I. What are we talking about???

Introduction/Overview:

Annual Assessment Equity is merely a title intended to encompass the efforts of municipalities regardless of whether they participate in the ORP[T]S Annual Reassessment program.

[Annual Reassessment has been replaced with Cyclical Reassessment & Non-reappraisal Reassessment which will be described throughout this presentation.]
What are we talking about???

Introduction/Overview:

- Many assessment officials of the region have made great strides during the past few years. But of course there is more to be done…
- What are the current assessment practices within the region?
- How are assessments maintained?

Level: We’d like to see a sea of pink…

Level: We’d like to see a sea of salmon…
But the number of reassessment projects has diminished.

<table>
<thead>
<tr>
<th>County</th>
<th>2005 Reassessments</th>
<th>2015 Reassessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jefferson</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Lewis</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Oneida</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Oswego</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>14</td>
</tr>
</tbody>
</table>

Maintaining Assessment Equity

in a Post-Annual Reassessment World

1. Assessment Equity – Level of Assessment & Uniformity
Measuring your success:

Is the municipality’s Level of Assessment, based upon the roll year’s valuation date, applied with uniformity?
How is Level of Assessment measured?

• A ratio study of time adjusted sales prices compared to assessed values leads to a measurement of level.

• A ratio study of computer assisted mass appraisal (CAMA) values to assessed values leads to a measurement of level.

The Residential Ratio: .882

What about the other Major Types?

Uniformity

Are all properties being treated the same?

Are all properties being assessed at the same percent of current market value? (the Level of Assessment)
Uniformity:
Coefficient of Dispersion (COD)

Measures relative dispersion

Average absolute deviation
\[
\frac{\text{COD}}{\text{Median (or mean)}}
\]

Low COD is a good indication of roll uniformity

\* Multiply by 100 to yield a percentage \*

---

Uniformity:
Coefficient of Dispersion

Tells us:

The average deviation as a percentage of the middle value (median)

---

Uniformity:
IAAO Standards...
COD Example (15%)

Market Value
$100,000

Uniform Percentage of Value 100%

COD of 15%

Assessed Value is likely to fall in the range $85,000 to $115,000.

COD Example (15%)

<table>
<thead>
<tr>
<th>Market Value</th>
<th>Assessed Value</th>
<th>Tax Rate</th>
<th>Tax Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
<td>85,000 (15% low)</td>
<td>$20.00/k</td>
<td>$1,700</td>
</tr>
<tr>
<td>100,000</td>
<td>115,000 (15% high)</td>
<td>$20.00/k</td>
<td>$2,300</td>
</tr>
<tr>
<td>400,000</td>
<td>340,000 (15% low)</td>
<td>$20.00/k</td>
<td>$6,800</td>
</tr>
<tr>
<td>400,000</td>
<td>460,000 (15% high)</td>
<td>$20.00/k</td>
<td>$13,600</td>
</tr>
</tbody>
</table>

COD Example (15%) – Potential Tax Impact

Market Value
$100,000

Uniform Percentage of Value 100%

COD of 15%

Assessed Value is likely to fall in the range $85,000 to $115,000.
1. Assessment Equity – Level of Assessment & Uniformity

Is achieved:

When the municipality’s Level of Assessment, based upon the roll year’s valuation date, is applied with uniformity.

Influences that affect your ability to maintain equity

- Keeping up with the real property market
- ...
- ...

Residential Market Trends:
Residential Market Trends:

Cumulative Trends

2. Assessment Roll Equity Analysis
  – What kind of shape is your roll in?
  - ORPTS Performed Annual PDC Analysis
  - Assessor Performed Equity Analysis
Residential Analysis

Sale Ratio Study – Time adjusted sales prices from within the municipality are compared to the latest Final Assessed Value to develop AV/MV ratios. The array of ratios is trimmed where statistically appropriate and then summarized.
CAMA Ratio Study – Time adjusted sales prices, together with the physical inventory characteristics for each sale from within the market area are programmaticaly analyzed to develop a statistically valid Computer Assisted Mass Appraisal (CAMA) model that is then used to predict the probable market value of each subject parcel. Those estimates of market value are compared to the latest Final Assessed Value to develop AV/MV ratios. The array of ratios is trimmed where statistically appropriate and then summarized.
Town of Richland – Special Request

3 – Year Sale Ratio

<table>
<thead>
<tr>
<th>NBHD 50003</th>
<th>NBHD 50005</th>
<th>NBHD 50711</th>
<th>Overall Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Yr Sale</td>
<td>.839</td>
<td>.856</td>
<td>.826</td>
</tr>
<tr>
<td>3 – Yr Sale</td>
<td>.829</td>
<td>.897</td>
<td>.815</td>
</tr>
<tr>
<td>CAMA</td>
<td>.789</td>
<td>.905</td>
<td>.787</td>
</tr>
</tbody>
</table>

All show good uniformity

Consistently higher
PDC “Syntax #9”

Breaks down the residential ratios numerous ways.

<table>
<thead>
<tr>
<th>Property Class</th>
<th>WTRFront type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBHD</td>
<td>WTRFront Ranges</td>
</tr>
<tr>
<td>BLDSTY</td>
<td>SQFT Ranges</td>
</tr>
<tr>
<td>Grade</td>
<td>YRBLT Ranges</td>
</tr>
<tr>
<td>Condition</td>
<td>Acre Ranges</td>
</tr>
</tbody>
</table>

Definitions:

- **Measured roll** means the assessment roll used as the basis for estimating the full value of a municipality, or for a major type within a municipality. For most reassessment municipalities it is the assessment roll upon which the reassessment is implemented. For most non-reassessment municipalities it is the 2010, 2011, 2012 or 2013 assessment roll. The measured roll for one or more major types within a municipality may be different than the overall measured roll for that municipality.

- **Aggregate Adjustment Factors** means Market Area Trends - These factors are developed in broad market areas by analysis of the real property market value in one roll year to the next. Each is applied as a yearly adjustment of the major type base full value to the rate year or current year.

- **Quantity Change factor** means the percent change in the amount of locally assessed taxable real property existing on one assessment roll and the next, expressed as a factor. The factor is computed as follows: (1 + \(\frac{\text{quantity increases}}{\text{current assessed value} - \text{quantity increases}}\)) times (1 - \(\frac{\text{quantity decreases}}{\text{prior assessed value}}\)).
2. Assessment Roll Equity Analysis
   – What kind of shape is your roll in?
     - ORPTS Performed Annual PDC Analysis
     - Assessor Performed Equity Analysis
Tab 1: Select Muni, Latest Final Assessment Roll Yr, Sale Date Range, **Time Adjusted Sale Prices**

A small diversion: **How to Time Adjusted Sale Prices!**

Create (or Update) the Time Trend Options set
Select Muni, Val Date, Sale
Selection Range and Grouping
Option

Tip: Define 3 groups,
one for each Major
Type.

Define the Group, Specify the Time
Periods and Adjustment Rates; Click
the Running Man.

Resulting Time Adjusted Sale Prices.
Close Report to return to COD report
With our sales adjusted for time (trended), we are now ready to continue the COD Study.

Tab 2: Select Sort, Roll Year Assessments

Tip: Select NBHD Code for breakdown by NBHD

Tab 3: Exclude Sales with conditions
Tab 4: Exclude Val Non-Useable Sales, select property category

Tab 5: Select All

Tab 6: Select All
No matter how good you think you are at reviewing/verifying sales, you’ll find sales that show up in the analysis that you’re going to want to ‘take another look’ at.

- If you change any, just make sure you re-transmit them to ORPTS for future use.

**Guarantee ...**

- 9.8336 COD
  - ‘untrimmed’ Wtd Mean Ratio of .938

---

**Sample Report 1**

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**Sample Report 2**

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Observations …

- Can you see any common themes throughout the previous topics??
  - Accurate physical inventory data
  - Accurate and timely reported sale data

Absolutely Essential

Data Accuracy

- Road Review of Data
- Diligent Inventory and Sale data verification
- Editing and Using the computerized data
  - Because ‘Clean edits’ may not mean clean data!
    (inconsistent data will not flag an edit)

Break Time

We will resume at 10:30.
3. Overview of Reassessment Options

- Conventional Reassessment (Reappraisal)
- Non-Reappraisal Reassessment

How to get there:
> Tax.ny.gov
> Government & Researchers
> Property Tax and Assessment Administration
> Assessment Administration
> Reassessments

- Assessing units can conduct a reassessment by individually appraising all parcels for the same roll year (a full reappraisal), trending all parcels or through a combination of reappraisal and trending. Either of these approaches is considered a non-reappraisal reassessment.

- In determining which approach is the most appropriate, each assessing unit must consider the length of time since its last reappraisal and whether sufficient market data is available to demonstrate uniformity within the groups identified for analysis. Trending is not recommended for use in groups for which there are insufficient market data to demonstrate uniformity. Whether or not uniformity can be demonstrated, it should be recognized that the development and on-site review of individual values (reappraisal) will yield more accurate and equitable assessments because all properties in a group do not appreciate or depreciate at the same rate.

- If the analysis indicates that uniformity in a group is acceptable to good and that assessments are at the desired level, no change may be necessary (individual parcels within such a group may still require assessment changes, at a minimum, for new construction or demolition).

- If the analysis indicates that there is acceptable to good uniformity in a group, but the assessments are not at the desired level, assessments can be trended to achieve the desired LOA.

- Trending refers to the application of an arithmetic factor to the assessments of a group of properties to reflect increasing or decreasing property values over a period of time. A 5% trend would indicate that property values have increased 5%.

- If the analysis indicates that there is a lack of uniformity in a group or there is not enough data to draw that conclusion, a reappraisal must be conducted regardless of whether assessments are at the desired level.

- Reappraisal means developing and reviewing a new determination of market value for each parcel, based upon current data, by the appropriate use of one or more of the three accepted approaches to value (cost, market, or income).
What “Maintaining 100%” means
Municipality must notify ORPTS in writing no later than 180 days prior to tentative roll (11/1 for most).
Maintaining 100% implies the municipality is doing a "Non-Reappraisal" Reassessment (NRR). Municipality is required to: perform (and share with ORPTS) systematic analysis; prove that appropriate changes were made to the roll based on the results of the systematic analysis.

<table>
<thead>
<tr>
<th>Programmatic Elements</th>
<th>Maintaining 100% NRR</th>
<th>100% NRR w/ Graduated Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation of RAR</td>
<td>Any valid ratio between 95% and 105% means you get 100%</td>
<td>Average of valid ratios</td>
</tr>
<tr>
<td>Utility properties</td>
<td>Requires utility advisory appraisals</td>
<td>No advisories</td>
</tr>
</tbody>
</table>
| Tentative Eq. Rate    | Measured using Tentative Roll | PDC results reflect actual tentative roll change-in-
|                       | accepted at 100% when supporting documentation is provided | level is greater than 5% |
| Muni Property Types B & C | accepted at 100% when supporting documentation is provided | Apply our current year trends |
| Analysis & Plan for action | Due by Feb 1 | Not Applicable |

For additional detail related to State Aid and specific reassessment program requirements and dates, see the
- Guidelines for Cyclical Reassessment and
- Guidelines for Non-reappraisal Reassessments
or contact your regional ORPTS representative.
4. Performing a Non-reappraisal Reassessment

Major Type A, B and C diagnostic options:

1. Time Adjust 3 to 5 years of Sales and use them to produce a “Sales Analysis & COD Report” for each Major Type.
   A. For detailed instructions of how to incorporate Time Adjustment and produce the “Sales Analysis & COD Report” go back to slide 38 of this presentation.
   B. ORPTS regional staff will be sharing a detailed PDC ratio analysis of Major Type A, broken down by Property Class, NBHD, School, Value Interval, etc.
   C. Analysis should determine assessment level and uniformity within the various significant inventory data items, such as NBHDS within the municipality.
   D. Municipal and ORPTS staff will work together to interpret the analysis and develop a work plan for the reassessment.
   E. See example of this analysis output on following page.

Insufficient Quantity of Sales: less than an average of 10 sales per year causes the validity of the analysis to be in question. Additional analysis, described on subsequent pages in this document.

Does the analysis identify areas of weakness?
How will your reassessment address any weakness that is identified?

Measures of Central Tendency:

**Weighted Mean** only is used for Major Type A.

**Weighted Mean** &/or **Median** are used for Major Types B or C.
2. Are previously generated value estimates (Cost, Model, Commercial Market and Income) in line with current time adjusted sale prices?

A. For detailed instructions of how to incorporate Time Adjustment and produce the “Sale Analysis & COD Report” go back to slide 38 of this presentation.
B. For Major Type A, reproduce Cost &/or Model estimates for these sales. Are these estimates, based on the previous reassessment, statistically consistent indicators of current market value?
C. For Major Type B, reproduce Cost &/or Commercial Market & Income estimates for these sales. Are these estimates, based on the previous reassessment, statistically consistent indicators of current market value?
D. For Major Type C, reproduce Cost estimates for these sales. Are these estimates, based on the previous reassessment, statistically consistent indicators of current market value?
E. See example of this analysis output on following page.

Do these reports identify areas of weakness?
How will your reassessment address any weakness that is identified?

3. Municipalities where there is an insufficient number of sales may need to incorporate verified, time adjusted sales (or recent appraisal values) from outside the municipality in their analysis.

Verified sales or appraisals of similar type properties in comparable settings and with similar market influences in a neighboring municipality can serve as indicators of market value.

For diagnostic analysis, a summary report could be created in Excel, incorporating these additional indicators based upon dollar/square foot or dollar/acre and comparing those indicators to those found in the municipality’s assessment roll.

See example of this analysis output on following page.

Does the report identify areas of weakness?
How will your reassessment address any weakness that is identified?
After incorporating neighboring vacant land sales (resulting in a total of 26 in this acreage group), analysis indicates the selling price of this acreage group to be between $2950 and $3000 per acre. But the assessments of vacant land in this acreage group appear to be in the $2000 to $2600 per acre range (approximately 65% to 90% of current market value).

4. Are prior commercial market indicators that were used to determine the assessed values, in line with current commercial market indicators?
   A. For example, if current market rents were used to determine value estimates, how much would the estimates differ from the current AV?
      See example of this on next page.
   B. For example, are assessed values per unit or per SF in line with time adjusted selling prices per unit or per SF.
      See example of this two pages from now.

Do these reports identify areas of weakness?
How will your reassessment address any weakness that is identified?

If VFF not available, consider any spreadsheet where this information might have been captured and used for the previous reappraisal.
5. Re-process valuation, incorporating current market indicators, produce analysis of value estimates vs current AV.

A. Do valuation approaches that have been updated based upon current market indicators still support the current assessed values or are there areas where value adjustment is needed?

See example of this analysis output on following page.

Do these reports identify areas of weakness?

How will your reassessment address any weakness that is identified?

Recalibrated valuation parameters, reapplied, indicates that current assessments are not at current market.
If all analysis is inconclusive, the only remaining course of action is reappraisal of the group.

Let’s see how this works:

A. Analysis and resolution of Major Type C (Vacant/Farm/Forest)
B. Analysis and resolution of Major Type A (Residential)
C. Analysis and resolution of Major Type B (Commercial)

Key Dates and Documentation Examples

Town of West Monroe 2016 NRR

[Map of Town of West Monroe]
Analyzing MT C Sales to determine/illustrate NRR Level & Uniformity

5 years of Time
Adjusted Sales

West Monroe MT C Sale Analysis Run #1

New Construction

New Construction
Note: There is a feature in this report that lets you exclude Time of Sale/Assessment Roll Property Class mismatches – which would ideally exclude those new construction parcels from the study. But for this muni, it excluded almost all of the sales and was therefore not used.

Would like 30 ‘observations’

Illustrates good level and uniformity, but insufficient number of observations. Need additional support.
Using the previous valuation model(s) to determine &
demonstrate that MT C values are at current market value

Illustrates good level and uniformity, but insufficient
number of observations. Need additional support.
Can MTC sales from neighboring towns be used to
further support the West Monroe land schedule?
Lunch Time

We will resume at 1:00PM.

Maintaining Assessment Equity in a Post-Annual Reassessment World

Town of West Monroe 2016 NRR
Analyzing MT A Sales to determine/illustrate NRR Level & Uniformity

5 years of Time
Adjusted Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Adjusted Sales</th>
<th>NRR Level</th>
<th>Uniformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$500,000</td>
<td>1.2</td>
<td>0.95</td>
</tr>
<tr>
<td>2012</td>
<td>$550,000</td>
<td>1.3</td>
<td>0.98</td>
</tr>
<tr>
<td>2013</td>
<td>$600,000</td>
<td>1.4</td>
<td>1.00</td>
</tr>
<tr>
<td>2014</td>
<td>$650,000</td>
<td>1.5</td>
<td>1.02</td>
</tr>
<tr>
<td>2015</td>
<td>$700,000</td>
<td>1.6</td>
<td>1.04</td>
</tr>
</tbody>
</table>

West Monroe MT A Sale Analysis Run #1

Tug Hill Local Government Conference – March 31, 2016

[Table of MT A Sale Analysis Run #1]

West Monroe MT A Sale Analysis Run #1

Tug Hill Local Government Conference – March 31, 2016

[Table of MT A Sale Analysis Run #1]
West Monroe Summary of MT A Analysis

- NBHDs with sufficient market data indicate they are clearly at current market value (100%)
- Town Wide appears to clearly be at current market value (100%) with excellent uniformity.

West Monroe Summary of MT B Analysis

- The Town has few commercial properties and no useable sales. The Town should re-appraise the few commercial properties. (this is not to say that values must be changed)
NRR Sample Narrative – part 1
ORPTS Regional staff can provide other samples

NRR Sample Narrative – part 2
ORPTS Regional staff can provide other samples

Key NRR Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Nov 1 (120 days prior to TSD)</td>
<td>Muni required to notify in writing (by email is fine) ORPTS that they intend to do NRR. Otherwise PDC results will be used in Eq Rate.</td>
</tr>
<tr>
<td>By Feb 1 (90 days prior to Tentative Roll)</td>
<td>Muni required to provide ORPTS with systematic analysis documentation used to guide local value decisions. This usually includes a narrative. These items become part of the PDC process and ORPTS verification of the local full value for RAR and Eq Rate purposes.</td>
</tr>
</tbody>
</table>
5. Discussion Case Study

- Interpret the analysis and determine how to improve assessment equity

Is Richland a candidate for NRR?

6. Tools & Techniques

1. Using Excel analysis to identify outliers.

Cost Calibrated to Market

Run and save values to Subjects

**Changes were made to improve (increase) how depreciation was computed on homes.**
**Base $/SFLA was increased from $20 to $35**

**Run and save values to Subjects**

**Extract the Values to Excel**

**Save output as Excel with Headers**

**Open data and manipulate it in Excel**

**West Monroe Res Analysis**
Tools & Techniques

2. Comparable Sales Refresher – how does the RPS comp sheet work?
   - Points
   - Options
   - Computations

Comp Sales Points
How you’ve told the system to ‘see’ comparability.

Comp Sales Options
How you’ve told the system to set up the Comp document.
If you don’t like a comp, reject it!

Or, select your comps from the list.

Or, you can key in your own comps, save them and print your own comp sheet.
Even though Cost seems high (old homes), the Comp Estimate works. Let’s see why…

1. In Options, we told the system to use Cost Total as the ‘Value Estimate to Adjust’.

2. In Options, we told the system to use the Median of the Adjusted Sale Prices as the Comparable Estimate.
Thanks for participating and have a safe drive home.