

Recommendations for COD Standards

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for

**New York State
Office of Real Property Services**

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1. Summary

This report describes analyses conducted to help determine appropriate COD standards for New York assessment jurisdictions. It concludes that such standards must consider the wide range of municipalities in New York and recommends an approach that begins with a base COD, which is incremented for “difficulty points” based on type of community.

2. Analyses

ORPS provided files of New York municipalities that contained potentially relevant assessment statistics and community characteristics, such as population density per square mile. This was supplemented with data for properties sold in 2006-2008 downloaded from the State’s data warehouse. The data includes such attributes as living area, grade, year built, and waterfront identifiers. These data were aggregated by municipality and matched based on SWIS code to the municipality summary data received from ORPS.

A series of regression analyses were conducted using CODs for jurisdictions that had conducted recent reassessments (within the last four years). The purpose of this approach was to determine the level of assessment uniformity that is feasible with up-to-date assessment rolls. The dependent variable in these analyses was the residential COD. Independent variables included:

- Population count
- Population per square mile
- Median residential assessment ratio
- Percent residential (class 200) parcels
- Average residential value per parcel
- Average age (based on year built)
- Variation of assessed values (standard deviation ÷ mean)

- Percent waterfront properties

The following variables were statistically significant in the models: population per square mile, median assessment level, percentage of parcels in residential use, average age, variation in assessed values, and percent of properties on waterfront. Results were discussed and, for simplicity and to allow for inconsistencies in available data, it was decided to limit final models to three variables:

- Population per square mile
- Percent residential
- Percent waterfront

Of course, expected CODs increase with measures of appraisal difficulty, such as the percentage of properties that are on water, and decrease with such factors as population per square mile and the percentage of properties in residential use. Although it was the strongest variable in initial model, the median residential assessment ratio was not used in the final models because COD goals should not be a function of assessment level (rather, the goal should be to assess at market value with good uniformity).

3. Difficulty Points

To translate these results into operational standards, factors related to appraisal difficulty were converted into “difficulty points” as follows:

Difficulty Points	Population PSM	Percent Residential	Percent Waterfront
0	Greater than 400	Greater than 80%	Less than 5%
1		70 to 80%	5-10%
2	100 to 400	60 to 70%	10-20%
3		Less than 60%	Greater than 20%
4	Less than 100		

Note that a jurisdiction with a population per square mile of more than 400, over 80% of parcels in residential use, and less than 5% of properties on waterfront receives no difficulty points. Conversely, a jurisdiction with a population of less than 100 people per square mile, less than 60% of its properties in residential use, and over 20% on waterfront receives 10 points. Thus, possible difficulty points range from 0 to 10. A regression of CODs on difficulty points calculated in this manner produces the following equation:

$$\text{Expected COD} = 11.85 + 1.13 * \text{Difficulty Points}$$

Of course, jurisdictions that assesses at market value should be (and are) able to achieve better CODs at all levels.

4. Recommended Residential COD Standards

With these considerations in mind, a workable COD standard for residential properties is:

$$\text{Expected COD} = 12 + \text{Difficulty Points}$$

This standard, which has a range of 12 to 22, can be compared against the current ORPS standard for residential property, based on population per square mile alone, which ranges from 10 to 15 (more than 400 people psm = 10, 100 to 400 = 12, and less than 100 = 15). Thus, the recommended standard has slightly more tolerance at the lower end (minimum value of 12 versus 10) and better distinguishes between relatively easy and hard to assess communities. Of course, the starting point could be set to 10, as per the current standards, or some other value, but such matters are policy issues. In any case, the present research results indicate that differences in acceptable CODs between easy and hard to assess communities should be approximately 10 points, versus the 5 points provided in the current standard.

The range of the current ORPS standard of 10 to 15 is consistent with the IAAO standard for residential properties, which is 10 for “newer or more homogeneous areas” and 15 for “older or more heterogeneous areas”¹. As stated on the cover to the standard, IAAO recommended standards are “advisory” only and are superseded by state standards. More importantly, IAAO’s standards are targeted more to neighborhoods or specific “areas” and apply to “single-family residential properties, including condominiums, but exclude 2-4 family, rural, seasonal, and recreational (e.g., waterfront) properties common to many parts of New York state. In addition, New York municipalities rarely (if ever) include only newer properties and more commonly include a wide range of ages or a predominance of older, often renovated properties. Given these considerations, IAAO (and the current ORPS) standards would appear overly tight for residential (class 200) properties in New York. Further, any attempt to develop constructive COD standards or goals must recognize current difficult market conditions. Thus, some caution is advised until markets stabilize and experience is gained.

5. Recommended Overall COD Standards

The standard for residential CODs recommended above can be extended to non-residential properties by recognizing the additional difficulties of appraising commercial properties and vacant land. Specifically, IAAO standards increase by 5 points for commercial properties and 10 points for vacant land. Thus, an appropriate overall COD can be computed as a parcel-weighted average of the three classes. Assume, for example, a jurisdiction with 70% residential, 10% commercial, and 20% vacant/agricultural properties that merits 7 difficulty points as described above. Using a base standard of 12, its residential standard would be 19 and its overall standard would be:

$$(.70)(19) + (.10)(24) + (.20)(29) = 21.5 \text{ (rounded to 22)}$$

¹ *Standard on Ratio Studies*, IAAO, 2007 (page 17).

Assuming a base residential standard of 12, overall COD standards would range from slightly over 12 (virtually all residential with no difficulty points) to approximately 27 (e.g., 10 difficulty points, 50% residential, and 50% vacant/agricultural). Again, these standards would appear reasonable and realistic in normal market conditions.

About the Author

Robert J. Gloude-mans is a partner in Almy, Gloude-mans, Jacobs & Denne. Prior to forming his partnership in 1991, Bob worked for IAAO and the Arizona Department of Revenue. He provides consulting services in designing valuation methodology, developing mass appraisal models, determining time trends, and conducting ratio studies. He has also contributed extensively to the mass appraisal and ratio study literature, including authoring the current IAAO textbook, *Mass Appraisal of Real Property* (1999). Bob has served over 100 clients in the U.S. and internationally. His goal is to help clients operate at the forefront of our profession.