraded to the level needed to run the system. He said that as a result, he could not perform data entry for one month. The comment regarding system response time was marked as "fixed" as of July 2009.

- The IAS system cannot generate bills to entities for Payments in Lieu of Taxes ("PILOT") agreements.[22] Assessment currently bills 47 PILOTS manually. A manual billing process increases the risk of error in the calculations performed. This issue was also marked as closed as of March 2010.

Other deficiencies that remain outstanding were brought to our attention:

- The system could not properly transfer exemption amounts from tables used in IAS to those used in IAS World. For example, a property that had an exemption on $100 of assessed value might be transferred to IAS World with an exemption on only $98. This resulted in the need for Assessment to file petitions with the County Legislature to correct the exemptions on 128 properties, which had produced small taxable amounts for wholly exempt properties.

- The IAS system had a 'front foot system' which allowed for the automated calculation of changes to a property's square footage where either the front or rear (or both) square footage was irregular. This feature does not exist in the IAS World system.

- The same information viewed in different windows for the same property may reflect different values. Tyler advised Assessment not to keep multiple windows open as it might "confuse" the system.

<u>Review Recommendations:</u>

Assessment should ensure that:

a) all outstanding system deficiencies are corrected; and
b) a process is developed whereby system deficiencies are evaluated, prioritized and resolved. The concurrence of the affected unit heads should be obtained before items are marked off as resolved.

[22] The Nassau County Industrial Development Agency ("NCIDA") has entered into agreements providing financial assistance to businesses seeking to develop projects or expand or renovate their businesses in Nassau County. The NCIDA has the authority to enter into Payments in Lieu of Taxes (PILOT) agreements with project applicants.

1.6 Instances of Reductions in Valuation Were Not Adequately Documented

During the course of the review, a property brought to our attention was a yacht club in East Rockaway, which was granted a decrease in fair market value from $1,544,670 for 2011 to $365,980 for 2012, or 76%. The valuation was changed in 2009 by means of a petition filed in the same year. The only justification as to the valuation change shown on the petition was "As per Ted – Change AV and exemption amount."[23] It should be noted that the property owners did not file grievances with ARC to protest the values.

We examined a sample of other yacht clubs to find out if this action was unique or whether other yacht clubs had been granted similar reductions of value. The values were as follows:

Exhibit 1

Comparison of Yacht Club Values

Property Section/Block/Lot	2010 Fair Market Value	2011 Fair Market Value	Percentage Change 2010 to 2011	2012 Fair Market Value	Percentage Change 2011 to 2012	Percentage Change 2010 to 2012
Subject Property	$ 1,529,130	$ 1,554,670	1.7%	$ 365,980	-76.5%	-76.1%
42/41/208	$ 1,175,730	$ 841,680	-28.4%	$ 757,512	-10.0%	-35.6%
42/67/147A	$ 1,336,560	$ 1,347,960	0.9%	$ 1,328,640	-1.4%	-0.6%
5/C/191	$ 5,809,010	$ 4,185,930	-27.9%	$ 3,767,337	-10.0%	-35.1%

With regard to the four properties listed in Exhibit 1, we found that the subject property had been granted a reduction of 76.1% covering the tax rolls for the period 2010 through 2012, while two others had been granted reductions of approximately 35% and the third was essentially unchanged. These reductions were made during the Assessment process which took place in 2008 and 2009. We requested an explanation as to why the value of the subject property was reduced by a higher percentage than the other yacht clubs. The Acting County Assessor responded in an e-mail that an issue regarding the exemption status for the yacht club has been discussed by Assessment and that any change in the status of the property to exempt/partially exempt would have an effect on the assessed value of the property. We disagree with this conclusion. The impact of the exemption is to reduce the portion of the assessed value that is taxable, not as a decrease in the assessed value. To consider the exemption in valuation and then apply a percentage of exemption to that decreased valuation would constitute a double counting. Additionally, a decrease in tax expense would generate a higher fair market value, not a lower fair market value.

[23] We were informed that the notation refers to the immediate prior Assessor.

The Acting County Assessor further pointed out that the property is subject to a license agreement with the landowner, the Town of Hempstead. The license agreement can be cancelled with 60 days' notice by the Town if, in the Town's opinion, "…the conduct of any licensed activity or the breach of any condition of this License has caused or is causing the premises to be a nuisance to the neighborhood."[24] While we concur that this provision may have an effect on the property's valuation, no evidence was presented as to how this figured into Assessment's calculations.

Assessment also evaluated the level of exemption granted the property. The License Agreement states "The clubhouse must be made available free of charge to local community groups (proof must be provided), from Monday through Thursday, and such availability for community meetings must be advertised in local newspapers two times annually."[25] Based on this clause, the former County Assessor determined that four-sevenths of the property's assessed value should be exempt from tax.

Review Recommendations:

Assessment should:

a) reconsider the valuation of this yacht club in comparison to the comparable properties;
b) reconsider whether a four-sevenths exemption is appropriate for this yacht club;
c) conduct an independent audit of other undocumented reductions in value; and
d) document its decisions to change the values of specific properties or make across the board reductions to groups of properties.

Section 2 – Property Valuations

Background

For the tentative rolls for the years, 2003 through 2012, the Department of Assessment ("Assessment") used the Computer Assisted Mass Assessment ("CAMA") product purchased from CLT/Tyler ("Tyler") to produce the annual assessment rolls. The Integrated Assessment System ("IAS") CAMA system maintained a database of property characteristics from which the appraised value estimates were developed. The system included the valuation tables and

[24] License Agreement between The Town of Hempstead and the East Rockaway Yacht Club Dated December 21, 1999. Section 3
[25] Ibid, Section 7

algorithms to support the three approaches of value used: cost, market/comparable sales, and income. The residential tax roll prepared for the years 2003-2012 were based on an average of different values for each property. For properties that were not the subject of arms-length sales, the assessed values were based on an averaging of:

- the value determined by the use of arm's length sales of comparable properties; and
- the value determined by the use of multiple regression analysis.

Where the subject property was sold at arm's-length, the time adjusted sale price was used as a third value to be included in the average.

For the tentative roll dated January 2011 (for the 2013 tax year), Assessment determined that it would use a different methodology than was used in prior years which we discuss in Review Finding 2 below.

<u>Review Finding (2):</u>

<u>2.0 The 2013 Assessment Roll Selects the Lowest Value From an Array of Values to Determine Assessed Valuation</u>

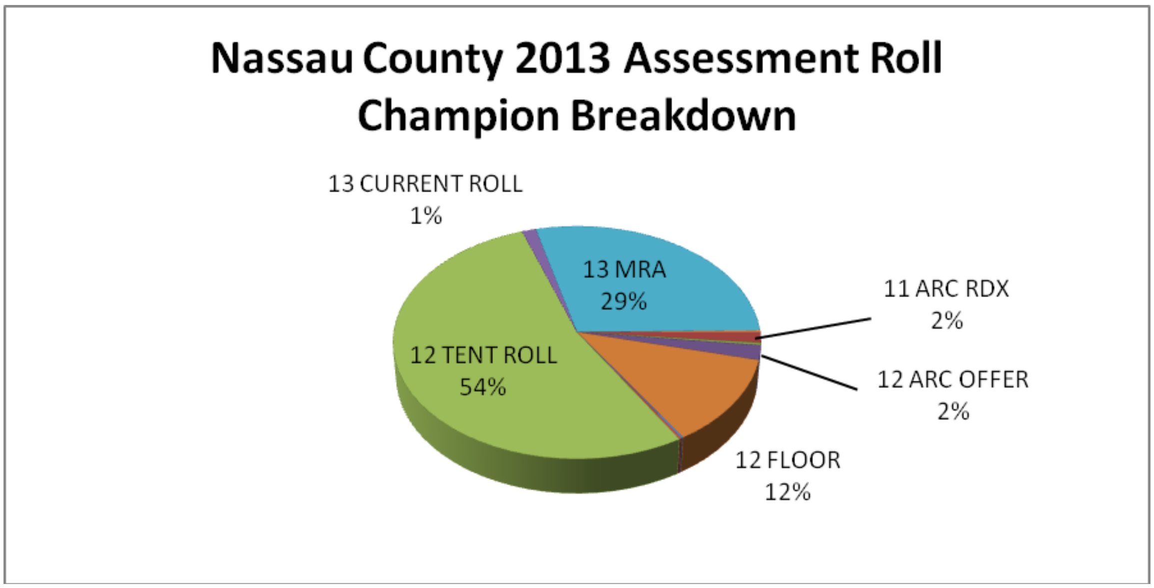
The 2013 tentative assessed value established for each property is based on the lowest of an array of values (herein referred to as the Champion value), including:

- the 2012 assessed value;
- the 2013 benchmarked assessed value;
- the 2011 assessed value after adjustment for any reduction granted by the Assessment Review Commission ("ARC"), the County Attorney, or Small Claims Assessment Review ("SCAR");
- the 2012 assessed value after adjustment for any reduction granted by ARC, the County Attorney or SCAR;
- the adjusted arms-length sale price of the subject property; and
- other criteria. (see Exhibit 2)

Exhibit 2

2013 Roll By Champion		
Champion	**Number of Parcels**	**Percentage of Total**
2011 ARC OFFER (ARC Opinion of Value)	5	0.0%
2011 ARC Value (Stipulated or Unilateral)	6,222	1.5%
2011 SCAR Hearing Decision	1,438	0.3%
2012 ARC OFFER (ARC Opinion of Value)	8,380	2.0%
2012 ARC Value (Stipulated or Unilateral)	32	0.0%
2012 FLOOR (Values Adjusted by FMV ratio by School District)	51,128	12.2%
2012 Petitioned Value	712	0.2%
2012 SALE (Arms Length Sale of Class I Property)	827	0.2%
2012 Tentative Roll	224,068	53.4%
2013 CURRENT ROLL (Properties Valued by Assessments Field Division	5,624	1.3%
2013 MRA (Valuation as Determined by Valuation Standards Group)	120,390	28.7%
2013 TOP 500 (Valuations Developed by Assessment)	1,085	0.3%
Total	419,911	100.0%

Exhibit 3



As can be seen in the above Exhibits 2 and 3, approximately 54% of parcels will have the same tentative assessed value in 2013 as they had in 2012. Forty three percent of property owners will see a reduction in assessed value because of the use of fair market value to sales price ratio adjustments, MRA values, or individual property values.

While the use of this array of values ensured that the lowest value was assigned, the approach appears to have emphasized risk management and we cannot determine if its use provided the most accurate valuations possible. We were informed that the decision to use this method was made in late October 2010, after the termination of the former County Assessor. Fifty-three percent of property owners' assessments will remain unchanged from last year.

The benchmarking process used to determine a value for over 120,000 properties was not independently reviewed by mass appraisal experts, is not used by other municipalities, and has not been documented by promulgating a valuations procedures manual as recommended by ORPS.[26] However, we note that the Chair of the Assessment Transition Team was the former Assessor of Smithtown. We were informed that up until at least December 20, 2010, Assessment was still making changes to its tables of possible values with regard to setting floors to valuations for residential properties in certain school districts.

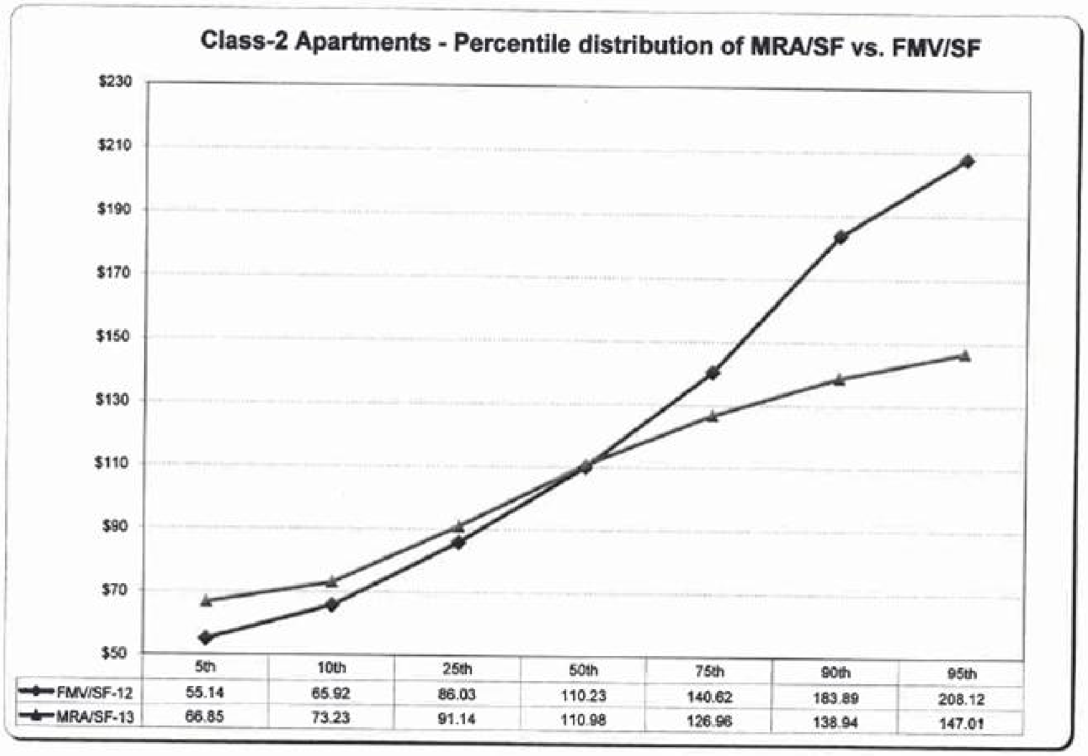
While Assessment has asserted that the values produced through benchmarking are more accurate than 2012 values, benchmarking, or MRA, was only used as a valuation for approximately 29% of the total properties valued.

We reviewed a series of charts (see Exhibit 4) provided in support of Assessment's decision to use the benchmarking method.

The percentile distribution MRA/SF vs. FMV/SF (MRA/SF is the property's value per square foot as determined through the use of multiple regression analysis. FMV/SF is the property's fair market value per square foot as determined from the 2012 tax roll) provided by Assessment showed that those properties with values in the bottom 50th percentile were under assessed and those in the top 50th percentile were over assessed for 2012 as compared to the 2013 MRA.

[26] ORPS Valuation Standards State that "An extensive description of the valuation modeling process is important. The ultimate users of the valuation results should be given: a description and justification of the model specification(s) considered, data requirements, and the models chosen for mass appraisal. Furthermore, valuation reports should include a description of the calibration methods considered and chosen including the mathematical form of the final models; identify appraisal performance tests used and set forth the performance measures attained; and explain any permitted departures employed."
http://www.orps.state.ny.us/assessor/valuation/valstdsm.htm#avoiding

Exhibit 4



The approach used by Assessment for 2013 retains the lower assessed values from 2012 and therefore the bottom 50th percentile will remain under assessed. The assessments of the top 50th percentile will be lowered to one of the other 2013 champion values. The total assessed value of Class 1 residential properties is being reduced by 3.6% from $466.6 million to $449.9 million.

2.1 The New Valuation Methodologies Use of the Lowest Value May Not Reduce Tax Grievances

A major objective of assessment is to ensure that each property's fair market value is accurately determined. ORPS publication "How The Property Tax Works" states "New York State law provides that all property in a municipality be assessed at the same uniform percentage of value (except in Nassau County and NYC where Class assessing is authorized)."[27] "All properties in an assessing unit must be assessed at the same percentage of their market values except where

[27] http://www.orps.state.ny.us/pamphlet/taxworks.htm

classified assessments are allowed in which case all properties in the same Class must be assessed at the same percentage of their market values."[28]

The grounds for grieving an assessment are: that the assessment is unequal or excessive[29] when compared to comparable properties, the assessment of the property represents a different ratio than that of other properties or the property is assessed on a market value that is unequal when compared to comparable properties.

Assessment's new methodology may not meet the objective of reducing property tax refunds. The selection of the lowest value may result in:

- some properties being under assessed;
- different levels of assessment for similar properties; and
- properties that were grieved in the past being valued at less than comparable properties that were not grieved in the past.

The use of prior year ARC, SCAR, and County Attorney valuations ensures that corrections to the prior roll are not ignored when establishing the current year's roll. However, consideration of these adjustments in establishing the following year's roll may cause unequal assessment for those properties that were not grieved. For example, a neighborhood may have two houses comparable to each other, house A and house B, both of which were overvalued on the 2012 tentative roll. Homeowner A files a grievance and homeowner B does not. If homeowner A was granted a reduction by ARC or SCAR to correct the assessment, it follows that house A became properly assessed while house B remained over assessed. This over assessment will carry forward for 2013 because house A will be valued at the ARC/SCAR value while house B may be valued at its 2012 value.[30]

<u>2.2 The New Valuation Methodology Shifts Class 1 Total Assessed Valuation to Mid-Tier Properties</u>

The methodology used in creating the 2013 tentative roll may impact homeowners by shifting the Class 1 assessed valuation from both top and bottom-tier properties to middle-tier properties.

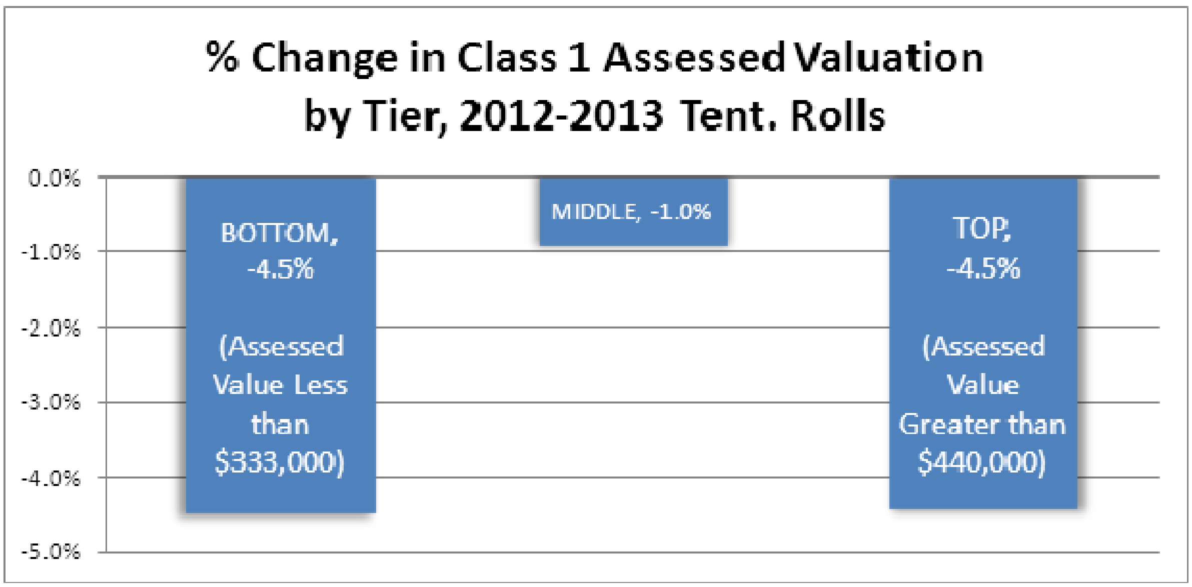
We performed an analysis based on data provided by the Department to test for any potential shifts in assessed valuation between different segments of Class 1 properties in Nassau County. All Class 1 properties in the 2013 tentative roll were sorted from highest to lowest value and

[28] http://www.nassau countyny.gov/agencies/Assessor/general info/terms.html
[29] Real Property Tax Law §524 Complaints with Respect to Assessments
[30] This presumes that the 2013 Benchmark is not the lowest value.

divided into three equal parts, or “tiers”. Each tier represented approximately 148,000 properties, illustrating that properties valued at higher than $440,000 were in the “top-tier”, properties valued at less than $333,000 were in the “bottom-tier”, and everything in-between was considered the “middle-tier”. The same process was repeated for the 2012 roll. We then took the total assessed valuation from each tier in 2013 and compared it to the total assessed valuation from that same tier in 2012.

As can be seen from Exhibit 5 below, we conclude that the top and bottom-tiers each realized a 4.5% reduction, while the middle-tier was reduced by less than 1%.

Exhibit 5: Comptroller’s Office Analysis of Assessed Valuation Change in 2013 Roll*



*Excludes any parcels assessed at < 1Assessed Value.

It should be noted that each property’s 2012 assessed value (which is one of the champion values allowed by Assessment’s 2013 methodology) represents a value that was already arbitrarily adjusted downward. Initial 2012 values were calculated by Assessment’s valuation models, as part of the valuation process during the Fall of 2009, but then were adjusted downward. According to the Valuation Standards Supervisor, (“VSS”) the former County Assessor made a decision to override the valuation of all commercial properties that were valued using the income method. The values were overridden to reduce the calculated value by 15%. Further, a 5% reduction was applied to all residential properties. We requested that Assessment provide copies of any directives issued or e-mails written by the senior management ordering these adjustments and explaining the rationale behind them. None were provided.[31] We cannot determine the purpose or authority for these adjustments. The amounts of these reductions appear arbitrary. When all properties assessed values are adjusted by the same percentage, each property's percentage of total assessed value remains the same.

2.3 The Presumption of More Accurate Results from the New Benchmarking Methodology Lacks Support

A presumption used by Assessment is that the process for creating the 2013 benchmark assessed value produces more accurate valuations than the IAS model.[32] This presumption has not been adequately substantiated.

The benchmarking process was described by the Valuation Standards Supervisor ("VSS") as a correction of the 2012 roll. The benchmarking process uses corrected and/or updated property descriptions and assigns weights to a limited number of variables using statistical software and multiple regression analysis to determine values.

For residential properties, IAS considers three different values determined as follows:

- the arms-length sale price of comparable properties;
- values determined by multiple regression analysis using weightings for approximately 60 variables; and
- the adjusted sale price of the subject property.[33]

Commercial property values are determined by the IAS model using either the income or cost method.

We were not provided with sufficient evidence to form an opinion about the superiority of the values produced by the benchmarking process over the values produced by IAS. The benchmarked valuation represented the lowest property value for 120,390 out of 419,911 parcels or 29% of the parcel valuations. Therefore it is significant to the overall integrity of the roll.

Although benchmarking was presented as a correction of the 2012 roll, the VSS stated that, "Benchmarking is not modeling; it is limited in what it can correct. However, problems created

[31] Information Technology provided us with scripts describing the methodology used for making the reductions.
[32] The IAS model is the valuation program provided by Tyler Technologies that has been used by Nassau County from the 2003 reassessment forward.
[33] When there was no subject sale a 50/50 weighting of the other two factors is used.

by the linear nature of the IAS models and the problems associated with the use of tables are mitigated through the benchmarking process."

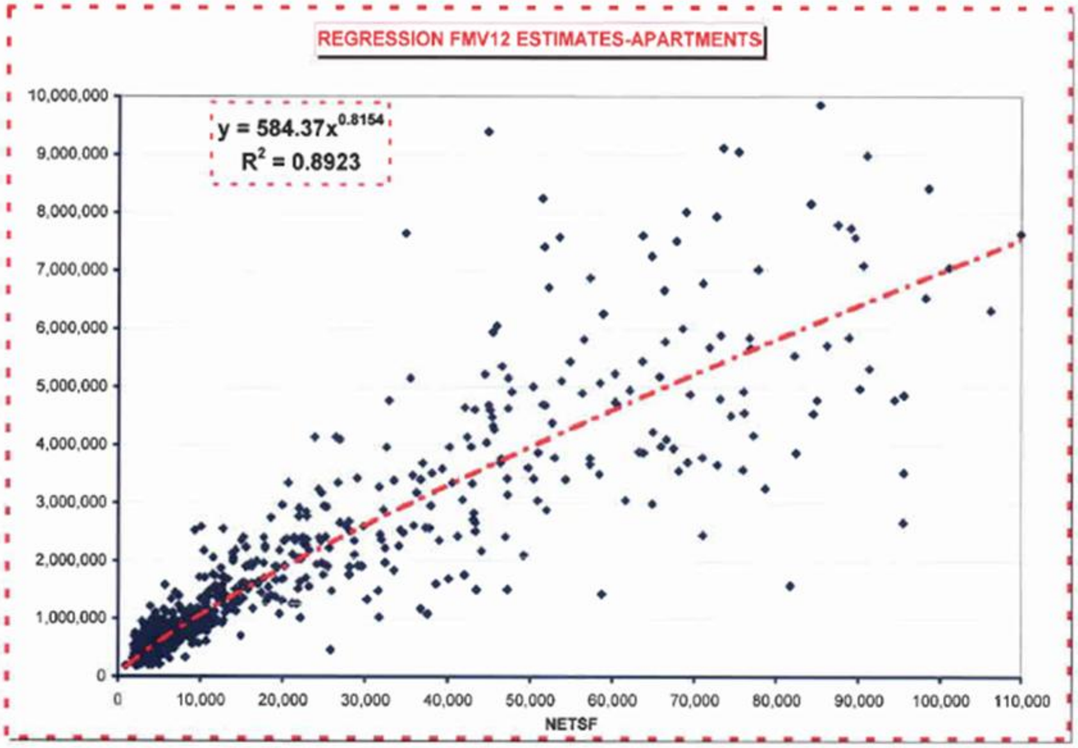
When asked why the values produced through the benchmarking process would be more accurate than the values produced by IAS, the VSS responded that there were inherent flaws in the IAS system. An e-mail in December 2010 from the Acting Assessor stated "The most compelling evidence of the inherent flaws in the IAS system are the assessment rolls that have been produced since we started using it and the $1.6 billion in debt and outstanding liabilities associated with it."[34] While perhaps an accurate statement concerning the failure of the prior system, it does not prove the merits of the benchmarking methodology.

The VSS provided tables, which he asserted, showed that his process produced rolls with lower standard deviations than those produced by IAS. The VSS also provided data for samples of a number of property types showing standard deviations lower that those achieved in the 2012 roll. Additionally, he provided a number of line charts for different types of properties of value per square foot by percentile. The charts were intended to demonstrate that the lower priced properties were undervalued in 2012 and that the higher priced properties were overvalued. In contrast, the values for 2013 increased the values for the lower percentile properties and lowered the values for the higher percentiles, thus producing a line with a lower slope. The valuations used for 2013 reduce the higher priced properties' assessed values, but leave the lower priced properties at their 2012 level.

The following Exhibits 6 and 7 represent the assessed value data before and after the benchmarking process.

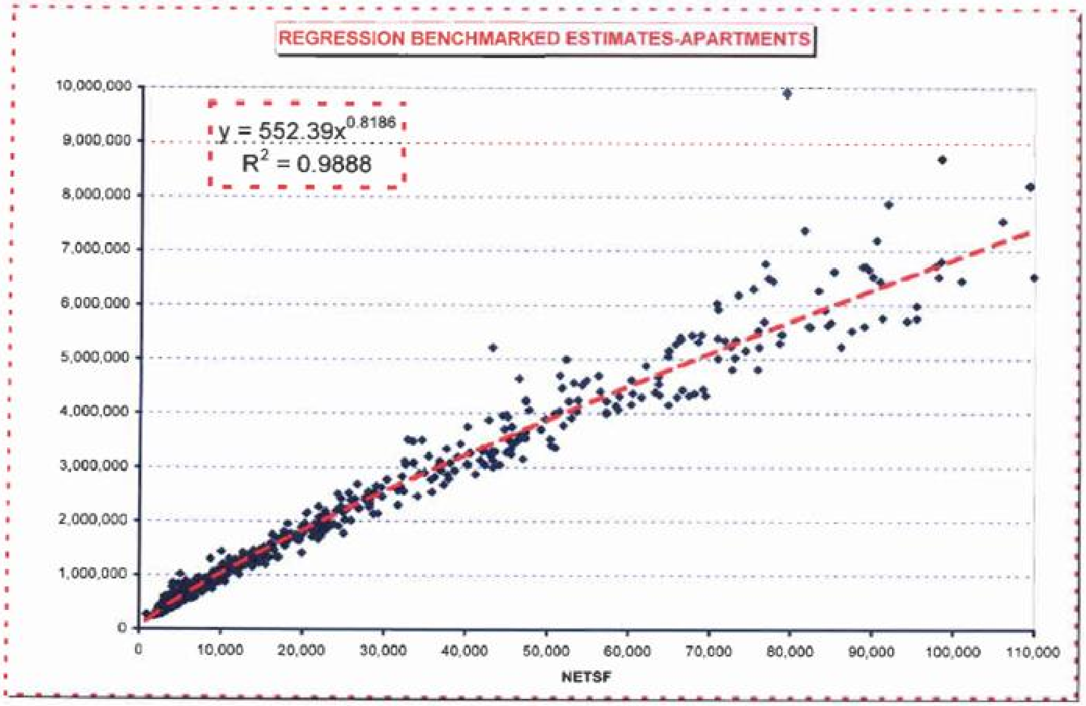
[34] The $1.6 billion in outstanding debt is primarily a result of successful tax certiorari challenges by commercial property owners.

Exhibit 6



The above chart is an analysis of the 2012 values of apartment buildings and shows that the values become more disbursed above and below the line of ideal assessment as the size of the apartment building increases.

Exhibit 7



The above chart is an analysis of the 2012 benchmarked values of apartment buildings and shows that the values are much more aligned with the ideal assessment.

We were unable to validate the results presented in these charts. We requested a comparison of the variables and weighting used for each variable using IAS and the benchmarking process so that we could try to replicate Assessment's results, but the information needed was not provided (see Presumption of More Accurate Results Lacks Support below). The VSS attributed the better valuations to the selection of variables he considered to be objective, rather than subjective. The VSS also stated that his model was non-linear and that therefore it recognized the concept of diminishing returns. For example, a second full bathroom in a house will add more value than a third or fourth bathroom. In a December 13, 2010 e-mail, Assessment pointed out what it considered to be flaws in using a linear model:

- According to the IAAO's Standard on Automatic Valuation Models[35] (AVMs)

[35] http://www.iaao.org/uploads/AVM_STANDARD.pdf

    - "Nonlinear (hybrid) models…more accurately reflect the combination of additive and multiplicative relationships in the real estate market."
    - "Hybrid (nonlinear) models are a combination of additive and multiplicative models. As such, they are theoretically the best alternative of the three, but software is relatively limited."
    - "…linear additive models do not possess the ability to measure nonlinear effects or interactive effects of market conditions, without transforming raw variables. In such cases, one must consider using nonlinear or hybrid models."
- "IAS is a table driven system. This leads to a problem we refer to as "falling in the gaps." For some land use codes LUCs[36], like the 4500 (Retail), the tables are broken down by square footage. Therefore, if a property in the 4500s is 3,000 square feet, for example, it will be valued using the table for 4500s between 1,100 square feet and 3,000 square feet. If there is another property exactly the same in every way except for the fact that it is 3,001 square feet it will be valued using the table for 4500s between 3,001 and 7,000 square feet and can produce a very different value for a very minor difference. This means that the values that IAS produces are inconsistent."

<u>2.4 The New Assessment Methodology Has Not Been Independently Reviewed</u>

We also questioned whether the valuation model used for benchmarking as well as the methodology for the valuation of the 2013 Assessment roll had been reviewed by any outside independent valuation experts and were told by the Chair of the Assessment Transition Team that it had not been. It should be noted however that the Chair who oversaw the valuation of the 2013 assessment roll is a former Assessor of the Town of Smithtown. In a written response, the Acting Assessor assured us that "…everything proposed is compliant with IAAO standards and ORPS requirements." At the time of our review, we were informed that the methodology used was still pending ORPS written approval.

<u>2.5 The Assessment Department Did Not Provide Evidence of Sufficient Knowledge of the Previously Utilized IAS Valuation Module</u>

As indicated in Section 1.3 above, Assessment's staff is not adequately trained in the use of the IAS valuation module. We were not provided with evidence that Assessment's staff has sufficient institutional knowledge of the IAS valuation module to support the decision to abandon it for purposes of determining 2013 benchmarked fair market values. This institutional knowledge is required by the IAAO's Standard on Mass Appraisal of Real Property, which

[36] LUCs is an abbreviation for Land Use Codes.

states, "…software should be designed so that it can be easily modified; it should be well documented, at both the appraiser/user and programmer levels."[37]

It is unclear what factors Assessment took into consideration when it concluded that the IAS system produced values that were inferior to those produced by the benchmarking process. The VSS did not provide basic information about how IAS calculated values. The VSS indicated he had no access to the internal variables used by the Tyler system. Tyler informed us that the information we requested is not proprietary and should have been available.

Given this apparent misunderstanding, we then asked Assessment and Tyler about the VSS's level of expertise with the IAS model. Through a series of e-mail correspondence we gleaned:

- The VSS claims no level of expertise and that when he rejoined the County another employee was the manager of the modeling team.
- The VSS assumed management of the valuation standards group after the modeling manager left the employ of the County.
- The modeling manager did not pass any knowledge along to staff.
- The VSS worked directly for the Assessor performing all his analysis outside of IAS.
- Assessment received very little formal training by Tyler and was not provided with a work manual until October 29, 2010.

Tyler's Project Manager informed us that he never had any discussions with the VSS regarding Tyler's valuation model.

2.6 High End Residential Property Valuations Are Inconsistent

The immediate former Assessor found the valuation of residential properties to be lacking integrity. In a November 24, 2009 e-mail to a former Chief Deputy Assessor, he wrote, "Hey if I can sell the quality of our residential values with a straight face I can sell anything – strategically a step we had to take though – however sometimes I feel like a snakeoil salesman."

In February 2010, Assessment had posted the following statement on its website: "Due to the economic collapse that began in the third quarter of 2008, the real estate market in Nassau County for both residential and commercial properties has experienced a significant downturn. The assessed values produced by the Department of Assessment have reflected the decline in the market conditions. For the second consecutive year, the vast majority of residential assessed

[37] http://www.iaao.org/uploads/StandardOnMassAppraisal.pdf International Association of Assessing Officers Standard on Mass Appraisal of Real Property §5.3.2

values have dropped. This year, most residential assessed values once again declined, in addition to a 17% average decrease last year." As of December 2010, this statement is no longer on the website.

Our office was contacted by two taxpayers who were concerned about the assessments of their homes in Oyster Bay, the values of which did not follow the apparent trend of declining assessments. Both of these residences fall into the category of "high end properties," one of which is in the 99th percentile and the other is in the 97th percentile of home values, which Assessment has acknowledged are problematic in assessing using a CAMA due to the unique nature of these types of properties and resultant lack of comparable properties with arms length sales. We inquired of the Residential Supervisor how the assessments were determined and his response was to acknowledge the difficulty in adequately pricing higher end properties, particularly in a declining real estate market where high-end properties were adversely impacted by the current economic situation. According to ORPS Valuation standards, "The use of mass appraisal is contingent upon the homogeneity and frequency of similar property occurrences, not solely the property type. For example, an architecturally unique single family residence may require an individual property valuation while an industrial warehouse may be valued effectively using mass appraisal standards."[38] These homeowners were not satisfied with answers they had received from Assessment as to the accuracy of the valuations.

We reviewed both of these properties, both of which are in the Town of Oyster Bay as well as the Oyster Bay East Norwich School District. A detailed analysis was performed of both properties, as well as of the comparables listed on the Department's website. These comparable properties are listed on the website as a reference for the property owner to use in judging the accuracy of the assessments of their homes. The comparable properties are chosen from properties that have been sold at arm's length and represent those properties that are most similar to the subject property. Where the homeowner's property has not been the subject of an arms-length sale, its value is generally determined by a 50%/50% weighting of comparable sales and multiple regression analysis. We determined the following:

The first home (Section 27 Block L Lot 216), (or subject property) was built in 1915. The style of the home appears to meet the ORPS criteria of "architecturally unique" which would warrant an individual property valuation.

The properties used as comparables for each property are listed on Assessment's website. We reviewed the comparable sales used and noted that the three comparable properties used were in other communities on the north shore of Nassau County, including, Mill Neck, Glen Head and

[38] http://www.orps.state.ny.us/assessor/valuation/valstdsm.htm

Oyster Bay. Of the three comparable properties used, none were in the same village and only one was in the same school district. We then reviewed the three comparable properties used to value the subject property to find out if the comparable properties used to value the three subject properties comparables were similar to the subject property or to each other. None of the properties used as comparables sales used each other as comparables. Ten different properties were used to value the subject property's comparables. No property was used more than once.

The ability to fairly assess higher-end properties is impeded by the fact that there are fewer comparable sales upon which values can be based. The methodology recommended by ORPS to include some valuations based on individual appraisals might have produced a more equitable valuation in this case.

While the homeowner expected to see fair market values that followed County trends, Assessment's web site as of November 2010 and January 2011 showed the following:

Exhibit 8

Year	Fair Market Value (1)	Percentage Change	Adjusted Market Value per Notice of Tentative Assessment (2)	Percentage Change
2008/09	$2,507,570		$2,507,570	
2009/10	$4,998,500	99.3%	$2,658,000	6.0%
2010/11	$3,410,800	-31.8%	$2,716,000	2.2%
2011/12	$4,551,700	33.4%	$2,878,800	6.0%
2012/13	$2,418,000	-46.9%	$419,600	-85.4%

(1) Fair market Value is the value determined by the Department of Assessment, which reflects the amount of money a buyer would be willing to pay a seller for property offered for sale on an open market, over a reasonable amount of time, where both the buyer and the seller are well informed and neither is under undue pressure to act.

(2) The Adjusted Market Value is used in the calculation of property taxes and as the basis for filing an appeal; it reflects any and all adjustments and limitations to increases in assessed value.

There is no indication as to why the valuation of this property did not follow the County-wide trend for 2011/12 of declining values. We questioned Assessment regarding the 85% decrease in adjusted value for 2013 and were informed that it was the result of a systems error in that "For some reason, there is an erroneous value sitting in the 6%/20% calculator in 2012 which caused the error for 2013." "The correct assessment for 2013 should be 6,045, which equates to a fair market value of $2,416,000." We inquired further as to whether this error was one of a kind and what steps need to be taken to fix it. On January 4, 2011 we received a response stating that Assessment would be performing an analysis. An error of this magnitude should have been detected through a quality control process that would identify outliers with significant decreases in assessed value. We noted that in the past, the VSS requested edits to be run identifying Class 4 properties valued under the income method with reductions of 25% or greater for the assessor to review. Had this been done for the 2013 roll of residential properties this error could have been detected.

The homeowner appealed the assessment for 2010, which was denied by ARC. They then appealed to SCAR and were granted a reduction in adjusted market value to $2,225,200. In 2011, the adjusted market value was adjusted upward to reflect the 6% cap on transitional assessments. By having to appeal to SCAR, the reduction results in a refund expense to the County. For 2011, ARC again rejected the homeowner's appeal and the grievance now is pending with SCAR. If the homeowner is successful at the SCAR level, there will once again be a refund situation.

The second home (Section 27, Block G, Lot 1490), while also at the higher end of residential property values in Nassau County, does not appear to meet the architecturally unique standard as suggested by ORPS.

Assessment's web site as of November 2010 and January 2011 showed the following:

Exhibit 9

Year	Fair Market Value	Percentage Change	Adjusted Market Value per Notice of Tentative Assessment	Percentage Change
2009/10	$1,797,800		$1,536,800	
2010/11	$1,546,900	-14.0%	$1,546,900	0.7%
2011/12	$1,630,300	5.4%	$1,630,300	5.4%
2012/13	$1,369,600	-16.0%	$1,369,600	-16.0%

We noted that this property's Adjusted Market value increased each year through 2011/12 because of the 6% transitional assessment. However, Assessment decreased the property's fair market value by 14% for 2011, increased it by 5.4% for 2012 and the decreased it by 16% for 2013. The increase in 2012 was counter to the County-wide trend of a decrease of 5%. In addition, in our interviews with the Residential Supervisor, he indicated that higher end properties suffered a market reduction during this same period due to the poor economy, yet this property has inexplicably increased.

As part of our review, we examined the five comparable sales used to value the subject property. We found that the five comparables were all in the same village and school district, and that, for the most part, the comparables were used as comparables for each other. This is indicative of a high level of similarity between the properties. However, the homeowner provided us with a chart that showed the decline in values of similar homes in her immediate neighborhood.

This homeowner also appealed to both ARC and SCAR, receiving a SCAR reduction in adjusted market value from $1,516,400 to $1,450,000 in 2009, which resulted in a refund. The reduction was not carried forward to 2010 and the adjusted market value was increased to $1,536,800 due to the increase in transitional assessment. The homeowner's 2010 applications to both ARC and SCAR were denied. A SCAR proceeding is pending for 2011. The assessed value for 2012 was increased to $1,630,300, and then decreased by 16% for 2013 to $1,369,600. Again, it is unclear what market factors are causing this homeowner's assessment to vary so much from year to year.

Both homeowners found that the values of their properties increased for 2012 while the trend of the County was a decline in market value. Even when the fair market value of the property declines, the adjusted fair market can increase because of transitional assessment limit increases. The owner of lot Section 27 Block L Lot 216 found that the comparable properties shown on the website were not comparable to the subject property. The property owner did their own search for comparable properties from which to prove an overvaluation.

<u>Review Recommendations:</u>

Assessment should:

a) in cases of unique properties, perform individual property valuations as recommended by ORPS;
b) thoroughly investigate complaints and errors as possible symptoms of systemic issues instead of treating them as isolated cases; and

c) perform a thorough quality control review of the new methodology to ensure that no other errors occurred in which incorrect assessed values were included in the tentative roll for 2013.

Department of Assessment's Response to the Nassau County Office of the Comptroller's Draft Limited Review

June 17, 2011

County of Nassau
Department of Assessment

Response to the Nassau County Office of the Comptroller
Draft Limited Reviews of the Department of Assessment
Released on February 2, 2011 and May 2, 2011

The Nassau County Department of Assessment has reviewed the findings contained in the draft audit report completed and submitted to the Chairman of the Transition Team for the Department of Assessment, Gregory Hild, and former Acting Assessor, Lisa LoCurto, on February 2, 2011, as well as an amended draft audit report submitted to the Department of Assessment on May 2, 2011. The first draft audit report was developed after audit team members consulted with key valuation professionals from the Department of Assessment who worked to educate audit team members on assessment methodologies and formulas in just eight weeks while the 2012-2013 Tentative Assessment Roll was being developed and was later amended by the Comptroller upon submission of the Department of Assessment's reply dated March 25, 2011.

It should be noted that, rather than following standard protocol and incorporating the Department of Assessment's March 25, 2011 formal response to the February 2, 2011 Draft Audit which was prematurely released to and reported in the media (February 15 and 16), the Comptroller has amended, reorganized and redacted sections of his first draft audit and asked the Department of Assessment to redraft its reply to the second draft audit released on May 2, 2011.

While it appears that a number of challenges issued by the Comptroller's audit team were removed in the second draft audit report, the overall theme and opinions expressed in the report remain the same. Therefore, the Department of Assessment will address points raised in both audit reports in either this Executive Summary and/or in its point-by-point response.

Since the formal submission of the Department of Assessment's response to the Comptroller's draft audit, the County Executive implemented a highly successful Residential and Commercial Property Assessment Grievance Negotiation and Settlement Program that will save taxpayers over $100 million in future property tax refund liability. The settlement program has been lauded by assessment professionals and members of the Tax Certiorari Bar as a major breakthrough in dealing with the assessment policies and methodologies used in the past that generated over $1.6 billion dollars in property tax refund liability. As the $100 million savings above indicates, significant improvements have been made since the Comptroller's audit was conducted.

The Department of Assessment agrees with a number of recommendations made in the Comptroller's audit. Since the transition period began shortly after the firing of Assessor Thaddeus Jankowski, Jr. at the end of October 2010, the County Executive embarked on a reorganization of the Department of Assessment's management and redeployed support personnel in vital areas. Key to this reorganization was the hiring of an assessment professional who now serves as a Deputy Assessor to provide better oversight of the Residential and Commercial Assessment divisions. In addition, division supervisors are establishing improved procedures and controls to ensure the quality of the work product that is being generated. Also, a thorough review of the current models used in IAS is being implemented and a concerted effort is being made to expand the working knowledge of the staff charged with utilizing IAS. Further, guidelines are now being created and will be periodically updated to ensure that the models provide market data that is accurate and defendable. Notably, the Department of Assessment has intensified its working relationship with New York State's Office of Real Property Tax Services (*ORPTS*) as Nassau County moves forward on its planned four-year assessment cycle.

As the Comptroller's report attests, the 2012-2013 Tentative Assessment Roll "represents a departure from the previous valuation methodology." The decision to abandon the emphasis on past Computer Assisted Mass Appraisal (*CAMA*) valuation methods (for Class 1 Residential properties) was done to address and correct a myriad of valuation problems that have existed under previous assessors. However, it is important to understand that **the methodologies used by the Assessment Transition Team complied with and exceeded the standards and practices established by the International Association of Assessing Officers (*IAAO*) and ORPTS, and, more importantly, have resulted in residential values that are more accurate, fair and equitable**.

Nassau County is the first assessing jurisdiction to embrace the recent change to §1573 of the New York State Real Property Tax Law (*RPTL*) which rewards the implementation of four-year revaluation cycles. The modification to the RPTL was endorsed by ORPTS, which will be providing funding only to those municipalities that adopt an assessment cycle. This change is significant in that New York State recently terminated the program that provided funding to municipalities that conducted annual reassessment. Westchester County is now looking to follow Nassau County's lead.

The most important and positive change in developing values for Class 1 Residential properties was that, for the first time in Nassau's reassessment history, the Department of Assessment adjusted the values to reflect all intervening court-ordered and Assessment Review Commission (*ARC*) reductions on properties. This simple, common-sense approach finally put an end to the past practice of raising assessed values of properties months after a court or ARC determination that these assessments were in fact too high.

In the first draft audit that was reported in the media on February 15 and 16, the audit team made the following assertions: another year of reassessment should have been entrusted to a flawed Integrated Assessment System, that a highly respected and industry-certified valuation expert's use of a more accurate methodology to establish the assessed values of residential properties should have been "validated by an independent third party", and that the new assessed values "appear(s) inequitable." These assertions are ill-founded and without merit. Throughout the development of the 2012-2013 assessment roll, industry professionals at the Department of Assessment worked closely with valuation experts at ORPTS who monitored whether the annual assessment roll produced met New York State's assessment standards. The answer was clear - **the methodologies used to create Nassau County's 2012-2013 Assessment Roll were recognized and accepted by ORPTS and proved to be superior in many ways to those used by previous assessors –** a fact that will be illustrated in the Department's detailed point-by-point response – and that the residential values were the best that have ever been developed in the history of reassessment in the County of Nassau.

The underlying theme of the audit team's focus and criticism of the 2012-13 Assessment Roll is that – according to the report – "even with a decrease in assessment, the taxpayer will not see an automatic reduction in their taxes" and that "assessing properties at the lowest possible value will not necessarily result in a fair and equitable tax roll or lower taxes for property owners." This demonstrates a stunning misunderstanding of both the role of the Department of Assessment and the dynamic nature of value fluctuations in a broad real estate market. The report also attacks the benchmarking methodology as being "counterproductive to meeting the objective of reducing property tax refunds" and is "creating an unfair tax burden on mid-priced homes."

The Comptroller stresses its findings of lowered values in its artificially created top and bottom thirds of the County's housing stock. The implication is made of a sinister, intentional transfer of the tax burden to the more static valuation of the artificial middle third. This shows a basic unawareness of a greater number of distress sales in the "lower third," and the near disappearance of "jumbo loan" financing in the "top third." These are very real and powerful market forces that are driving the values of these properties down. The artificial "middle third," if one were to believe it were even a relevant concept, had more available financing and fewer foreclosures, which resulted in more stable values for these properties. In addition, the Comptroller's own numbers are inaccurate. Unchanged values for this middle group were actually 37% versus the 53% claimed.

But what is more difficult to understand is the fact that the Comptroller sites as fact (on page 18 of his second draft audit) that ""all Class 1 properties in the 2013 tentative roll were sorted from the highest to lowest value and divided into three equal parts, or 'tiers'. Each tier represented approximately 148,000 properties..." However, there are only approximately 385,229 Class 1 Residential properties in Nassau County, one third of that number (rounded off) would be 128,410. Thus, the Comptroller's informal survey appears to be both inaccurate and misleading.

The Comptroller's conclusion that using the lowest value to establish a property's fair assessed value "may not reduce tax grievances," is immaterial to the role assigned to the Department of Assessment. The Department of Assessment's statutory responsibility under the RPTL is to assess properties fairly and uniformly. First, it should be clearly understood that property owners may not challenge their taxes. They may only challenge their assessed value. Second, the Department of Assessment did not place lower values to reduce the number of assessment grievances. The lower assessed values that have been questioned by the Comptroller's audit team now more accurately reflect the real estate market that has been in decline over the past few years. **The real measure of an accurate assessment roll will be the number of overvaluations and the actual dollar amount of the refunds that will be paid out – not the number of assessment challenges.**

It should also be noted that even if an annual reassessment did not take place, valuation shifts would still occur. These valuation shifts will have an effect on an individual's share of the school district or special district tax levies. Valuation shifts occur when exemptions are removed or granted on a property or the assessed values reflect physical changes (i.e. demolitions or additions) made to the property. **An assessment is not a tax levy, tax rate or tax. Rather, it is the reflection of the fair market value of a home at a particular point in time.**

Another point that is being lost in the confusing and complicated assessment-property tax debate is that it is municipal, special district and school district spending that is driving property taxes to record levels. Simply stated – lower budgets mean lower property taxes! Taxing authorities use the assessed value of a property to determine how much value there is to tax, and how the tax pie will be divided and shared by relative value among properties within a school district, special district or municipality.

To further justify its attack on the Department of Assessment's methodology to establish the residential values for the 2012-2013 assessment roll, the Comptroller's first draft audit emphasized that the old methodology should not have been abandoned because the Department of Assessment had invested over $55 million dollars to mass appraisal contractors Tyler Systems/Cole-Layer-Trumble (*CLT*) since the court-ordered reassessment of all residential property was stipulated in March of 2000. Nassau County is one of the most varied and complex assessment systems in the country and the Department of Assessment knows it well. The report implied that the contractor and its methodologies (Integrated Assessment System – *IAS* – software) used to conduct mass appraisals may be superior to the methodologies used for the first time by experts at the Department of Assessment because of the contractor's claims on its website that they have "appraised 50 million parcels and that it can handle any size jurisdiction." This is an unconvincing argument to make to justify an attack on the methodologies used by the Department of Assessment.

From a historical perspective, Department of Assessment valuation experts, division supervisors and staff expressed concerns about the inherent weaknesses and flaws in the assessment contractor's valuation system for years. However, since two former chief deputy assessors (one who also served as the County's assessment consultant) are exclusive consultants to Tyler/CLT, one could reach the obvious conclusion that these individuals may have had a vested interest in promoting the IAS and Adapt software systems developed by the assessment contractor and may have consciously or subconsciously discounted its many documented problems.

As our former valuation supervisor and expert statistician indicated in his response to the draft audit report, "the most compelling evidence of the inherent flaws in IAS are the assessment rolls that have been produced since we started using it and the $1.6 billion dollars in debt and outstanding liability associated with it." From a technical perspective, the valuation models used at this time in IAS cannot effectively measure interactive effects of market conditions without transforming basic variables based on subjectivity and judgment. This weakness in the contractor's IAS model produced a 2011-2012 assessment roll that contained an overall increase in value of 33% from the prior year during a time – that the Comptroller's audit even acknowledges – when real estate values plummeted annually since the nationwide economic collapse began in 2008. In preparing the Tentative 2012-2013 Assessment Roll, the Department of Assessment's valuation team was proactive in making sure that the roll more accurately reflected the overall declining real estate market.

In addition, the comparable sales used to develop the assessed values in IAS caused the values to be "skewed" by individual sales. To illustrate this point, the Department of Assessment's valuation team produced a number of charts and statistical analyses to illustrate how much better the residential values produced using the benchmarking methodology were over IAS produced values. These comparisons were either not understood or overlooked by the audit team.

It is important to understand that the Tentative 2012-2013 Assessment Roll which was released on January 3, 2011 utilizing, in part, the "benchmarking methodology" is in essence a correction and perfection of the IAS-generated 2011-2012 roll. In short, the 2012-2013 roll was made more equitable and fair to all property owners by finally recognizing the decline in the real estate market.

In response to the review of policies, procedures and practices for internal control at the Department of Assessment, the Assessment Transition Team agreed that there is a definite need for the creation of more transparent quality control procedures and the redevelopment of operations and procedure manuals that can be updated and disseminated to staff on a periodic basis. However, it should be noted that the Department of Assessment adheres to many of the procedures and standards enunciated by ORPTS and the IAAO. Additionally, the Department of Assessment has used CLT's "*Residential*" and "*Commercial/Industrial Data Verification*" Manuals (which also outline assessment procedures and data inventory collection techniques), and a manual on IAS which were all provided when they were hired as the reassessment contractor. At the time that the Comptroller's audit was being conducted, (also when the Assessment Transition Team just assumed control of the Department of Assessment in November 2010), division supervisors were instructed on the need to update procedure manuals. On April 14, 2011, the Department of Assessment produced a "*Standards of Sales Verification Manual*" and is currently in the process of finalizing a number of additional valuation manuals for the Commercial and Residential Field divisions.

While the Department of Assessment agrees with instituting better internal controls and supervision of daily work assignments as they relate to data input, we respectfully objected to the audit team's inartfully drafted statement in its first draft audit that implied that records have been fraudulently changed. The Comptroller's audit team openly acknowledged that they "found no evidence of fraud." It nonetheless recommended that employees should be "prohibit(ed) . . . from falsifying records by entering their supervisor's initials as a reviewer." This statement was at the very least reckless and hinted at an agenda well beyond the audit's original stated purpose.

The Department of Assessment also agrees with the audit team's findings that there are many system deficiencies with the IAS/ADAPT project that have not been corrected by the assessment contractor. To this end, the Department of Assessment will continue to work with the Comptroller's Office, Information Technology and the other county agencies which utilize this system to ensure that Tyler fulfills its contractual obligations and fixes the many flaws that have existed since "ADAPT" was first implemented at the county several years ago.

The third objective of the Comptroller's audit of the Department of Assessment was to "determine the cause of the exemption error that caused the Theodore Roosevelt Executive and Legislative Building at 1550 Franklin Avenue to become taxable." The Department of Assessment concurs with the audit team's findings and understands that this significant and preventable error was one of the many factors that led to the termination of the former appointed assessor. Quality control measures were not put in place during the term of his appointment. There was a glaring failure to recognize the unexplained and sizeable increase in the Garden City School District's taxable assessed valuation (with no major construction project in the district) from one assessment roll to the next. Yet, he examined and certified the roll as correct. A complete review of all wholly exempt properties was initiated and continues to date to make sure that this type of error does not occur again.

Lastly, the valuation conclusions reached by the former appointed assessor regarding the reduction in the assessed value of the East Rockaway Yacht Club was unilateral and not shared by his valuation team and the current members of the assessment staff. All of these individuals vehemently disagreed with the decision to implement the proposed reduction as set forth by the former assessor. Since the premature release of the Comptroller's first draft audit (dated February 2, 2011), the assessed value of the property cited was restored to a more equitable value.

First formal response respectfully submitted to Nassau County Comptroller George Maragos by Transition Chairman Gregory Hild and former Acting Assessor Lisa LoCurto on March 25, 2011.

Second formal response respectfully submitted by the Department of Assessment on June 17, 2011.

ADDENDUM

TO THE

DEPARTMENT OF ASSESSMENT'S EXECUTIVE SUMMARY

Comptroller Draft Report Deviations

Since the following sections or findings of the Comptroller's First Draft Audit (February 2, 2011) that were released to and reported by the media on February 15/16, 2011 have been removed from the Second Draft Audit released on May 2, 2011, it is important from a historical and factual perspective that these deletions be highlighted. The numbered extractions cited are based on the original Findings produced in the first draft audit. While the Department of Assessment has addressed each point contained in the audit, in instances where an entire section was removed by the Comptroller (i.e. Finding 1.3, Finding 1.5 and Finding 1.7), the Department of Assessment's response has been included.

Audit Team's Limited Review Finding 1.3

Lower Assessments May Not Result in Lower Taxes

The Chair of the County Executive's Assessment Transition Team provided correspondence from and to homeowners that he said illustrated the validity of the tax roll. We reviewed the seven letters protesting each owner's school tax bill for 2010/11. In five of seven instances, the assessed value of the homeowner's property declined, however, by less than the average decline in their community, therefore resulting in an increase in the homeowner's share of the total property tax levy. This illustrates that even with a decrease in assessment; the taxpayer will not see an automatic reduction in their taxes. Assessing properties at the lowest possible value will not necessarily result in a fair and equitable tax roll or lower taxes for property owners.

The following is the Department of Assessment response to the Audit Team's Review Finding (1.3):

Properties were not assessed at the lowest possible value. Several legitimate and relevant value candidates were considered for each property. By doing this, Department of Assessment valuation experts were able to correct over-assessment on the prior roll. Coefficient of Dispersion (*COD*), Price Related Differential (*PRD*) and Coefficient of Variation (*COV*) statistical studies were conducted to verify that this roll is an improvement in terms of fairness and equity. Importantly, the 2012-2013 Tentative Assessment Roll produced values that are within the acceptable limits set by the International Association of Assessing Officers ("IAAO") and the New York State Office of Real Property Tax Services ("ORPTS"). Yet, this important piece of information is conspicuously absent from the audit findings.

Audit Team's Limited Review Finding 1.5

The New Benchmarking Methodology Has Not Been Independently Reviewed

We also questioned whether the valuation model used for benchmarking had been reviewed by any independent valuation experts and were told that it had not been. In a written response, the Acting Assessor assured us that "…everything proposed is compliant with IAAO standards and ORPS requirements." We are concerned that the VSS, who is advocating for an abandonment of the IAS model, may have a vested interest in abandoning it in favor of using the model he developed. He informed us that he is leaving the employ of the County in January 2011. We

obtained an e-mail dated October 6, 2010 from the VSS to the former assessor turning down an offer to be paid $75 per hour and counter offering to work for the County as a consultant at his "…normal local rate of $2,000/day." It is apparent that negotiations had taken place with the former assessor for the VSS to have a consulting relationship with the County after his employment ended. We also found that on January 16, 2008 the VSS filed for a patent for an assessment modeling system.

The following is the Department of Assessment response to the Audit Team's Review Finding (1.5):

As previously stated, what the Department of Assessment refers to as the benchmark is a standard application process of MRA, although it is not a market model. MRA is widely used and accepted in the assessment community and it need not be reviewed by an additional independent valuation expert as the audit suggests. What the audit team overlooked was that the County Executive appointed Gregory Hild, a well-respected assessment professional with over 26 years experience, to serve as the independent Chairman of Nassau County's Assessment Transition Team, at the end of October 2010. Mr. Hild served as the Assessor for Smithtown and was named the "*Assessor of the Year*" by the New York State Assessor's Association in recognition of his expertise and exceptional body of work over the course of his career. For all intents and purposes, Mr. Hild performed the role of the "independent" arbiter of all assessment questions at the Department of Assessment and validated the use of the Department's valuation team's use of the benchmarking method to establish the values on the 2012-2013 Tentative Assessment Roll released on January 3, 2011.

The Comptroller claims that the benchmarking method "lacks support." Benchmarking is a recognized statistical formula that takes an existing dataset and corrects any "outliers" that are present within that dataset. In this case, benchmarking took an existing dataset – the IAS numbers – and eliminated the many outliers that had caused the County to pay out over a *billion dollars* in refunds over the last decade. The Department is confident that the results which were achieved through the benchmarking process are superior to the numbers produced solely by utilizing IAS and that the accuracy of the roll will be borne out over the next year as the challenges to its accuracy percolate through the system.

The Department of Assessment shares the former Valuations Standards Team Supervisor's indignation at the audit team's suggestion that his "abandonment of the IAS model" to develop the values on the 2012-2013 Tentative Assessment Roll was somehow linked to his having a "vested interest in abandoning it in favor of using the model he developed." This statement is prejudiced and based upon pure conjecture so that the audit team can find fault with the use of a methodology that produced values that were fair, equitable and superior to the values produced by the audit team's favored and flawed IAS model that was produced by an assessment contractor with a "vested" interest to continue its financial relationship with Nassau County.

As the former Valuation Standards Team Supervisor explained to the audit team, the statistical application that he had requested a patent on – when he was in the private sector – had nothing to do with the mass appraisal or assessment modeling used by the Department of Assessment as the audit team failed to comprehend. It should also be noted that, as the former supervisor explained to the audit team and to this Department, he abandoned his patent application after it was rejected by the United States Patent and Trademark Office in June of 2009. *See EXHIBIT 1.*

EXHIBIT 1

United States Patent and Trademark Office

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12/007,891 — Visual and spatially-oriented real estate valuation and best comparables report generation system and method

Select New Case | Application Data | Transaction History | Image File Wrapper | Continuity Data | Published Documents | Address & Attorney/Agent

Bibliographic Data

Application Number:	12/007,891	Customer Number:	-
Filing or 371 (c) Date:	01-16-2008	Status:	Abandoned -- Failure to Respond to an Office Action
Application Type:	Utility	Status Date:	09-04-2009
Examiner Name:	SITTNER, MATTHEW T	Location:	ELECTRONIC
Group Art Unit:	3629	Location Date:	-
Confirmation Number:	2918	Earliest Publication No:	US 2008-0183597 A1
Attorney Docket Number:	-	Earliest Publication Date:	07-31-2008
Class / Subclass:	[redacted]	Patent Number:	-
First Named Inventor:	[redacted]	Issue Date of Patent:	-

Title of Invention: Visual and spatially-oriented real estate valuation and best comparables report generation system and method

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(1 of 1)

United States Patent Application	**20080183597**
Kind Code	**A1**
Veerappan; Rama ; et al.	**July 31, 2008**

Visual and spatially-oriented real estate valuation and best comparables report generation system and method

Abstract

Real estate valuation system and method generally, and more specifically, a visual and spatially-oriented real estate valuation and best comparables report generation system and method.

Inventors:
Correspondence Address:

PERSONAL DATA REMOVED FOR PRIVACY

Serial No.:	**007891**
Series Code:	**12**
Filed:	**January 16, 2008**

Current U.S. Class:	705/26.1
Class at Publication:	705/27
International Class:	G06Q 30/00 20060101 G06Q030/00

Audit Team's Limited Review Finding 1.7

The Residential Sales Ratio Study does not Support Level of Assessment

One of the values considered in the array of values used as candidates for assessed value is referred to as the "2012 Floor". As indicated earlier, Assessment made a series of downward adjustments to properties' 2012 tentative assessed values to determine the 2012 Floor. The Nassau County Charter, which provides "There shall be no equalization of assessed valuations among towns and cities within the County, notwithstanding any other provision of law." [28] We requested that the Acting County Assessor provide a legal opinion as to whether the methodology is in compliance with the Charter. However, given the fact that the request was made as the 2013 roll was being compiled, the Acting County Assessor was unable to provide same.

Residential properties should be assessed based on fair market value, a good indicator of which is arms length sales price adjusted for market price trends between the date of the sale and the date that the roll is established. Assessment prepared a study of the values of Class 1 residential properties sold at arm's length to determine the ratio of assessed fair market values to sales price on a school district by school district basis and on a County-wide basis. Based on values used for the 2012 tentative tax roll, the County-wide ratio was 92%, implying that, on average, homes' assessed values were 92% of sales price. The ratios within each school district ranged from 84% in the Floral Park-Bellerose School District to 108% in the Roosevelt School District. These ratios show that homes in Roosevelt are over assessed while homes in Floral Park-Bellerose are under assessed when compared to arms length sales prices.

Assessment decided to make override adjustments to reduce the assessed value of properties in each district where the district-wide ratio was above the County wide median of 92%. The assessed value of each home in the school district was reduced by the percentage by which the school district's median 2012 assessed valued exceeded 92% of the median sales prices.

Prior to 2012, valuations were performed based on neighborhoods, which may have included more than one school district. The use of school district boundaries recognizes the fact that school districts are a significant factor in determining the price of a home.
The percentage adjustments applied were as follows:

Exhibit 7

	Ratio of Fair Market Value to Sales Price	Reduction to Assessment
ROOSEVELT UFSD	108%	-16%
UNIONDALE UFSD	105%	-13%
BROOKVILLE	104%	-12%
HEMPSTEAD SD	103%	-11%
COLD SPRING HARBOR CSD	102%	-10%
WESTBURY UFSD	100%	-8%
LOCUST VALLEY	99%	-7%
GLENWOOD LANDING	98%	-6%
SYOSSET	97%	-5%
FREEPORT	97%	-5%
OYSTER BAY	96%	-4%
MALVERNE UFSD	96%	-4%
GLENWOOD LANDING	96%	-4%
EAST ROCKAWAY UFSD	96%	-4%
PORT WASHINGTON UFSD	95%	-3%
ISLAND PARK UFSD	95%	-3%
GLEN HEAD	95%	-3%
EAST WILLISTON UFSD	95%	-3%
BAYVILLE	95%	-3%
SEA CLIFF	94%	-2%
NEW HYDE PARK-GARDEN CITY PARK UFSD	94%	-2%
HEWLETT-WOODMERE UFSD	94%	-2%
BALDWIN UFSD	94%	-2%
WOODBURY	93%	-1%
VALLEY STREAM UFSD-24	93%	-1%
ROSLYN UFSD	93%	-1%
MINELOA UFSD	93%	-1%
LAWRENCE UFSD	93%	-1%
GARDEN CITY UFSD	93%	-1%
ELMONT UFSD	93%	-1%
EAST NORWICH	93%	-1%

Source: Nassau County Department of Assessment

Properties in districts that had a ratio of less than 92% were not adjusted upward. Adjustments made in this manner to determine values for all properties in a district are arbitrary. Properties that are undervalued will remain undervalued and those that were preliminarily overvalued will be adjusted downward. The fact that the County-wide ratio of Sales Price to Fair Market Value was 92% is indicative of under assessment. A fair assessment system, based on adjusted arms length sales, would derive a ratio of 100%. These arbitrary downward adjustments of the assessed values for all homes in districts with ratios above 92% may represent an equalization of assessed valuations.

The following is the Department of Assessment response to the Audit Team's Review Finding (1.7):

On page 14 of the Comptroller's audit, the audit team suggests that the downward adjustment in assessed value that took place in school districts where properties were over-assessed might be in contravention of the Nassau County Charter. As the Comptroller notes, the County was assessing properties on average at about 92% of their sale price. A decision was made to lower the assessed values in school districts where the assessed values were greater than the County average of 92%. The Nassau County Charter (§ 602) states that, "there shall be no equalization of assessed valuations among the towns and cities within the County, notwithstanding any other provision of law." The author believes that these downward adjustments in value that occurred are in contravention of the Charter's admonition that there shall be no "equalization" of assessed values among the towns and cities within the County.

Unfortunately, the audit team has a fundamental misunderstanding of what the word "equalization" means in the assessment context. "Equalization" is a term of art within assessment and it is concerned with the effect of *different* assessing units (e.g. cities, towns and villages) assessing property *within* a particular jurisdiction, such as a county or school district. Under the RPTL, both the State and counties (other than Nassau County) are required to equalize assessments among different assessing jurisdictions in order to ensure that certain taxes (among other things) which are calculated on the basis of the value of real property are done at a standard, i.e., "equalized", full-value basis. That is, the State and counties must make sure that variations in the levels of assessment applied by different assessors do not distort tax allocations.[39]

County equalization is required pursuant to RPTL Article 8, "County Equalization." That calculation is used, among other things, to allocate local sales taxes among cities, towns and villages within counties under the Tax Law.[40] Because Nassau County assesses every property in the County for purposes of taxation, there is no need for it to equalize different levels of assessment applied by different assessors when allocating sales taxes in the County. Thus, Charter § 602 provides an exception to RPTL Article 8, in that, it is worth repeating in the proper context, "[t]here shall be no equalization of assessed valuations among the towns and cities within the County, notwithstanding any other provision of law."

As can be plainly seen, the County's assessment practice described above, which has been criticized by the audit team, has nothing to do with "equalization" so there is no violation of the Charter.

[39] See, for example, N.Y. Education Law § 1314. "Equalization in school districts located in more than one city or town."

[40] See, for example, N.Y. Tax Law § 1262. "Disposition of revenues from taxes imposed by cities under one million, counties and school districts", subsection (f)(3): Full valuation of real property. The assessed valuation of real property divided by the equalization rate as determined in accordance with article eight of the real property tax law."

The school district ratio adjustment used the 2012 tentative value with 2010 sales. The purpose of this was to determine the amount of change in the market by school district from last year to this year. In other words, how last year's assessed value (2012 tentative value) would have to be adjusted to account for changes in the market. Using the 2012 tentative value with 2010 sales would not provide any information as to over or under assessment on either the 2012 or 2013 assessment rolls or any information as to the level of assessment (LOA) on either roll. The only information that could be determined from that is how the prior year's assessed value should be updated to reflect current market conditions. A sales ratio study to confirm or challenge level of assessment would use 2012 final values with 2009 sales or 2013 final values with 2010 sales. In addition the sales used were only up until September, as there was no data from the last quarter at the time. A real ratio study would have to use sales from the full year.

Additionally, there seems to be a misunderstanding as to how this ratio was used. In school districts that had a ratio adjustment it was not only used to adjust the floor value; all value candidates were adjusted, except Sales values. All value candidates, with the exception of sales values, were based on sales data from 2009 or earlier; had the ratio adjustment not been applied to these values the declining market would not have been captured in these areas.

As previously stated, the "2012 Floor" value was the 2012 tentative value minus 12.5%. In school districts that had a ratio adjustment it was the 2012 tentative value minus the ratio adjustment minus 12.5%. This was not a regular value candidate for any property. In cases where the winning candidate was the 2011 ARC Offer, 2012 ARC Offer, 2013 MRA, or Top 500 and that value was less than 12.5% of the 2012 tentative value, it reverted to the 2012 floor value.

It should be noted that commercial property owners and their attorneys have used a reduction in value on the current roll as evidence of overvaluation in prior years.

Limited Deletions or Retractions

Executive Summary

I. Background

A rational and fair property tax system should assure that each taxpayer pays an equitable share of property taxes. The Nassau County Charter charges the County Assessor with the responsibility of assessing all property situated in the County liable for taxation for state, town, school and/or special district purposes.[1] Nassau County ("County") is one of two county level assessing units in the state. The Cities of Glen Cove and Long Beach and the villages are separate assessing units and can choose to adopt their own values rather than those established by the County. Most County taxing districts, such as the Towns of Hempstead, North Hempstead and Oyster Bay, most school districts, and local authorities such as fire, sewer, and water, use County values. (Some taxing districts, however, do not use County values; for example, the Glen Cove School District uses city assessments.)

It should be noted that ORPS continues to test the validity of assessments annually. In 2008, ORPS awarded an "Excellence in Equity" certificate to the County, which is awarded to assessing units that "…conduct reassessments which meet national standards". "These municipalities and assessors are to be commended for meeting high standards for assessment administration. State law requires all properties in each municipality to be assessed fairly based on market value. By adjusting assessments to reflect market value, these municipalities are taking the necessary steps to ensure that property owners are fairly assessed and do not pay more or less than their fair share of taxes."[6] 2008 was the sixth year in a row that the County received this award. The County did not receive the award in 2009 or 2010.

II. Potential County Liability

An accurate assessment role is necessary to meet the goal of assuring that each taxpayer pays an equitable share of property taxes. It is also important because according to the Nassau County Administrative Code ("Administrative Code") "…any deficiency existing or hereafter arising from a decrease in an assessment or tax.... or by reason of exemption or reductions of assessments shall be a County charge."[7] Under this guarantee, when a property owner successfully grieves an assessment and receives a reduction, the County refunds not only the overcharge of the County portion of the taxes, but also the overcharge of the town, school and special district taxes. For the 2008/09 tax year, the County's share of real estate taxes levied totaled $973,193,661 while town, school and special district taxes totaled $4,195,497,504.[8] Therefore, for example, if the County overcharges a property $1,000 in County taxes it must pay a refund of $5,311. This represents the $1,000 collected by the County for its own use plus $4,311 it has guaranteed to the towns, schools and special districts.[9]

III. 2010 Assessment System Changes

The tentative roll issued January 3, 2011 for the 2012/13 tax year represents a departure from the previous valuation methodology used by the Department of Assessment ("Assessment"). Assessment made a decision to no longer use Tyler's IAS system to value all properties. Instead, it used a hybrid of values determined by selecting the lowest value from an array of values including the 2012 tentative value, 2013 benchmarked value, 2012 floor value, ARC or other values determined through the appeal process.

IV. Objectives

process. Assessment is responsible for property assessments that comply with ORPS requirements. The objectives of this "limited review" were to:

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[6] http://www.orps.state.ny.us/reassess/excellence.htm

[7] Nassau County Administrative Code § 6-26(b)(3)(c)

[8] Draft ARC Annual Report 2009-10, Taxes Levied in Nassau County 2008-09, page 7

[9] The total taxes collected in 2008-09 were $5.168 billion consisting of $.973 billion in County taxes and $4.195 billion in school and town taxes. This is a ratio of $1 in County tax to $4.311 in town and school tax.

Finding 1.0

The decision to adopt the process was made without a full understanding of the capabilities of Tyler's IAS model used for rolls prior to 2013. In addition, the process selects the lowest of an array of values rather than ensuring that it selects the most accurate value. The approach of chasing the lowest value may lead to a level of assessment that is in reality, lower than the levels assigned by Assessment.

Finding 1.1

…May be Inequitable…

The recent report of the County Executive's Assessment Reform Team expressed concern with Assessment's trend in recent years to systematically under-assess parcels[15] and as a result "….under-assessment has become a misleading yet effective way to reduce assessment

challenges….".[16] This can result in a lower actual residential LOA than the official .25% LOA assigned by Assessment, and thus could actually cause an increase in the number of appeals filed by taxpayers.

adjustments, MRA values, or individual property values. The 54% of property owners whose assessed value did not decrease from last year may see an increase in taxes because their proportionate share of total assessed value has increased. It is uncertain why these properties have not decreased in value given the overall declining market. This also further illustrates the concern regarding the lack of independent review of the methodology and its fairness.

Assuming total tax levies are constant, all property owners' tax rates will increase since the countywide total of all assessed value decrease.

Finding 1.2

… the Tax Burden to…

The methodology used in creating the 2013 tentative roll impacts homeowners by shifting the residential tax burden to mid-range priced homes.

Secondly, we estimated the amount of county, town and school taxes that would be paid by tier in 2013 based on the proporionate share to be paid in 2011…tax burden...

On a per parcel basis, the middle third's annual taxes are estimated to increase by an average of $227 per parcel while the top third and bottom third will see annual decreases by an average of $173 and $55, respectively.[18]

- a level of assessment below the 1% of fair market value claimed for commercial properties and .25% of fair market value claimed for residential properties; and

valued at its 2012 value.[20] Based on the final values, it appears that homeowner B, who did not grieve, is penalized because the home will be assessed at a higher amount than home A. This creates an environment where property owners (including commercial property owners) will need to file grievances every year to help ensure that they are not assessed in a future year at a higher value than their neighbor who has grieved.

Finding 1.6

…to Make the Determination that the New Methodology was Better

should be noted that CLT was originally selected to perform the 2003 reassessment and supply software for maintaining the assessment roll because of its extensive experience. The County has a major investment in the IAS system. Tyler and its predecessor company, CLT, have been paid in excess of $55 million for the revaluation services and systems to establish and maintain the assessment roll. Tyler's website claims that it has appraised 50 million parcels and that it can handle any size jurisdiction.[27]

Assessment provide a comparison of the variables and the weights assigned to each variable for the multiple regression analysis in order to evaluate the difference between the two approaches and form an opinion as to their validity. This comparison was not provided. The VSS indicated

Finding 2

…and Lack Integrity

Finding 3

…Violates ORPS Standards and has Resulted in Errors

Therefore, Assessment is in violation of ORPS standards.

Without such uniformity, there can be no property equity.

Finding 4

…May Cause Valuation Inequities

Finding 5

…Subjective Valuations…Errors, and Possible Fraud

County of Nassau
Department of Assessment

Comprehensive Response to the Office of Comptroller's Draft Limited Review of the Department of Assessment Released on May 2, 2011

Auditors' Follow-up:

At the commencement of our audit, the Department of Assessment ("Assessment") was provided with our standard "Audit Protocol for County Departments and Agencies" which outlines our procedures regarding the draft report, the auditee's response and the issuance of the final report. It states: "The auditors will review the auditee's response and may revise the draft audit report, depending upon clarifications and additional supporting documentation provided." As such, it is consistent with our audit protocol that information included in our initial draft may be revised and/or removed in a subsequent draft.

We provided Assessment with a draft report on February 2, 2011. The draft was clearly marked as such and included the following disclaimer as a footer on each page: "Draft – Not intended for external distribution. Contains non-final, intra-agency and/or interagency materials that may be exempt from disclosure under the Freedom of Information Law." Following the distribution of the draft report to Assessment, a copy of the draft was provided to the media without the Comptroller's approval or knowledge which is in direct contravention of our audit protocol and in violation of professional conduct.

A revised draft was provided to Assessment on May 2, 2011 which was modified based on several meetings with key personnel from various County departments to obtain updated information. However, Assessment's Audit Response also addressed items that we had agreed to modify. Our Auditors' Follow-up will address only Assessment's response to the revised draft report. Therefore, no Auditor's Follow-up has been provided to Assessment's Audit Responses on pages 37-48.

Audit Team's Limited Review Finding 1.0

The Lack of Policy and Procedures Manuals Does Not Comply with ORP[T]S Recommendation

The following is the Department of Assessment response to the Audit Team's Review Finding (1.0):

The Department of Assessment has always complied with New York State's Office of Real Property Tax Services (*ORPTS*) and the International Association of Assessing Officers (*IAAO*) standards, as well as adhering to statutes and provisions of New York State's Real Property Tax Law (RPTL).

It is worth noting that the Department of Assessment has used CLT's "*Residential*" and "*Commercial/Industrial Data Verification*" Manuals (which also outline assessment procedures, descriptions, and data inventory collection techniques), and a manual on the Integrated Assessment Software (IAS) which were provided when they were hired as the reassessment contractor.

The Department of Assessment recognizes the importance of written manuals and procedures and will continue to comply with the recommendations of the audit. As stated earlier in the Executive Summary, on April 14, 2011, the Department of Assessment produced a "*Standards of Sales Verification Manual*" and is currently in the process of finalizing a number of additional valuation manuals for the Commercial and Residential Field divisions.

Auditors' Follow-up:

We concur with Assessment's producing a Standards of Sales Verification Manual and other business process manuals to be used by staff in performing valuations.

Audit Team's Limited Review Finding 1.1

The Lack of Adequate Internal Controls resulted in a $1,277,502 Tax Bill for 1550 Franklin Avenue

The following is the Department of Assessment response to the Audit Team's Review Finding (1.1):

The Department of Assessment concurs with the audit team's findings and understands that the lack of adequate internal controls resulted in a significant and preventable error that caused the Theodore Roosevelt Executive and Legislative Building at 1550 Franklin Avenue to become taxable. This was one of the many factors that led to the termination of the former appointed assessor. Quality control measures were not put in place during the term of his appointment. There was a glaring failure to recognize the unexplained and sizeable increase in the Garden City School District's taxable assessed valuation (with no major construction project in the district) from one assessment roll to the next. Yet, the former appointed assessor examined and certified the roll as correct. A complete review of all wholly exempt properties was initiated and continues to date to make sure that this type of error does not occur again.

Auditors' Follow-up:

We concur with the action taken by Assessment regarding a review of all wholly exempt properties.

In addition, we reiterate our recommendation that Assessment run edit reports to ensure that exemptions are properly carried forward or eliminated from one roll to the next.

Audit Team's Limited Review Finding 1.2

The New Valuation Methodology Shifts the Underlying Descriptions Used in Valuing Property May be Inaccurate

The following is the Department of Assessment response to the Audit Team's Review Finding (1.2):

In the original first draft audit report, under the heading "*Audit Team's Limited Review Finding 4 - The Underlying Descriptions Used in Valuing Property May be Inaccurate and May Cause Valuation Inequities*", the Department of Assessment was criticized for emphasizing risk management in the production of the 2012-2013 Tentative Assessment roll. Risk management should not be denigrated, it should be lauded. As the audit report noted, Nassau County paid out over a *billion* dollars in refunds over the last decade. It is unconscionable that steps have not previously been taken to address the glaring flaws that are present in the values that were produced by Tyler/CLT. This year, through benchmarking, we were able to correct some of last year's flawed values which will substantially mitigate the County's liability next year. Correcting these values is a significant step in the right direction.

Auditors' Follow-up:

Assessment did not respond to our recommendations regarding property valuation which stated that they should:

- *Establish procedures for investigating and correcting data discrepancies brought to its attention by ARC;*

- *Reinstitute the process of preparing guidelines for and re-inspecting all commercial properties; and*
- *Promulgate uniform data collection policies and procedures.*

These steps are vital to producing a fair and equitable assessment roll. An effective quality assurance mechanism will mitigate assessment challenges.

Audit Team's Limited Review Finding 1.3

The Lack of Supervisory Review of Data Changes Increases the Risk of Discrepancies

The following is the Department of Assessment response to the Audit Team's Review Finding (1.3):

While the Department of Assessment agrees with instituting better internal controls and supervision of daily work assignments as they relate to data input, we respectfully object to the audit team's thinly veiled assertion that records may have been fraudulently changed. The Comptroller's audit team openly acknowledged that they "found no evidence of fraud." It nonetheless recommended that employees should be "prohibit(ed) . . . from falsifying records by entering their supervisor's initials as a reviewer." This statement is at the very least reckless and hints at an agenda well beyond the audit's stated purpose.

Auditors' Follow-up:

We reiterate our recommendation that Assessment prohibit employees from entering their supervisor's initials in the official departmental records. Proper internal control requires segregation of duties: one employee should perform the data entry with a separate supervisory approval. Standard system controls should auto-input the user's identification for all transactions.

Audit Team's Limited Review Finding 1.4

Staff is Not Adequately Trained on the Use of the $50 Million Computerized Mass Appraisal System

The following is the Department of Assessment response to the Audit Team's Review Finding (1.4):

The valuation and field division personnel have a working knowledge of CLT/Tyler's IAS system. The Department of Assessment has repeatedly asked the contractor for more comprehensive training seminars aimed at fixing the flaws in the system which have caused significant valuation errors over the years. Unfortunately, Tyler's own technical staff has been unable to make the requisite changes to the IAS/ADAPT operating systems to address these flaws. Thus, the issue is not the Department of Assessment's "inadequate training", but, rather, Tyler's inability or unwillingness to address the systematic flaws that are present within its operating system.

<u>Auditors' Follow-up:</u>

During the course of our review, Assessment staff repeatedly stated that there was a lack of training on the features of the Tyler/CLT IAS system

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Audit Team's Limited Review Finding 1.5

System Deficiencies Are Not Resolved in a Timely Manner

The following is the Department of Assessment response to the Audit Team's Review Finding (1.5):

The Department of Assessment has and continues to work with Tyler Systems on identifying significant problems with their software applications used in IAS and ADAPT.

<u>Auditors' Follow-up:</u>

We re-iterate our recommendation that a process be developed whereby system deficiencies are evaluated, prioritized and resolved.

Audit Team's Limited Review Finding 1.6

Instances of Reductions in Valuation Were Not Adequately Documented

The following is the Department of Assessment response to the Audit Team's Review Finding (1.6):

The Audit team's critique of the lack of detailed documentation with regard to their specific review of the East Rockaway Yacht Club and the reduction cited is not being disputed by the

Department of Assessment's valuation experts. The Department of Assessment's Valuation Standards Team did not share the valuation conclusions reached by the former appointed assessor Thaddeus Jankowski, Jr. (who was fired at the end of October 2010) regarding the reduction in assessment for East Rockaway Yacht Club. **This decision to lower the value was his and his alone.**

It is important to note that the audit team misinterpreted discussions with the former Acting Assessor as to why the value on the East Rockaway Yacht Club was significantly reduced. **The discussion with an audit team member concerned the possible reasoning behind Mr. Jankowski's unilateral decision to lower this property's assessed value despite the vehement opposition to this reduction among valuation professionals at the Department. The former Acting Assessor did not reach any formal conclusion which could have been challenged by the audit team.**

Since the premature release of the Comptroller's first draft audit (dated February 2, 2011), the assessed value of the property cited above was restored to a more equitable value and an examination of all yacht clubs was conducted. The Valuation Team's research concluded that the valuation method used to assess the East Rockaway Yacht Club was an aberration from the correct valuation methodology which was used for other similarly situated properties.

Auditors' Follow-up:

We agree that per our recommendation all yacht clubs were re-valued and that Assessment corrected the Each Rockaway Yacht Club valuation.

Audit Team's Limited Review Finding 2.0

The 2013 Assessment Roll Selects the Lowest Value from an Array of Values to Determine Assessed Valuation

The following is the Department of Assessment response to the Audit Team's Review Finding (2.0):

Properties were not assessed at the lowest possible value. Several legitimate and relevant value candidates were considered for each property. By doing this, Department of Assessment valuation experts were able to correct over-assessments on the prior roll. Coefficient of Dispersion (*COD*), Price Related Differential (*PRD*) and Coefficient of Variation (*COV*) statistical studies were conducted to verify that this roll is an improvement in terms of fairness and equity. Importantly, the 2012-2013 Tentative Assessment Roll produced values that are within the acceptable limits set by the IAAO and ORPTS. Yet, this important piece of information is conspicuously absent from the audit findings.

Furthermore, it is untrue that 54% of property owners' assessments will remain unchanged from last year. Indeed, 30% of the 54% cited Class 1 properties were reduced by the school district ratio adjustment. Thus, 30% of the 54% cited Class 1 properties will actually receive a lower assessed value on the 2013 Tentative Assessment Roll than they received on the 2012 Tentative Assessment Roll. We do acknowledge that there are some properties, though less than the percentage quoted in the Comptroller's draft, that do have the same assessment for 2013 as they did for 2012 and it is likely that their share of taxes will slightly increase.

Similarly, it is untrue that benchmarking "was only used as a valuation for approximately 29% of the total properties used." The benchmarking methodology was used, in fact, in 71% of all residential properties. For example, in Class One, the benchmark value actually proved to be more accurate for 161,115 properties or 41.82% when you add back the Floor Values which use the benchmark value as its underlying value (44,158 out of 44,925 floors or 98.29%). Without this, it would appear that the benchmark value only won for 116,957 properties or 30.36% in Class One. In Class Four, an additional 5,212 properties had the benchmark value as their underlying value but reverted to the Floor Value. This is 94.63% of the Floor Values in Class Four. In Class Two, an additional 367 properties had the benchmark value as their underlying value but reverted to the Floor Value. This is 53.34% of the Floor Value for Class Two.

In addition**,** not all 419,911 properties were benchmarked. For example, the following properties were not benchmarked: the top 500 commercial properties, condominiums, and any property which had a physical change made. As mentioned earlier, a benchmark value was considered as an attempt to statistically correct the failures of IAS which has caused significant overvaluations of certain properties. This number was only intended to be used where such a problem was identified.

Auditors' Follow-up:

We disagree with Assessment's response that "Properties were not assessed at the lowest possible value." Assessment's "Property Search" website for the 2013 tentative roll clearly states that "Property was assigned the lowest of one of the following possible assessed values…" and goes on to outline the various value candidates that were considered for each property. We made numerous requests for documentation to show that using the lowest from an array of values is acceptable to the IAAO and ORPTS. However, we were not provided with this documentation.

Audit Team's Limited Review Finding 2.1

The New Valuation Methodologies Use of the Lowest Value May Not Reduce Tax Grievances

The following is the Department of Assessment response to the Audit Team's Review Finding (2.1):

Property owners have been frustrated with successfully challenging their assessment only to see their assessments increased the following year. When the real estate market was appreciating, a reduction in a prior year might be irrelevant. In the current declining market, these reductions are now highly relevant and were therefore considered.

In the past, the Department of Assessment has been criticized for not considering prior reductions when determining new property values. For the first time in the history of reassessment in Nassau County, the Department of Assessment incorporated Assessment Review Commission ("ARC") Offers, ARC Reductions, Small Claims Assessment Review ("SCAR") Decisions, and County Attorney Decisions in producing the values for the 2012-2013 Tentative Assessment Roll. The reductions used reflected successful grievances and court cases filed against the 2010-2011 Assessment Roll.

Auditors' Follow-up:

As noted in Assessment's response to Review Finding 2.0, properties that have the same assessment for 2013 as they did for 2012 may "likely" see an increase in their share of taxes. We stand by our finding that the lowest value may not reduce tax grievances.

Audit Team's Limited Review Finding 2.2

The New Valuation Methodologies Shifts Class 1 Total Assessed Value to Mid-Tier Properties

The following is the Department of Assessment response to the Audit Team's Review Finding (2.2):

The Comptroller claims that the new valuation methodology will shift the total assessed value to "mid-tier" homes. In making this statement, the Comptroller fundamentally misunderstands and misconstrues the role of the Department of Assessment. The Department of Assessment sets valuations of properties as per the requirements of the Nassau County Charter, the Nassau County Administrative Code and the RPTL. It does not consider taxation when setting the value of these properties.

Mass appraisal does not occur in a vacuum. The valuation of a property is selected in an effort to mimic and track what the property is actually worth on the open market. Real estate is not fungible.

The Department estimates a property's value based on the real estate market. The real estate market has dropped precipitously over the last four years. In particular, the lower end properties have seen tremendous decreases as foreclosures throughout this tier have caused a downward pressure on the value of these homes**.**

Market forces affect different parcels differently. However, some generalizations may be made. Parcels on the lower end of the value scale tend to have a higher incidence of subprime mortgages, higher loan-to-value ratios and display other similar characteristics which have recently resulted in higher foreclosure rates and more distress sales. Logically, the value of a lower end property on the open market would be driven down when a near identical home is available in distress for 20% less.

Parcels in the upper end of the scale, where there had typically been a greater value run-up in the boom years, experienced a greater negative correction as the market fell. Additionally widespread layoffs on Wall Street, the tightening of credit by the banking community and the near disappearance of "jumbo loans" produced many "short" sales. Again, the value of a luxury home on the open market would logically be driven down when a near identical home in distress is available for 20% less.

Mid-tier valued homes were, of course, subject to the same market forces. However, fewer were "under water" as the employment market for mid-tier owners remained more stable and "conforming loans", although affected, remained available. Also, federal incentives have benefited these properties the most and their overall decrease has been less than the properties at either the low or high end. Thus, values for this artificial one-third grouping remained more stagnant.

The benchmark value was utilized as a means to statistically correct the failures of the linear nature of the residential model and the problems associated with the table-derived values of commercial properties which were responsible for the over-assessments on the 2012 roll. We believe by considering the benchmark value, as well as reductions from judicial decisions and administrative reviews, we would correct most of the overvaluations from the 2012 roll.

What we have called the benchmark process is really Multiple Regression Analysis (MRA). MRA is not a market model. MRA is widely accepted in the assessment community and used by other municipalities; therefore, there was no need for independent verification.

Because the Department of Assessment is forced to prognosticate value changes in the whole last quarter and part of the third quarter, there have been decisions made in the past to reduce all assessments in a property class by a certain percentage once the values are calculated. This has not been done to "mislead" the public or "systematically under-assess." Rather, it is done to capture the market trend for data that is not at our disposal, but which is relevant to our valuation date. This year, rather than reducing all properties in a tax class, adjustments were made by school district to more accurately reflect actual market trends in contrast to prior years' universal adjustments to the assessed values of Class One properties. There was no global reduction to Class One properties on the 2012/2013 Tentative Assessment Roll.

The Department of Assessment conducted its own study to determine the validity of the Comptroller's claim that the 2013 assessment roll will shift the tax burden to mid-tier homes. First, we would like to point out that even when there is evidence of a shift in the tax burden, it does not mean that there is a problem with the values. Redistribution of the tax burden is actually the point of a reassessment and not evidence of a problem with the methodology. A person who is purchasing a property at the 5th percentile or the 10th percentile is not also considering a property at the 90th or 95th percentile or even the median. They are totally different markets and they do not necessarily move in unison. Where a percentage of change up or down in one market is greater than in another, a shift in the tax burden is expected and appropriate. These changes are what a reassessment is supposed to capture.

Current market conditions suggest that jumbo mortgages which cover the higher-end homes are much harder to get which drives down prices in that market. On the low-end, the high number of foreclosures and distress sales has also driven down prices in that market. While there has been a decrease in sales prices at the median as well, federal incentives have benefited these properties the most and their overall decrease has been less than the properties at either the low or high end.

Countywide, properties in the middle of the curve decreased less than properties on the outer ends. This suggests that there will in fact be some shift in the County portion of the taxes. The County portion of the taxes is, however, the smallest portion of property taxes. The largest portion of property taxes is the school district taxes. While the Comptroller's study only looked at Countywide statistics, our study broke the population down by school district to determine what, if any, shift there may be in school taxes. Looking at the information on the school district level, no generalization can be made about a shift in the tax burden. Each school district presents a unique picture. For example, the Roosevelt School District, which had one of the most significant percent decreases in assessed value from 2012 to 2013, has virtually the same percent decrease in assessed value from the first percentile to the 99th percentile which suggests that there will be virtually no redistribution of school district taxes. Looking at the East Meadow School District, a school district that has mostly mid-range properties, there is almost no shift of the school tax burden across all percentiles from the first to the 99th. Should the school district levy remain the same for both of the above-referenced school districts, homeowners will see almost no change in their school taxes.

While the combined county, town, and school tax rate used by the Comptroller's Office may be useful for their annual reports, the manner in which it was used in this audit is extremely flawed. Importantly, the property tax rates from one school district to another are vastly different. For example, the 2011 property tax rate for the Garden City School District is 450.458, while the tax rate for the Levittown School District is 882.11. The General Fund tax rates from each of the three towns are also quite different. The 2011 General Fund tax rate for the Town of Hempstead is 5.854, Oyster Bay's rate is 18.824, and the rate for North Hempstead is 12.248. In addition, since the assessed value decreased by a different percentage in each town and school district, the rate change would be different in each of those places. Districts and towns whose total assessed value decreased more would need to increase their rate a greater amount to generate the same amount in taxes as the prior year. Districts and towns whose total assessed value decreased less would need to increase theirs less. For these reasons, the dollar amounts quoted in the Comptroller's draft are misleading.

Auditors' Follow-up:

Assessment explained in its response that there have been market shifts in both the upper and lower ends of the market which have necessitated lowering valuations for those markets. They also state in their response that "Where a percentage of change up or down in one market is greater than in another, a shift in the tax burden is expected and appropriate." They also state that "Countywide, properties in the middle of the curve decreased less than the properties on the outer ends." "This suggests that there will in fact be some shift in the County portion of the taxes."

We did not make any representation that Assessment sets tax rates and we concur that market forces impact different segments of the market in a variety of ways. We also concur with Assessment that "Each school district presents a unique picture."

Audit Team's Limited Review Finding 2.3

The Presumption of More Accurate Results from the New Benchmarking Methodology Lack Support

The following is the Department of Assessment response to the Audit Team's Review Finding (2.3):

The change in methodology for producing the 2012-2013 Tentative Assessment Roll was aimed at improving the quality, fairness and equity of the assessment roll by balancing valuation techniques with liability reduction.

Quality and Liability Reduction

- Although it is normally assumed that utilizing comparable sales produces the best values for residential properties, the events of the last two years have made the comparable sales method much less reliable for predicting a fair and consistent assessed value. The definition of market value is based on several assumptions including an open and competitive market with typical market financing. In the last eighteen months, there have been two tax incentives targeting properties on the lower-end of the market. Also, massive foreclosures have resulted in short sales and bank-owned property sales of these lower end properties. Financing in general, but particularly jumbo loans for the mid and upper-value markets, was increasingly difficult to obtain. Many sellers were under duress to sell which resulted in large swings in sales prices. When employing the comparable sales module of IAS/ADAPT, one comparable sale selected by the system can swing a value on 100 or more properties, while not being used on others. In this atypical year, the statistical methods utilized smoothed out the swings and produced a more equitable roll.

- Instead of ignoring the value reductions a taxpayer received at ARC, the County Attorney, or in *SCAR*, these reductions were carried forward onto the 2013 Tentative Assessment Roll. This technique is not unusual. In fact, it has been utilized in other towns where an agreed upon reduction is carried forward (i.e. stipulated) onto the following year's tax roll. These reductions were the result of an individual review and/or conference negotiation and were therefore considered reliable and representative of the property's true value. ARC and SCAR reductions affected only 3.26% of the total residential population of 385,229 properties. It should be noted that RPTL sections 727 and 739 make favorable reference to carrying forward a prior year's reduction in assessment.

- In order to reduce liability and improve the quality of our residential valuations, the recent sale of a subject property was also considered. An assessor's curbside data only reflects certain aspects affecting a property's value. Importantly, this data does not capture buyer reaction to layout or property deficiencies. Since a willing buyer's offer is heavily weighted in the ARC and SCAR process, and in order to reduce future refund liability, validated sales which resulted in values lower than the modeled value were considered for reduction. Where the sale was validated as an arms-length transaction by the residential field assessors and the value was lower than the proposed assessment, the sale was considered for the tentative roll. A pool of about 6,702 sales was considered for reduction, and 825 were ultimately employed. This is 0.21% (less than ¼ of one percent) of the total residential population of 385,229.

- In an effort to improve the consistency and relatedness of the values in an erratic market, and to reduce future liability, the 2012 tentative assessment roll was benchmarked. Benchmarking utilizes an MRA equation to reduce inconsistencies between the property valuations. It is important to understand that all benchmarking is MRA but not all MRA is benchmarking. Benchmarking is not a market method. *The market values were established in the IAS/ADAPT system. They were then benchmarked to smooth out the inconsistencies and to account for diminishing returns as properties increase in size and complexity*. Table-driven systems, such as those employed in IAS, do not statistically account for increasing size and complexity. IAS employs manually entered constraints. Benchmarking uses statistically derived results. For example, for residential properties, each bathroom added to a 2,000 square foot house above what is typical in the market does not add equally to the value of the property. A 2,000 square foot property with 6 bathrooms is not going to be worth significantly more than a property with 3 bathrooms.

- For commercial properties, benchmarking smoothes out the transitions between the table categories which improves the quality of the roll. The commercial valuation component of IAS/ADAPT utilizes updateable tables to value properties by the cost or income approaches to value. The income tables are established by use type and a limited number of variables such as income per square foot, vacancy, expense ratio, and capitalization rate are utilized to build an income approach to value. This results in the following issues which benchmarking can correct:

1) The IAS/ADAPT commercial tables were not statistically generated and generally do not account for "diminishing returns" as properties increase in size. This causes an over-projecting for values on the outer-end of the size range.

EXAMPLE 1**:** "Over projecting values at the outer end of the size range by square foot."

PROPERTY	**MODEL**	**TYPE**	**COUNT**	**5th %**	**25th %**	**50th %**	**75th %**	**95th %**	**STD DEV**
Mixed (480)	**FULL MARKET VALUE**	**2012 Roll**	**3,900**	**75**	**100**	**120**	**147**	**208**	**59**
		BENCHMARKED	**3,900**	**90**	**104**	**120**	**137**	**174**	**26**

EXAMPLE 2: "Over projecting values at the outer end of the size range by income."

2010 TABLE: Multi-use Office Use Code#23, commercial neighborhood C01
Below is a comparison of two offices: one at 2,000 square feet, one at 20,000 square feet.

2,000 sq x 27.81/sf = $55,620 less 28% vac+expense/8.75 cap= $457,673 or $229/sf
20,000 sq x 27.81/sf = $556,200 less 28% vac+expense/8.75 cap=$4,576,673 or $229/sf
In the market, smaller buildings generally sell for a higher price per square foot, while larger buildings generally sell at a lower price per square foot. In this example, both buildings are valued at $229 per square foot. Using an MRA equation, benchmarking distributes the value over the bell curve.

2) Due to the limitations of the table format, there are large "step offs" between the table categories.

EXAMPLE: "Step off between table categories." Even if a model was stratified by building size with a cut off between 45,000 and 45,001 square feet:

2010 TABLE: ***Income use #72, commercial neighborhood C01, income/sf.***
Two warehouse buildings being valued, one at 45,000 sf. and the other at 45,001 sf.

45,000 x \$17.50/sf = \$787,500 less 13.5% vac+expense/8.25% cap = \$825,682
45,001 x \$16.50/sf = \$742,517 less 13.5% vac+expense/8.25% cap = \$778,517

In this example, where the income valuation table is established by building size ranges, one square foot difference in building size resulted in a \$47,165 difference in assessed market value. When IAS/ADAPT commercial values were benchmarked with properties of the same use type (industrial with industrial), the IAS values were smoothed out.

In mass appraisal, to reduce variance in value among commercial properties, we developed separate MRA for various property strata.

Coefficient of Determination or R^2: Regression analysis measures the strength of the relationship between the independent variables and the dependent variables. The measure ranges from 0-1. The higher the number, the stronger the relationship.

As illustrated by the tables below, the R^2 of each property type has improved from the 2012 tentative roll.

Property Type	Tax Roll	Coefficient of Determination
Office	2012 Tentative	0.6274
Office	2013 Tentative	0.7101

Property Type	Tax Roll	Coefficient of Determination
Retail	2012 Tentative	0.8652
Retail	2013 Tentative	0.8876

Property Type	Tax Roll	Coefficient of Determination
Apartment Building	2012 Tentative	0.8855
Apartment Building	2013 Tentative	0.8905

The three property groups above realized improvements, respectively, of .0827, .0224 and .005 which all indicate an overall qualitative improvement in the 2012-2013 Tentative Assessment Roll over the 2011-2012 Tentative Assessment Roll.

Equity and Measures of Appraisal Uniformity

2012 and 2013 RESIDENTIAL ASSESSMENT RATIO (RAR) COD ANALYSIS					
	Count	PRD	COD	COV	Std Dev
2012 MRA Values compared to 2009 Verified J Sales	7286	**1.0034**	**10.2075**	13.7626	0.1277
2013 Tentative Values compared to 2010 Verified J Sales	5274	**1.0193**	**8.0531**	9.3699	0.0937

Using the standard deviation to compare the rolls also shows an improvement from the 2012 Roll to the 2013 Roll. The 2013 Roll has a standard deviation of 0.0937 while the 2012 roll has a standard deviation of 0.1277.

It should be noted that the Audit team's assertion that "commercial property values are determined by the IAS model using either the income or cost method" is incorrect. There is no such thing as a Commercial model in IAS. IAS is unable to use MRA for the valuation of Class Two and Four properties. IAS uses tables for both cost and income values for these properties.

As has been explained in prior correspondence and quoted on page 23 of the Comptroller's draft report, the use of tables can create inconsistencies which interfere with the fairness and equity of the assessments that are produced. For example, some Land Use Codes, like the 4500s (Retail), have tables that are broken down by square footage. If there is a property that is classified as a 4500 and is 3,000 square feet, it will be valued using the table for 4500s between 1,000 square feet and 3,000 square feet. If there is another property exactly the same in every way except that it is 3,001 square feet, it will be valued using the table for 4500s between 3,001 and 7,000 square feet. This can produce a very different value for a miniscule difference which would have prevented us from creating a fair and equitable roll. When an MRA process is used, like benchmarking, this problem is eliminated.

Auditors' Follow-up:

On March 9, 2011, Assessment gave a presentation for the audit team which demonstrated the impact on individual school districts of the new methodology. We commend Assessment for its thoroughness in both its response and school district analysis of the impact of the changes resulting from the new methodology. However, we believe this should have been done prior to the issuance of the 2013 tentative roll.

Audit Team's Limited Review Finding 2.4

The New Benchmarking Methodology Has Not Been Independently Reviewed

The following is the Department of Assessment response to the Audit Team's Review Finding (2.4):

As previously stated, what the Department of Assessment refers to as benchmarking is actually a standard application process of MRA, although it is not a market model. MRA is widely used and accepted in the assessment community. Thus, it does not to be reviewed by an additional independent valuation expert as the audit suggests. What the audit team overlooked was that the County Executive appointed Gregory Hild, a well-respected assessment professional with over 26 years experience, to serve as the independent Chairman of Nassau County's Assessment Transition Team at the end of October 2010. Mr. Hild served as the Assessor for Smithtown. For all intents and purposes, Mr. Hild performed the role of the "independent" arbiter of all assessment questions at the Department of Assessment and validated the valuation team's use of the benchmarking method to establish the values on the 2012-2013 Tentative Assessment Roll released on January 3, 2011.

The Comptroller claims that the benchmarking method "lacks support." Benchmarking is a recognized statistical formula that takes an existing dataset and corrects any "outliers" that are present within that dataset. In this case, benchmarking took an existing dataset, the IAS numbers, and it eliminated the many outliers that had caused the County to pay out over a *billion dollars* in refunds over the last decade. The Department is confident that the results which were achieved through the benchmarking process are superior to the numbers produced solely by utilizing IAS and that the accuracy of the roll will be borne out over the next year as the challenges to its accuracy percolate through the system.

<u>Auditors' Follow-up:</u>

We stand by our finding regarding an independent review prior to implementation of the new methodology. We appreciate the Chairman of the Nassau County Assessment Transition Team's expertise in assessment. However, we were not provided with any written analysis or other documentation supporting his independent professional opinion regarding the benchmarking methodology. We still have not been provided with documentation that the new methodology has received New York State ORPS approval.

Audit Team's Limited Review Finding 2.5

The Assessment Department Did Not Provide Evidence of Sufficient Knowledge of the Previously Utilized IAS Valuation Module

The following is the Department of Assessment response to the Audit Team's Review Finding (2.5):

The major problem with Tyler/CLT's IAS system is not that the Department of Assessment staff cannot make an expert determination on methodology. Rather, it is that the assessment contractor's system is flawed. For years the Department of Assessment has worked with Tyler/CLT and has asked Tyler to make a number of modifications to its system which we have been told they are unable to do! For example, the part of the system that calculates transitional assessments and six percent caps is incredibly flawed. This problem is particularly apparent when there is a negative physical change to a given property.

There is no question that Tyler and its predecessor CLT have been paid millions of dollars over the years to perfect its valuation system; however, that is no justification for continuing the use of their products (as was suggested in the Comptroller's first draft audit dated February 2, 2011) when there are better alternatives. But what is more alarming is the fact that Tyler/CLT's own technical staff cannot easily modify or fix flaws in their own program or adapt it to Nassau County's unique and complex assessment system.

The decision by valuation experts at the Department of Assessment to utilize a proven and superior methodology was only arrived at after a careful review and determination that the IAS system produced inferior values in comparison to the values generated through the benchmarking process.

Since the Department did not have any MRA-based commercial models, the initial emphasis was on the commercial modeling and use groups (office vs. retail vs. industrial, etc.). The valuation team developed models comprised not only of the market, income and hybrid models, but also included IAS' table-driven models as equal probability models. The models included benchmarking, not as a value option, but as a tool to determine the risk curve and to ensure that the most efficient model values were used for the roll. Simply put, had all of the IAS models been the most efficient, it would be an all-IAS roll.

To review the merits of the continued use of IAS in developing the 2012-2013 commercial values, the valuation team used Statistical Analysis System (SAS). The following are the results of this proven testing method of the IAS commercial models:

1. The IAS tables that produced the income models were essentially subjective and could not be substantiated. Conversely, the valuation team's income models were based on internal recent Annual Survey of Income and Expenses (*ASIE*) data and an additive-multiplicative MRA logarithm.

2. IAS does not produce any market models. The market models developed by the valuation team used seven to ten years of internally-cleansed sales (which were needed to generate representative samples) to develop those models.

3. IAS does not have a modeling process to generate Gross Income Multipliers (*GIM*). The valuation team used a combination of market and income models to develop GIMs which were truly reflective of the Nassau market.

4. IAS does not have any hybrid modeling.

5. IAS does not provide any sampling procedure.

6. In the summer of 2010, the valuation team presented its commercial valuation/MRA modeling to senior officials at ARC, The County Attorney's Office, The Treasurer's Office, The Office of Management and Budget, and the County Executive's Office. All individuals present at this meeting thought very highly of this long-overdue commercial modeling technique.

In August 2010, valuation experts developed a residential market model to determine the risk level of the 2011 SCAR cases. This was the first time that a risk model was developed to pre-assess risk. Additionally, it was a collaborative systems analysis using SAS and IAS. While SAS provided the front-end risk modeling, IAS/ADAPT produced the comparable sales used at SCAR hearings. In September 2010, the valuation team started developing a Class-1 market model for 2013.

The following observations demonstrate the superiority of the residential SAS market model over the IAS market model:

1. Nassau County is a classic case of fixed neighborhoods as defined by the school districts which are the recognized economic lines in real estate market transactions. IAS maintains 23 different sub-market MRA models based off the arbitrary neighborhoods CLT had created during the last revaluation. Notably, these twenty-three arbitrary neighborhoods wholly disregarded school district boundaries.

2. Instead of using hybrid models, IAS uses one regression equation covering all of the independent variables, thus often resulting in unexplainable MRA coefficients. For example, in 2012 IAS modeling, several sub-market models produced final values, even without using a home's actual Square Footage Living Area.

3. In MRA modeling, it is universally accepted that the independent variables must always pass the test of multicollinearity and often Cornbach's alpha to enter into the regression equation. Likewise, the IAS MRA model is not subjected to any transparent residual optimization (homoscedasticity). The IAS MRA module obviously predates these basic statistical concepts and tests. When building the SAS MRA models, these were essential parts of the process. In fact, the SAS MRA models categorically satisfy all four primary assumptions of multiple

regression – all variables are normally distributed, linear relationship between the dependent and independent variables, multicollinearity and homoscedasticity (professors *Jason W. Osborne and Elaine Waters* http://pareonline.net/getvn.asp?v=8&n=2).

Auditors' Follow-up:

During the course of our review we found disagreement as to whether additional IAS training is needed, IAS flaws need to be corrected, or if going forward SAS should be used for valuation.

Audit Team's Limited Review Finding 2.6

High End Residential Property Valuations Are Inconsistent

The following is the Department of Assessment response to the Audit Team's Review Finding (2.6):

High-end residential homes are problematic to value using any market methodology because of the lack of comparable sales. Valuing the property individually does not increase the number of appropriate comparables.

The property cited by the Audit team in their analysis is a perfect illustration of the inherent flaw of IAS (and its reliance on linear models). Typically, when comparing a linear model to a non-linear model, the values in the middle of the curve will be close. However, on the high-end, they begin to diverge at the 60th percentile with the difference getting larger as you move toward the outer end. A non-linear model limits the County's exposure to over-valuing high-end residential properties.

The Department of Assessment acknowledges the difficulty of valuing high-end residential properties. Historically, the architectural uniqueness and the lack of liquidity of sales of high-end residential properties challenge most assessment departments no matter which methodology is selected. The Department of Assessment will consider individual property valuation (which has its biases), along with enhancing our modeling techniques.

Auditors' Follow-up:

Assessment did not respond to our recommendation regarding the valuation of high-end residential properties, and how they plan to correct the assessments on properties cited in our report. We re-iterate our recommendation regarding the need for a quality control process that would identify potential errors prior to the issuance of the roll.

DEPARTMENT OF ASSESSMENT'S

VALUATION STANDARDS DIVISION

Valuation Standards Team who developed valuation models that were used to prepare the 2012-2013 Tentative Assessment Roll. The valuation team was comprised of veteran assessors, appraisers, statisticians and analysts. Six valuation team members possess master's degrees. The following Valuation Team Standards Division employees who helped prepare the Department of Assessment's Transition Team's point-by-point reply to the Draft Limited Review released to the Department of Assessment on February 2, 2011 and May 2, 2011 are:

SIDDHARTHA SOM was appointed as the Deputy Director of Real Property Services and Valuation Standards Division Supervisor for the Department of Assessment in 2008. Before joining the Department of Assessment, he served as the Director of Automated Valuation Modeling for the Nassau County Assessment Review Commission from 2003-2007; Director of Statistics and Senior CAMA Analyst for the New York City Department of Finance, Property Division; and was a freelance consultant and Senior Portfolio Analyst for Sunterra Financial Services. Mr. Som holds Masters Degrees in International Management and Business Administration from Thunderbird School of International Management and the University of Calcutta, India.

TIMOTHY SHEARES, IAO, is a New York State Professional Assessor with over 27 years in the Assessment/Appraisal industry and is a member of the New York State Assessors' Association (Past President 2008-2009), an Accredited Member of the International Association of Assessing Officers, and a New York State General Certified Appraiser.

CLAUDIA ADOMAITIS has her Masters degree in Computer Science from New York Institute of Technology and her Bachelors degree in Engineering from NYU Polytechnic. She worked for the Assessment Review Commission (ARC) for four years where she maintained and updated Access databases. She also assisted ARC in computer user support and modeled Multiple Regression Analysis using SAS. Claudia has taught computer courses including Network administration, Introduction to Visual Basic, Software Environment (Windows 2000 workstation and Office Suite), and Advanced Programming in C as an adjunct at Briarcliff College. Prior to coming to the County, she was an Industrial Engineering Consultant assisting companies interested in relocating or redesigning, and analyzing their order profiles and inventory levels through Excel and Access. The job also included recommending alternatives for warehouse and distribution facilities and aiding in implementation of new designs utilizing Microsoft Project and simulated models.

ANTHONY ARCURI has 27 years Assessment experience as a Commercial Assessor. While working for the NYC Department of Finance in quality control, he created valuation guidelines and developed assessment procedures as well as standards and policies for hotels and specialty properties. Tony directed the NYCDOF income and expense program for several years before joining DOA in 2004 to create and direct the Annual Survey of Income and Expense (ASIE). Once here, he also assumed the utility and special franchise valuation.

JOHN BOLOGNINI, JR. is a New York State Certified General Real Estate Appraiser. He began at the Department of Assessment five years ago. Before joining the Valuation Standards team he worked as an Assessor in the Residential Field Division for two years where his territory was the southeast portion of the County; he then moved to the Commercial Field Division for three years and covered the southwest portion of the County assessing Class 2 and 4 properties. Prior to joining the County, John ran Computer Aided Manufacturing departments for a number of New York garment manufacturers.

MARY BROWER is a Certified Appraiser who has been involved in the Nassau County market since 1980. She was hired in 2003 by the Assessment Review Commission (ARC) to manage the annual 80,000 +/- residential grievances. Formerly, she has been a self employed appraiser, a Regional Vice President and Appraisal Manager for Citibank, and has served as a SCAR Hearing Officer and Real Estate Trainer. She came to the Assessment Department in 2006 where she supervised a Quality Review Unit. She has considerable knowledge of Nassau County's residential and commercial real estate.

RAY MANNING is a New York State Certified Commercial Appraiser who began his appraisal career with Cushman & Wakefield in 1983. He joined GE Capital-Franchise Finance as a Northeast Regional Real Estate Analyst in 1998. He came to ARC in 2002 where he analyzed commercial cases. Since 2004, he has worked in DOA on commercial valuation projects, sales verifications, and reviewing outside vendor and petitioner appraisals for County Attorney in preparation for court cases.

HOWARD SILVERSTEIN is a New York State Licensed Residential Real Estate Appraiser. He began at the Department of Assessment six years ago with the Small Claims Assessment Review (SCAR) Division defending residential assessments at Small Claims Hearings. Howard joined the Valuation Standards Division in June 2010. He has a Masters of Arts Degree in Computer Science from Brooklyn College. Prior to joining the Department of Assessment he had careers in Education, Insurance and as a Computer Programmer/Analyst.

SARAH WELT has an M.B.A and is a New York State Certified Residential Real Estate Appraiser. She began at the Department of Assessment almost five years ago. Before joining the Valuation Standards team she worked as an Assessor in the Field Division focusing on one, two, and three family residential properties, specializing in the beach communities on Nassau County's south shore. Prior to that, she worked helping the public in the Department's Assessment Assistance Division.