

Comparison of *Quality of Assessments* in Pennsylvania Counties Reassessed Since 2000

This study was conducted at the request of Lackawanna County Commissioner Robert C. Cordaro, for the purpose of comparing quality of assessments performance by reassessment companies.

June 1, 2005

Prepared by: **Roger H. Downing**
Reviewed by: **Richard D. Twark, Ph.D.**

The data used for this study was based on valid sales data provided by the State Tax Equalization Board (STEB). This study was completed under the supervision of Roger H. Downing, Property Tax Consultant and Pennsylvania State University Statistician, P.O. Box 422, Lemont, PA 16851; Telephone: (814) 234-0192; email: rhdown@psu.edu and Richard D. Twark, PhD., Associate Professor Emeritus of Quantitative Business Analysis of the College of Business, Pennsylvania State University; Telephone: (814) 238-3884; email: rdtwark@psu.edu.

Which Reassessment Company is Most Qualified?

The enclosed documents provide a performance comparison of three Pennsylvania reassessment companies; namely, (1) Manatron, (2) Tyler Technologies, and (3) 21st Century Appraisals, Inc.

Performance measures for Uniformity (COD), Regressivity (PRD), and Market Value Level (CLR) are computed for all Pennsylvania counties reassessed by the three companies since 2000 and compared to Pennsylvania and IAAO standards. The best point in time to evaluate the performance of a reassessment company is to review these statistics for quality assessments one year *after* the reassessment has been completed.

Pennsylvania law does not distinguish between land use classes (example: all land uses are to be assessed at the same common level) so there is one Pennsylvania Standard for Uniformity (COD), but the IAAO has different standards depending upon the type of land use.

Data delineated by various land use classes was provided by the Pennsylvania State Tax Equalization Board (STEB) and is the same data used by STEB to compute the Common Level Ratio (CLR) for each county, as mandated by Pennsylvania law.

Detailed comparisons of the past performance of the three reassessment companies using standard performance measures are given in *Charts 1* and *2*. Some brief general conclusions among the three companies are as follows:

1. 21st Century Appraisals is the only company that has average uniformity (COD) statistics within the Pennsylvania standard.
2. 21st Century Appraisals is the only company that has average uniformity (COD) statistics within the IAAO standard.
3. 21st Century Appraisals is the only company that has average regressivity statistics within the IAAO standard.
4. 21st Century Appraisals is the only company that has an average market value closest to the ideal Pennsylvania and IAAO standards.

5. All counties reassessed by Manatron and Tyler Technologies are outside Pennsylvania and IAAO uniform standards.

In short, the only company that is within the average uniformity (COD) under Pennsylvania and IAAO standards is 21st Century Appraisals. The only company within IAAO standards for regressivity (PRD) is 21st Century Appraisals, and its average market value comes closest to the ideal IAAO standard of 100 percent.

Summary of *Charts 1 and 2*

1. **MANATRON (formerly Sabre).** Manatron has completed two county-wide reassessments in Pennsylvania since 2000 (totaling 168,000 parcels) and is currently conducting one county-wide reassessment (17,000 parcels). In addition, Manatron is providing CAMA support to two of the counties they previously reassessed.

Uniformity.

- A. **County-Wide COD Score.** Manatron's average uniformity or COD county-wide score is 22% (the first year after a reassessment). The Pennsylvania standard is 15%.
- B. **Residential COD Score.** Manatron's average uniformity or COD for residential properties is 18.65% (the first year after a reassessment). The Pennsylvania standard is 15%; the IAAO *average standard is 12.5%.
- C. **Commercial COD Score.** Manatron's average uniformity or COD for commercial and industrial properties is 25.7% (the first year after a reassessment). Pennsylvania and IAAO standards are 15%.
- D. **Land COD Score.** Manatron's average uniformity or COD for land properties is 30.4% (the first year after a reassessment). The IAAO standard is 20%.

Regressivity.

- E. **County-Wide PRD Score.** Manatron's average county-wide regressivity score is 1.05 (the first year after a reassessment). The IAAO standard is 1.03. This means assessments of counties reassessed by Manatron since 2000 are regressive.

- F. **Residential PRD Score.** Manatron's average residential regressivity score is 1.05 (the first year after a reassessment). The IAAO standard is 1.03.
- G. **Commercial PRD Score.** Manatron's average commercial regressivity score is 1.08 (the first year after a reassessment). The IAAO standard is 1.03.
- H. **Land PRD Score.** Manatron's average land regressivity score is 1.12 (the first year after a reassessment). The IAAO standard is 1.03.

Market Value Level.

- I. **County-Wide CLR Score.** Manatron's average county-wide market value level is 93.25% (the first year after a reassessment). IAAO standards are 90 - 110%.
- J. **Residential CLR Score.** Manatron's average residential market value level is 91.7% (the first year after a reassessment). IAAO standards are 90 - 110%.
- K. **Commercial CLR Score.** Manatron's average commercial market value level is 100.6% (the first year after a reassessment). IAAO standards are 90 - 110%.
- L. **Land CLR Score.** Manatron's average land market value level is 77.8% (the first year after a reassessment). IAAO standards are 90 - 110%.

2. **TYLER TECHNOLOGIES (formerly Cole-Layer-Trumble).** Tyler Technologies has completed four county-wide reassessments in Pennsylvania since 2000 (totaling 448,000 parcels) and is currently conducting one county-wide reassessment (8,000 parcels). In addition, Tyler Technologies is providing CAMA support to eight of the counties they previously reassessed.

Uniformity.

- A. **County-Wide COD Score.** Tyler Technologies' average uniformity or COD county-wide score is 24% (the first year after a reassessment). The Pennsylvania standard is 15%.
- B. **Residential COD Score.** Tyler Technologies' average uniformity or COD for residential properties is 21.5% (the first year after a reassessment). The Pennsylvania standard is 15%; the IAAO *average standard is 12.5%.
- C. **Commercial COD Score.** Tyler Technologies' average uniformity or COD for commercial and industrial properties is 29.6% (the first year after a reassessment). Pennsylvania and IAAO standards are 15%.
- D. **Land COD Score.** Tyler Technologies' average uniformity or COD for land properties is 37.7% (the first year after a reassessment). The IAAO standard is 20%.

Regressivity.

- E. **County-Wide PRD Score.** Tyler Technologies' average county-wide regressivity score is 1.095 (the first year after a reassessment). The IAAO standard is 1.03. This means assessments of counties reassessed by Tyler Technologies since 2000 are very regressive.
- F. **Residential PRD Score.** Tyler Technologies' average residential regressivity score is 1.10 (the first year after a reassessment). The IAAO standard is 1.03.
- G. **Commercial PRD Score.** Tyler Technologies' average commercial regressivity score is 1.16 (the first year after a reassessment). The IAAO standard is 1.03.
- H. **Land PRD Score.** Tyler Technologies' average land regressivity score is 1.26 (the first year after a reassessment). The IAAO standard is 1.03.

Market Value Level.

- I. **County-Wide CLR Score.** Tyler Technologies' average county-wide market value level is 95.9% (the first year after a reassessment). IAAO standards are 90 - 110%.

- J. **Residential CLR Score.** Tyler Technologies' average residential market value level is 96.7% (the first year after a reassessment). IAAO standards are 90 - 110%.

- K. **Commercial CLR Score.** Tyler Technologies' average commercial market value level is 96.6% (the first year after a reassessment). IAAO standards are 90 - 110%.

- L. **Land CLR Score.** Tyler Technologies' average land market value level is 87.25% (the first year after a reassessment). IAAO standards are 90 - 110%.

3. **21ST CENTURY APPRAISALS, INC.** 21st Century has completed seven county-wide reassessments (including updates) in Pennsylvania since 2000 (totaling 361,000 parcels) and is currently conducting one county-wide reassessment (160,000 parcels). Additionally, 21st Century is managing three Pennsylvania Assessment Offices (Lycoming, Pike, and Venango Counties). 21st Century is also providing CAMA support to 18 Pennsylvania counties. 21st Century is the only company required to conduct a four-year cyclical update reassessment (three counties).

Uniformity.

- A. **County-Wide COD Score.** 21st Century's average uniformity or COD county-wide score is 12.9% (the first year after a reassessment). The Pennsylvania standard is 15%.
- B. **Residential COD Score.** 21st Century's average uniformity or COD for residential properties is 9.1% (the first year after a reassessment). The Pennsylvania standard is 15%; the IAAO *average standard is 18.75%.
- C. **Commercial COD Score.** 21st Century's average uniformity or COD for commercial and industrial properties is 12.5% (the first year after a reassessment). Pennsylvania standard is 15% and the IAAO average standard is 18.75%.
- D. **Land COD Score.** 21st Century's average uniformity or COD for land properties is 13.5% (the first year after a reassessment). The IAAO standard is 20%.

Regressivity.

- E. **County-Wide PRD Score.** 21st Century's average county-wide regressivity score is 1.00 (the first year after a reassessment). The IAAO standard is 1.03. This means assessments of counties reassessed by 21st Century since 2000 have a perfect non-regressivity score.
- F. **Residential PRD Score.** 21st Century's average residential regressivity score is 1.00 (the first year after a reassessment). The IAAO standard is 1.03.
- G. **Commercial PRD Score.** 21st Century's average commercial regressivity score is 1.02 (the first year after a reassessment). The IAAO standard is 1.03.
- H. **Land PRD Score.** 21st Century's average land regressivity score is 1.02 (the first year after a reassessment). The IAAO standard is 1.03.

Market Value Level.

- I. **County-Wide CLR Score.** 21st Century's average county-wide market value level is 96.5% (the first year after a reassessment). IAAO standards are 90 - 110%.
- J. **Residential CLR Score.** 21st Century's average residential market value level is 96.9% (the first year after a reassessment). IAAO standards are 90 - 110%.
- K. **Commercial CLR Score.** 21st Century's average commercial market value level is 96.6% (the first year after a reassessment). IAAO standards are 90 - 110%.
- L. **Land CLR Score.** 21st Century's average land market value level is 91% (the first year after a reassessment). IAAO standards are 90 - 110%.

CLR = Common-Level Ratio
COD = Coefficient of Dispersion
PRD = Price-Related Differential

* The different IAAO land use standards have been averaged in order to calculate an IAAO average standard.

The data used for this study was based on valid sales data provided by the State Tax Equalization Board (STEB). This study was completed under the supervision of Roger Downing, Property Tax Consultant and Pennsylvania State University Statistician, P.O. Box 422, Lemont, PA 16851; Telephone: (814) 234-0192; email: rdh@psu.edu and Richard D. Twark, PhD., Associate Professor Emeritus of Quantitative Business Analysis of the College of Business, Pennsylvania State University; Telephone: (814) 238-3884; email: rdt@psu.edu.

Revised 05/31/2005