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**UTAH STATE TAX COMMISSION**

**Property Tax Division**

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**1998 ASSESSMENT/SALES RATIO STUDY**

**1998**

**FOR THE PERIOD**

**JANUARY 1, 1997 TO DECEMBER 31, 1997**

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## PREFACE

The Property Tax Division of the Utah State Tax Commission has prepared the following Assessment/Sales Ratio Study in accordance with the relevant state statutes, administrative rules, and using the applicable guidelines recommended for such studies by the International Association of Assessing Officers (IAAO).

One of the purposes of this study is to check the proportional equity of the tax revenue contributions of counties to the Uniform School Fund. The mean and the median are used to estimate the county-wide level of assessment for each of four classes of property: primary residential, secondary residential, commercial, and vacant land properties. The dollar-weighted mean (DWM) is also calculated to aid in the analysis of assessment levels. The four classes listed above are stratified into smaller samples to identify specific valuation characteristics when there is sufficient sales data available. Any resulting corrective action orders are designed to address specific valuation problems and minimize adverse alterations of appropriate county values.

Additionally, this study measures the assessment performance and effectiveness of the local assessment jurisdiction. Measures of central tendency and uniformity for each county are compared to the standard established by Tax Commission Rule R884-24P-27 to determine assessment performance compliance. Where samples are small for a given class of property, other analysis is used to determine uniformity compliance. This is accomplished through the evaluation of county valuation procedures and practices including locally produced valuation guidelines, market data collection accuracy, or elements of training, resources, and funding. Utah Code<sup>1</sup> also requires the assessor to complete property reviews on a five-year cycle and to update values annually through reappraisal or other value adjustments.

The median and mean ratios are used to evaluate intracounty assessment equality and compliance to the cyclical appraisal requirements noted above. The median is the middle value of all the ratios and is, therefore, not greatly affected by extreme high or low ratios. The mean is the arithmetic average of the ratios. These can be valuable tools to evaluate local assessment methods, procedures, and performance. The median and the mean are calculated for each relevant class or sub-class of property within the county.

The 1998 Assessment/Sales Ratio Study is based on arms-length sales occurring from January 1, 1997 through December 31, 1997. The bases of the sales samples are qualified warranty deeds, supported by data received in response to questionnaires completed by the buyer of the

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<sup>1</sup> Utah Code Ann. (1953) .59-2-303.1

property. Appraisals of residential properties may be performed to supplement the sales data where sample size is small. Residential properties are chosen because of the significance in terms of dollar value and number of parcels of that class of property. However, for the 1998 study cycle, no residential appraisals were conducted as sample size was adequate in all counties to measure performance.

Measures of variability are important to the evaluation of the assessment function because they indicate how consistently property is being assessed within a specific county. The measures of variability used in this study are the coefficient of dispersion (COD) and the coefficient of variation (COV). The COD and the COV are important indicators of the quality of a mass appraisal system. They measure the relative variability of the ratios in the study and can be used to determine assessment consistency within classes of property. This comparison can be both within a county and between counties themselves.<sup>2</sup>

The dollar-weighted mean (DWM) may be used as the basis for adjusting a county's assessment level to the legal level. However, the median and/or the mean may also be used to measure the level of assessment. Coefficients of dispersion and variation, (COD) & (COV) are the bases for ordering reappraisal to correct problems with assessment uniformity. The Tax Commission assessment performance standards were developed from those recommended by the International Association of Assessing Officers. These standards are part of Tax Commission Rule R884-24P-27 included in this report as Appendix VI.

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<sup>2</sup> International Association of Assessing Officers, Property Appraisal and Assessment Administration (Chicago: The International Association of Assessing Officers, 1990), p. 23.

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## NARRATIVE REPORT

### INTRODUCTION

In an effort to improve the uniformity of local property tax valuations, Utah law requires that assessment/sales ratio studies be prepared annually. Statute further requires that the "commission shall . . . order each county to adjust or factor its assessment rates using the most current studies."<sup>3</sup> Accordingly, the Property Tax Division of the Utah State Tax Commission has published this report summarizing all the data relating to the 1998 Assessment/Sales Ratio Study using the guidelines cited in the Preface.

### GOALS

The State of Utah has the following primary goals for its 1998 Assessment/Sales Ratio Study:

1. To check the proportional equity of property tax revenue that each county contributes to the Uniform School Fund.
2. To evaluate assessment performance in terms of both assessment level and uniformity within individual property classes and between classes in each county.
3. To participate with local assessment officers in the analysis of ratio data and the development of effective valuation policies, procedures, and work plans.

In relation to a county's proportional contribution to the uniform school fund, the Assessment/Sales Ratio Study is used to determine if factoring and/or reappraisal is necessary. If wide dispersion is present, a reappraisal may be required. Relatively tight dispersion accompanied by an assessment/sales ratio level estimator which is substantially above or below required levels, indicates that values could be uniformly adjusted or factored in the proper direction.

As an example of conditions indicating the need for assessment level adjustment, consider an assessment jurisdiction with a property class or sub-class assessment level of 88 and a uniformity measure, the coefficient of dispersion (COD), of 10. The COD of 10 indicates a

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<sup>3</sup> Utah Code, Ann. (1953), .59-2-704(2), .59-2-303.1(a).

high degree of uniformity which means the level could be adjusted with minimal negative outcome on the resulting uniformity after any adjustment.

The adjustment factor is computed by dividing the "target" or desired assessment level by the "current" assessment level. In the example, the target level is 100 and the current level is 88. The computation of the factor is 100 divide by 88, which equals 1.14. The final step in this example is to multiply the property values in the class or sub-class by the adjustment factor of 1.14.

Statistical assessment level estimates and their related dispersion measures are fully explained in the methodology and glossary sections of this report.

The second goal is evaluating the assessment performance of each county. The completed study provides information useful in measuring the degree of accuracy and consistency of valuation activity in the local jurisdiction and assists in the identification of valuation problems. Solutions to assessment problems are suggested based on additional analysis in regard to assessment level, uniformity, procedural and technical problems, and administrative policies.

The third goal involves the participation and cooperation of both the local assessment officer and the Property Tax Division. Throughout the ratio study process, input is invited from county assessors in the form of real property sales transaction and sales verification information. Upon completion of the study, the analysis and interpretation of the findings becomes a joint exercise between the Division staff and local assessors. The expected outcome is to jointly identify solutions to valuation problems.

## METHODOLOGY

The study begins with the identification and classification of sales data. All recorded warranty deeds are the basis for identifying potential sales to be included in the study. Each sale is screened and verified before it is considered as an arms-length transaction. The following criteria are used to qualify recorded deeds which identify sales transactions for potential inclusion in each county's sample:

1. Qualified instruments of conveyance of real property are used.
2. The instrument recordation date is between January 1, 1997 and December 31, 1997.



Up to two questionnaires are mailed to the person(s) listed as buyer(s) for each deed. A random sample of deeds is selected in counties where a large number of real property sales suggests a strong real estate market.<sup>4</sup> Returned questionnaires are categorized into four property classifications: primary residential, commercial, vacant land, and secondary residential property. Additionally, these categories may be stratified further to identify local assessment problem areas.

Two types of information are necessary to construct an assessment/sales ratio for a specific parcel of property. The first is the county's appraised market value, sometimes called the "assessed" value, which is obtained from the county assessor's office. The second is the sales price which is obtained from the property buyer through the questionnaire.

Throughout this report, the terms "assessed value" and "appraised market value" mean the same thing. State statutes, Tax Commission rules, IAAO and other appraisal texts use the term "assessed" when discussing valuation levels or performance, and when defining formulas or other mathematical procedures related to ratio studies. This report uses the term "appraised market value" when identifying the value obtained from the local county assessor's office; and the term "assessed value" when addressing valuation level and performance issues, or when describing formulas and mathematical procedures, or in examples, so as to be consistent with IAAO publications, state statutes, and other publications.

Returned questionnaires are screened and only arms-length sales enter preliminary analysis. The following criteria are used to qualify sales for initial inclusion in the study.

1. The sale date was between January 1, 1997 and December 31, 1997.
2. The sale was not a compulsory transaction because of foreclosure, divorce, etc.
3. The sale was not between relatives, affiliated companies, or their officers.
4. The property was not sold to or purchased from any church, fraternal, educational, or governmental organization.
5. Real estate in more than one county was not involved.
6. A partial interest only was not purchased or sold.

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<sup>4</sup> Random selections of sales transactions are taken in Davis, Iron, Salt Lake, Utah, Summit, Washington, and Weber Counties.

7. Possession by buyer was not delayed for more than one year.
8. The sale was not strictly a transfer of convenience, i.e. the creation of a family trust or the correction of a title.
9. The sale was not transitional property or between unknowledgeable buyers and/or sellers.

Computation of the assessment/sales ratio for each sampled property is another fundamental step. The county's appraised market value is divided by the identified sale price for the real property in each sales transaction. The resulting number is the assessment/sales ratio and is used to compute the various statistics for county assessment performance analysis. Care must be taken to achieve an accurate match between the property which sold, and the property which was appraised by the county assessor to insure that an appropriate comparison can be made between the two.

When county appraised market value information is identified for all qualified sales transactions, each transaction is verified to ensure the following:

1. The property was not assessed under the Farmland Assessment Act (FAA).
2. A single property class was identified.
3. The property was not a segregation lacking a serial number or assessment as of January 1, 1998.
4. The buyer was not listed as being a major financial institution.

### ADJUSTMENTS

To insure an accurate comparison between the county appraised market value and the selling price of the property, any needed adjustments are applied to the selling price before ratios are calculated. Adjustments may become necessary when the county appraised market value, which is for land and improvements only and for a given point in time, is not directly comparable to the selling price. The price may represent a different circumstance, i.e. personal property was involved in the sale, or the time difference between the county appraisal process and the selling date may reflect a significant change in value.

Through the data verification process, adjustments were applied for personal property and time as needed. Personal property value adjustments were obtained from the respondents of questionnaires or from the county personal property tax roll. Time adjustments were developed for each county through procedures outlined by the I.A.A.O.<sup>5</sup>

### CENTRAL TENDENCY AND DISPERSION

Several statistical measures of central tendency are calculated and presented including the dollar-weighted mean (DWM), the median, the mean, and the 95% confidence intervals. The coefficient of dispersion (COD) about the median and the coefficient of variation (COV) about the mean are used as the primary measures of dispersion.

The dollar-weighted mean (DWM) is calculated for each property class. The DWM is calculated by dividing the sum of the county's appraised market values of the properties that sold by the sum of the adjusted sale prices. The DWM doesn't give equal weight to each ratio, rather it gives equal weight to each sale dollar and thus is more affected by ratios with high sales prices. According to the IAAO, it is the preferred measure when ratio studies are used to adjust values, as in the development of equalization factors for the distribution of school funds.<sup>6</sup>

The median is simply the middle ratio of the sorted or arrayed assessment/sales ratios. If there is an even number of ratios, the median is the average of the middle two ratios. If there is an odd number of ratios, it is the middle ratio. The median divides the data into two equal parts; and is less affected by the extreme ratios on either side of the distribution than other measures of central tendency. For these reasons, "the median is the generally preferred measure of central tendency for monitoring appraisal performance, determining reappraisal priorities, or evaluating the need for a reappraisal."<sup>7</sup>

The arithmetic average of the ratios, a statistic called the mean, is calculated by summing the ratios for a particular class of property and dividing by the number of ratios in that sample. The mean is presented as another measure of assessment level for use by the local assessment officer in the analysis of local valuation performance. Additionally, the mean itself is used as part of the calculation of another statistic: the price-related differential (PRD).

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<sup>5</sup> IAAO, Standard, p. 15

<sup>6</sup> IAAO, Standard, p. 17

<sup>7</sup> Ibid.

The example in FIGURE 1 is presented as an illustration of five individual assessment/sales ratios. Included are the parcel number, the assessed or appraised market value, and the sale price for each parcel. The individual ratios, which are computed by dividing each assessed value by its related sale price, are also included. This basic data are the foundation of the Assessment/Sales Ratio Study. The measures of central tendency including the dollar-weighted mean, the median, and the mean are calculated from these ratios. Also calculated are the measures of uniformity including the coefficient of dispersion and the coefficient of variation.

FIGURE 1

<u>PARCEL</u>	<u>ASSESSED VALUE</u>	<u>SALE PRICE</u>	<u>RATIO</u>
1	\$88,000	\$101,000	87
2	67,000	63,000	106
3	59,000	58,000	102
4	72,000	72,500	99
5	52,000	54,000	96

To find the median, the individual ratios are arranged in order of magnitude from lowest to highest, then the middle ratio in the series is selected. This array is presented in FIGURE 2. The number of sales in this sample is odd, therefore the ratio of 99 is identified as the median or middle ratio.

FIGURE 2

<u>PARCEL</u>	<u>ASSESSED VALUE</u>	<u>SALE PRICE</u>	<u>RATIO</u>
1	\$88,000	\$101,000	87
5	52,000	54,000	96
4	72,000	72,500	* 99
3	59,000	58,000	102
2	<u>67,000</u>	<u>63,000</u>	106
Totals:	\$338,000	\$348,500	

\* The Median is the middle number in the array.

The dollar-weighted mean is the sum of the county appraised values divided by the sum of the sale prices. From FIGURE 2, divide the total of the county appraised values, \$338,000 by the total of the sale prices, \$348,500 and multiply by 100. The dollar-weighted mean is 97.  $(\$338,000 / \$348,500) \times 100 = 97$ .

The mean ratio is simply the arithmetic average of the ratios. It is calculated by adding all of the ratios, and dividing by the number of ratios. From the example in FIGURE 2, the mean ratio is 98. This is calculated by adding the 5 ratios:  $87 + 96 + 99 + 102 + 106 = 490$ ; and dividing by 5:  $490 / 5 = 98$ .

Researchers also calculate 95 percent confidence intervals about the median and about the mean. A 95 percent confidence interval indicates that if 100 samples are drawn and confidence intervals calculated for each sample, 95 of the intervals would contain the true population measure of central tendency.

The purpose of the study is to identify the assessment level and uniformity for all the parcels in the jurisdiction. In statistical terms, that group is called the population. The sales information, called the sample, is used to generate statistics and draw conclusions about the whole jurisdiction or the population. The confidence intervals described above provide a measurement of assurance or confidence of these calculations.

These confidence intervals are also used to analyze assessment level performance. The 95 percent confidence interval indicates a range that may contain the true population measure of central tendency with a 95 percent degree of confidence. As an example, consider a measure of central tendency of 88 with a lower and upper confidence limit of 73 and 103 respectively. This may suggest that the true population assessment level meets the standard of plus or minus 10% of the legal level of assessment, i.e. between 90 and 110. When a calculated point estimate such as the mean or the median does not meet standard, this interval analysis is used to determine if the property represented by the sample may indeed be at the legal level of assessment. Specifically, if the confidence interval contains the legal level of assessment, 100, it is considered to meet the standard. For a complete description of this process, refer to Rule R884-24P-27 in Appendix VI.

Coefficients of dispersion and variation (COD) & (COV) denote the relative uniformity of assessments within a property class. The COD is the average absolute deviation divided by the measure of central tendency, in this case the median. The average absolute deviation is defined as the sum of the absolute differences between the individual observations and the measure of central tendency, divided by the number of observations. The coefficient of variation is the standard deviation expressed as a percentage of the mean. Using the example introduced above, FIGURE 3 illustrates these calculations for the coefficient of dispersion about the median.

To evaluate the COD or the COV, use the following rule: The lower the coefficient, the more uniform the assessments. Generally, the greatest dispersion is expected in vacant land; followed by commercial, secondary residential, and primary residential. In urban counties, a coefficient of dispersion of 15 or less for residential and commercial property is considered acceptable; for other classifications it should be 20 or less. In rural counties, the standard is 20 or less for residential and commercial properties; and for other classifications it is 25 or less. The limits for the COV are 1.25 times the COD. "Urban counties means counties classified as

first or second class counties pursuant to Section 17-16-13.”<sup>8</sup> Refer to rule R884-24P-27 in Appendix VI for greater detail on the standards for assessment level and uniformity.

FIGURE 3

<u>RATIO</u>		<u>MEDIAN</u>	<u>ABS. Deviation From MEDIAN</u>
87	-	99	12
96	-	99	3
99	-	99	0
102	-	99	3
106	-	99	<u>7</u>
			25
Total Deviation ÷ Number of Ratios = Average Deviation			
25 ÷ 5 = 5.0			
And:			
Average Deviation ÷ Median X 100 = COD			
(5.0 ÷ 99) x 100 = 5.05			

Another useful statistic is the Price Related Differential (PRD). This describes to what degree assessments are regressive or progressive. An assessment is said to be regressive if higher priced properties are under assessed as compared with lower priced properties. Conversely, progressivity is when higher priced properties are over assessed as compared with lower priced properties. The PRD is calculated by dividing the mean ratio by the dollar-weighted mean ratio.

Using the example above, the mean ratio is 98 and from a previous calculation, the dollar-weighted mean ratio is 97. The calculation of the PRD is the mean ratio divided by the dollar-weighted mean ratio. If the answer is greater than 1, the assessment is regressive. In the example,  $98 \div 97 = 1.01$ ; a slightly regressive situation. Generally, a PRD between .98 and 1.03 is considered acceptable.

<sup>8</sup> Rule R884-24P-27, Tax Commission Rules, December 23, 1997

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## USE OF APPRAISALS

Insufficient sales data can be a problem in rural counties where relatively few real estate transactions occur. In an attempt to correct this problem and to increase the sample size of residential property class, a random selection of parcels from that class may be appraised. This procedure is particularly useful when the number of sales does not meet the required sample size as per Rule R884-24P-27. These independent appraised values are then used as the estimates of sale price and substituted for the sale price in the ratio formula.

When both sales and appraisals are used, the Mann-Whitney<sup>9</sup> test is used to determine if both groups of properties, the actual sold properties and the independently appraised properties, are assessed at the same level. This analysis is conducted to reduce any subjectivity that might be introduced through the appraisal process.

For the 1998 ratio study, appraisals were not conducted because the sample of the residential property class in all counties was of sufficient size to conduct statistical analysis.

## USE OF COUNTY STUDY

Several counties in the state conduct their own assessment/sales ratio studies. When possible, the Property Tax Division makes use of these counties' assessment/sales ratio studies. This reduces the duplication of effort and enhances the effectiveness of the State's study through county involvement. The Property Tax Division reviews each county's ratio study procedure to assure the accuracy and objectivity of the county findings. Once the county data are accepted, it is incorporated into the State's ratio study.

## SAMPLE SIZE

Even with appraisals, there may be inadequate sales data to make statistically reliable calculations for some classes of property. Rule R884-24P-27 requires that a sample for any class or sub-class of property consist of 10 or more ratios to achieve statistical accuracy. Where appropriate, the study period may be extended to include additional sales data, or appraisals supplemented as described above. An exception to this rule is that a sample may be used if it represents at least 10% of the population of a given class or sub-class of property.

The individual county data presented in this study represents those classes of property from among primary residential, commercial, vacant land, and secondary residential with a sample

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<sup>9</sup> IAAO, Standard, p.22

size of 10 or more. Some classes of property, particularly commercial and secondary residential, may have been represented by sales data, but less than the required number of 10. While a small sample may give some insight to county assessment practices, it is difficult to be sure that any indicated assessment level or coefficient of dispersion is representative of the property class population at large.

In those instances where the sample size does not meet the standard and uniformity is being measured, other performance evaluation is considered. This evaluation may include analysis of a county's data collection procedures, valuation guideline development procedures, and available valuation resources. Rule R884-24P-27 in Appendix VI offers greater detail regarding non-statistical performance evaluation.

### PERFORMANCE CRITERIA

The study measures performance both in terms of assessment level and assessment uniformity. Utah law requires that all property is assessed at 100 percent of its "fair market value," and that assessments meet specified uniformity standards. For the purpose of this study, the counties' market values are used in computing the ratios. This ensures that the counties' values and the sale prices are compared on the same basis, both being in terms of "market value".

The Tax Commission has adopted standards of performance developed from those recommended by the International Association of Assessing Officers. Under Tax Commission guidelines, generally a county is deemed to have met the 100 percent assessment level if its measure of central tendency for an individual property class falls within plus or minus ten percent of the legal level. At a 100 percent level of assessment requirement such as Utah's, the range is 90 to 110 percent.

A second test is applied if the measure of central tendency does not fall between 90 to 100 percent. Under this test, the standard is considered to have been achieved if the confidence interval surrounding the measure of central tendency contains the legal level of assessment of 100 percent. Consider the example cited above where the measure of central tendency is 88, and the lower and upper confidence limits are 73 and 103 respectively. Since that confidence interval of 73 to 103 includes the legal level of 100, it is considered to meet standard.

These standards also specify uniformity performance criteria. For urban counties, the coefficient of dispersion (COD) for residential and commercial property must be 15 or less; and 20 or less for other classes of property. For rural counties the COD must be 20 or less for residential and commercial property; and 25 or less for other classes of property. The limits for the COV are 1.25 times the COD. Refer to Rule R884-24P-27 in Appendix VI for the complete standard. If the assessment level or uniformity measurement is outside of these



standards, the Tax Commission will order an adjustment or factor, require reappraisal, or take other corrective action intended to bring assessment performance into compliance.

### SELECTIVE REAPPRAISAL AUDITS

Assessment/sales ratio study data are used to estimate the appraisal performance for an entire jurisdiction or county population of properties. For this reason, it is important to ensure that the sold properties used in any study and the unsold parcels in the county are appraised uniformly.

To confirm equal treatment, value changes of both sold and unsold properties are compared from one year to the next year. For example, the total value of a sample of sold properties is compared with the previous year's value of that same sample and the percent of change noted. The total value of a sample of non-sold properties is compared with its previous year's value and this percent of change also noted. Evidence of "sales chasing" or selective reappraisal may exist if the percents of change are significantly different between the two groups. If that is the case, a reappraisal may be ordered or other appropriate action may be taken.

### APPEALS OF FACTOR ORDERS

Tax Commission Rule R861-1A-11, which governs procedures for appealing assessment level factor orders, appears in Appendix V. The process allows the Property Tax Division to enter into stipulations with county assessment jurisdictions regarding adjustments to the Commission's corrective action orders when there is a reasonable basis for modifying such orders.

All stipulations must be reviewed and approved by the Tax Commission. In the event a stipulation is reached between the county and the Property Tax Division, the formal hearing may be waived.

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## STATISTICAL SUMMARIES

The following pages include a summary of any corrective action orders, appeals, and resulting stipulations. Twenty counties were issued corrective action orders in 1998. Stipulations were developed in most counties where an appeal was filed. During this process, additional sales data stratification and in-depth analysis were conducted. The data were segregated by age and size of improvement, and/or geographic or value area location. This provided a detailed review and the identification of specific reasons for non-compliance to assessment standards. This kind of analysis made possible the formulation of a detailed work plan to address the corrective action orders. It should be noted that many local assessment offices were already in the process of correcting assessment level and uniformity problems before correction orders were issued.

Also included are the statistical summary tables and individual county statistical reports. Included in TABLE 1 are summaries by property class for the dollar-weighted mean. TABLE 2 displays the summaries for the median. TABLE 3 shows the relative assessment uniformity as represented by the coefficient of dispersion about the median. TABLE 4 displays the mean by county and property class. TABLE 5 presents the coefficients of variation by county and property class. In these five tables and the individual county statistical summaries following, statistics are presented only where the corresponding property class had a sample size of 10 or more sales.

Assessment level corrective action orders are based on the mean, the median, or their 95 percent confidence limits. The mean is considered to be the best measure of central tendency if the distribution of the sample is normal or “parametric”. The median is used if the distribution is not normal or “non-parametric”. Assessment uniformity corrective action orders are based on the coefficient of dispersion about the median or the coefficient of variation about the mean for non-parametric or parametric samples respectively. These measures are presented as well as other statistics useful to the measurement and analysis of local jurisdictional assessment performance.

These orders and stipulations meet the requirements of .59-2-704, .59-2-303.1, and Rule R861-1A-11 of the Utah Code and USTC Rules. While corrective action orders are required, they should not be interpreted as poor assessment practices at the local level. Most assessment problems would be corrected through the cyclical appraisal activities identified in local work plans. It should be noted that many local assessment jurisdictions had already identified local assessment problems, developed corrective action work plans, and had begun implementation of those plans prior to the issuance of orders from the USTC.

**Beaver County:**

Order: Factor vacant land in regions 1 by 1.08; Out County East of Minersville.

**Box Elder County:**

Order: Factor vacant land in regions 3 by 1.22; Honeyville, Mantua, Harper, Perry, and Willard.

Stipulation: Reappraise or factor vacant land in Willard and Perry.

**Cache County:**

Order: Factor vacant land larger than 1 acre in regions 1, 2, and 3 by 1.21;

**Carbon County:**

Order: Factor primary residential property , excluding Mobile Homes in East Carbon by 1.17

**Duchesne County:**

Order: Factor primary residential property county-wide by 1.06. Factor vacant non-FAA agricultural land (LA1, LA2, and LA3 by 1.17. Reappraise secondary residential property located in unincorporated areas county-wide. Develop Five Year Appraisal Plan by 12/31/98.

Stipulation: Factor by 1.20 or otherwise bring to market value the Primary Residential properties in the Park View and Golf Course subdivisions located in Roosevelt City; and factor by 1.14 or otherwise bring to market value the Primary Residential properties in Townships 2, 3, and 4 South Ranges 1 and 2 West; Townships 3 and 4 South Range 3 West; and sections 19 through 36 Township 2 South Range 3 West, excluding those properties located within the cities or platted subdivisions. Factor by 1.19 or otherwise bring to market value the Secondary Residential properties in Township 2 North Range 9 West; Township 1 North Ranges 8 and 9 West; Townships 1, 2, and 3 South Ranges 7, 8, and 9 West. Factor by 1.17 or otherwise bring to market value the non-FAA Agricultural land with the county code of LA2.

**Emery County:**

Order: Factor primary residential less than 1100 square feet in size, except mobile homes, by 1.21.

Stipulation: Reappraise primary residential properties in Casltle Dale, Elmo, and Cleveland. Factor primary residential properties in Emery, Orangeville, Ferrron, Green River, and Huntington.

**Garfield County:**

Order: Factor secondary residential property in Region 4 by 1.33.

Stipulation: Factor or reappraise secondary residential property in the Beaver Dam and West Panguitch Lake subdivisions0.

**Grand County:**

Order: Factor primary residential properties in Moab City, except mobile homes and condominiums, by 1.19.

**Kane County:**

Order: Factor secondary residential property in Region 5 (Cedar Mountain) by 1.03. Factor vacant land in Region 6 (Outside) by 1.45..

Stipulation: Implement factor order for secondary residential and reappraise vacant land as per county five year plan, plus Long Valley Estates Subdivision.

**Piute County:**

Order: Factor primary residential property in Region 4 (Marysvale) by 1.07.

**Rich County:**

Order: Factor primary and secondary residential properties in Region 1 District 2, except condominiums and non lake front properties in Garden City. Factor vacant land in Region 1 District 1 (lake front) by 1,28.

**Sanpete County:**

Order: Factor primary residential property in region 3 by 1.08 and in region 5 by 1.08. Factor vacant land in region 2 by 1.10 and in region 5 by 1.06.

**Sevier County:**

Order: Factor primary residential properties in cities and towns located within regions 3 and 4 by 1.14. Factor vacant land in regions 3 and 4 by 1.20. Factor vacant land in the Accord Lake Subdivision by 1.16.

**Tooele County:**

Order: Factor primary residential property 1989 and newer county-wide by 1.09.

Stipulation: Reappraise land and factor residential properties as needed in Districts 2, 7, and 10.

**Utah County:**

Order: Factor primary residential properties in Region 1 (north 1/3 of county) by 1.13. Factor commercial property county wide by 1.04.

**Wasatch County:**

Order: Factor county wide primary residential property 1995 and older, except condominiums, by 1.16. Factor vacant land in region 3 (Charleston/Wallsburg) by 1.13.

Stipulation: Reappraise vacant and primary residential properties in regions 3 and 9.

**Washington County:**

Order: Factor primary residential property in region 5 by 1.18. Factor commercial property county-wide by 1.05.

Stipulation: Reappraise residential properties in Pine Valley Ranches. Reappraise commercial properties in St George and Hurricane.

**Wayne County:**

Order: Factor primary residential county wide by 1.18. Factor vacant land county wide by 1.05.

**Weber County:**

Order: Factor primary residential property in regions 5 and 8 by 1.1. Factor vacant land in region 1 by 1.15.

TABLE 1

DOLLAR-WEIGHTED MEAN BY CATEGORY - 1998 ASSESSMENT/SALES RATIO STUDY

<u>COUNTY</u>	<u>RESIDENTIAL</u>		<u>COMMERCIAL</u>		<u>VACANT LAND</u>		<u>SECONDARY</u>	
	<u>DWM</u>	<u>SAMPLE</u>	<u>DWM</u>	<u>SAMPLE</u>	<u>DWM</u>	<u>SAMPLE</u>	<u>DWM</u>	<u>SAMPLE</u>
Beaver	92.1	48			77.3	54		
Box Elder	99.8	362	91.1	11	91.7	87		
Cache	99.4	678			85.0	157		
Carbon	87.6	123			80.1	25		
Daggett	86.9	20					89.7	16
Davis	97.6	350	96.4	18	66.3	89		
Duchesne	87.2	59			72.0	164	65.0	17
Emery	87.8	32			79.4	21		
Garfield	92.4	20			84.9	62	74.8	19
Grand	86.3	51			75.1	39		
Iron	95.1	229			86.6	166	96.0	39
Juab	89.1	38			65.9	20		
Kane	94.8	48			82.0	220	79.2	39
Millard	96.5	74			120.2	37		
Morgan	97.1	40			88.3	20		
Piute	89.0	26						
Rich	72.0	36			85.4	113		
Salt Lake	99.93	5,914	95.3	118	98.8	191		
San Juan	98.5	22			81.2	54		
Sanpete	89.1	112			76.2	105	93.3	14
Sevier	93.6	99			83.3	58		
Summit	98.1	124			89.1	99	97.0	118
Tooele	91.9	253			66.4	57		
Uintah	96.7	187	85.8	14	89.4	86		
Utah	92.1	248	71.3	29	79.9	54		
Wasatch	91.5	71			86.7	110	92.8	16
Washington	91.4	482	63.0	21	75.6	214		
Wayne	87.2	10			60.0	19		
Weber	92.6	250	101.6	27	87.6	70		

TABLE 2

MEDIAN BY CATEGORY - 1998 ASSESSMENT/SALES RATIO STUDY

<u>COUNTY</u>	<u>RESIDENTIAL</u>		<u>COMMERCIAL</u>		<u>VACANT LAND</u>		<u>SECONDARY</u>	
	<u>MEDIAN</u>	<u>SAMPLE</u>	<u>MEDIAN</u>	<u>SAMPLE</u>	<u>MEDIAN</u>	<u>SAMPLE</u>	<u>MEDIAN</u>	<u>SAMPLE</u>
Beaver	93.4	48			85.6	54		
Box Elder	99.4	362	77.3	11	91.6	87		
Cache	96.8	678			92.4	157		
Carbon	87.9	123			73.8	25		
Daggett	88.7	20					92.9	16
Davis	95.6	350	75.6	18	95.5	89		
Duchesne	86.6	59			79.8	164	61.2	17
Emery	92.6	32			81.6	21		
Garfield	92.3	20			93.1	62	78.8	19
Grand	85.8	51			97.5	39		
Iron	96.7	229			92.3	166	91.0	39
Juab	91.8	38			79.4	20		
Kane	93.2	48			89.8	220	89.9	39
Millard	94.7	74			91.7	37		
Morgan	95.4	40			100.0	20		
Piute	96.4	26						
Rich	73.0	36			93.8	113		
Salt Lake	100.4	5,914	99.8	118	99.0	191		
San Juan	104.7	22			98.1	54		
Sanpete	84.1	112			89.2	105	92.5	14
Sevier	93.5	99			83.5	58		
Summit	98.0	124			97.0	99	98.0	118
Tooele	90.5	253			99.7	57		
Uintah	98.1	187	92.0	14	98.5	86		
Utah	93.0	248	81.1	29	93.7	54		
Wasatch	91.4	71			96.6	110	91.9	16
Washington	94.2	482	60.4	21	96.2	214		
Wayne	87.1	10			72.9	19		
Weber	91.9	250	94.4	27	88.0	70		

TABLE 3

COEFFICIENT OF DISPERSION BY CATEGORY - 1998 ASSESSMENT/SALES RATIO STUDY

<u>COUNTY</u>	<u>RESIDENTIAL</u>		<u>COMMERCIAL</u>		<u>VACANT LAND</u>		<u>SECONDARY</u>	
	<u>COD</u>	<u>SAMPLE</u>	<u>COD</u>	<u>SAMPLE</u>	<u>COD</u>	<u>SAMPLE</u>	<u>COD</u>	<u>SAMPLE</u>
Beaver	16.9	48			35	54		
Box Elder	11.5	362	32.4	11	14.3	87		
Cache	14.5	678	16.3	9	19.1	157		
Carbon	21.9	123			56.0	25		
Daggett	33.8	20					9.1	16
Davis	10.1	350	14.0	18	22.5	89		
Duchesne	20.2	59			43.7	164	37.4	17
Emery	11.7	32			38.5	21		
Garfield	16.4	20			34.1	62	27.6	19
Grand	12.1	51			34.3	39		
Iron	10.1	229			26.0	166	10.8	39
Juab	12.2	38			32.1	20		
Kane	18.7	48			35.4	220	24.5	39
Millard	19.6	74			34.9	37		
Morgan	7.2	40			16.5	20		
Piute	16.4	26						
Rich	21.2	36			19.1	113		
Salt Lake	4.9	5,914	11.8	118	12.8	191		
San Juan	21.2	22			28.9	54		
Sanpete	20.9	112			35.7	105	65.7	14
Sevier	16.4	99			23.7	58		
Summit	10.3	124			18.5	99	9.1	118
Tooele	12.4	253			23.6	57		
Uintah	8.3	187	31.2	14	32.7	86		
Utah	11.4	248	31.4	29	25.9	54		
Wasatch	11.2	71			28.1	110	19.3	16
Washington	10.7	482	49.6	21	15.4	214		
Wayne	13.7	10			43.4	19		
Weber	9.2	250	15.0	27	16.9	70		



TABLE 4

MEAN - 1998 ASSESSMENT/SALES RATIO STUDY

<u>COUNTY</u>	<u>RESIDENTIAL</u>		<u>COMMERCIAL</u>		<u>VACANT LAND</u>		<u>SECONDARY</u>	
	<u>MEAN</u>	<u>SAMPLE</u>	<u>MEAN</u>	<u>SAMPLE</u>	<u>MEAN</u>	<u>SAMPLE</u>	<u>MEAN</u>	<u>SAMPLE</u>
Beaver	95.2	48			91.5	54		
Box Elder	99.5	362	90.5	11	92.5	87		
Cache	101.2	672			90.9	187		
Carbon	91.0	123			93.0	25		
Daggett	96.9	20					92.5	16
Davis	96.6	350	84.9	18	94.3	89		
Duchesne	88.0	59			81.7	164	69.8	17
Emery	90.4	32			88.8	21		
Garfield	92.1	20			97.7	62	82.9	19
Grand	86.6	51			94.6	39		
Iron	97.9	229			92.4	166	93.3	39
Juab	90.0	38			88.1	20		
Kane	94.6	48			93.8	220	88.3	39
Millard	100.0	74			101.5	37		
Morgan	96.7	40			88.6	20		
Piute	93.5	26						
Rich	79.9	36			94.7	113		
Salt Lake	100.6	5,914	97.6	118	98.6	191		
San Juan	107.6	22			95.8	54		
Sanpete	89.9	112			94.8	105	125.3	14
Sevier	94.3	99			85.2	58		
Summit	98.8	124			95.1	99	97.8	118
Tooele	90.3	253			96.4	57		
Uintah	97.1	187	98.4	14	102.6	86		
Utah	92.6	248	82.5	29	91.8	54		
Wasatch	90.2	71			94.4	110	92.3	16
Washington	94.0	482	74.6	21	96.8	214		
Wayne	89.4	10			76.1	19		
Weber	92.3	250	92.1	27	88.3	70		

TABLE 5

COEFFICIENT OF VARIATION BY CATEGORY - 1998 ASSESSMENT/SALES RATIO STUDY

<u>COUNTY</u>	<u>RESIDENTIAL</u>		<u>COMMERCIAL</u>		<u>VACANT LAND</u>		<u>SECONDARY</u>	
	<u>COV</u>	<u>SAMPLE</u>	<u>COV</u>	<u>SAMPLE</u>	<u>COV</u>	<u>SAMPLE</u>	<u>COV</u>	<u>SAMPLE</u>
Beaver	27.4	48			63.5	54		
Box Elder	14.8	362	48.2	11	19.0	87		
Cache	40.5	672			33.8	187		
Carbon	31.7	123			103.5	25		
Daggett	38.6	20					10.7	16
Davis	13.1	350	16.7	18	37.5	89		
Duchesne	27.2	59			59.0	164	39.3	17
Emery	14.8	32			47.8	21		
Garfield	22.1	20			46.1	62	42.5	19
Grand	15.2	51			70.7	39		
Iron	16.8	229			38.6	166	13.7	39
Juab	16.2	38			50.1	20		
Kane	23.7	48			66.5	220	32.1	39
Millard	27.2	74			42.5	37		
Morgan	8.4	40			29.1	20		
Piute	23.7	26						
Rich	27.0	36			26.4	113		
Salt Lake	6.7	5,914	18.9	118	17.7	191		
San Juan	33.1	22			59.4	54		
Sanpete	26.9	112			67.0	105	68.9	14
Sevier	21.9	99			27.7	58		
Summit	15.2	124			27.2	99	13.5	118
Tooele	17.9	253			37.7	57		
Uintah	11.4	187	50.4	14	53.9	86		
Utah	13.2	248	43.7	29	39.1	54		
Wasatch	14.9	71			28.1	110	28.3	16
Washington	14.9	482	53.0	21	25.0	214		
Wayne	17.3	10			51.5	19		
Weber	12.2	250	21.7	27	24.9	70		

1998 Utah Assessment/Sales Ratio Study  
 Beaver County  
 Summary Report

General Data	RES	VAC
Number of Sales	48	54
Population of Property Class	1,820	2,240
Price Related Differential	1.03	1.18
Dollar Weighted Mean		
Upper Limit of Confidence Interval	96.73	89.54
Dollar Weighted Mean	92.14	77.30
Lower Limit of Confidence Interval	87.56	65.05
Median		
Upper Limit of Confidence Interval	96.90	94.12
Median	93.43	85.56
Lower Limit of Confidence Interval	85.78	73.79
Coefficient of Dispersion	16.92	34.99
Mean		
Upper Limit of Confidence Interval	102.84	107.48
Mean	95.22	91.49
Lower Limit of Confidence Interval	87.60	75.50
Coefficient of Variation	27.42	63.54

RES: Primary Residential Property      This Sample Is: Parametric  
 VAC: Vacant Land Property              This Sample Is: Parametric

BOX ELDER

1998 Utah Assessment/Sales Ratio Study  
 Box Elder County  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	362	11	87
Population of Property Class	9,973	762	6,145
Price Related Differential	1.00	0.99	1.01
Dollar Weighted Mean			
Upper Limit of Confidence Interval	101.33	115.4	97.33
Dollar Weighted Mean	99.82	91.08	91.69
Lower Limit of Confidence Interval	98.31	66.75	86.05
Median			
Upper Limit of Confidence Interval	100.54	213.11	98.57
Median	99.41	77.26	91.58
Lower Limit of Confidence Interval	98.50	56.32	86.67
Coefficient of Dispersion	11.46	32.40	14.34
Mean			
Upper Limit of Confidence Interval	101.02	119.44	96.27
Mean	99.50	90.51	92.51
Lower Limit of Confidence Interval	97.98	61.58	88.74
Coefficient of Variation	14.82	48.17	18.98

RES:	Primary Residential Property	This Sample Is:	Parametric
COM:	Commercial Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Cache County  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	678	9	157
Population of Property Class	16,443	1,098	13,447
Price Related Differential	1.02	1.12	1.07

Dollar Weighted Mean

Upper Limit of Confidence Interval	101.05	83.69	90.57
Dollar Weighted Mean	99.38	61.88	84.96
Lower Limit of Confidence Interval	97.71	40.08	79.34

Median

Upper Limit of Confidence Interval	97.78	86.32	95.82
Median	96.83	75.09	92.35
Lower Limit of Confidence Interval	95.34	35.83	88.54
Coefficient of Dispersion	14.45	16.32	19.06

Mean

Upper Limit of Confidence Interval	104.25	82.20	95.73
Mean	101.17	69.05	90.92
Lower Limit of Confidence Interval	98.08	55.90	86.12
Coefficient of Variation	40.51	25.26	33.79

RES:	Primary Residential Property	This Sample Is:	Non-Parametric
COM:	Commercial Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric

1998 Utah Assessment/Sales Ratio Study  
 Carbon County  
 Summary Report

General Data	RES	VAC
Number of Sales	123	25
Population of Property Class	6,328	3,379
Price Related Differential	1.04	1.16
Dollar Weighted Mean		
Upper Limit of Confidence Interval	90.8	99.0
Dollar Weighted Mean	87.6	80.1
Lower Limit of Confidence Interval	84.4	61.3
Median		
Upper Limit of Confidence Interval	91.8	95.3
Median	87.9	73.8
Lower Limit of Confidence Interval	82.6	57.0
Coefficient of Dispersion	21.9	56.0
Mean		
Upper Limit of Confidence Interval	96.1	132.7
Mean	91.0	93.0
Lower Limit of Confidence Interval	85.9	53.4
Coefficient of Variation	31.7	103.5

RES: Primary Residential Property      This Sample Is: Non-Parametric  
 VAC: Vacant Land Property              This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
 Daggett County  
 Summary Report

General Data	RES	VAC
Number of Sales	16	20
Population of Property Class	182	1549
Price Related Differential	1.03	1.11
Dollar Weighted Mean		
Upper Limit of Confidence Interval	94.8	104.2
Dollar Weighted Mean	89.7	86.9
Lower Limit of Confidence Interval	84.5	69.6
Median		
Upper Limit of Confidence Interval	104.4	130.0
Median	92.9	88.7
Lower Limit of Confidence Interval	82.5	66.7
Coefficient of Dispersion	9.1	33.8
Mean		
Upper Limit of Confidence Interval	97.7	114.3
Mean	92.5	96.9
Lower Limit of Confidence Interval	87.3	79.4
Coefficient of Variation	10.7	38.6

RES: Residential Property      This Sample Is: Parametric  
 VAC: Vacant Land Property      This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
 Davis County  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	350	18	89
Population of Property Class	49,619	1,840	7,576
Price Related Differential	1.00	0.96	1.54

Dollar Weighted Mean

Upper Limit of Confidence Interval	99.2	105.5	103.1
Dollar Weighted Mean	97.6	96.4	66.3
Lower Limit of Confidence Interval	96.9	87.3	29.5

Median

Upper Limit of Confidence Interval	99.6	108.1	105.1
Median	97.5	91.9	100.0
Lower Limit of Confidence Interval	95.6	75.6	95.5
Coefficient of Dispersion	10.1	14.0	22.5

Mean

Upper Limit of Confidence Interval	99.3	100.2	110.5
Mean	98.0	92.6	102.4
Lower Limit of Confidence Interval	96.6	84.9	94.3
Coefficient of Variation	13.1	16.7	37.5

RES:	Primary Residential Property	This Sample Is:	Parametric
COM:	Commercial Property	This Sample Is:	Non-parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric



1998 Utah Assessment/Sales Ratio Study  
 Duchesne County  
 Summary Report

General Data	RES	VAC	SEC
Number of Sales	59	164	17
Population of Property Class	3,310	15,989	427
Price Related Differential	1.01	1.14	1.07

Dollar Weighted Mean

Upper Limit of Confidence Interval	93.2	78.1	76.4
Dollar Weighted Mean	87.2	72.0	65.0
Lower Limit of Confidence Interval	81.2	65.9	53.5

Median

Upper Limit of Confidence Interval	92.9	85.6	97.4
Median	86.6	79.8	61.1
Lower Limit of Confidence Interval	82.5	68.9	46.6
Coefficient of Dispersion	20.2	43.7	37.4

Mean

Upper Limit of Confidence Interval	94.3	89.1	83.9
Mean	88.0	81.7	69.8
Lower Limit of Confidence Interval	81.7	74.3	55.8
Coefficient of Variation	27.2	59.0	39.3

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric
SEC:	Secondary Residential Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Emery County  
 Summary Report

General Data	RES	VAC
Number of Sales	32	21
Population of Property Class	2,905	2,677
Price Related Differential	1.03	1.12
Dollar Weighted Mean		
Upper Limit of Confidence Interval	92.5	95.4
Dollar Weighted Mean	87.8	79.4
Lower Limit of Confidence Interval	83.1	63.4
Median		
Upper Limit of Confidence Interval	99.3	137.1
Median	92.6	81.6
Lower Limit of Confidence Interval	84.1	53.3
Coefficient of Dispersion	11.7	38.5
Mean		
Upper Limit of Confidence Interval	95.2	108.1
Mean	90.4	88.8
Lower Limit of Confidence Interval	85.6	69.6
Coefficient of Variation	14.8	47.8

RES: Primary Residential Property      This Sample Is: Parametric  
 VAC: Vacant Land Property              This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
Garfield County  
Summary Report

General Data	RES	VAC	SEC
Number of Sales	20	62	19
Population of Property Class	1,167	5,334	130
Price Related Differential	1.00	1.15	1.11

Dollar Weighted Mean

Upper Limit of Confidence Interval	101.0	104.0	86.7
Dollar Weighted Mean	92.4	84.9	74.8
Lower Limit of Confidence Interval	83.9	65.9	62.8

Median

Upper Limit of Confidence Interval	104.3	106.3	95.4
Median	92.3	93.1	78.8
Lower Limit of Confidence Interval	77.7	81.7	61.2
Coefficient of Dispersion	16.4	34.1	27.6

Mean

Upper Limit of Confidence Interval	101.6	109.1	99.8
Mean	92.1	97.7	82.9
Lower Limit of Confidence Interval	82.6	86.3	66.0
Coefficient of Variation	22.1	46.1	42.5

RES:	Primary Residential Property	This Sample Is:	Non-metric
VAC:	Vacant Land Property	This Sample Is:	Parametric
SEC:	Secondary Residential Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Grand County  
 Summary Report

General Data	RES	VAC
Number of Sales	51	39
Population of Property Class	2,118	2,062
Price Related Differential	1.00	1.26

Dollar Weighted Mean

Upper Limit of Confidence Interval	89.8	87.0
Dollar Weighted Mean	86.3	75.1
Lower Limit of Confidence Interval	82.9	63.1

Median

Upper Limit of Confidence Interval	92.4	104.0
Median	85.8	97.5
Lower Limit of Confidence Interval	79.7	77.5
Coefficient of Dispersion	12.1	34.3

Mean

Upper Limit of Confidence Interval	90.3	116.5
Mean	86.6	94.6
Lower Limit of Confidence Interval	82.9	72.7
Coefficient of Variation	15.2	70.7

RES:           Primary Residential Property      This Sample Is: Parametric  
 VAC:           Vacant Land Property                This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
 Iron County  
 Summary Report

General Data	RES	VAC	SEC
Number of Sales	229	166	39
Population of Property Class	5,539	18,495	585
Price Related Differential	1.03	1.07	.97

Dollar Weighted Mean

Upper Limit of Confidence Interval	100.9	93.2	100.6
Dollar Weighted Mean	95.1	86.6	96.0
Lower Limit of Confidence Interval	89.4	80.0	91.3

Median

Upper Limit of Confidence Interval	98.1	96.2	99.5
Median	96.7	92.3	91.0
Lower Limit of Confidence Interval	95.5	88.9	89.6
Coefficient of Dispersion	10.1	26.0	10.8

Mean

Upper Limit of Confidence Interval	100.0	97.8	97.5
Mean	97.9	92.4	93.3
Lower Limit of Confidence Interval	95.7	87.0	89.1
Coefficient of Variation	16.8	38.6	13.7

RES:	Primary Residential Property	This Sample Is:	Non-Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric
SEC:	Secondary Residential Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Juab County  
 Summary Report

General Data	RES	VAC
Number of Sales	38	20
Population of Property Class	1,912	2,441
Price Related Differential	1.01	1.34

Dollar Weighted Mean

Upper Limit of Confidence Interval	93.7	86.8
Dollar Weighted Mean	89.1	65.9
Lower Limit of Confidence Interval	84.5	44.9

Median

Upper Limit of Confidence Interval	96.6	99.7
Median	91.8	79.4
Lower Limit of Confidence Interval	84.8	67.8
Coefficient of Dispersion	12.2	32.1

Mean

Upper Limit of Confidence Interval	94.7	108.8
Mean	90.0	88.2
Lower Limit of Confidence Interval	85.2	67.6
Coefficient of Variation	16.2	50.1

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
Kane County  
Summary Report

General Data	RES	VAC	SEC
Number of Sales	48	220	39
Population of Property Class	1,738	9,315	193
Price Related Differential	1.00	1.14	1.12

Dollar Weighted Mean

Upper Limit of Confidence Interval	102.0	87.7	90.2
Dollar Weighted Mean	94.8	82.0	79.2
Lower Limit of Confidence Interval	87.6	76.3	68.1

Median

Upper Limit of Confidence Interval	107.5	95.1	97.4
Median	93.2	89.8	89.9
Lower Limit of Confidence Interval	83.3	83.6	77.4
Coefficient of Dispersion	18.7	35.4	24.5

Mean

Upper Limit of Confidence Interval	101.1	102.0	97.6
Mean	94.6	93.8	88.3
Lower Limit of Confidence Interval	88.0	85.5	79.0
Coefficient of Variation	23.7	66.5	32.1

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric
SEC:	Secondary Residential Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Millard County  
 Summary Report

General Data	RES	VAC
Number of Sales	74	37
Population of Property Class	3,244	4,467
Price Related Differential	1.04	.84

Dollar Weighted Mean

Upper Limit of Confidence Interval	101.2	138.7
Dollar Weighted Mean	96.5	120.1
Lower Limit of Confidence Interval	91.7	101.7

Median

Upper Limit of Confidence Interval	100.0	106.7
Median	94.7	91.7
Lower Limit of Confidence Interval	88.5	71.4
Coefficient of Dispersion	19.6	34.9

Mean

Upper Limit of Confidence Interval	106.3	115.9
Mean	100.0	101.5
Lower Limit of Confidence Interval	93.7	87.0
Coefficient of Variation	27.2	42.5

RES:           Primary Residential Property       This Sample Is: Non-Parametric  
 VAC:           Vacant Land Property                    This Sample Is: Parametric



1998 Utah Assessment/Sales Ratio Study  
Morgan County  
Summary Report

General Data	RES	VAC
Number of Sales	40	20
Population of Property Class	1,500	735
Price Related Differential	1.00	1.00

Dollar Weighted Mean

Upper Limit of Confidence Interval	100.0	101.5
Dollar Weighted Mean	97.1	88.3
Lower Limit of Confidence Interval	94.1	75.2

Median

Upper Limit of Confidence Interval	101.3	100.0
Median	95.4	100.0
Lower Limit of Confidence Interval	92.2	64.2
Coefficient of Dispersion	7.2	16.5

Mean

Upper Limit of Confidence Interval	99.3	100.6
Mean	96.7	88.6
Lower Limit of Confidence Interval	94.1	76.6
Coefficient of Variation	8.4	29.5

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Piute County  
 Summary Report

General Data RES

Number of Sales	20
Population of Property Class	544
Price Related Differential	1.05

Dollar Weighted Mean

Upper Limit of Confidence Interval	96.8
Dollar Weighted Mean	89.0
Lower Limit of Confidence Interval	81.3

Median

Upper Limit of Confidence Interval	100.0
Median	96.4
Lower Limit of Confidence Interval	80.6
Coefficient of Dispersion	16.4

Mean

Upper Limit of Confidence Interval	102.5
Mean	93.5
Lower Limit of Confidence Interval	84.6
Coefficient of Variation	23.7

RES: Primary Residential Property This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
 Rich County  
 Summary Report

General Data	RES	VAC
Number of Sales	36	113
Population of Property Class	618	3,421
Price Related Differential	1.11	1.11
Dollar Weighted Mean		
Upper Limit of Confidence Interval	81.1	90.0
Dollar Weighted Mean	72.0	85.4
Lower Limit of Confidence Interval	62.8	80.9
Median		
Upper Limit of Confidence Interval	92.1	100.0
Median	73.0	93.8
Lower Limit of Confidence Interval	69.9	88.9
Coefficient of Dispersion	21.2	19.1
Mean		
Upper Limit of Confidence Interval	87.2	99.4
Mean	79.9	94.7
Lower Limit of Confidence Interval	72.6	90.0
Coefficient of Variation	27.0	26.4

RES: Residential Property                      This Sample Is: Parametric  
 VAC: Vacant Land Property                    This Sample Is: Parametric

1 Primary and Secondary Residential property have been combined in the Primary Residential property category.

1998 Utah Assessment/Sales Ratio Study  
Salt Lake County  
Summary Report

General Data	RES	COM	VAC
Number of Sales	5,914	118	191
Population of Property Class	207,803	13,434	32,323
Price Related Differential	1.01	1.02	1.00

Dollar Weighted Mean

Upper Limit of Confidence Interval	100.2	100.5	103.0
Dollar Weighted Mean	99.9	95.3	98.8
Lower Limit of Confidence Interval	98.6	90.1	94.6

Median

Upper Limit of Confidence Interval	100.6	100.1	100.2
Median	100.4	99.8	99.0
Lower Limit of Confidence Interval	100.2	98.3	96.5
Coefficient of Dispersion	4.9	11.8	12.8

Mean

Upper Limit of Confidence Interval	100.8	101.0	101.1
Mean	100.6	97.6	98.6
Lower Limit of Confidence Interval	100.4	94.2	96.1
Coefficient of Variation	6.7	18.9	17.7

RES:	Primary Residential Property	This Sample Is:	Non-Parametric
COM:	Commercial Property	This Sample Is:	Non-Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric

<sup>1</sup> Primary and Secondary Residential property have been combined in the Primary Residential property category.

1998 Utah Assessment/Sales Ratio Study  
 San Juan County  
 Summary Report

General Data	RES	VAC
Number of Sales	22	54
Population of Property Class	1,529	1,921
Price Related Differential	1.09	1.18

Dollar Weighted Mean

Upper Limit of Confidence Interval	109.6	95.9
Dollar Weighted Mean	98.5	81.2
Lower Limit of Confidence Interval	87.4	66.5

Median

Upper Limit of Confidence Interval	112.6	100.0
Median	104.7	98.1
Lower Limit of Confidence Interval	83.1	91.5
Coefficient of Dispersion	21.2	28.9

Mean

Upper Limit of Confidence Interval	123.3	111.5
Mean	107.6	95.8
Lower Limit of Confidence Interval	91.8	80.1
Coefficient of Variation	33.1	59.4

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Sanpete County  
 Summary Report

General Data	RES	VAC	SEC
Number of Sales	112	105	14
Population of Property Class	5,009	8,268	451
Price Related Differential	1.01	1.24	1.34

Dollar Weighted Mean

Upper Limit of Confidence Interval	93.1	84.7	131.8
Dollar Weighted Mean	89.1	76.2	93.3
Lower Limit of Confidence Interval	85.1	67.8	54.8

Median

Upper Limit of Confidence Interval	91.8	95.5	285.1
Median	84.1	89.2	92.5
Lower Limit of Confidence Interval	80.5	82.8	53.3
Coefficient of Dispersion	20.9	35.7	65.7

Mean

Upper Limit of Confidence Interval	94.5	107.2	174.9
Mean	89.9	94.8	125.3
Lower Limit of Confidence Interval	85.3	82.4	75.8
Coefficient of Variation	26.9	67.0	68.9

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-metric
SEC:	Secondary Residential	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
 Sevier County  
 Summary Report

General Data	RES	VAC
Number of Sales	99	58
Population of Property Class	4,930	4,822
Price Related Differential	1.01	1.02

Dollar Weighted Mean

Upper Limit of Confidence Interval	97.1	89.3
Dollar Weighted Mean	93.6	83.2
Lower Limit of Confidence Interval	90.1	77.2

Median

Upper Limit of Confidence Interval	100.0	98.9
Median	93.5	83.5
Lower Limit of Confidence Interval	87.7	74.9
Coefficient of Dispersion	16.4	23.7

Mean

Upper Limit of Confidence Interval	98.4	91.4
Mean	94.3	85.2
Lower Limit of Confidence Interval	90.1	78.9
Coefficient of Variation	21.9	27.7

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

1998 Utah Assessment/Sales Ratio Study  
Summit County  
Summary Report

General Data	RES	VAC	SEC
Number of Sales	124	99	118
Population of Property Class	4,877	7,262	6,997
Price Related Differential	1.01	1.07	1.01

Dollar Weighted Mean

Upper Limit of Confidence Interval	101.9	99.9	99.8
Dollar Weighted Mean	98.1	89.1	97.0
Lower Limit of Confidence Interval	94.3	78.2	94.2

Median

Upper Limit of Confidence Interval	99.7	100.0	99.9
Median	98.0	97.0	98.0
Lower Limit of Confidence Interval	96.5	93.3	96.0
Coefficient of Dispersion	10.3	18.5	9.13

Mean

Upper Limit of Confidence Interval	101.4	100.3	100.2
Mean	98.8	95.1	97.8
Lower Limit of Confidence Interval	96.2	89.9	95.4
Coefficient of Variation	15.2	27.2	13.5

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric
SEC:	Secondary Residential Property	This Sample Is:	Non-Parametric



1998 Utah Assessment/Sales Ratio Study  
 Tooele County  
 Summary Report

General Data	RES	VAC
Number of Sales	253	57
Population of Property Class	6,999	6,062
Price Related Differential	0.98	1.45
Dollar Weighted Mean		
Upper Limit of Confidence Interval	94.0	92.4
Dollar Weighted Mean	91.9	66.4
Lower Limit of Confidence Interval	89.9	40.4
Median		
Upper Limit of Confidence Interval	92.6	101.4
Median	90.5	99.7
Lower Limit of Confidence Interval	88.1	87.5
Coefficient of Dispersion	12.4	23.6
Mean		
Upper Limit of Confidence Interval	92.3	106.2
Mean	90.3	96.4
Lower Limit of Confidence Interval	88.3	86.7
Coefficient of Variation	17.9	37.7

RES: Primary Residential Property      This Sample Is: Non-Parametric  
 VAC: Vacant Land Property              This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
 Uintah County  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	187	14	86
Population of Property Class	6,149	636	3,763
Price Related Differential	1.00	1.15	1.15

Dollar Weighted Mean

Upper Limit of Confidence Interval	98.3	95.8	99.1
Dollar Weighted Mean	96.7	58.8	89.4
Lower Limit of Confidence Interval	95.0	75.8	79.8

Median

Upper Limit of Confidence Interval	99.5	111.2	108.3
Median	98.1	92.0	98.5
Lower Limit of Confidence Interval	96.5	64.8	85.5
Coefficient of Dispersion	8.3	31.2	32.7

Mean

Upper Limit of Confidence Interval	98.7	126.8	114.5
Mean	97.1	98.4	102.6
Lower Limit of Confidence Interval	95.6	70.0	90.7
Coefficient of Variation	11.4	50.4	53.9

RES:	Primary Residential Property	This Sample Is:	Non-Parametric
COM:	Commercial Property	This Sample Is:	Non-Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric

1998 Utah Assessment/Sales Ratio Study  
 Utah County  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	248	29	54
Population of Property Class	71,479	3,515	23,896
Price Related Differential	1.01	1.16	1.16
Dollar Weighted Mean			
Upper Limit of Confidence Interval	94.0	83.6	101.52
Dollar Weighted Mean	92.1	71.3	79.9
Lower Limit of Confidence Interval	90.2	59.1	58.3
Median			
Upper Limit of Confidence Interval	95.0	92.3	101.8
Median	93.0	81.1	93.7
Lower Limit of Confidence Interval	91.1	55.0	81.0
Coefficient of Dispersion	11.4	31.4	25.9
Mean			
Upper Limit of Confidence Interval	94.5	96.1	101.7
Mean	92.6	82.5	91.8
Lower Limit of Confidence Interval	90.8	68.8	81.9
Coefficient of Variation	16.2	43.7	39.1

RES:	Primary Residential Property	This Sample Is:	Non-Parametric
COM:	Commercial Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

WASATCH

1998 Utah Assessment/Sales Ratio Study  
Wasatch County  
Summary Report

General Data	RES	VAC	SEC
Number of Sales	71	110	16
Population of Property Class	2,645	5,265	222
Price Related Differential	0.99	1.09	0.99

Dollar Weighted Mean

Upper Limit of Confidence Interval	95.0	94.6	102.7
Dollar Weighted Mean	91.5	86.7	92.8
Lower Limit of Confidence Interval	88.0	78.7	82.9

Median

Upper Limit of Confidence Interval	95.6	100.0	114.0
Median	91.4	96.6	91.9
Lower Limit of Confidence Interval	86.6	89.7	74.3
Coefficient of Dispersion	11.2	18.4	19.3

Mean

Upper Limit of Confidence Interval	93.4	99.5	106.11
Mean	90.2	94.4	92.3
Lower Limit of Confidence Interval	87.0	89.4	78.5
Coefficient of Variation	14.9	28.1	28.3

RES:	Primary Residential Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric
SEC:	Secondary Residential Property	This Sample Is:	Parametric

WASHINGTON

1998 Utah Assessment/Sales Ratio Study  
 Washington County<sup>10</sup>  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	482	21	214
Population of Property Class	14,171	1,057	15,581
Price Related Differential	1.03	1.18	1.28
Dollar Weighted Mean			
Upper Limit of Confidence Interval	95.4	80.1	96.6
Dollar Weighted Mean	91.4	63.0	75.6
Lower Limit of Confidence Interval	87.4	45.9	54.6
Median			
Upper Limit of Confidence Interval	95.8	95.9	99.3
Median	94.2	60.4	96.2
Lower Limit of Confidence Interval	93.2	46.3	93.5
Coefficient of Dispersion	10.7	50.0	15.4
Mean			
Upper Limit of Confidence Interval	95.3	92.5	100.0
Mean	94.0	74.6	96.8
Lower Limit of Confidence Interval	92.8	56.6	93.5
Coefficient of Variation	14.9	53.0	25.0

RES:	Primary Residential Property	This Sample Is:	Non-Parametric
COM:	Commercial Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Non-Parametric

<sup>10</sup> Primary and Secondary Residential property have been combined in the Primary Residential property category.

1998 Utah Assessment/Sales Ratio Study  
Wayne County  
Summary Report

General Data	RES	VAC
Number of Sales	10	19
Population of Property Class	484	1,748
Price Related Differential	1.02	1.27
Dollar Weighted Mean		
Upper Limit of Confidence Interval	95.5	77.2
Dollar Weighted Mean	87.2	60.0
Lower Limit of Confidence Interval	78.9	42.9
Median		
Upper Limit of Confidence Interval	115.0	112.8
Median	87.1	72.9
Lower Limit of Confidence Interval	66.2	35.0
Coefficient of Dispersion	13.7	43.4
Mean		
Upper Limit of Confidence Interval	100.3	94.9
Mean	89.4	76.1
Lower Limit of Confidence Interval	78.5	57.3
Coefficient of Variation	17.3	51.5

RES: Primary Residential Property This Sample Is: Parametric  
VAC: Vacant Land Property This Sample Is: Parametric

1998 Utah Assessment/Sales Ratio Study  
 Weber County  
 Summary Report

General Data	RES	COM	VAC
Number of Sales	250	27	70
Population of Property Class	51,306	3,150	11,333
Price Related Differential	1.00	0.91	1.01

Dollar Weighted Mean

Upper Limit of Confidence Interval	94.0	122.2	91.8
Dollar Weighted Mean	92.6	101.6	87.6
Lower Limit of Confidence Interval	91.2	81.1	83.5

Median

Upper Limit of Confidence Interval	93.7	100.0	93.2
Median	91.9	94.4	88.0
Lower Limit of Confidence Interval	90.3	83.2	83.6
Coefficient of Dispersion	9.17	15.0	16.9

Mean

Upper Limit of Confidence Interval	93.7	100.0	93.6
Mean	92.3	92.1	88.3
Lower Limit of Confidence Interval	90.9	84.2	83.1
Coefficient of Variation	12.2	21.7	24.9

RES:	Primary Residential Property	This Sample Is:	Parametric
COM:	Commercial Property	This Sample Is:	Parametric
VAC:	Vacant Land Property	This Sample Is:	Parametric

APPENDICES

First Solicitation Letter ..... Appendix I

Second Solicitation Letter..... Appendix II

Questionnaire ..... Appendix III

Screening Criteria ..... Appendix IV

Tax Commission Rule R861-1A-11 Procedures  
for Appeal of Factor Orders ..... Appendix V

Tax Commission Rule R884-24P-27 Standards  
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Statutory Basis for Study - Section 59-2-704, UCA,  
1953, as amended..... Appendix VII

Statutory Basis for Standards - Section 59-2-704.5, UCA,  
1953, as amended..... Appendix VIII

Statutory Basis for Mandatory Cyclical Appraisals  
Section 59-2-303.1, UCA, as amended..... Appendix IX



September 20, 1996

Dear Property Owner:

The laws of the State of Utah require this office to conduct a study each year to determine the relationship between assessed value and the current market value of all classes of real estate. Section 59-1-210(14) of the Utah Code empowers the Tax Commission to request information needed to ensure fair property taxation.

Public records indicate that you **bought (or sold)** real property during our study period. Please answer questions one (1) through eleven (11) concerning the transfer of the described property and return the 'Real Property Transfer Survey' form by **October 10, 1996**. **A prompt response will insure that you do not receive a second mailing of the questionnaire.**

If you have not been involved in a transaction which included exchange of monies, but **recently refinanced, corrected a defective title, created a family trust or added/deleted names on a deed**, it will only be necessary to complete question #7 of the survey. This question pertains to the reasons for the sale. Item **(G) Transfer of Convenience**, would be the applicable response for these types of transfers.

A postage paid, business reply envelope is enclosed for your convenience. Please include the reference number from the questionnaire on any correspondence. The information you supply will help ensure that property taxes are fair and equitable; and that each property pays its fair share of the cost of local government. If you need assistance, please call 297-3647 during normal business hours. If you are calling from outside of the Salt Lake area, you may call 1-800-662-4335, enter 1, 73647 (ext).

Sincerely,

Valuation Appraiser  
Sales Ratio Studies  
Property Tax Division

September 20, 1996

## ***SECOND REQUEST***

Dear Property Owner:

This office recently sent you a Real Property Transfer Survey regarding a real estate transaction to which you were a party. Our records indicate that **we have not yet received the completed survey.**

Utah law requires this office to conduct the study annually to determine the relationship between taxable value and the current market value of all classes of real estate. Utah Code Ann. Section 59-1-210(14) (Supp. 1987) empowers the Tax Commission to request information needed to ensure fair property taxation. The information you supply will help ensure that property taxes are fair and equitable.

Enclosed is a copy of the survey form recently sent to you. If you have not been involved in a transaction which included exchange of monies, **but recently refinanced, corrected a defective title, created a family trust or added/deleted names on a deed,** it will only be necessary to complete question #7 of the survey. This question pertains to the reasons for the sale. Item ***(G) Transfer of Convenience***, would be the applicable response for these types of transfers.

Please complete and return it by **October 10, 1996**, in the postage paid business reply envelope provided. If you have already returned the first survey, **please accept our thanks for your cooperation and discard this second request.** If you need assistance, please call 297-3647 during normal business hours. If you are calling from outside of the Salt Lake area, you may call 1-800-662-4335, enter 1, 73647 (ext).

Sincerely,

Valuation Appraiser  
Sales Ratio Studies  
Property Tax Division



**REAL PROPERTY TRANSFER SURVEY**

**Utah State Tax Commission TC-221**

RETURN TO USTC, PROPERTY TAX DIVISION  
210 NORTH 1950 WEST  
SALT LAKE CITY, UT. 84134

-PT-- GRANTEE: AA 12345679 -----

----- Please return by: -----  
>>>> June 25, 1995  
REFERENCE NUMBER: AA 1234 5679  
SERIAL NUMBER:  
SERIES: 1 COUNTY:  
ACCOUNT: 0 SEQ.: 0  
----- GRANTOR: (Seller) -----  
  
----- LEGAL: (May Not All Print) --

0-

1. Address/location of property (approximate if necessary)

\_\_\_\_\_  
(street) (city or area) (county)

2. In this sale, what was the:

- A. Date of sale \_\_\_\_\_  
SALE PRICE OF: \_\_\_\_\_ (month/year)
- B. Land/buildings \$ \_\_\_\_\_
- C. Personal Property (if any) \$ \_\_\_\_\_  
(i.e. machinery, inventory, water rights, etc.)  
Specify Any Personal Property: \_\_\_\_\_
- D. Total Sale Price (B + C) \$ \_\_\_\_\_  
DOWN PAYMENT: \$ \_\_\_\_\_
- E. Down Payment Cash \$ \_\_\_\_\_
- F. Down Payment Other (if any) \$ \_\_\_\_\_  
(i.e. jewelry, coins, sweat equity, etc.)  
Specify Any Down Payment Other: \_\_\_\_\_

3. Specify any trade of real estate in this transaction.

- A. Type of property \_\_\_\_\_
- B. Agreed upon value (if any) \$ \_\_\_\_\_

4. Circle the letter of the category below that best describes property included in the sale price.

- A. Vacant land, residential lot, or recreational lot
- B. Vacant commercial land
- C. Residence
- D. Mobile home and lot
- E. Apartment building
- F. Commercial land and building(s)
- G. Agricultural land only
- H. Agricultural land and building(s)
- I. Cabin or summer home (seasonal use only)
- J. Other: \_\_\_\_\_

5. If use of the property has changed since time of sale, enter new use (use letter from list in #4). \_\_\_\_\_

6. Explain any reason this sale may not have been a "fair market value" transaction. \_\_\_\_\_

7. Circle the letter(s) of the following that apply to this sale.

- A. This was a forced transaction because of foreclosure, divorce, court order, condemnation, probate, etc.
- B. Sale was between relatives, affiliated companies or officers.
- C. Property was sold to or purchased from any church, fraternal, educational, or governmental organization.
- D. Real estate in more than one county was involved in this sale.
- E. Partial interest only was purchased or sold.
- F. Possession by buyer was delayed for more than one year from date of deed.
- G. A transfer of convenience (i.e. refinance, correct defective title, create family trust, add/delete names on deed, etc.)
- H. None of the above.

8. Circle the letter(s) indicating the types of financing used in this sale (circle all that apply).

- A. Conventional
- B. Graduated payment
- C. Adjustable rate mortgage
- D. FHA
- E. VA
- F. Farmer's Home Loan
- G. Utah Housing Authority
- H. Assumption of mortgage
- I. Seller financing
- J. Cash

9. Please give financing details if known.

Amount Financed \$ \_\_\_\_\_ Interest Rate \_\_\_\_\_ %  
Length of Loan (yrs.) \_\_\_\_\_ Explain if Necessary \_\_\_\_\_

10. Was sale handled through a real estate agent or broker? \_\_\_\_\_  
If yes, name of agent or broker \_\_\_\_\_

11. In the event we need to contact you about this survey, please list your name, phone number, and best time to be reached.

\_\_\_\_\_ print name phone best time

Thank you for taking a moment to answer these questions. Your help in obtaining thorough & accurate sales information is appreciated.

These answers are, to the best of my knowledge, true and correct.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



---

## SCREENING CRITERIA

The existence of any of the following conditions will cause a sale to be eliminated from the study.

1. Sales involving a trade or exchange of property or loan assumption and where no specific value can be determined for the property traded and exchanged or the loan balance assumed.
2. Sales by the sheriff or other county officials; other forced sales.
3. Sales for which the improvements sold are not included in the assessment or the assessment included an improvement value for an improvement built after the sale.
4. Sales to or by the federal government, state or local government, or utilities.
5. Sales which included personal property and no specific value amount was assigned to the personal property.
6. Sales of minerals or timber only, or rights to mines or timber cuts.
7. Sales between known affiliated companies or corporations, or between companies or corporations and their officers, principles, etc.
8. Sales of cemetery lots and other exempted property.
9. Sales involving real estate located in more than one county.
10. Sales to or by any church, lodge, school, or other benevolent, fraternal, or education organization.
11. Sales conveying an unspecified, undivided, or fractional interest in property or merely conveying a life estate where such interest is not separately assessed.
12. Sales in which the seller retains possession of the property for over one year from the transaction date as stated on the deed.
13. Sales in which the seller retains a lease on the property for over one year from the transaction date as stated on the deed.
14. The instrument recorded describes an easement.

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**TAX COMMISSION RULE R861-1A-11****R861-1A-11 Appeal of Factor Order Pursuant to Utah Code Ann.****59-2-704 (1953)****R861-1A-11 Administrative Procedures**

A. Appeal of Factor Order. Any county appealing a factor order issued pursuant to Utah Code Ann. Section 59-2-704(2), or any amendment initiated by the Commission to the order, shall, within 15 days of the mailing of an order to factor, request in writing a hearing before the Commission. The Commission shall immediately set the time and place of the hearing which shall be held no later than March 1 of the tax year to which the factor applies.

B. Hearings. Hearings on factor-order appeals shall be conducted as formal hearings and shall be governed by the procedures contained in these rules. If the parties are able to stipulate to a modification of the factor order, and it is evident that there is a reasonable basis for modifying the factor order, then an amended factor order may be executed by the Commission. One or more commissioners may preside at a hearing under this rule with the same force and effect as if a quorum of the Commission were present. However, a decision must be made and an order signed by a quorum of the Commission.

C. Decisions and Orders. The Commission shall render its decision and order no later than March 15. Upon reaching a decision, the Commission shall immediately notify the county assessor or if unavailable, his deputy, by telephone and shall confirm the order by mail. A county desiring to appeal the order must petition for reconsideration within ten days after the county assessor has been notified by telephone. No petition for reconsideration will be entertained unless evidence not reasonably available at the time of the hearing is to be presented. Oral argument on reconsideration will be heard only if the Commission determines it to be in the public interest. The Commission shall render a decision and order on a petition for reconsideration no later than March 31 and shall notify the county assessor by telephone and by mail.

D. Sales Information. Access to Commission property sales information shall be available by written agreement with the Commission to any county assessor appealing under this rule. All other reasonable and necessary information shall be available upon request, according to Commission guidelines.

E. Conflict with Other Rules. This rule supersedes all other rules which may otherwise govern such proceedings before the Commission.

## TAX COMMISSION RULE R884-24P-27

**R884-24P-27. Standards for Assessment Level and Uniformity of Performance Pursuant to Utah Code Ann. Section 59-2-704.5.**

A. "Urban counties" means counties classified as first or second class counties pursuant to Section 17-16-13.

B. The Tax Commission adopts the following standards of assessment performance regarding assessment level and uniformity:

1. Adjustment shall be ordered for a property class or subclass if the measure of central tendency is not within 10 percent of the legal level of assessment or the 95 percent confidence interval of the measure of central tendency does not contain the legal level of assessment.

a) The measure of central tendency shall be the mean for parametric samples and the median for nonparametric samples.

b) The adjustment shall be calculated by dividing the legal level of assessment by the measure of central tendency when uniformity meets the standards in B.2., or by the 95 percent confidence interval limit nearest the legal level of assessment when the standards in B.2. are not met.

2. Corrective action for the property being appraised under the cyclical appraisal plan for a given year shall be ordered if the measure of dispersion is outside the following limits for the coefficient of dispersion (COD), or for the coefficient of variation (COV) when data are normally distributed:

a) In urban counties, the limit for the COD is 15 percent or less for primary residential and commercial property, and 20 percent or less for vacant land and secondary residential property.

b) In rural counties, the limit for the COD is 20 percent or less for primary residential and commercial property, and 25 percent or less for vacant land and secondary residential property.

c) The limit for the COV is 1.25 times the COD.

d) Corrective action may contain language requiring a county to create or follow its cyclical appraisal plan.

e) If the sample size does not meet the requirements of B.3., or if there is reason to question the reliability of statistical data achieved under B.3., an alternate performance evaluation shall be conducted, which may result in corrective action. The alternate performance evaluation shall include review and analysis of the following:

(1) the county's procedures for use and collection of market data, including sales, income, rental, expense, vacancy rates, and capitalization rates;

(2) the county-wide land, residential, and commercial valuation guidelines and their associated procedures for maintaining current market values;

(3) the accuracy and uniformity of the county's individual property data through a field audit of randomly selected properties;

(4) the county's level of personnel training, ratio of appraisers to parcels, level of funding, and other workload and resource considerations.

3. To achieve statistical accuracy in determining assessment level under B.1. and uniformity under B.2. for any property class or subclass, the acceptable sample size shall consist of 10 or more ratios.

a) To meet the minimum sample size, the study period may be extended.

b) A smaller sample size may be used if that sample size is at least 10 percent of the class or subclass population.

c) All input to the sample used to measure performance shall be completed by September first of each study cycle.

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STATUTORY BASIS FOR  
ASSESSMENT/SALES RATIO STUDIES

SECTION 59-2-704

- (1) Each year, to assist in the evaluation of appraisal performance of taxable real property, the commission shall conduct and publish studies to determine the relationship between the market value shown on the assessment roll and the market value of real property in each county. The studies shall include measurements of uniformity within counties and use statistical methods established by the commission. County assessors may provide sales information to the commission for purposes of the studies. The commission shall make the sales and appraisal information related to the studies available to the assessors upon request.
- (2) The commission shall each year, order each county to adjust or factor its assessment rates using the most current studies so that the assessment rate in each county is in accordance with that prescribed in Section 59-2-103. The adjustment or factoring may include an entire county, geographical areas within a county, and separate classes of properties. Where significant value deviations occur, the commission shall also order corrective action.
- (3) If the commission determines that sales data in any county is insufficient to perform the studies required under Subsection (1), the commission may conduct appraisals of property within that county.
- (4) If a county fails to implement factoring or corrective action ordered under Subsection (2), the commission shall:
- (a) implement the factoring or corrective action; and
  - (b) charge 100% of the reasonable implementation costs to that county.
- (5) If a county disputes the factoring or corrective action ordered under Subsection (2), the matter may be mediated by the Multicounty Appraisal Trust.
- (6) The commission may change the factor for any county which, after a hearing before the commission, establishes that the factor should properly be set at a different level for that county. The commission shall establish the method, procedure, and timetable for the hearings authorized under this section, including access to information to ensure a fair hearing. The commission may establish rules to implement this section.



STATUTORY BASIS FOR  
STANDARDS OF ASSESSMENT LEVEL/UNIFORMITY

SECTION 59-2-704.5

- (1) In accordance with Title 63, Chapter 46a, Utah Administrative Rulemaking Act, and after receiving the advice of the Utah Assessors Association, the commission shall by rule adopt standards for determining acceptable assessment levels and valuation deviations within each county. The standards shall be used for determining whether factoring or corrective action is required under Subsection 59-2-704(2).
- (2) As part of its review of the standards for determining acceptable assessment levels and valuation deviations within each county, the commission shall consider any relevant standards promulgated by the International Association of Assessing Officers.
- (3) By October 1, 1998, and every five years thereafter, the Revenue and Taxation Interim Committee shall review the commission's standards and determine whether the standards should be modified.

STATUTORY BASIS FOR  
MANDATORY CYCLICAL APPRAISALS

SECTION 59-2-303.1

(1) Beginning January 1, 1994, each county assessor shall annually update property values of property as provided in Section 59-2-301 based on a systematic review of current market data. In addition, the county assessor shall complete a detailed review of property characteristics for each property at least once every five years.

(a) The commission shall take corrective action if the commission determines that:

(i) a county assessor has not satisfactorily followed the current mass appraisal standards, as provided by law;

(ii) the sales-assessment ratio, coefficients of dispersion, or other statistical measures of appraisal performance related to the studies required by Section 59-2-704 are not within the standards provided by law; or

(iii) the county assessor has failed to comply with the requirements of Subsection (1).

(b) For purposes of this section, "corrective action" includes:

(i) factoring pursuant to Section 59-2-704;

(ii) notifying the state auditor that the county failed to comply with the requirements of this section; or

(iii) filing a petition for a court order requiring a county to take action.

(2) (a) By July 1, 1993, each county assessor shall prepare a five-year plan to comply with the requirements of Subsection (1).

(b) The plan shall be available in the county assessor's office for review by the public upon request.

(c) The plan shall be annually reviewed and revised as necessary.

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## GLOSSARY

Of particular importance in any sales ratio study is a clear understanding of the definitions used in the analysis. This is especially true for Utah because of the unique nature of some of its property tax laws.

**Appraisal:** An opinion by a qualified appraiser of the estimated value of real property. Elements of the analysis include: preliminary survey and planning; collection of data; application of cost, comparative sales, or income approaches; correlation and reconciliation of indicated values; and the final value estimate.

**Arms-length Transaction:** A real estate sale between two unrelated, knowledgeable parties, neither of whom is under abnormal pressure from the other and each is attempting to maximize his gains.

**Assessment Level:** The level of assessment after application of any fractional assessment ratio, partial exemption, or other adjustment.

**Assessment Uniformity:** The degree to which properties within a specific class or county are assessed at equal percentages of market value. The most common measure of uniformity is the coefficient of dispersion.

**Coefficient of Dispersion (COD):** The average absolute deviation of all assessment/sales ratios from the chosen measure of central tendency expressed as a percentage of the measure of central tendency. The lower the coefficient of dispersion, the more uniform are the assessments.

**Coefficient of Variation (COV):** The standard deviation expressed as a percentage of the mean.

**Confidence Interval:** The interval within which the population parameter (true median, mean, etc.) will be found in relation to the statistic from the sample data (the ratio study median, mean, etc.). This interval varies in relation to the confidence level desired, i.e. 90%, 95%, 99%, etc.

**Confidence Level:** The certainty that the statistician has in his confidence interval including the true parameter (true median, mean, etc.) of the whole population, i.e. all property in the county.

**Date of Sale:** The date on which the real property sale was agreed to. The data of recording may be used as a proxy for the date of sale. (See Transaction Date)

**Deed Recordation:** The process of registering a real property sale with the county recorder's office.

**Dispersion:** The degree to which data are distributed around a measure of central tendency. Measures of dispersion include the range, average deviation, standard deviation, coefficient of dispersion, and coefficient of variation.

**Dollar-Weighted Mean (DWM):** The measure of central tendency weighted by the dollar value of each entry. It is calculated by dividing the sum of all the adjusted assessments by the sum of all the adjusted sales prices.

**Factoring:** The process by which all assessments or a group of assessments are adjusted to meet the legal level of assessment. Factoring is considered appropriate when coefficients of dispersion are relatively low. The correct factor is calculated by dividing the target level of assessment by the current level of assessment.

**Intangible Property:** The non-physical evidence of ownership and of property rights such as patent rights, copyrights, notes, mortgages, deeds of trust, and stock certificates.

**Mann-Whitney Test:** A test that seeks to determine whether the differences in values between two sets of data from a population are statistically significant.

**Mean:** The result of adding all the values and dividing by the number of values.

**Measures of Central Tendency:** Those statistics which measure the tendency of ratio data to center about a typical or central value. Measures of central tendency include the median, the mean, the mode, and the dollar-weighted mean.

**Measures of Variability:** Those statistics which measure the amount of dispersion, variability, or dissimilarities of ratio data. Some measure absolute differences, while others measure relative variability. Included as measures of variability are the range, average absolute deviation, and the standard deviation. Measures of relative variability include the coefficient of dispersion and the coefficient of variation.

**Median:** The middle observation of a set of numbers when ranked or arrayed according to magnitude. It is the middle number when there is an odd number in the set. It is the average of the middle two observations when there is an even number in the set.

**Mode:** The value in a set of numbers that occurs most often.

**Normal Distribution:** A symmetrical and bell-shaped frequency distribution where 68 percent of the observations occur within one standard deviation of the mean and 95 percent occur within two standard deviations.

**Observation:** One recording or occurrence of a sale ratio in the sample.

**Parameter:** An estimated numerical descriptive measure of the population such as the arithmetic mean.

**Parametric:** A statistic whose interpretation depends on the distribution of the data. Parametric statistics are most reliable when the data sample is normally distributed.

**Population:** The total number of properties in an assessment jurisdiction of a property class of interest.

**Price-Related Differential:** This is the mean assessment/sales ratio divided by the weighted mean assessment/sales ratio. It is an indication of the progressivity or regressivity of the property tax within a specific county and may be used within specific classes if the sample size is at least 29. As a rule of thumb, a price-related differential greater than 1.03 indicates regressivity may be present, and a differential of less than 0.98 signals that progressivity may be a concern.

**Progressivity:** The assessment of higher-priced properties at a higher percentage of market value than lower-priced properties.

**Property Class:** An assigned category of property used in the analysis of sales in the assessment/sales ratio study. Utah uses four principal categories: 1) primary residential, 2) commercial, 3) vacant land, and 4) secondary residential.

**Quit Claim Deed:** This document transfers to the buyer any interest the seller may have, without warranty to clear title.

**Random Sample:** A sample chosen such that each unit in the population has an equal chance of being selected.

**Reappraisal:** A county-wide re-valuation of all properties indicated when coefficients of variation or dispersion indicate that significant inconsistencies exist.

**Real Estate:** The physical parcel of land and improvements to the land.

**Real Property:** The sum of tangible and intangible property rights in land and improvements; the rights, interests, and benefits connected with real estate.

**Regressivity:** The assessment of lower-priced properties at a higher percentage of market value than higher-priced properties.

**Sale Price:** The total purchase price for which real property is sold on the open market.

**Sale Ratio:** The ratio of an appraised value (or assessment) to the sale price of a property.

**Sample:** A number of properties selected from the whole population of properties. The sample is usually much smaller than the population. The sample for ratio study purposes is usually all qualified sold properties.

**Standard Deviation:** The statistic calculated by subtracting the mean from each value of a sample and squaring the remainders, adding these squares together, and dividing by the sample size less one, and finally taking the square root of the result.

**Statistical Estimator:** This estimates some characteristic of the sample drawn from the population for study. Parameters are used to estimate some characteristic about the population in general.

**Statistics:** Numerical descriptions calculated from a sample to estimate measures (parameters) for the population. Statistics include the mean, median, and the coefficient of dispersion

**Transaction Date:** The date the real property transaction was agreed on, indicating that on that date it was worth the specified value.

**Warranty Deed:** A document from seller to buyer transferring title free and clear of all encumbrances except those specifically spelled out or of public record.

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