

Final Report

Recommendations for the Handling of Multi-Residential and Dual Use Properties

Prepared for

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by

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December 9, 2014

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Acknowledgements

The author wishes to acknowledge the full cooperation of the Iowa Department of Revenue in providing all information needed to conduct this study. Julie Roisen, MA, CAE, Property Tax Administrator, arranged for all requested documents and the full cooperation of her staff. She and staff provided full and timely answers to all questions. The author also thanks Sue Chambers, Kay Arvidson, Karen Cooper, Joel Gabrielson, Carmen Putzier, and Roland Simmons for their helpful assistance.

Executive Summary

The 2013 Legislature passed legislation that created a new multi-residential property class and established dual use classification for properties that have a primary commercial or industrial use and secondary residential use. Both property types were part of the former commercial class. Multi-residential properties are properties used primarily for human habitation with 3 or more living units. They include mobile home parks and assisted living facilities. Dual use properties are properties that have a primary commercial use and secondary residential use. The secondary residential use is classified as multi-residential regardless of number of units.

Multi-residential properties can be expected to constitute approximately 3% of locally assessed property, similar to the industrial property class. Approximately eight of Iowa's 107 assessment jurisdictions will have over 400 such properties and adequate market data to support and justify ratio studies as currently performed for residential and commercial properties. Many smaller jurisdictions will have too few properties to justify separate study and it is recommended that, like industrial property, the Department conditionally accept local values. The majority of jurisdictions will likely fall between these two extremes, comprising a meaningful percentage of the assessment base but with too little market data to make ratio studies cost-effective. It is recommended that the Department conduct procedural audits for these jurisdictions. If the audits find that multi-residential properties are appraised appropriately, local value should be accepted. If not, the Department should spend the necessary resources to conduct a ratio study and order any necessary adjustments.

The Department should develop consistent criteria for assigning jurisdictions to one of the three above groups. The best and most readily available criteria are number of properties and percentage of value on the prior roll. The following benchmarks are suggested:

Multi-Residential Properties	Default Approach
Less than 50 properties and less than 2.5% of actual local value	Conditionally accept and monitor local value
More than 50 properties and/or more than 2.5% of actual local value	Procedural audit
400 properties and/or 5% of actual local value	Ratio study

Based on these benchmarks, ratio studies would be used for approximately eight jurisdictions, procedural audits for somewhat more than one-half, and values would be conditionally accepted for the remaining, smallest jurisdictions.

Because they constitute a minor percentage of properties and value and because they have a primarily commercial use, it is recommended that dual use properties continue to be studied with 100% commercial use properties. This affords the advantage of not attempting to split a class with already limited sales into two smaller classes. However, the Department can and

should calculate separate ratios for 100% commercial and dual use properties and stand ready to order adjustments if it is found that dual use properties are assessed significantly different than other commercial properties.

With respect to ratio studies, the Department should strive to maximize the use of sales, which provide the most objective evidence of market value before undertaking appraisals to obtain adequate samples. The International Association of Assessing Officers' (IAAO) *Standard on Ratio Studies* condones the use of up to five years of sales provided that prices are adjusted for significant changes in market conditions between time of assessment and time of sale. IAAO textbooks and courses describe and illustrate several methods of making such adjustments. The most practical method for the Department to adopt is the "sales ratio trend method".

Where appraisals are necessary, an intriguing possibility is the development of sales-based mass appraisal models. These models would be built with sales and relevant property characteristics and provide object, market-based value estimates while avoiding the need to conduct manually intensive single property appraisals. Such models, however, require knowledge of statistical and data analysis tools and so would involve a learning curve and pilot phase.

To implement the above recommendations, it is recommended that steps be taken to enhance the skill set of the existing staff. At least one person should have expertise in multi-residential properties and at least one, preferably two, will require data analysis skills.

Recommendations for the Handling of Multi-Residential and Dual Use Properties

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1. Background and Setting

1.1 Purpose of Study

To assist with implementation of the 2013 Commercial Property Tax Reform Act relating to the creation of multi-residential and dual use property classes, the Iowa Department of Revenue contracted with Robert J. Gloudemans, Mass Appraisal Consultant and Partner in Almy, Gloudemans, Jacobs & Denne, to review the legislation and provide recommendations for cost-effective implementation.

The Department assembled relevant Iowa Code, administrative rules, and background data on the distribution of property counts, values, and sales. The consultant visited the Department's Offices in November 2014 to interview staff, clarify questions, and discuss issues and alternatives.

This report presents findings and recommendations for implementation of the new legislation as it impacts equalization procedures. The remainder of section 1 summarizes the current assessment and equalization process, as well as the new legislation. Section 2 discusses alternatives and makes recommendations for the treatment of multi-residential properties. Section 3 discusses and makes recommendations for dual use properties. Section 4 summarizes the conclusions and recommendations.

1.2 Overview of Iowa Assessment and Equalization Process

Iowa Code 441.21 requires assessors to value properties at actual value as of January 1. Actual value is generally synonymous with market value but for agricultural properties is based on productivity value. There are 99 county and eight city assessors in Iowa for a total of 107 assessment jurisdictions.

Prior to the new legislation there were four classes of locally-valued property in Iowa: agricultural, residential, commercial, and industrial. Increases in the

statewide aggregate *taxable* value for each class were limited to no more than 4% annually. Further, increases for agricultural and residential property were limited to the lower increase for each class. Thus, if actual values for the two classes increased by 2% and 3%, respectively, the increase in taxable values for both classes was limited to 2%.

Increases in actual values beyond the 4% growth ceilings are offset by “assessment limitation factors”. For example, if actual values increase by 10% for agricultural properties and 5% for residential properties in a given year, each would be limited to an increase in taxable value of 4%. Agricultural property, however, would require a greater reduction in its assessment limitation factor than would residential to achieve the necessary rollback. A further ramification is that the assessment limitation factors can increase in years where actual values decline or increase by less than the 4%, thus helping to mitigate the assessment limits extended in prior years.

Increases in commercial and industrial taxable value were also limited to 4% annually, although the maximum increase for each class is not tied to the lesser of the two as it is for agricultural and residential properties.

Because actual values for agricultural and residential properties have generally grown more rapidly than commercial and industrial values, the ratio of taxable to actual values for agricultural and residential properties is far less than the ratio for the other two classes. As of 2012, the ratio stood at 43.4% for agricultural property, 52.8% for residential property, and 100% for commercial and industrial property. Tax rates are applied to taxable values and, due to these disparities, effective tax rates are higher for commercial and industrial properties than for agricultural and residential properties.

To assuage these disparities, the 2013 legislation set the assessment limitation factor for commercial and industrial property at 95% (down from 100%) for assessment year 2013 and at 90% for assessment year 2014 and subsequent years. At the same time, the growth limit for residential and agricultural properties was reduced from 4% to 3%.

These complex limitations occur subsequent to the determination of actual values by assessors. To ensure the uniform appraisal of properties at actual values, the Department of Revenue’s Property Tax Division conducts biennial equalization studies of assessed values in odd-numbered years and orders adjustments in actual value for a property class in a jurisdiction for which the ratio of assessed values to equalized true market value is less than 95% or greater than 105%. As in other states, these studies involve a “ratio” study in which assessed values are compared against sales prices or appraisals made by Department staff for a random sample of unsold properties. For 2013 the Department relied exclusively on sales for residential properties but added appraisals for commercial properties

as required to obtain statistically reliable sample sizes. For agricultural property the studies involve a comparison of a jurisdiction's aggregate assessed value to the Department's estimate of total productivity value, which is based on yields, prices, and acres published by the National Agricultural Statistical Service (NASS). Because of the dearth of market data, no formal studies are conducted for industrial properties, although the Director can order adjustments if evidence is found that industrial properties are valued improperly.

Iowa's assessment and equalization framework is fundamentally sound. Assessments are based on market value or productivity value in the case of agricultural properties. Assessors are required to conduct biennial reappraisals and, in accordance with best practice, some update values annually. The Department is charged with ensuring the accurate and equitable valuation of properties and conducts equalization studies every two years. Sales, the best evidence of market value, are relied on to the extent possible and supplemented with appraisals as necessary to obtain adequate sample sizes. Statutes provide that a Declaration of Value be filed as a prerequisite for recording a property transfer and recorders regularly convey the documents to assessors, who in turn are responsible for providing them to the Department. Administrative rule requires assessors to screen sales and assign an appropriate qualification code to each sale indicating its usability (or lack thereof) for appraisal analysis and ratio studies. Department staff review the assigned codes and conduct an independent investigation of commercial transactions by contacting buyers, sellers, or property managers.

Using abstracts that jurisdictions are required to submit on a timely basis and the results of its ratio studies, staff calculate equalized full market values for each jurisdiction and issues adjustment orders as appropriate. Although not part of the equalization process, the Property Tax Division also appraises centrally valued properties (including utilities and railroads), maintains an assessor education program, and administers the processing of exemptions, credits, and real estate transfer taxes.

At the same time, both assessors and the Property Tax Division face challenges and difficulties. With limited staff, assessors must continually update property characteristics and market data and make and defend property values. Limited market data in smaller jurisdictions make appraisals particularly difficult. With a total staff of 15, the Property Tax Division must maintain the programs and functions outlined above and provide information and guidance on specific issues. The existence of 107 separate appraisal jurisdictions makes workloads difficult. Smaller jurisdictions often lack adequate sales and conducting appraisals to reach adequate sample sizes is a labor-intensive operation. Like assessors, the Division seeks to take advantage of new technologies and more efficient work processes when opportunities arise.

1.3 Summary of New Legislation

In addition to changes to growth limits and assessment limitation factors as described above, the 2013 legislation amended Iowa Code 441.21 relating to the classification of real estate by creating a new property class for multi-family real estate, which was previously part of the commercial class. The legislation also provides for dual classification of properties that have a primary commercial use and secondary use for human habitation. The new legislation is effective for the 2015 assessment year.

The legislation was adopted in good part to equalize the treatment of multi-family and other residential properties for tax purposes. An assessment limitation factor of 86.25% will be applied to multi-residential properties for 2015. The factor is further lowered in increments each year to 63.75% for 2021, after which it will be the same as the residential assessment limitation factor.

These new multi-residential and dual use classifications present difficulties for both assessors and the Department alike. In addition to providing guidance on proper classification and reporting of values, the Department must determine how to treat the new classes for equalization purposes. Sections 2 and 3 below provide alternatives and recommendations in this regard.

2. Multi-Residential Property

2.1 Definitions and Property Counts

As defined in new subsection 441.21(13), multi-residential property includes property used for human habitation comprised of three or more living units. In addition to small rental properties (e.g., 3-plexes and 4-plexes) and apartment buildings, multi-residential property includes mobile home parks and assisted living facilities.

These properties were previously included in the commercial category, where there are few sales in smaller jurisdictions. Thus, the new legislation will split a property class that was already difficult to evaluate and equalize into two classes.

Because it is a new property class, there is no consistent data available on the number and actual value of multi-residential properties. The Department sent a survey to assessors soliciting estimates of the number of multi-residential and dual class properties in their jurisdictions. Figure 1 below shows the distribution of the estimated number of multi-residential properties for all 107 jurisdictions. Estimates range from less than ten in two jurisdictions to over 1,000 in Polk County. Table 1 summarizes the responses in table format. Notice that 40

jurisdictions (37%) have less than 50 multi-residential properties. On the other hand, eight jurisdictions estimate they have over 400 such properties. These jurisdictions are Polk County, Davenport, Dubuque, Cedar Rapids, Sioux City, Iowa City, Pottawattamie County (Council Bluffs), and Black Hawk County (Waterloo). A natural break occurs in the range of 350 to 400 properties.

Figure 1 – Estimated Number of Multi-Residential Properties

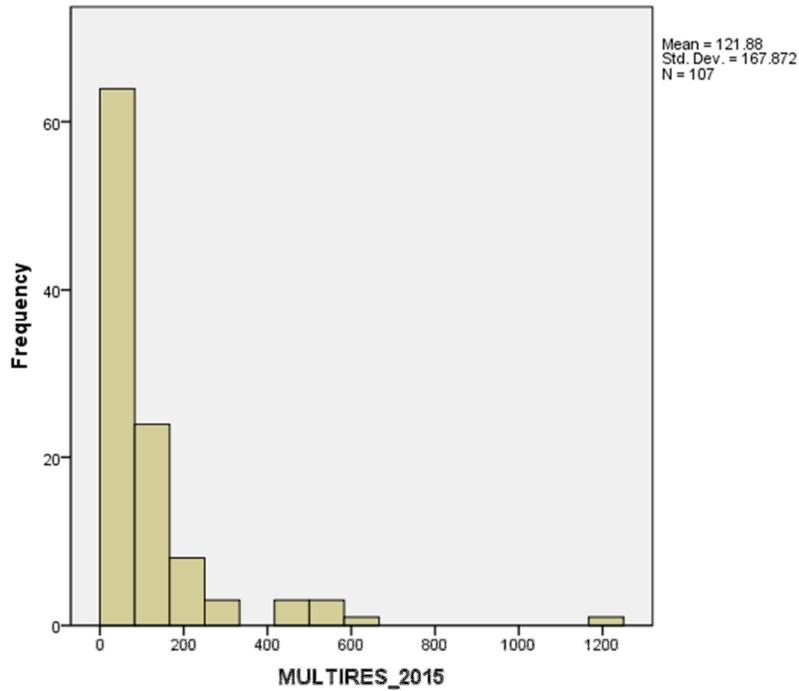


Table 1. Distribution of Estimated Multi-Residential Properties

Properties	Frequency	Percent	Valid Percent	Cumulative Percent
< 50	40	37.4	37.4	37.4
50 - 99	34	31.8	31.8	69.2
100-149	11	10.3	10.3	79.4
150-249	11	10.3	10.3	89.7
250 - 350	3	2.8	2.8	92.5
400 +	8	7.5	7.5	100.0
Total	107	100.0	100.0	

Estimating the probable actual value of multi-residential properties is more problematic. However, some idea can be gained from values reported on sales submitted to the Department of Revenue thus far for calendar 2014. The available data includes 606 sales from January through June (plus a few July sales) with a primary use of commercial or multi-residential. The data span 88 jurisdictions (not including Polk County). Multi-residential properties account for 108 of the 606 sales (18%) and 20% of assessed value. Forty of the 88 respondents (45%) reported no multi-residential sales for the first half of 2014. For sales in the other 48 respondents, the median ratio of multi-residential value to total value (for multi-residential and commercial sales combined) is 21%. For all 88 respondents, including those with no reported multi-residential sales, the corresponding median ratio of multi-residential to total multi-residential and commercial value is only 3%.

Thus it appears that (1) many jurisdictions will have virtually no multi-residential sales (and certainly no more than three) in a given year and that, overall, multi-residential properties comprise approximately 20% of the former commercial class of properties.

On 2014 abstracts the former commercial class comprised 14.4% of total statewide assessed value of the four locally valued property classes (agricultural, residential, commercial, and industrial). Assuming that one-fifth of the former commercial class is multi-residential, it appears that the new class will comprise approximately 3% of total property value in Iowa ($20\% \times 14.4\%$). Residential and agricultural values together make up over 80% of total 2014 value. Commercial and multi-residential properties together comprise 14.4% and industrial comprises 3.5%. Going forward, the new multi-residential class will likely constitute a percentage of value not unlike that of industrial property, which is not actively studied for equalization purposes.

2.2 Discussion of Alternatives

The mainstay tool for equalization analysis is a ratio study, which is usually based on sales supplemented by appraised values in property classes with inadequate sales. Iowa's ratio studies have followed this approach. Ratio studies made for 2013 relied exclusively on sales for residential property but, in accordance with administrative rule, supplemented sales for the former commercial class as required by adding appraisals for a random selection of unsold properties.

The primary alternative to a ratio study is a procedural audit in which Department appraisers audit local valuation procedures, often by examining a sample of properties. The final alternative is to accept local value when it constitutes a small percentage of total value. The three subsections below

discuss the advantages and disadvantages of each approach as it relates to the new multi-residential class.

2.2.1 Ratio Study

Ratio studies are the preferred method of measuring assessment performance and determining the level of assessment for equalization purposes. The International Association of Assessing Officers (IAAO) has developed a detailed, widely used standard on conduct of ratio studies and ratio studies are taught in several IAAO courses and workshops. Approximately 45 states and most local jurisdictions conduct ratio studies.

Ratio studies yield a “point” estimate of the ratio of locally-determined value to market value. Confidence intervals can be computed about these estimates. Other ratio study statistics, most notably the coefficient of dispersion, measure the uniformity of values, i.e., the extent to which ratios are similar from property to property.

Ratio studies can employ either sales or appraisals. Sales are more objective and express the prices agreed to by willing buyers and sellers in normal market transactions. Non-normal sales, such as distress sales and sales between related parties, must be removed from the analysis. The Department has developed a series of codes which assessors assign to indicate whether a sale is a normal transaction or should be rejected for analysis. Sales not meeting one of the enumerated rejection criteria are included in the ratio study.

Since sales occur over a continuum while assessments represent a specific date (namely January 1 of the assessment year), sales prices should be adjusted to the assessment date to obtain valid comparisons. For example, if a sale occurred 12 months before the assessment date and prices have appreciated 0.5% per month, the sale should be adjusted upward by approximately 6%. Several methods of making time adjustments are provided in the *Standard on Ratio Standard* (2013) and taught in IAAO courses and workshops. Likely the most practical for the Department is the “sales ratio trend method”, which involves tracking the change in sale-to-appraisal ratio over the chosen study period. It requires data on only property type, sale date and price, and most recent assessment. Properties with significant physical changes between valuation date and time of sale are deleted from the analysis.

According to the *Standard on Ratio Studies*, sales up to 5 years prior to the assessment date can be used as long as the necessary adjustments are applied. Using older sales is the most efficient method of increasing otherwise inadequate samples. The Department, however, has refrained from using sales from more than one or two years in its studies out of concern for how to make and justify time adjustments.

Appraisals can also be used in ratio studies. Appraisals have the advantage of precluding the need to screen sales and make adjustments for time and perhaps other factors, most notably the inclusion of personal property (e.g., inventories or furnishings) in some transactions. A random sample of properties can be selected for appraisal, helping to ensure representativeness.

On the other hand, appraisal are labor-intensive and costly. Appraisals represent an opinion of value and are therefore less objective than sales. Since relatively few sales or income data are available in most jurisdictions, as with commercial properties, the Department's appraisals for multi-family properties would likely rely largely on the cost approach, which requires estimates of replacement cost new (RCN), accumulated depreciation, and land value.

An intriguing alternative to traditional single property appraisals are value estimates derived from sales-based mass appraisals models. The dependent variable in the models is sales price. Independent variables include relevant property characteristics, location, and sale date. Colorado has effectively used this approach by combining smaller jurisdictions with similar economic bases (e.g., dry crop farming or recreation) in order to achieve adequate sales for analysis. For multi-residential properties, relevant variables could include property type or number of units (e.g., 3-4 plex, 5-16 unit, or larger), average unit size, construction type, age or condition, jurisdiction, and other location data.

In any case, such models have the advantages of being rooted in actual sales and not requiring individual appraisals. Once developed, the models can be applied to either (a) a random sample of unsold properties or (b) all properties in the jurisdiction that fall in broad norms. (While providing larger sample sizes and broad coverage, the latter option requires an electronic copy of assessment data files).

While traditional ratio studies are clearly the preferred approach where adequate data available, most jurisdictions can be expected to have insufficient sales to conduct ratio studies based on sales alone. Although sales can be supplemented with appraisals, appraisals are costly and represent an opinion of value that requires estimates of RCN, depreciation, and land value (in effect, a jurisdiction appraisal is matched against a Department appraisal).

2.2.2 Procedural Audit

Procedural audits involve a review of methods and procedures used in the appraisal process. In response to a question on IAAO's 2011 *Ratio Study Survey*, 25 states and eight Canadian provinces indicated that they conduct procedural audits. However, only two (California, where assessments are

governed by Proposition 13, and New York) indicated they were used in place of ratio studies.

On the positive side, procedural audits require neither sales nor appraisals. On the other hand, they have the major limitation of not providing specific (“point”) estimates of assessment levels. They also require appraisers knowledgeable of the property types being audited and the cooperation of local jurisdictions in providing appraisal records or access to CAMA systems.

Eighteen of the responses to the IAAO survey indicated that procedural studies were used to advise or assist jurisdiction. Twelve indicated that procedural audits were used in the equalization or roll approval process.

Thus procedural audits can be effective in indicating whether properties are properly appraised in accordance with accepted practice but cannot provide a point estimate of the assessment level. As the IAAO *Standard on Ratio Studies* states, “Often, procedural audits can be used as adjuncts to more traditional ratio studies. These audits can be particularly effective when the purpose is to judge overall appraisal quality and when precise, quantitative statistical measures are not obtainable.” Of course, reliable statistical measures are not attainable when there are insufficient sales and there are too few properties in a class to justify or support appraisal ratio studies.

All things considered, procedural audits offer an attractive option for the new multi-residential class, particularly in those jurisdictions where there are adequate properties and value to justify their separate study but little market data to support ratio studies.

2.2.3 Adopt Local Values

The remaining option is for the Department to accept local values in the absence of information indicating improper appraisal as is currently done for industrial properties. This approach has the appeal of minimizing required cost and effort. However, like procedural audits, it provides no estimate of assessment level.

This strategy has obvious appeal when multi-residential properties constitute a minimal percentage of actual value but appears too *laisse faire* for jurisdictions that do have a significant multi-residential component. Of course, rather than accepting local value automatically, the Department can take proactive steps to check the reasonableness of reported values. This could include monitoring and comparing value changes and average values among jurisdictions.

2.3 Multi-Residential Conclusions and Recommendations

Although it appears that the multi-residential class may constitute a percentage of value similar to that of industrial properties, which are not actively studied, the new class can be expected to have considerably more properties and market data. Ratio studies, which provide the only specific estimate of the assessment level, can and should be used in those jurisdictions where multi-family properties are adequate in number and constitute a significant percentage of market value. Further, ratio studies should rely on sales whenever possible before adding more expensive and less objective appraisals. If appraisals are used, consideration should be given to the possibility of introducing mass appraisal models.

Procedural audits are appropriate for those jurisdictions that contain some minimal number of properties but for which ratio studies are not practical or cost-effective. This will require appraisers with the necessary knowledge of the multi-residential property market and valuation procedures. In cases where audits conclude that local appraisal procedures do not represent accepted best practice (as contained in IAAO standards and Iowa guidelines), the Department should stand ready to conduct a ratio study using available sales supplemented as necessary by appraisals, as done for jurisdictions with a larger multi-residential component.

Formal study, either through ratio studies or procedural audits, are difficult to justify for those jurisdiction's that have a minimal multi-residential component. It is recommended that the Department monitor values in such jurisdiction but accept local values that appear reasonable and raise no flags in terms of value per unit or average value changes.

To ensure consistency, the Department should adopt specific criteria for studying jurisdictions in one manner or another. The best, most readily available criteria in this regard are number of properties (economic units) and percentage of actual value on the prior assessment roll. The following table illustrates a suggested schema.

Table 2. Benchmark Criteria for Handling of Multi-Residential Properties

Multi-Residential Properties	Default Approach
Less than 50 properties and less than 2.5% of actual local value	Conditionally accept and monitor local value
More than 50 properties and/or more than 2.5% of actual local value	Procedural audit
400 or more properties and/or 5% of actual local value	Ratio study

Based on available data, it appears that, based on the above criteria, jurisdictions would be distributed approximately as follows:

- Ratio study – at least eight jurisdictions including Polk County, Davenport, Dubuque, Cedar Rapids, Sioux City, Iowa City, Black Hawk County (Waterloo), and Pottawattamie County (Council Bluffs),).
- Procedural audits - at least 59 jurisdictions (approximately 55% of jurisdictions). This is the number estimating they have 50 or more but less than 350 multi-residential properties in the Department's survey of expected property counts (no jurisdiction estimated they have between 350 and 400 multi-residential properties).
- Conditional acceptance of local value – 35 to 40 jurisdictions. As noted in Table 1, 40 jurisdictions estimated they have less than 50 multi-residential properties. In some of these cases, however, multi-residential properties may comprise more than 2.5% of local values.

The above criteria provide recommended approximate break points. The Department should develop final criteria based on a consideration of available data, resources, costs, and other input. Final criteria could be vetted and adopted into administrative rule. In any case, some combination of the three alternatives is recommended. Although multi-residential properties comprise too minimal a percentage of value to justify formal study in many small jurisdiction, they will constitute sufficient properties and/or value to justify a ratio study in others. Procedural audits offer a compromise approach for jurisdictions that fall between these two groups.

3. Dual Use Properties

Dual use properties are properties that have a primary commercial use and secondary use for human habitation. They include downtown commercial properties with upper level apartments and retail or office properties with living quarters. The residential use is classified as multi-residential regardless of number of living units.

Half of respondents to the Department's survey of assessment jurisdictions estimated that they have less than 50 dual use properties and 75% estimated that they have less than 100. Only three estimated that they have 250 or more such properties. Only 39 of the of 633 (6.2%) sales in the former commercial class thus far available for 2014 fall into the dual use category.

Because dual use properties constitute such a small percentage and because their primary use is commercial, it is recommended that they remain in the commercial class. Were they

treated separately, it would not be practical or cost effective to conduct ratio studies. Nor does it seem prudent to devote limited staff to procedural audits. Although local value could be conditionally accepted, studying them as part of the current commercial class seems more constructive, as they would continue to contribute to sample size. Again, the primary use is commercial and they have been studied as part of the commercial class in the past.

At the same time, it is recommended that the Department monitor and report ratio statistics both combined and separately for 100% commercial and dual use properties. If there are adequate observations and there is a meaningful and statistically significant difference in assessment levels between 100% commercial and dual use properties, the Department should consider ordering an adjustment. Although such actions can be expected to be few and far between due to the limited number of dual use properties in most jurisdiction, this safeguard will provide assurance that, where adequate data exists, dual use properties are assessed similar to properties with a 100% commercial use. IAAO recommends the use of the Mann-Whitney test for such comparisons. The test determines if there is as significant difference in the distribution of assessment ratios for two property groups.

4. Conclusions and Recommendations

Conclusions and recommendations for the treatment of multi-residential and dual use properties are summarized below.

1. Multi-residential ratio studies. Ratio studies generate point estimates of the assessment level. They should be used for jurisdictions with adequate market data.
2. Multi-residential procedural audits. Procedural audits offer a method of evaluating the acceptability of local values when there are insufficient properties and value to justify and support a ratio study. Procedural audits are recommended for the mid-tier of jurisdictions: those with a significant multi-residential component but for which ratio studies are not practical or cost-effective. However, when a procedural audit finds that multi-residential properties in a jurisdiction are improperly appraised, the Department should conduct a ratio study of the jurisdiction in order to quantify the required value adjustment.
3. Conditional acceptance of multi-residential values. Neither ratio studies nor procedural audits can be justified for jurisdictions with an insignificant multi-residential component. The Department should monitor and conditionally accept local values for these jurisdictions as long as average values and changes in value raise no flags.
4. Criteria for consistent handling of multi-residential properties. The Department should develop and apply consistent criteria for assigning jurisdictions to one of the three categories: ratio studies, procedural audits, or conditional acceptance of local value.

These criteria should be based on number of properties and percentage of local value on the prior assessment roll. Table 2 above provides benchmarks. Based on these benchmarks, approximately eight jurisdictions would fall in the ratio study category, half or more in the procedural audit category, and the rest in the conditional acceptance category.

5. Dual Use Properties. Dual use properties have a primary commercial use but secondary residential use. Because they constitute too small a component of the assessment base to justify separate study, they should continue to be included in ratio studies conducted for commercial properties, thus contributing to adequate sample size. At the same time, the Department should compute separate ratio statistics for 100% commercial and dual use properties and consider ordering adjustments if it is found that dual use properties are assessed significantly different than 100% commercial use properties.
6. Maximize use of sales. Properly screened sales provide the most objective indicators of market value and the Department should seek to maximize their use in its ratio studies. According to IAAO standards, sales up to 5 years can be used in ratio studies provided that prices are adjusted for significant changes in price levels. IAAO textbooks and courses contain methods for making credible adjustments. It is recommended that the Department consider using up to four years of sales in its ratio studies for commercial and multi-family properties (one or two years may be adequate for residential properties). However, because assessors could set values for sold properties based on observed prices rather than on valuation tables used for other properties, the Department will have to be vigilant to check for “sales chasing”. The IAAO *Standard on Ratio Studies* describes methods for doing so, the most common of which is to compare value changes for sold and unsold properties. If sales chasing is detected, past sales should be discarded in favor of additional appraisals.
7. Consider Mass Appraisal Models. To increase the objectivity and coverage of appraisals, the Department should consider the use of sales-based mass appraisal models. Smaller jurisdictions with a similar economic base could be combined to obtain adequate sales for analysis. Once developed, the models could be applied against a random sample or even the large majority of properties in a jurisdiction to obtain market-based value estimate, which would then be compared against local values in the usual manner. The introduction of such models would, however, involve a learning curve and require mass appraisal skills.
8. Staff. With a staff of 15, the Property tax Division is charged with monitoring and conducting equalization studies for each class of property in each of Iowa’s 107 assessment jurisdictions. The new classes impose additional obligations and workloads and, by splitting the former commercial class, exacerbate sample size problems, potentially requiring additional appraisals. To handle these increased responsibilities it is recommended that steps be taken to enhance the skill set of the existing staff. At least

one person should have expertise in multi-residential properties and at least one, preferably two, will require data analysis skills.

Appendix - About the Author

Robert J. Gloudemans is a mass appraisal consultant and partner in Almy, Gloudemans, Jacobs & Denne. Bob has a master degree in Economics from the University of Iowa. After serving in the army, he began his career with the International Association of Assessing Officers (IAAO), where he worked as a Research Associate. In 1978 he took a position with the Arizona Department of Revenue, where he worked initially as Head of the Computer Assisted Appraisal Unit and later as Administrator of the Research and Equalization Section. In 1989 he began consulting and in 1991 formed the partnership, Almy, Gloudemans & Jacobs (now Almy, Gloudemans, Jacobs & Denne).

Mr. Gloudemans provides consulting services in mass appraisal and ratio studies and has served, either independently or through his partnership, over 100 clients in the U.S., Canada, and internationally. He has served three appointments on the IAAO Standards Committee, instructed in over 40 states, provinces, or countries and contributed extensively to IAAO standards and the mass appraisal literature. He is the author of *Mass Appraisal of Real Property* (IAAO, 1999) and with his partner, Richard Almy, co-author of the current IAAO text, *Fundamentals of Mass Appraisal* (IAAO, 2011).