



Division of Property Valuation

2018

Kansas Real Estate Ratio Study

DAVID HARPER, RMA, AAS DIRECTOR

ABBREVIATIONS

| | |
|--------|---|
| Ag. | Agricultural |
| BMed. | Broadened Median Ratio |
| BOTA | Board of Tax Appeals |
| C/I | Commercial/Industrial |
| COD | Coefficient of Dispersion |
| Comm. | Commercial |
| Ex. | Exempt |
| IAAO | International Association of Assessing Officers |
| Imp. | Improvement |
| Ind. | Industrial |
| K.S.A. | Kansas Statutes Annotated |
| LOC | Level of confidence |
| N/A | Not applicable |
| NP | Not-for-profit |
| PRB | Price-Related Bias |
| PRD | Price-Related Differential |
| PVD | Property Valuation Division |
| Res. | Residential |
| S | Supplemental sales |
| T | Time trended |
| Ut. | Utility |
| w | With |

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INTRODUCTION

This publication contains the Official 2018 Kansas Appraisal/Sales Ratio Study that is based upon real estate transfers occurring from January 1, 2018, through December 31, 2018. This study is conducted annually by the Kansas Department of Revenue, Division of Property Valuation for all 105 Kansas Counties.

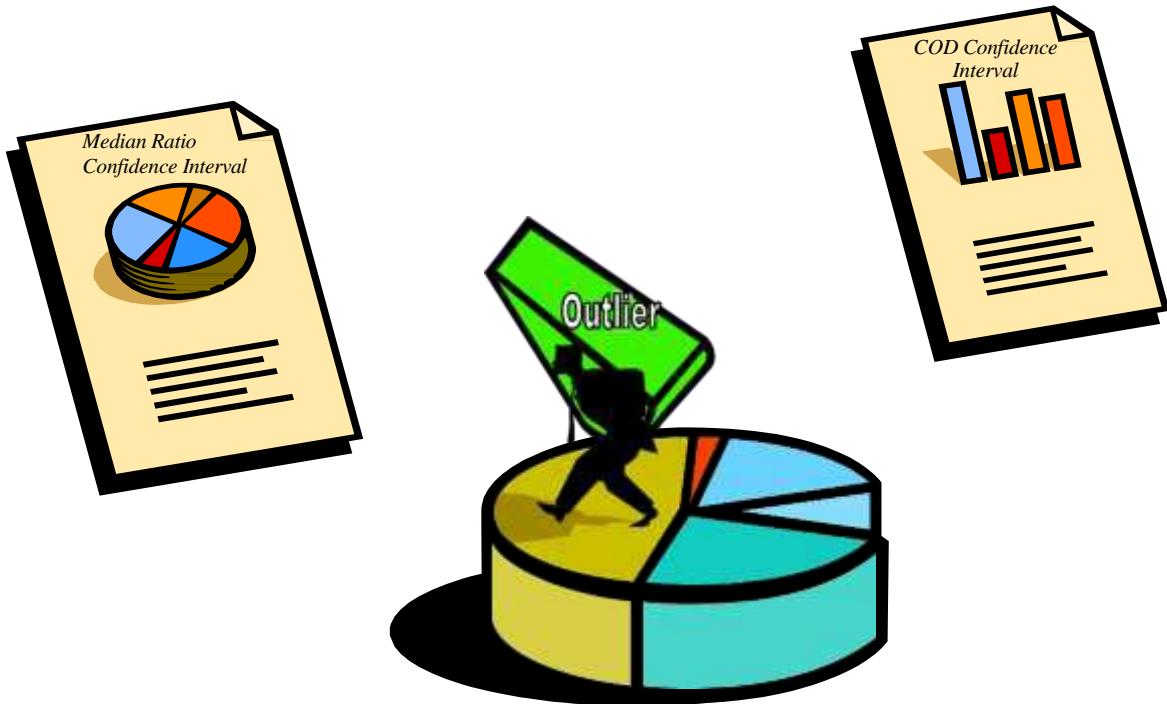


<http://www.ksrevenue.org/pvdratiostats.html>

Section 1

Year 2018

Official Appraisal/Sales Ratio Study



Purpose and Overview

Fundamental to the administration of the property tax is the concept that all property should be appraised and assessed on a uniform basis. The Kansas Constitution requires that all taxable property be appraised and assessed uniformly as to class. Uniformity of like property assures an equitable distribution of the property tax burden.

The *purpose* of the 2018 Official *Kansas Appraisal/Sales Ratio Study* is to meet the requirements pursuant to K.S.A. 79-1489. It also provides statistical information used to evaluate appraisal *level* and *uniformity* for substantial statutory compliance as set forth in Property Valuation's Directive #14-046 pursuant to the provisions of K.S.A 79-505. A copy of this Directive is located in Section IV of this publication.

The study includes sales that are considered to be *valid* arm's-length transactions. These real property transfers have been qualified independently by PVD staff and can serve as an useful indicator of market value. Supplemental valid sales from the four prior years have been included for the commercial/industrial subclass if less than five valid commercial sales were available in the year 2018. In addition, the sales were trimmed of outliers prior to the computation of some statistical measures. A further explanation of the validation and trimming procedures are discussed in Section III of this publication.

In 1994, changes in statute permitted the use of a sampling process for the residential subclass of property in counties with a total parcel count in excess of 15,000 parcels. These counties must also have experienced at least 200 valid residential sales based on previous studies to be considered for sampling. The 2018 ratio study has used a representative sampling for those counties meeting the statutory criteria. A brief explanation of the sampling process is included in Section III of this publication.

The letter *T* denotes the subclass (residential or commercial/industrial) where sale prices have been *trended back* to January 1, 2018, the date of appraisal, where inflation or deflationary market trends were identifiable and documented by the county appraiser.

The ratios analyzed in this study are appraisal/sales ratios computed by dividing the appraised value of real estate as determined by the county appraiser by the total selling price of the real property. A perfect ratio would be 100.0. Care should be taken when reviewing the agricultural subclass. Agricultural land is appraised according to its *use* value; therefore, for *Agricultural Land Only* and *Agricultural with/Improvements* no ideal ratio exists. The total statistical measures can be misleading because the ratios for agricultural land are included with the ratios of all other real property subclasses to determine the county *TOTAL with/Agricultural & Farm* category.

We are grateful to the Kansas County Appraisers and their professional organization for their cooperation in this annual task. Our appreciation further extends to our support staff at the Department of Revenue, our associates within the Division and to the Ratio Study Technical Advisory Committee for their service and guidance.

**2018 Ratio Study Technical Advisory
Committee**

Dr. John Boyer
Prof. of Statistics
101 Dickens Hall
Kansas State University
Manhattan, KS 66506

Dr. Ronald L. Wasserstein
Executive Director
American Statistical Assn.
732 N Washington St.
Alexandria, Virginia 22314-3402

Dr. Paul Byrne
Assoc. Prof. of Economics
Washburn University
School of Business
Henderson 310-P
1700 SW College
Ave. Topeka, KS

2018 County Appraiser's Ratio Study Committee

Chairman: Jerry Denny, Gray County Appraiser-

Members: Barry Porter Truette McQueen
Republic-Cloud Ottawa
County Appraiser County Appraiser



Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

001 : ALLEN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|----|
| Residential | 99.4 | 94.9 | to 102.2 | 10.5 | 8.3 | to 13.5 | 1.02 | 1.00 | to 1.05 | 59 | 8 | | |
| Commercial/Ind. | 104.8 | 76.7 | to 126.2 | 22.0 | 10.4 | to 49.4 | 1.15 | 0.97 | to 1.42 | 7 | 0 | | |
| Vacant Lot | 189.0 | - | N/A | - | 83.6 | - | N/A | - | 1.71 | - | N/A | 4 | 0 |
| Farm & Home | 58.3 | - | N/A | - | 36.7 | - | N/A | - | 1.10 | - | N/A | 5 | 0 |
| Ag. Land Only | 7.7 | - | N/A | - | 47.1 | - | N/A | - | 1.07 | - | N/A | 8 | 0 |
| Ag. (Impr.+ Land) | 7.7 | - | N/A | - | 58.9 | - | N/A | - | 1.08 | - | N/A | 10 | 0 |
| Other/Ex/Ut/NP/M | 165.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Total w/Ag.&F&H | 97.0 | - | N/A | - | 18.4 | - | N/A | - | 1.13 | - | N/A | 86 | 17 |
| Total Market | 100.0 | - | N/A | - | 14.1 | - | N/A | - | 1.04 | - | N/A | 71 | 9 |

002 : ANDERSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|---|
| Residential | 100.4 | 96.2 | to 105.9 | 12.6 | 10.6 | to 15.2 | 1.02 | 1.00 | to 1.04 | 87 | 11 | | |
| Commercial/Ind. | 56.9 | 37.0 | to 106.6 | 42.5 | 25.8 | to 80.3 | 0.98 | 0.85 | to 1.16 | 6 | 0 | | |
| Vacant Lot | 80.7 | - | N/A | - | 39.1 | - | N/A | - | 1.13 | - | N/A | 5 | 0 |
| Farm & Home | 64.2 | - | N/A | - | 31.5 | - | N/A | - | 1.01 | - | N/A | 16 | 1 |
| Ag. Land Only | 3.2 | - | N/A | - | 36.8 | - | N/A | - | 0.95 | - | N/A | 14 | 1 |
| Ag. (Impr.+ Land) | 3.5 | - | N/A | - | 56.4 | - | N/A | - | 0.74 | - | N/A | 16 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 93.3 | - | N/A | - | 32.7 | - | N/A | - | 1.14 | - | N/A | 130 | 3 |
| Total Market | 99.0 | - | N/A | - | 16.0 | - | N/A | - | 1.02 | - | N/A | 98 | 9 |

003 : ATCHISON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 98.5 | 96.3 | to 101.3 | 11.7 | 9.8 | to 14.1 | 1.03 | 1.01 | to 1.05 | 128 | 19 | | |
| Commercial/Ind. | 99.0 | 94.9 | to 122.1 | 10.4 | 4.7 | to 16.8 | 1.04 | 0.98 | to 1.10 | 7 | 0 | | |
| Vacant Lot | 110.0 | - | N/A | - | 47.6 | - | N/A | - | 0.85 | - | N/A | 7 | 1 |
| Farm & Home | 45.2 | - | N/A | - | 69.7 | - | N/A | - | 0.98 | - | N/A | 2 | 0 |
| Ag. Land Only | 10.0 | - | N/A | - | 78.3 | - | N/A | - | 0.66 | - | N/A | 6 | 0 |
| Ag. (Impr.+ Land) | 12.8 | - | N/A | - | 42.8 | - | N/A | - | 0.76 | - | N/A | 9 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 97.8 | - | N/A | - | 13.3 | - | N/A | - | 1.04 | - | N/A | 153 | 29 |
| Total Market | 98.8 | - | N/A | - | 12.1 | - | N/A | - | 1.03 | - | N/A | 142 | 22 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

004 : BARBER COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|---------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 97.3 | 90.6 | to | 106.2 | 16.5 | 12.1 | to | 22.8 | 1.02 | 0.99 | to | 1.06 | 39 | 4 |
| Commercial/Ind. S-3 | 61.2 | 52.8 | to | 104.0 | 33.3 | 9.1 | to | 41.9 | 0.89 | 0.82 | to | 1.06 | 7 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 51.7 | - | N/A | - | 61.5 | - | N/A | - | 1.28 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 1.6 | - | N/A | - | 34.2 | - | N/A | - | 0.88 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 1.6 | - | N/A | - | 34.2 | - | N/A | - | 0.88 | - | N/A | - | 3 | 0 |
| Other/Ex/Ut/NP/M | 95.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 94.8 | - | N/A | - | 25.9 | - | N/A | - | 1.34 | - | N/A | - | 52 | 3 |
| Total Market | 96.1 | - | N/A | - | 18.3 | - | N/A | - | 1.00 | - | N/A | - | 47 | 4 |

005 : BARTON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|-------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 101.5 | 98.5 | to | 104.4 | 15.7 | 14.1 | to | 17.4 | 1.03 | 1.01 | to | 1.04 | 276 | 27 |
| Commercial/Ind. | 102.5 | 59.8 | to | 149.4 | 27.4 | 17.7 | to | 55.5 | 1.00 | 0.88 | to | 1.15 | 9 | 0 |
| Vacant Lot | 52.8 | - | N/A | - | 118.6 | - | N/A | - | 1.53 | - | N/A | - | 5 | 0 |
| Farm & Home | 59.8 | - | N/A | - | 29.2 | - | N/A | - | 0.88 | - | N/A | - | 10 | 0 |
| Ag. Land Only | 11.6 | - | N/A | - | 47.3 | - | N/A | - | 0.96 | - | N/A | - | 11 | 0 |
| Ag. (Impr.+ Land) | 11.6 | - | N/A | - | 51.9 | - | N/A | - | 0.94 | - | N/A | - | 13 | 0 |
| Other/Ex/Ut/NP/M | 158.4 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 99.5 | - | N/A | - | 17.4 | - | N/A | - | 1.03 | - | N/A | - | 314 | 43 |
| Total Market | 101.6 | - | N/A | - | 16.8 | - | N/A | - | 1.03 | - | N/A | - | 291 | 29 |

006 : BOURBON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|---------------------|--------------|---------------------|-----|-------|-------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 96.2 | 92.5 | to | 99.3 | 15.3 | 13.3 | to | 17.8 | 1.01 | 0.99 | to | 1.04 | 170 | 25 |
| Commercial/Ind. S-4 | 90.4 | 76.2 | to | 113.5 | 20.5 | 12.6 | to | 33.3 | 1.12 | 1.01 | to | 1.38 | 8 | 0 |
| Vacant Lot | 95.2 | - | N/A | - | 58.9 | - | N/A | - | 1.32 | - | N/A | - | 16 | 1 |
| Farm & Home | 35.4 | - | N/A | - | 84.6 | - | N/A | - | 1.13 | - | N/A | - | 16 | 0 |
| Ag. Land Only | 3.6 | - | N/A | - | 105.1 | - | N/A | - | 1.05 | - | N/A | - | 21 | 0 |
| Ag. (Impr.+ Land) | 3.9 | - | N/A | - | 96.2 | - | N/A | - | 1.04 | - | N/A | - | 32 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 90.8 | - | N/A | - | 31.2 | - | N/A | - | 1.16 | - | N/A | - | 242 | 28 |
| Total Market | 96.2 | - | N/A | - | 17.8 | - | N/A | - | 1.03 | - | N/A | - | 194 | 27 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

007 : BROWN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 98.2 | 94.1 | to | 105.5 | 20.4 | 16.2 | to | 26.1 | 1.08 | 1.02 | to | 1.16 | 72 | 11 |
| Commercial/Ind. S-7 | 94.1 | 52.3 | to | 115.5 | 23.9 | 11.6 | to | 83.4 | 1.17 | 0.96 | to | 1.80 | 9 | 0 |
| Vacant Lot | 86.0 | - | N/A | - | 142.5 | - | N/A | - | 3.52 | - | N/A | - | 6 | 0 |
| Farm & Home | 86.1 | - | N/A | - | 17.6 | - | N/A | - | 1.01 | - | N/A | - | 5 | 0 |
| Ag. Land Only | 15.4 | - | N/A | - | 20.0 | - | N/A | - | 0.96 | - | N/A | - | 15 | 3 |
| Ag. (Impr.+ Land) | 15.4 | - | N/A | - | 20.0 | - | N/A | - | 0.96 | - | N/A | - | 15 | 3 |
| Other/Ex/Ut/NP/M | 196.4 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 94.8 | - | N/A | - | 36.0 | - | N/A | - | 1.51 | - | N/A | - | 108 | 11 |
| Total Market | 98.2 | - | N/A | - | 20.3 | - | N/A | - | 1.06 | - | N/A | - | 88 | 16 |

008 : BUTLER COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 97.2 | 95.9 | to | 98.3 | 8.6 | 7.5 | to | 9.8 | 1.00 | 0.99 | to | 1.01 | 221 | 25 |
| Commercial/Ind. | 101.3 | 95.9 | to | 113.4 | 19.8 | 13.5 | to | 30.3 | 1.10 | 1.03 | to | 1.21 | 22 | 1 |
| Vacant Lot | 87.5 | - | N/A | - | 37.7 | - | N/A | - | 1.10 | - | N/A | - | 47 | 3 |
| Farm & Home | 59.2 | - | N/A | - | 31.9 | - | N/A | - | 1.01 | - | N/A | - | 37 | 2 |
| Ag. Land Only | 5.3 | - | N/A | - | 62.9 | - | N/A | - | 0.92 | - | N/A | - | 14 | 0 |
| Ag. (Impr.+ Land) | 4.2 | - | N/A | - | 68.8 | - | N/A | - | 0.99 | - | N/A | - | 17 | 1 |
| Other/Ex/Ut/NP/M | 83.4 | - | N/A | - | 59.4 | - | N/A | - | 2.13 | - | N/A | - | 2 | 0 |
| Total w/Ag.&F&H | 95.4 | - | N/A | - | 14.9 | - | N/A | - | 1.02 | - | N/A | - | 346 | 49 |
| Total Market | 97.0 | - | N/A | - | 10.4 | - | N/A | - | 0.99 | - | N/A | - | 292 | 46 |

009 : CHASE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 92.6 | 88.9 | to | 105.7 | 17.9 | 12.1 | to | 30.2 | 0.98 | 0.89 | to | 1.07 | 23 | 4 |
| Commercial/Ind. S-4 | 94.2 | 66.5 | to | 135.7 | 23.5 | 8.4 | to | 32.7 | 0.98 | 0.92 | to | 1.10 | 5 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 52.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 5.9 | - | N/A | - | 28.1 | - | N/A | - | 0.84 | - | N/A | - | 4 | 0 |
| Ag. (Impr.+ Land) | 5.9 | - | N/A | - | 28.1 | - | N/A | - | 0.84 | - | N/A | - | 4 | 0 |
| Other/Ex/Ut/NP/M | 194.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 91.3 | - | N/A | - | 31.1 | - | N/A | - | 1.41 | - | N/A | - | 34 | 5 |
| Total Market | 94.2 | - | N/A | - | 19.3 | - | N/A | - | 1.00 | - | N/A | - | 29 | 5 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

010 : CHAUTAUQUA COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 103.5 | 75.1 | to | 123.2 | 34.4 | 23.4 | to | 58.3 | 1.09 | 1.02 | to | 1.20 | 20 | 0 |
| Commercial/Ind. S-5 | 101.2 | 63.5 | to | 123.8 | 21.4 | 10.4 | to | 44.3 | 1.13 | 0.94 | to | 1.40 | 6 | 0 |
| Vacant Lot | 55.9 | - | N/A | - | 0.8 | - | N/A | - | 1.00 | - | N/A | - | 2 | 0 |
| Farm & Home | 42.1 | - | N/A | - | 31.2 | - | N/A | - | 1.08 | - | N/A | - | 8 | 1 |
| Ag. Land Only | 3.7 | - | N/A | - | 11.4 | - | N/A | - | 0.97 | - | N/A | - | 6 | 0 |
| Ag. (Impr.+ Land) | 3.8 | - | N/A | - | 13.1 | - | N/A | - | 0.97 | - | N/A | - | 10 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 60.1 | - | N/A | - | 73.3 | - | N/A | - | 1.95 | - | N/A | - | 46 | 0 |
| Total Market | 97.8 | - | N/A | - | 30.4 | - | N/A | - | 1.12 | - | N/A | - | 28 | 1 |

011 : CHEROKEE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 93.6 | 91.1 | to | 97.8 | 20.6 | 18.1 | to | 23.7 | 1.01 | 0.98 | to | 1.04 | 189 | 21 |
| Commercial/Ind. | 158.0 | 96.9 | to | 390.7 | 54.5 | 33.6 | to | 122.0 | 1.65 | 1.24 | to | 2.44 | 8 | 0 |
| Vacant Lot | 78.7 | - | N/A | - | 53.1 | - | N/A | - | 1.57 | - | N/A | - | 18 | 2 |
| Farm & Home | 51.9 | - | N/A | - | 41.2 | - | N/A | - | 1.12 | - | N/A | - | 16 | 0 |
| Ag. Land Only | 3.5 | - | N/A | - | 86.2 | - | N/A | - | 0.92 | - | N/A | - | 7 | 0 |
| Ag. (Impr.+ Land) | 3.6 | - | N/A | - | 73.9 | - | N/A | - | 1.04 | - | N/A | - | 9 | 0 |
| Other/Ex/Ut/NP/M | 103.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 91.3 | - | N/A | - | 27.7 | - | N/A | - | 1.10 | - | N/A | - | 241 | 28 |
| Total Market | 94.0 | - | N/A | - | 23.6 | - | N/A | - | 1.02 | - | N/A | - | 216 | 25 |

012 : CHEYENNE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 99.4 | 86.0 | to | 103.0 | 18.2 | 13.3 | to | 24.8 | 1.09 | 1.03 | to | 1.18 | 39 | 2 |
| Commercial/Ind. S-2 | 50.6 | 31.3 | to | 101.4 | 36.7 | 9.9 | to | 58.0 | 1.84 | 1.14 | to | 2.25 | 4 | 0 |
| Vacant Lot | 51.2 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 63.5 | - | N/A | - | 14.3 | - | N/A | - | 0.97 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 10.0 | - | N/A | - | 23.3 | - | N/A | - | 1.01 | - | N/A | - | 7 | 1 |
| Ag. (Impr.+ Land) | 10.0 | - | N/A | - | 43.1 | - | N/A | - | 1.26 | - | N/A | - | 9 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 84.6 | - | N/A | - | 38.6 | - | N/A | - | 1.55 | - | N/A | - | 56 | 0 |
| Total Market | 96.1 | - | N/A | - | 23.9 | - | N/A | - | 1.35 | - | N/A | - | 44 | 0 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

013 : CLARK COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|---------------------|--------------|---------------------|-----|-------|------|---------------------|-----|-------|------|---------------------|-----|------|-------------|------------|
| Residential | 92.1 | 68.4 | to | 100.7 | 27.2 | 18.0 | to | 40.8 | 1.09 | 0.99 | to | 1.27 | 22 | 1 |
| Commercial/Ind. S-3 | 58.7 | 16.7 | to | 115.4 | 56.2 | 17.5 | to | 123.1 | 0.90 | 0.66 | to | 1.12 | 5 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 6.4 | - | N/A | - | 66.9 | - | N/A | - | 0.68 | - | N/A | - | 2 | 0 |
| Ag. (Impr.+ Land) | 6.4 | - | N/A | - | 44.0 | - | N/A | - | 0.85 | - | N/A | - | 3 | 0 |
| Other/Ex/Ut/NP/M | 607.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 83.3 | - | N/A | - | 40.6 | - | N/A | - | 1.14 | - | N/A | - | 31 | 2 |
| Total Market | 92.1 | - | N/A | - | 31.7 | - | N/A | - | 1.05 | - | N/A | - | 28 | 2 |

014 : CLAY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 97.0 | 91.8 | to | 99.1 | 12.2 | 10.2 | to | 15.2 | 1.02 | 1.00 | to | 1.05 | 87 | 13 |
| Commercial/Ind. | 109.1 | 70.8 | to | 141.8 | 22.3 | 10.5 | to | 39.9 | 0.95 | 0.87 | to | 1.08 | 6 | 0 |
| Vacant Lot | 99.9 | - | N/A | - | 62.4 | - | N/A | - | 1.93 | - | N/A | - | 3 | 0 |
| Farm & Home | 60.4 | - | N/A | - | 25.8 | - | N/A | - | 0.95 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 6.9 | - | N/A | - | 76.0 | - | N/A | - | 1.18 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 6.9 | - | N/A | - | 76.0 | - | N/A | - | 1.18 | - | N/A | - | 3 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 96.5 | - | N/A | - | 15.1 | - | N/A | - | 1.04 | - | N/A | - | 101 | 15 |
| Total Market | 97.5 | - | N/A | - | 13.0 | - | N/A | - | 1.03 | - | N/A | - | 96 | 15 |

015 : CLOUD COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|-------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 96.0 | 93.3 | to | 102.3 | 15.4 | 13.2 | to | 18.3 | 1.02 | 1.00 | to | 1.05 | 113 | 9 |
| Commercial/Ind. | 91.2 | 44.1 | to | 129.1 | 32.9 | 14.0 | to | 74.9 | 1.00 | 0.87 | to | 1.14 | 6 | 0 |
| Vacant Lot | 104.7 | - | N/A | - | 121.4 | - | N/A | - | 1.68 | - | N/A | - | 5 | 0 |
| Farm & Home | 58.3 | - | N/A | - | 20.9 | - | N/A | - | 2.10 | - | N/A | - | 4 | 0 |
| Ag. Land Only | 12.2 | - | N/A | - | 30.0 | - | N/A | - | 0.96 | - | N/A | - | 8 | 0 |
| Ag. (Impr.+ Land) | 13.2 | - | N/A | - | 25.1 | - | N/A | - | 0.95 | - | N/A | - | 9 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 94.2 | - | N/A | - | 17.8 | - | N/A | - | 1.03 | - | N/A | - | 137 | 18 |
| Total Market | 96.1 | - | N/A | - | 16.9 | - | N/A | - | 1.02 | - | N/A | - | 124 | 9 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

016 : COFFEY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 97.7 | 95.4 | to | 100.8 | 14.9 | 11.7 | to | 19.1 | 0.98 | 0.95 | to | 1.02 | 86 | 16 |
| Commercial/Ind. | 55.0 | 47.0 | to | 137.0 | 56.0 | 5.3 | to | 66.4 | 0.92 | 0.82 | to | 1.08 | 6 | 0 |
| Vacant Lot | 57.1 | - | N/A | - | 62.1 | - | N/A | - | 2.50 | - | N/A | - | 5 | 0 |
| Farm & Home | 59.3 | - | N/A | - | 17.9 | - | N/A | - | 0.92 | - | N/A | - | 5 | 0 |
| Ag. Land Only | 7.1 | - | N/A | - | 53.8 | - | N/A | - | 1.01 | - | N/A | - | 15 | 2 |
| Ag. (Impr.+ Land) | 7.3 | - | N/A | - | 41.4 | - | N/A | - | 0.97 | - | N/A | - | 17 | 2 |
| Other/Ex/Ut/NP/M | 103.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 93.1 | - | N/A | - | 37.0 | - | N/A | - | 1.13 | - | N/A | - | 120 | 9 |
| Total Market | 97.4 | - | N/A | - | 19.5 | - | N/A | - | 0.98 | - | N/A | - | 98 | 14 |

017 : COMANCHE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 96.9 | 74.9 | to | 108.0 | 24.0 | 18.5 | to | 37.1 | 1.06 | 1.00 | to | 1.17 | 19 | 2 |
| Commercial/Ind. S-4 | 69.5 | 37.4 | to | 84.6 | 29.7 | 14.7 | to | 77.7 | 1.33 | 1.14 | to | 1.74 | 7 | 0 |
| Vacant Lot | 111.4 | - | N/A | - | 6.4 | - | N/A | - | 1.00 | - | N/A | - | 2 | 0 |
| Farm & Home | 32.9 | - | N/A | - | 43.4 | - | N/A | - | 1.58 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 2.8 | - | N/A | - | 106.4 | - | N/A | - | 1.56 | - | N/A | - | 6 | 0 |
| Ag. (Impr.+ Land) | 2.4 | - | N/A | - | 112.7 | - | N/A | - | 1.76 | - | N/A | - | 7 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 72.0 | - | N/A | - | 48.0 | - | N/A | - | 4.95 | - | N/A | - | 38 | 2 |
| Total Market | 84.0 | - | N/A | - | 27.2 | - | N/A | - | 1.15 | - | N/A | - | 28 | 2 |

018 : COWLEY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 98.2 | 95.1 | to | 102.8 | 14.5 | 13.1 | to | 16.3 | 1.02 | 1.00 | to | 1.03 | 260 | 31 |
| Commercial/Ind. | 93.1 | 56.5 | to | 127.5 | 36.5 | 22.6 | to | 99.2 | 1.08 | 0.98 | to | 1.23 | 7 | 0 |
| Vacant Lot | 107.3 | - | N/A | - | 80.7 | - | N/A | - | 1.79 | - | N/A | - | 18 | 2 |
| Farm & Home | 66.6 | - | N/A | - | 31.7 | - | N/A | - | 1.05 | - | N/A | - | 13 | 0 |
| Ag. Land Only | 3.6 | - | N/A | - | 74.3 | - | N/A | - | 0.97 | - | N/A | - | 14 | 1 |
| Ag. (Impr.+ Land) | 3.8 | - | N/A | - | 47.1 | - | N/A | - | 0.87 | - | N/A | - | 16 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 96.0 | - | N/A | - | 17.6 | - | N/A | - | 1.03 | - | N/A | - | 314 | 47 |
| Total Market | 98.4 | - | N/A | - | 15.5 | - | N/A | - | 1.02 | - | N/A | - | 285 | 38 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

019 : CRAWFORD COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 93.2 | 91.6 | to | 94.6 | 14.4 | 13.0 | to | 15.9 | 1.03 | 1.02 | to | 1.05 | 347 | 35 |
| Commercial/Ind. | 97.0 | 84.0 | to | 102.9 | 17.4 | 11.0 | to | 26.8 | 1.09 | 1.00 | to | 1.26 | 20 | 0 |
| Vacant Lot | 85.4 | - | N/A | - | 20.8 | - | N/A | - | 1.36 | - | N/A | - | 27 | 4 |
| Farm & Home | 41.8 | - | N/A | - | 38.6 | - | N/A | - | 1.12 | - | N/A | - | 16 | 1 |
| Ag. Land Only | 3.8 | - | N/A | - | 105.8 | - | N/A | - | 0.77 | - | N/A | - | 19 | 0 |
| Ag. (Impr.+ Land) | 3.8 | - | N/A | - | 97.3 | - | N/A | - | 0.77 | - | N/A | - | 23 | 0 |
| Other/Ex/Ut/NP/M | 146.5 | - | N/A | - | 6.9 | - | N/A | - | 0.99 | - | N/A | - | 2 | 0 |
| Total w/Ag.&F&H | 91.6 | - | N/A | - | 15.8 | - | N/A | - | 1.04 | - | N/A | - | 435 | 70 |
| Total Market | 93.2 | - | N/A | - | 15.1 | - | N/A | - | 1.03 | - | N/A | - | 396 | 40 |

020 : DECATUR COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 100.6 | 83.3 | to | 116.9 | 26.4 | 20.1 | to | 36.2 | 1.22 | 1.14 | to | 1.34 | 30 | 1 |
| Commercial/Ind. S-6 | 78.9 | 55.2 | to | 135.0 | 39.7 | 27.3 | to | 77.5 | 1.15 | 1.03 | to | 1.39 | 9 | 0 |
| Vacant Lot | 1000.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 12.1 | - | N/A | - | 8.2 | - | N/A | - | 0.99 | - | N/A | - | 11 | 0 |
| Ag. (Impr.+ Land) | 12.2 | - | N/A | - | 8.2 | - | N/A | - | 0.99 | - | N/A | - | 12 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 80.0 | - | N/A | - | 49.7 | - | N/A | - | 1.85 | - | N/A | - | 52 | 2 |
| Total Market | 98.5 | - | N/A | - | 29.1 | - | N/A | - | 1.20 | - | N/A | - | 40 | 2 |

021 : DICKINSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 96.3 | 92.2 | to | 99.0 | 17.7 | 15.8 | to | 20.1 | 1.01 | 1.00 | to | 1.03 | 194 | 11 |
| Commercial/Ind. | 107.1 | 85.3 | to | 263.6 | 30.8 | 10.1 | to | 76.3 | 1.44 | 1.13 | to | 2.18 | 9 | 1 |
| Vacant Lot | 188.5 | - | N/A | - | 50.0 | - | N/A | - | 1.51 | - | N/A | - | 12 | 2 |
| Farm & Home | 65.4 | - | N/A | - | 27.1 | - | N/A | - | 1.02 | - | N/A | - | 22 | 0 |
| Ag. Land Only | 7.7 | - | N/A | - | 51.5 | - | N/A | - | 0.88 | - | N/A | - | 7 | 0 |
| Ag. (Impr.+ Land) | 7.7 | - | N/A | - | 50.0 | - | N/A | - | 0.88 | - | N/A | - | 11 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 93.5 | - | N/A | - | 20.9 | - | N/A | - | 1.05 | - | N/A | - | 248 | 30 |
| Total Market | 97.4 | - | N/A | - | 18.3 | - | N/A | - | 1.04 | - | N/A | - | 215 | 20 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

022 : DONIPHAN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 90.4 | 82.8 | to | 96.0 | 21.8 | 17.2 | to | 27.8 | 1.00 | 0.95 | to | 1.04 | 59 | 4 |
| Commercial/Ind. | 85.0 | 44.6 | to | 91.1 | 22.3 | 9.2 | to | 50.5 | 1.46 | 1.07 | to | 1.71 | 7 | 0 |
| Vacant Lot | 57.7 | - | N/A | - | 153.0 | - | N/A | - | 1.21 | - | N/A | - | 6 | 0 |
| Farm & Home | 63.1 | - | N/A | - | 292.2 | - | N/A | - | 2.73 | - | N/A | - | 5 | 0 |
| Ag. Land Only | 9.5 | - | N/A | - | 102.3 | - | N/A | - | 1.29 | - | N/A | - | 9 | 1 |
| Ag. (Impr.+ Land) | 8.7 | - | N/A | - | 105.3 | - | N/A | - | 1.20 | - | N/A | - | 12 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 82.8 | - | N/A | - | 36.2 | - | N/A | - | 1.36 | - | N/A | - | 89 | 6 |
| Total Market | 89.6 | - | N/A | - | 24.6 | - | N/A | - | 1.03 | - | N/A | - | 72 | 5 |

023 : DOUGLAS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 93.9 | 92.6 | to | 95.6 | 8.2 | 7.4 | to | 9.1 | 1.00 | 0.99 | to | 1.00 | 238 | 20 |
| Commercial/Ind. | 86.4 | 74.5 | to | 97.7 | 24.0 | 18.4 | to | 32.2 | 0.99 | 0.92 | to | 1.09 | 28 | 0 |
| Vacant Lot | 88.7 | - | N/A | - | 14.6 | - | N/A | - | 0.98 | - | N/A | - | 67 | 12 |
| Farm & Home | 61.9 | - | N/A | - | 33.0 | - | N/A | - | 1.05 | - | N/A | - | 18 | 0 |
| Ag. Land Only | 2.3 | - | N/A | - | 116.1 | - | N/A | - | 0.72 | - | N/A | - | 27 | 2 |
| Ag. (Impr.+ Land) | 2.3 | - | N/A | - | 125.5 | - | N/A | - | 0.73 | - | N/A | - | 29 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 91.3 | - | N/A | - | 12.0 | - | N/A | - | 1.00 | - | N/A | - | 380 | 59 |
| Total Market | 93.2 | - | N/A | - | 9.4 | - | N/A | - | 1.00 | - | N/A | - | 333 | 44 |

024 : EDWARDS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 102.0 | 85.7 | to | 112.8 | 27.4 | 17.6 | to | 41.9 | 1.07 | 0.97 | to | 1.21 | 22 | 1 |
| Commercial/Ind. S-3 | 44.1 | 22.8 | to | 89.2 | 48.1 | 10.9 | to | 66.7 | 0.93 | 0.87 | to | 1.00 | 4 | 0 |
| Vacant Lot | 99.7 | - | N/A | - | 25.1 | - | N/A | - | 1.05 | - | N/A | - | 2 | 0 |
| Farm & Home | 63.9 | - | N/A | - | 51.8 | - | N/A | - | 1.15 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 11.3 | - | N/A | - | 31.4 | - | N/A | - | 1.11 | - | N/A | - | 14 | 0 |
| Ag. (Impr.+ Land) | 10.8 | - | N/A | - | 26.5 | - | N/A | - | 1.01 | - | N/A | - | 19 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 56.3 | - | N/A | - | 83.8 | - | N/A | - | 3.07 | - | N/A | - | 49 | 1 |
| Total Market | 97.4 | - | N/A | - | 30.2 | - | N/A | - | 1.01 | - | N/A | - | 28 | 2 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

025 : ELK COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|---------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 106.5 | 80.8 | to | 130.7 | 25.8 | 18.5 | to | 46.4 | 1.18 | 1.01 | to | 1.45 | 15 | 2 |
| Commercial/Ind. S-5 | 87.2 | 73.6 | to | 102.4 | 13.0 | 8.4 | to | 19.1 | 1.04 | 0.97 | to | 1.12 | 6 | 0 |
| Vacant Lot | 51.5 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 29.4 | - | N/A | - | 76.8 | - | N/A | - | 1.27 | - | N/A | - | 8 | 0 |
| Ag. Land Only | 3.9 | - | N/A | - | 12.3 | - | N/A | - | 0.97 | - | N/A | - | 2 | 0 |
| Ag. (Impr.+ Land) | 3.9 | - | N/A | - | 12.3 | - | N/A | - | 0.97 | - | N/A | - | 2 | 0 |
| Other/Ex/Ut/NP/M | 221.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 80.8 | - | N/A | - | 42.0 | - | N/A | - | 1.97 | - | N/A | - | 33 | 3 |
| Total Market | 92.3 | - | N/A | - | 23.1 | - | N/A | - | 1.12 | - | N/A | - | 23 | 3 |

026 : ELLIS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 100.4 | 98.2 | to | 105.0 | 8.0 | 6.5 | to | 10.0 | 1.02 | 1.00 | to | 1.04 | 68 | 4 |
| Commercial/Ind. | 93.2 | 76.3 | to | 113.4 | 19.4 | 12.8 | to | 32.5 | 0.93 | 0.84 | to | 1.04 | 10 | 0 |
| Vacant Lot | 90.7 | - | N/A | - | 21.3 | - | N/A | - | 1.17 | - | N/A | - | 19 | 1 |
| Farm & Home | 58.0 | - | N/A | - | 18.4 | - | N/A | - | 1.13 | - | N/A | - | 5 | 0 |
| Ag. Land Only | 5.5 | - | N/A | - | 70.6 | - | N/A | - | 1.09 | - | N/A | - | 13 | 0 |
| Ag. (Impr.+ Land) | 4.8 | - | N/A | - | 77.0 | - | N/A | - | 1.09 | - | N/A | - | 14 | 0 |
| Other/Ex/Ut/NP/M | 40.5 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 96.7 | - | N/A | - | 14.1 | - | N/A | - | 1.01 | - | N/A | - | 117 | 18 |
| Total Market | 98.5 | - | N/A | - | 9.6 | - | N/A | - | 1.00 | - | N/A | - | 98 | 11 |

027 : ELLSWORTH COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|---------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 100.2 | 97.7 | to | 104.1 | 14.5 | 11.5 | to | 18.3 | 1.03 | 1.00 | to | 1.06 | 59 | 5 |
| Commercial/Ind. S-5 | 121.7 | 101.4 | to | 143.8 | 15.4 | 10.7 | to | 24.0 | 1.04 | 0.99 | to | 1.09 | 8 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 66.1 | - | N/A | - | 41.0 | - | N/A | - | 1.18 | - | N/A | - | 4 | 0 |
| Ag. Land Only | 11.0 | - | N/A | - | 60.6 | - | N/A | - | 1.41 | - | N/A | - | 4 | 0 |
| Ag. (Impr.+ Land) | 7.5 | - | N/A | - | 63.1 | - | N/A | - | 1.31 | - | N/A | - | 6 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 99.5 | - | N/A | - | 16.8 | - | N/A | - | 1.07 | - | N/A | - | 77 | 11 |
| Total Market | 100.7 | - | N/A | - | 16.4 | - | N/A | - | 1.03 | - | N/A | - | 67 | 4 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

028 : FINNEY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|
| Residential | 92.8 | 91.2 | to 94.7 | 8.5 | 7.7 | to 9.5 | 0.99 | 0.99 | to 1.00 | 259 | 22 | |
| Commercial/Ind. | 86.1 | 81.4 | to 100.1 | 13.1 | 9.5 | to 20.8 | 1.00 | 0.96 | to 1.04 | 15 | 0 | |
| Vacant Lot | 78.6 | - | N/A | - | 29.3 | - | N/A | - | N/A | - | 38 | 0 |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 13.6 | - | N/A | - | 43.4 | - | N/A | - | N/A | - | 14 | 0 |
| Ag. (Impr.+ Land) | 13.8 | - | N/A | - | 41.1 | - | N/A | - | N/A | - | 16 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 91.7 | - | N/A | - | 9.7 | - | N/A | - | N/A | - | 328 | 46 |
| Total Market | 92.4 | - | N/A | - | 9.2 | - | N/A | - | N/A | - | 312 | 35 |

029 : FORD COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | |
|-------------------|--------------|---------------------|---------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|
| Residential | 91.9 | 90.2 | to 94.1 | 11.6 | 10.5 | to 12.8 | 1.00 | 1.00 | to 1.01 | 306 | 33 | |
| Commercial/Ind. | 84.8 | 56.1 | to 94.7 | 30.1 | 18.4 | to 55.8 | 1.19 | 0.96 | to 1.55 | 18 | 1 | |
| Vacant Lot | 93.7 | - | N/A | - | 28.3 | - | N/A | - | N/A | - | 15 | 3 |
| Farm & Home | 58.1 | - | N/A | - | 157.5 | - | N/A | - | N/A | - | 5 | 0 |
| Ag. Land Only | 12.1 | - | N/A | - | 10.2 | - | N/A | - | N/A | - | 15 | 3 |
| Ag. (Impr.+ Land) | 12.4 | - | N/A | - | 12.2 | - | N/A | - | N/A | - | 16 | 3 |
| Other/Ex/Ut/NP/M | 117.0 | - | N/A | - | - | - | N/A | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 91.2 | - | N/A | - | 12.9 | - | N/A | - | N/A | - | 361 | 56 |
| Total Market | 91.7 | - | N/A | - | 12.0 | - | N/A | - | N/A | - | 340 | 44 |

030 : FRANKLIN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|
| Residential | 90.7 | 86.9 | to 92.3 | 13.9 | 12.6 | to 15.5 | 1.02 | 1.01 | to 1.03 | 297 | 35 | |
| Commercial/Ind. | 94.3 | 88.6 | to 100.8 | 9.9 | 6.0 | to 16.3 | 1.06 | 1.00 | to 1.21 | 15 | 2 | |
| Vacant Lot | 100.0 | - | N/A | - | 37.7 | - | N/A | - | N/A | - | 33 | 3 |
| Farm & Home | 54.0 | - | N/A | - | 30.8 | - | N/A | - | N/A | - | 43 | 0 |
| Ag. Land Only | 5.3 | - | N/A | - | 76.1 | - | N/A | - | N/A | - | 32 | 0 |
| Ag. (Impr.+ Land) | 6.1 | - | N/A | - | 62.3 | - | N/A | - | N/A | - | 38 | 1 |
| Other/Ex/Ut/NP/M | 142.1 | - | N/A | - | 24.5 | - | N/A | - | N/A | - | 3 | 1 |
| Total w/Ag.&F&H | 86.1 | - | N/A | - | 18.0 | - | N/A | - | N/A | - | 429 | 83 |
| Total Market | 91.4 | - | N/A | - | 14.0 | - | N/A | - | N/A | - | 348 | 48 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

031 : GEARY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 99.0 | 98.1 | to 100.6 | 9.3 | 8.5 | to 10.4 | 1.01 | 1.01 | to 1.02 | 311 | 41 | | |
| Commercial/Ind. | 108.4 | 80.8 | to 134.2 | 29.3 | 17.7 | to 60.1 | 1.12 | 0.95 | to 1.83 | 14 | 2 | | |
| Vacant Lot | 91.2 | - | N/A | - | 91.1 | - | N/A | - | 2.06 | - | N/A | 9 | 0 |
| Farm & Home | 75.7 | - | N/A | - | 22.7 | - | N/A | - | 1.10 | - | N/A | 2 | 0 |
| Ag. Land Only | 17.6 | - | N/A | - | 42.2 | - | N/A | - | 1.07 | - | N/A | 3 | 0 |
| Ag. (Impr.+ Land) | 17.6 | - | N/A | - | 42.2 | - | N/A | - | 1.07 | - | N/A | 3 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 98.8 | - | N/A | - | 9.9 | - | N/A | - | 1.00 | - | N/A | 339 | 53 |
| Total Market | 98.9 | - | N/A | - | 9.8 | - | N/A | - | 1.01 | - | N/A | 334 | 50 |

032 : GOVE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|----------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 88.0 | 83.1 | to 96.6 | 18.8 | 13.6 | to 27.2 | 0.96 | 0.90 | to 1.02 | 33 | 2 | | |
| Commercial/Ind. | 94.1 | 24.7 | to 176.4 | 50.8 | 16.4 | to 114.2 | 1.57 | 0.98 | to 1.99 | 5 | 0 | | |
| Vacant Lot | 35.5 | - | N/A | - | 43.6 | - | N/A | - | 0.69 | - | N/A | 3 | 0 |
| Farm & Home | 67.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Ag. Land Only | 19.0 | - | N/A | - | 29.1 | - | N/A | - | 1.03 | - | N/A | 6 | 0 |
| Ag. (Impr.+ Land) | 19.0 | - | N/A | - | 29.1 | - | N/A | - | 1.03 | - | N/A | 6 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 84.2 | - | N/A | - | 35.7 | - | N/A | - | 1.20 | - | N/A | 48 | 2 |
| Total Market | 87.9 | - | N/A | - | 23.3 | - | N/A | - | 1.04 | - | N/A | 41 | 4 |

033 : GRAHAM COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|---------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 93.8 | 83.0 | to 100.0 | 10.8 | 6.9 | to 18.7 | 1.00 | 0.96 | to 1.05 | 17 | 2 | | |
| Commercial/Ind. S-7 | 97.1 | 61.0 | to 127.9 | 18.3 | 8.9 | to 39.3 | 1.05 | 0.92 | to 1.17 | 8 | 1 | | |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 51.8 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Ag. Land Only | 20.3 | - | N/A | - | 33.3 | - | N/A | - | 1.19 | - | N/A | 11 | 0 |
| Ag. (Impr.+ Land) | 20.3 | - | N/A | - | 33.3 | - | N/A | - | 1.19 | - | N/A | 11 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 83.0 | - | N/A | - | 41.0 | - | N/A | - | 1.62 | - | N/A | 37 | 1 |
| Total Market | 93.9 | - | N/A | - | 12.2 | - | N/A | - | 1.00 | - | N/A | 25 | 4 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

034 : GRANT COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 95.3 | 87.4 | to | 100.5 | 15.9 | 12.6 | to | 20.7 | 1.00 | 0.97 | to | 1.04 | 50 | 4 |
| Commercial/Ind. | 64.7 | 51.7 | to | 128.3 | 40.1 | 8.0 | to | 42.9 | 1.42 | 0.99 | to | 1.69 | 4 | 0 |
| Vacant Lot | 117.5 | - | N/A | - | 40.9 | - | N/A | - | 1.24 | - | N/A | - | 3 | 0 |
| Farm & Home | 59.0 | - | N/A | - | 8.7 | - | N/A | - | 1.01 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 8.3 | - | N/A | - | 22.4 | - | N/A | - | 0.87 | - | N/A | - | 7 | 1 |
| Ag. (Impr.+ Land) | 8.3 | - | N/A | - | 22.4 | - | N/A | - | 0.87 | - | N/A | - | 7 | 1 |
| Other/Ex/Ut/NP/M | 157.8 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 90.7 | - | N/A | - | 31.7 | - | N/A | - | 1.08 | - | N/A | - | 67 | 2 |
| Total Market | 95.3 | - | N/A | - | 20.1 | - | N/A | - | 1.13 | - | N/A | - | 58 | 4 |

035 : GRAY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 87.2 | 82.2 | to | 96.3 | 20.0 | 16.1 | to | 26.2 | 1.06 | 1.02 | to | 1.12 | 45 | 1 |
| Commercial/Ind. | 108.6 | 63.8 | to | 159.8 | 33.1 | 17.6 | to | 64.1 | 1.09 | 0.87 | to | 1.35 | 6 | 0 |
| Vacant Lot | 65.9 | - | N/A | - | 19.9 | - | N/A | - | 1.04 | - | N/A | - | 4 | 0 |
| Farm & Home | 64.9 | - | N/A | - | 27.1 | - | N/A | - | 1.01 | - | N/A | - | 6 | 0 |
| Ag. Land Only | 15.9 | - | N/A | - | 34.1 | - | N/A | - | 0.94 | - | N/A | - | 8 | 0 |
| Ag. (Impr.+ Land) | 15.9 | - | N/A | - | 38.7 | - | N/A | - | 0.91 | - | N/A | - | 10 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 80.7 | - | N/A | - | 34.0 | - | N/A | - | 1.14 | - | N/A | - | 71 | 1 |
| Total Market | 87.2 | - | N/A | - | 22.6 | - | N/A | - | 1.05 | - | N/A | - | 55 | 1 |

036 : GREELEY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 85.2 | 73.2 | to | 105.6 | 16.6 | 13.2 | to | 25.3 | 1.07 | 1.02 | to | 1.15 | 13 | 0 |
| Commercial/Ind. S-4 | 93.5 | 35.4 | to | 144.1 | 35.2 | 9.7 | to | 79.6 | 0.78 | 0.64 | to | 1.96 | 5 | 0 |
| Vacant Lot | 63.6 | - | N/A | - | 63.9 | - | N/A | - | 1.20 | - | N/A | - | 2 | 0 |
| Farm & Home | 49.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 9.9 | - | N/A | - | 10.0 | - | N/A | - | 0.98 | - | N/A | - | 13 | 0 |
| Ag. (Impr.+ Land) | 9.9 | - | N/A | - | 12.4 | - | N/A | - | 1.01 | - | N/A | - | 15 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 56.0 | - | N/A | - | 73.2 | - | N/A | - | 0.95 | - | N/A | - | 36 | 0 |
| Total Market | 89.5 | - | N/A | - | 24.5 | - | N/A | - | 0.84 | - | N/A | - | 20 | 0 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

037 : GREENWOOD COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|----|
| Residential | 98.7 | 93.3 | to | 107.6 | 26.0 | 19.5 | to | 34.5 | 1.09 | 1.03 | to | 1.18 | 63 | 9 |
| Commercial/Ind. S-2 | 81.7 | 68.9 | to | 116.8 | 20.7 | 5.0 | to | 23.9 | 1.21 | 1.01 | to | 1.30 | 4 | 0 |
| Vacant Lot | 350.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 16.1 | - | N/A | - | 75.1 | - | N/A | - | 1.17 | - | N/A | - | 5 | 0 |
| Ag. Land Only | 3.4 | - | N/A | - | 14.5 | - | N/A | - | 1.00 | - | N/A | - | 9 | 0 |
| Ag. (Impr.+ Land) | 3.4 | - | N/A | - | 14.5 | - | N/A | - | 1.00 | - | N/A | - | 9 | 0 |
| Other/Ex/Ut/NP/M | 854.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 94.2 | - | N/A | - | 38.6 | - | N/A | - | 1.72 | - | N/A | - | 83 | 12 |
| Total Market | 98.7 | - | N/A | - | 25.8 | - | N/A | - | 1.10 | - | N/A | - | 69 | 11 |

038 : HAMILTON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 100.7 | 96.6 | to | 108.7 | 12.3 | 8.3 | to | 17.8 | 1.03 | 1.00 | to | 1.06 | 25 | 1 |
| Commercial/Ind. S-6 | 96.9 | 75.9 | to | 203.0 | 30.0 | 11.7 | to | 67.9 | 1.07 | 0.94 | to | 1.22 | 8 | 1 |
| Vacant Lot | 34.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 87.9 | - | N/A | - | 9.1 | - | N/A | - | 1.07 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 8.1 | - | N/A | - | 25.8 | - | N/A | - | 0.93 | - | N/A | - | 5 | 0 |
| Ag. (Impr.+ Land) | 8.1 | - | N/A | - | 25.8 | - | N/A | - | 0.93 | - | N/A | - | 5 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 98.0 | - | N/A | - | 15.0 | - | N/A | - | 1.00 | - | N/A | - | 41 | 8 |
| Total Market | 99.7 | - | N/A | - | 13.4 | - | N/A | - | 1.02 | - | N/A | - | 34 | 4 |

039 : HARPER COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 101.2 | 94.7 | to | 111.0 | 18.8 | 14.1 | to | 25.7 | 1.04 | 1.00 | to | 1.09 | 50 | 8 |
| Commercial/Ind. | 107.0 | 43.0 | to | 242.3 | 66.5 | 32.0 | to | 191.9 | 1.24 | 0.81 | to | 1.60 | 6 | 0 |
| Vacant Lot | 155.7 | - | N/A | - | 82.4 | - | N/A | - | 3.15 | - | N/A | - | 2 | 0 |
| Farm & Home | 65.2 | - | N/A | - | 54.7 | - | N/A | - | 1.07 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 7.8 | - | N/A | - | 52.2 | - | N/A | - | 1.04 | - | N/A | - | 17 | 0 |
| Ag. (Impr.+ Land) | 7.5 | - | N/A | - | 54.3 | - | N/A | - | 1.05 | - | N/A | - | 18 | 0 |
| Other/Ex/Ut/NP/M | 11.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 93.2 | - | N/A | - | 51.0 | - | N/A | - | 1.66 | - | N/A | - | 79 | 4 |
| Total Market | 101.1 | - | N/A | - | 26.8 | - | N/A | - | 1.13 | - | N/A | - | 59 | 8 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

040 : HARVEY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 92.6 | 89.6 | to | 94.3 | 10.7 | 9.3 | to | 12.4 | 1.01 | 0.99 | to | 1.02 | 154 | 20 |
| Commercial/Ind. | 80.6 | 57.7 | to | 100.0 | 22.1 | 15.6 | to | 35.4 | 0.95 | 0.88 | to | 1.06 | 11 | 1 |
| Vacant Lot | 95.9 | - | N/A | - | 36.6 | - | N/A | - | 1.20 | - | N/A | - | 10 | 1 |
| Farm & Home | 56.3 | - | N/A | - | 31.2 | - | N/A | - | 1.08 | - | N/A | - | 15 | 0 |
| Ag. Land Only | 9.7 | - | N/A | - | 50.1 | - | N/A | - | 1.00 | - | N/A | - | 18 | 0 |
| Ag. (Impr.+ Land) | 9.4 | - | N/A | - | 48.7 | - | N/A | - | 1.00 | - | N/A | - | 21 | 0 |
| Other/Ex/Ut/NP/M | 91.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 89.3 | - | N/A | - | 15.0 | - | N/A | - | 1.02 | - | N/A | - | 212 | 38 |
| Total Market | 92.2 | - | N/A | - | 11.9 | - | N/A | - | 1.01 | - | N/A | - | 176 | 23 |

041 : HASKELL COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 88.2 | 81.7 | to | 96.4 | 19.2 | 13.9 | to | 27.4 | 0.97 | 0.92 | to | 1.01 | 32 | 3 |
| Commercial/Ind. S-4 | 84.2 | 55.2 | to | 145.5 | 36.7 | 9.2 | to | 45.7 | 1.16 | 0.99 | to | 1.35 | 5 | 0 |
| Vacant Lot | 55.0 | - | N/A | - | 30.9 | - | N/A | - | 1.20 | - | N/A | - | 2 | 0 |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 9.3 | - | N/A | - | 0.9 | - | N/A | - | 0.99 | - | N/A | - | 2 | 0 |
| Ag. (Impr.+ Land) | 9.3 | - | N/A | - | 0.9 | - | N/A | - | 0.99 | - | N/A | - | 2 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 85.7 | - | N/A | - | 28.2 | - | N/A | - | 0.99 | - | N/A | - | 41 | 2 |
| Total Market | 86.8 | - | N/A | - | 22.9 | - | N/A | - | 0.98 | - | N/A | - | 39 | 3 |

042 : HODGEMAN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 96.0 | 91.7 | to | 103.5 | 10.7 | 7.4 | to | 16.5 | 1.02 | 0.98 | to | 1.09 | 17 | 1 |
| Commercial/Ind. S-6 | 72.3 | 52.1 | to | 83.2 | 15.5 | 7.5 | to | 26.5 | 1.13 | 0.99 | to | 1.20 | 6 | 0 |
| Vacant Lot | 174.7 | - | N/A | - | 7.9 | - | N/A | - | 1.03 | - | N/A | - | 4 | 0 |
| Farm & Home | 25.6 | - | N/A | - | 18.1 | - | N/A | - | 1.03 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 3.9 | - | N/A | - | 178.5 | - | N/A | - | 1.04 | - | N/A | - | 13 | 0 |
| Ag. (Impr.+ Land) | 3.9 | - | N/A | - | 166.2 | - | N/A | - | 1.07 | - | N/A | - | 15 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 70.0 | - | N/A | - | 62.2 | - | N/A | - | 1.93 | - | N/A | - | 45 | 0 |
| Total Market | 93.0 | - | N/A | - | 20.5 | - | N/A | - | 1.04 | - | N/A | - | 27 | 2 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

043 : JACKSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 93.5 | 89.9 | to 95.8 | 11.7 | 9.9 | to 14.2 | 1.02 | 1.00 | to 1.03 | 100 | 13 | | |
| Commercial/Ind. | 60.3 | 18.8 | to 110.4 | 44.1 | 10.5 | to 87.7 | 1.18 | 0.86 | to 1.45 | 4 | 0 | | |
| Vacant Lot | 87.8 | - | N/A | - | 20.2 | - | N/A | - | 1.04 | - | N/A | 2 | 0 |
| Farm & Home | 62.0 | - | N/A | - | 31.3 | - | N/A | - | 1.18 | - | N/A | 29 | 1 |
| Ag. Land Only | 3.9 | - | N/A | - | 153.9 | - | N/A | - | 0.88 | - | N/A | 27 | 0 |
| Ag. (Impr.+ Land) | 4.7 | - | N/A | - | 112.6 | - | N/A | - | 0.88 | - | N/A | 32 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 81.0 | - | N/A | - | 38.5 | - | N/A | - | 1.30 | - | N/A | 167 | 6 |
| Total Market | 93.0 | - | N/A | - | 12.6 | - | N/A | - | 1.03 | - | N/A | 106 | 14 |

044 : JEFFERSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 89.1 | 85.8 | to 92.2 | 14.4 | 12.9 | to 16.2 | 1.02 | 1.01 | to 1.03 | 199 | 13 | | |
| Commercial/Ind. | 108.8 | 75.7 | to 157.2 | 35.8 | 20.9 | to 73.3 | 1.14 | 0.99 | to 1.37 | 9 | 0 | | |
| Vacant Lot | 126.5 | - | N/A | - | 78.4 | - | N/A | - | 3.59 | - | N/A | 26 | 3 |
| Farm & Home | 74.4 | - | N/A | - | 22.4 | - | N/A | - | 1.06 | - | N/A | 53 | 3 |
| Ag. Land Only | 2.6 | - | N/A | - | 216.0 | - | N/A | - | 0.78 | - | N/A | 31 | 2 |
| Ag. (Impr.+ Land) | 2.9 | - | N/A | - | 198.9 | - | N/A | - | 0.91 | - | N/A | 41 | 3 |
| Other/Ex/Ut/NP/M | 176.8 | - | N/A | - | - | - | N/A | - | - | - | N/A | 2 | 0 |
| Total w/Ag.&F&H | 83.5 | - | N/A | - | 20.1 | - | N/A | - | 1.07 | - | N/A | 330 | 59 |
| Total Market | 91.1 | - | N/A | - | 15.2 | - | N/A | - | 1.03 | - | N/A | 236 | 29 |

045 : JEWELL COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 90.5 | 77.7 | to 107.0 | 25.3 | 18.4 | to 35.3 | 1.08 | 1.01 | to 1.17 | 22 | 0 | | |
| Commercial/Ind. | 84.6 | 66.3 | to 107.1 | 21.3 | 1.9 | to 22.5 | 0.94 | 0.88 | to 1.12 | 4 | 0 | | |
| Vacant Lot | 112.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Farm & Home | 64.7 | - | N/A | - | 41.9 | - | N/A | - | 1.11 | - | N/A | 4 | 0 |
| Ag. Land Only | 11.9 | - | N/A | - | 36.7 | - | N/A | - | 1.01 | - | N/A | 6 | 0 |
| Ag. (Impr.+ Land) | 11.9 | - | N/A | - | 36.7 | - | N/A | - | 1.01 | - | N/A | 6 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 81.6 | - | N/A | - | 38.3 | - | N/A | - | 1.67 | - | N/A | 37 | 0 |
| Total Market | 93.3 | - | N/A | - | 23.6 | - | N/A | - | 1.06 | - | N/A | 27 | 0 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

046 : JOHNSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|------|----|
| Residential | 93.5 | 92.0 | to | 94.8 | 8.9 | 8.1 | to | 9.8 | 1.04 | 1.00 | to | 1.09 | 306 | 17 |
| Commercial/Ind. | 86.8 | 80.1 | to | 91.7 | 22.1 | 18.8 | to | 26.0 | 1.05 | 0.95 | to | 1.21 | 126 | 3 |
| Vacant Lot | 59.0 | - | N/A | - | 27.0 | - | N/A | - | 1.04 | - | N/A | - | 808 | 35 |
| Farm & Home | 79.5 | - | N/A | - | 19.8 | - | N/A | - | 0.92 | - | N/A | - | 16 | 3 |
| Ag. Land Only | 0.6 | - | N/A | - | 133.7 | - | N/A | - | 1.08 | - | N/A | - | 41 | 6 |
| Ag. (Impr.+ Land) | 0.6 | - | N/A | - | 136.0 | - | N/A | - | 1.07 | - | N/A | - | 44 | 6 |
| Other/Ex/Ut/NP/M | 91.0 | - | N/A | - | 10.5 | - | N/A | - | 1.03 | - | N/A | - | 6 | 0 |
| Total w/Ag.&F&H | 68.6 | - | N/A | - | 33.2 | - | N/A | - | 1.54 | - | N/A | - | 1306 | 10 |
| Total Market | 69.2 | - | N/A | - | 30.9 | - | N/A | - | 1.57 | - | N/A | - | 1246 | 11 |

047 : KEARNY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 81.6 | 77.7 | to | 91.9 | 16.0 | 11.3 | to | 25.9 | 1.00 | 0.97 | to | 1.04 | 20 | 2 |
| Commercial/Ind. S-3 | 71.5 | 56.3 | to | 89.0 | 17.5 | 4.9 | to | 22.3 | 1.03 | 0.98 | to | 1.10 | 5 | 0 |
| Vacant Lot | 98.0 | - | N/A | - | 16.2 | - | N/A | - | 0.99 | - | N/A | - | 2 | 0 |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 11.7 | - | N/A | - | 15.6 | - | N/A | - | 1.17 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 11.7 | - | N/A | - | 15.6 | - | N/A | - | 1.17 | - | N/A | - | 3 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 79.7 | - | N/A | - | 16.6 | - | N/A | - | 1.02 | - | N/A | - | 30 | 5 |
| Total Market | 82.1 | - | N/A | - | 16.6 | - | N/A | - | 1.02 | - | N/A | - | 27 | 2 |

048 : KINGMAN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|----|
| Residential | 97.5 | 93.4 | to | 101.1 | 11.1 | 8.7 | to | 14.6 | 1.04 | 1.01 | to | 1.07 | 59 | 10 |
| Commercial/Ind. S-4 | 100.4 | 83.1 | to | 130.0 | 15.7 | 6.4 | to | 35.2 | 0.99 | 0.92 | to | 1.07 | 6 | 0 |
| Vacant Lot | 58.7 | - | N/A | - | 58.0 | - | N/A | - | 1.90 | - | N/A | - | 2 | 0 |
| Farm & Home | 34.9 | - | N/A | - | 24.1 | - | N/A | - | 0.96 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 5.9 | - | N/A | - | 86.6 | - | N/A | - | 0.94 | - | N/A | - | 17 | 0 |
| Ag. (Impr.+ Land) | 5.9 | - | N/A | - | 92.8 | - | N/A | - | 0.99 | - | N/A | - | 19 | 0 |
| Other/Ex/Ut/NP/M | 100.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 92.8 | - | N/A | - | 37.1 | - | N/A | - | 1.33 | - | N/A | - | 90 | 3 |
| Total Market | 97.8 | - | N/A | - | 10.8 | - | N/A | - | 1.02 | - | N/A | - | 68 | 12 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

049 : KIOWA COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 101.0 | 84.3 | to | 111.9 | 12.8 | 7.2 | to | 21.7 | 1.08 | 1.02 | to | 1.22 | 9 | 0 |
| Commercial/Ind. S-3 | 88.7 | 69.7 | to | 90.7 | 8.5 | 0.8 | to | 9.9 | 1.18 | 1.00 | to | 1.18 | 3 | 0 |
| Vacant Lot | 135.0 | - | N/A | - | 64.0 | - | N/A | - | 2.16 | - | N/A | - | 4 | 0 |
| Farm & Home | 65.6 | - | N/A | - | 19.1 | - | N/A | - | 1.01 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 12.9 | - | N/A | - | 23.7 | - | N/A | - | 0.95 | - | N/A | - | 7 | 0 |
| Ag. (Impr.+ Land) | 12.9 | - | N/A | - | 21.1 | - | N/A | - | 0.96 | - | N/A | - | 8 | 0 |
| Other/Ex/Ut/NP/M | 129.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 78.2 | - | N/A | - | 50.8 | - | N/A | - | 1.27 | - | N/A | - | 27 | 1 |
| Total Market | 90.8 | - | N/A | - | 19.5 | - | N/A | - | 1.16 | - | N/A | - | 17 | 2 |

050 : LABETTE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 106.3 | 103.0 | to | 110.8 | 18.2 | 15.3 | to | 21.4 | 1.09 | 1.06 | to | 1.13 | 132 | 15 |
| Commercial/Ind. | 88.9 | 71.6 | to | 131.9 | 24.8 | 13.7 | to | 57.4 | 1.09 | 0.90 | to | 1.43 | 10 | 1 |
| Vacant Lot | 56.6 | - | N/A | - | 54.3 | - | N/A | - | 2.64 | - | N/A | - | 3 | 0 |
| Farm & Home | 58.4 | - | N/A | - | 23.0 | - | N/A | - | 1.37 | - | N/A | - | 6 | 0 |
| Ag. Land Only | 8.7 | - | N/A | - | 24.5 | - | N/A | - | 0.90 | - | N/A | - | 11 | 0 |
| Ag. (Impr.+ Land) | 8.6 | - | N/A | - | 27.3 | - | N/A | - | 0.92 | - | N/A | - | 12 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 102.1 | - | N/A | - | 19.7 | - | N/A | - | 1.13 | - | N/A | - | 163 | 31 |
| Total Market | 105.1 | - | N/A | - | 19.5 | - | N/A | - | 1.13 | - | N/A | - | 145 | 16 |

051 : LANE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 95.1 | 87.9 | to | 127.3 | 28.7 | 14.5 | to | 51.4 | 1.08 | 0.94 | to | 1.28 | 14 | 1 |
| Commercial/Ind. | 96.8 | - | N/A | - | 8.6 | - | N/A | - | 0.96 | - | N/A | - | 2 | 0 |
| Vacant Lot | 171.7 | - | N/A | - | 13.9 | - | N/A | - | 1.11 | - | N/A | - | 4 | 1 |
| Farm & Home | 45.8 | - | N/A | - | 54.9 | - | N/A | - | 1.34 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 8.0 | - | N/A | - | 9.0 | - | N/A | - | 0.96 | - | N/A | - | 8 | 1 |
| Ag. (Impr.+ Land) | 8.0 | - | N/A | - | 9.0 | - | N/A | - | 0.96 | - | N/A | - | 8 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 88.9 | - | N/A | - | 52.5 | - | N/A | - | 2.43 | - | N/A | - | 30 | 2 |
| Total Market | 99.4 | - | N/A | - | 30.3 | - | N/A | - | 1.15 | - | N/A | - | 20 | 2 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

052 : LEAVENWORTH COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|-----|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 94.1 | 92.0 | to | 95.6 | 7.9 | 7.0 | to | 9.1 | 0.99 | 0.98 | to | 1.00 | 204 | 25 |
| Commercial/Ind. | 92.4 | 85.4 | to | 99.6 | 11.9 | 7.8 | to | 20.2 | 1.03 | 0.98 | to | 1.12 | 17 | 2 |
| Vacant Lot | 80.3 | - | N/A | - | 28.4 | - | N/A | - | 1.00 | - | N/A | - | 104 | 2 |
| Farm & Home | 75.8 | - | N/A | - | 20.0 | - | N/A | - | 1.03 | - | N/A | - | 53 | 2 |
| Ag. Land Only | 1.0 | - | N/A | - | 228.2 | - | N/A | - | 0.78 | - | N/A | - | 36 | 5 |
| Ag. (Impr.+ Land) | 1.0 | - | N/A | - | 284.6 | - | N/A | - | 0.90 | - | N/A | - | 37 | 3 |
| Other/Ex/Ut/NP/M | 81.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 88.2 | - | N/A | - | 16.7 | - | N/A | - | 1.00 | - | N/A | - | 416 | 52 |
| Total Market | 92.2 | - | N/A | - | 14.4 | - | N/A | - | 0.97 | - | N/A | - | 326 | 21 |

053 : LINCOLN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 95.0 | 80.1 | to | 115.1 | 20.4 | 13.9 | to | 34.3 | 0.96 | 0.87 | to | 1.05 | 12 | 0 |
| Commercial/Ind. S-2 | 73.9 | - | N/A | - | 30.9 | - | N/A | - | 0.98 | - | N/A | - | 2 | 0 |
| Vacant Lot | 125.5 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 56.3 | - | N/A | - | 50.1 | - | N/A | - | 0.88 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 11.9 | - | N/A | - | 49.4 | - | N/A | - | 0.76 | - | N/A | - | 7 | 0 |
| Ag. (Impr.+ Land) | 11.9 | - | N/A | - | 45.1 | - | N/A | - | 0.81 | - | N/A | - | 9 | 0 |
| Other/Ex/Ut/NP/M | 18.1 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 70.9 | - | N/A | - | 56.6 | - | N/A | - | 1.25 | - | N/A | - | 27 | 0 |
| Total Market | 94.2 | - | N/A | - | 25.6 | - | N/A | - | 0.96 | - | N/A | - | 16 | 0 |

054 : LINN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 89.6 | 83.3 | to | 97.7 | 22.3 | 19.3 | to | 26.3 | 1.02 | 0.99 | to | 1.06 | 143 | 21 |
| Commercial/Ind. | 77.1 | 60.3 | to | 103.8 | 19.1 | 9.8 | to | 38.7 | 1.19 | 1.06 | to | 1.35 | 6 | 0 |
| Vacant Lot | 72.9 | - | N/A | - | 51.3 | - | N/A | - | 1.06 | - | N/A | - | 188 | 17 |
| Farm & Home | 47.5 | - | N/A | - | 36.6 | - | N/A | - | 1.10 | - | N/A | - | 33 | 0 |
| Ag. Land Only | 4.1 | - | N/A | - | 88.4 | - | N/A | - | 0.93 | - | N/A | - | 29 | 2 |
| Ag. (Impr.+ Land) | 4.4 | - | N/A | - | 86.8 | - | N/A | - | 0.94 | - | N/A | - | 32 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 75.9 | - | N/A | - | 45.7 | - | N/A | - | 1.23 | - | N/A | - | 402 | 35 |
| Total Market | 82.7 | - | N/A | - | 36.0 | - | N/A | - | 0.97 | - | N/A | - | 337 | 35 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

055 : LOGAN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 90.9 | 85.8 | to | 100.6 | 15.6 | 11.4 | to | 22.4 | 0.98 | 0.94 | to | 1.03 | 32 | 3 |
| Commercial/Ind. S-4 | 89.8 | 59.2 | to | 133.7 | 31.0 | 18.0 | to | 48.9 | 1.64 | 1.31 | to | 2.28 | 6 | 0 |
| Vacant Lot | 149.8 | - | N/A | - | 28.5 | - | N/A | - | 0.99 | - | N/A | - | 3 | 0 |
| Farm & Home | 33.4 | - | N/A | - | 41.0 | - | N/A | - | 1.57 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 17.2 | - | N/A | - | 27.3 | - | N/A | - | 1.06 | - | N/A | - | 15 | 1 |
| Ag. (Impr.+ Land) | 17.2 | - | N/A | - | 27.3 | - | N/A | - | 1.06 | - | N/A | - | 15 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 83.4 | - | N/A | - | 42.3 | - | N/A | - | 1.45 | - | N/A | - | 58 | 2 |
| Total Market | 95.6 | - | N/A | - | 22.2 | - | N/A | - | 1.31 | - | N/A | - | 41 | 2 |

056 : LYON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 95.0 | 93.6 | to | 96.7 | 11.1 | 10.1 | to | 12.2 | 1.01 | 0.98 | to | 1.02 | 344 | 37 |
| Commercial/Ind. | 87.1 | 70.3 | to | 106.8 | 23.4 | 15.9 | to | 38.1 | 1.17 | 1.03 | to | 1.42 | 16 | 0 |
| Vacant Lot | 85.0 | - | N/A | - | 27.9 | - | N/A | - | 0.92 | - | N/A | - | 16 | 3 |
| Farm & Home | 77.0 | - | N/A | - | 22.1 | - | N/A | - | 1.01 | - | N/A | - | 18 | 1 |
| Ag. Land Only | 5.2 | - | N/A | - | 91.4 | - | N/A | - | 1.04 | - | N/A | - | 21 | 0 |
| Ag. (Impr.+ Land) | 5.8 | - | N/A | - | 82.1 | - | N/A | - | 0.99 | - | N/A | - | 27 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 93.2 | - | N/A | - | 12.5 | - | N/A | - | 1.02 | - | N/A | - | 421 | 70 |
| Total Market | 94.9 | - | N/A | - | 11.8 | - | N/A | - | 1.01 | - | N/A | - | 376 | 43 |

057 : MARION COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 96.0 | 92.5 | to | 99.1 | 18.9 | 15.8 | to | 22.9 | 1.03 | 1.00 | to | 1.07 | 115 | 11 |
| Commercial/Ind. | 99.8 | 78.4 | to | 113.7 | 17.2 | 10.7 | to | 27.6 | 1.00 | 0.96 | to | 1.05 | 12 | 0 |
| Vacant Lot | 71.4 | - | N/A | - | 123.2 | - | N/A | - | 2.52 | - | N/A | - | 6 | 0 |
| Farm & Home | 68.6 | - | N/A | - | 27.2 | - | N/A | - | 1.00 | - | N/A | - | 13 | 0 |
| Ag. Land Only | 7.7 | - | N/A | - | 33.2 | - | N/A | - | 0.98 | - | N/A | - | 9 | 0 |
| Ag. (Impr.+ Land) | 7.6 | - | N/A | - | 30.4 | - | N/A | - | 0.99 | - | N/A | - | 11 | 0 |
| Other/Ex/Ut/NP/M | 85.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 2 | 0 |
| Total w/Ag.&F&H | 93.4 | - | N/A | - | 20.4 | - | N/A | - | 1.03 | - | N/A | - | 159 | 27 |
| Total Market | 96.0 | - | N/A | - | 19.3 | - | N/A | - | 1.03 | - | N/A | - | 135 | 15 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

058 : MARSHALL COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 99.8 | 96.4 | to 104.1 | 12.8 | 10.5 | to 15.8 | 1.03 | 1.01 | to 1.06 | 89 | 13 | | |
| Commercial/Ind. | 102.6 | 70.3 | to 206.2 | 38.9 | 10.2 | to 53.1 | 1.14 | 0.98 | to 1.27 | 5 | 0 | | |
| Vacant Lot | 61.3 | - | N/A | - | 75.1 | - | N/A | - | 1.23 | - | N/A | 6 | 0 |
| Farm & Home | 41.2 | - | N/A | - | 53.3 | - | N/A | - | 1.09 | - | N/A | 3 | 0 |
| Ag. Land Only | 8.3 | - | N/A | - | 43.6 | - | N/A | - | 0.83 | - | N/A | 10 | 0 |
| Ag. (Impr.+ Land) | 7.9 | - | N/A | - | 45.3 | - | N/A | - | 0.80 | - | N/A | 11 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 96.5 | - | N/A | - | 17.9 | - | N/A | - | 1.09 | - | N/A | 114 | 21 |
| Total Market | 99.4 | - | N/A | - | 14.2 | - | N/A | - | 1.03 | - | N/A | 100 | 16 |

059 : MCPHERSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 98.9 | 97.7 | to 100.4 | 7.3 | 6.6 | to 8.1 | 1.00 | 1.00 | to 1.01 | 269 | 25 | | |
| Commercial/Ind. | 100.0 | 70.2 | to 134.4 | 19.6 | 9.8 | to 32.0 | 0.99 | 0.93 | to 1.10 | 9 | 0 | | |
| Vacant Lot | 91.6 | - | N/A | - | 33.1 | - | N/A | - | 2.15 | - | N/A | 7 | 0 |
| Farm & Home | 77.7 | - | N/A | - | 28.9 | - | N/A | - | 1.07 | - | N/A | 23 | 0 |
| Ag. Land Only | 13.4 | - | N/A | - | 23.1 | - | N/A | - | 1.05 | - | N/A | 13 | 1 |
| Ag. (Impr.+ Land) | 12.4 | - | N/A | - | 25.2 | - | N/A | - | 1.04 | - | N/A | 14 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 97.8 | - | N/A | - | 8.0 | - | N/A | - | 1.00 | - | N/A | 322 | 49 |
| Total Market | 98.9 | - | N/A | - | 7.5 | - | N/A | - | 1.00 | - | N/A | 285 | 29 |

060 : MEADE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|---------------------|--------------|---------------------|---------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 89.4 | 80.0 | to 93.6 | 17.2 | 12.4 | to 24.0 | 1.07 | 1.03 | to 1.12 | 31 | 1 | | |
| Commercial/Ind. S-4 | 68.8 | 52.4 | to 86.8 | 18.4 | 9.5 | to 43.7 | 0.81 | 0.77 | to 1.22 | 6 | 0 | | |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 76.6 | - | N/A | - | 37.1 | - | N/A | - | 1.52 | - | N/A | 3 | 0 |
| Ag. Land Only | 5.1 | - | N/A | - | 64.0 | - | N/A | - | 0.95 | - | N/A | 8 | 0 |
| Ag. (Impr.+ Land) | 5.1 | - | N/A | - | 64.0 | - | N/A | - | 0.95 | - | N/A | 8 | 0 |
| Other/Ex/Ut/NP/M | 346.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Total w/Ag.&F&H | 79.2 | - | N/A | - | 26.4 | - | N/A | - | 1.06 | - | N/A | 49 | 7 |
| Total Market | 87.6 | - | N/A | - | 18.9 | - | N/A | - | 1.02 | - | N/A | 38 | 2 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

061 : MIAMI COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 90.7 | 88.5 | to | 91.8 | 10.2 | 8.8 | to | 11.8 | 1.01 | 1.00 | to | 1.02 | 170 | 19 |
| Commercial/Ind. | 91.7 | 75.6 | to | 105.0 | 12.3 | 5.6 | to | 32.8 | 1.12 | 1.01 | to | 1.36 | 9 | 1 |
| Vacant Lot | 94.1 | - | N/A | - | 36.0 | - | N/A | - | 1.18 | - | N/A | - | 45 | 2 |
| Farm & Home | 51.2 | - | N/A | - | 29.1 | - | N/A | - | 0.99 | - | N/A | - | 38 | 2 |
| Ag. Land Only | 3.3 | - | N/A | - | 96.0 | - | N/A | - | 0.94 | - | N/A | - | 31 | 2 |
| Ag. (Impr.+ Land) | 3.3 | - | N/A | - | 89.8 | - | N/A | - | 1.00 | - | N/A | - | 35 | 2 |
| Other/Ex/Ut/NP/M | 444.8 | - | N/A | - | 82.3 | - | N/A | - | 1.64 | - | N/A | - | 2 | 0 |
| Total w/Ag.&F&H | 85.6 | - | N/A | - | 24.3 | - | N/A | - | 1.09 | - | N/A | - | 299 | 38 |
| Total Market | 91.2 | - | N/A | - | 11.5 | - | N/A | - | 1.02 | - | N/A | - | 226 | 37 |

062 : MITCHELL COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|----|
| Residential | 106.3 | 100.0 | to | 113.5 | 18.7 | 15.4 | to | 23.8 | 1.05 | 1.01 | to | 1.10 | 63 | 5 |
| Commercial/Ind. | 121.3 | 83.1 | to | 136.5 | 12.6 | 2.4 | to | 23.4 | 0.96 | 0.88 | to | 1.03 | 4 | 0 |
| Vacant Lot | 79.3 | - | N/A | - | 308.4 | - | N/A | - | 1.67 | - | N/A | - | 3 | 0 |
| Farm & Home | 134.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 12.4 | - | N/A | - | 33.7 | - | N/A | - | 0.81 | - | N/A | - | 4 | 0 |
| Ag. (Impr.+ Land) | 13.2 | - | N/A | - | 58.0 | - | N/A | - | 0.94 | - | N/A | - | 5 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 103.5 | - | N/A | - | 20.1 | - | N/A | - | 1.05 | - | N/A | - | 76 | 10 |
| Total Market | 107.0 | - | N/A | - | 19.2 | - | N/A | - | 1.04 | - | N/A | - | 70 | 6 |

063 : MONTGOMERY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 102.7 | 100.0 | to | 105.0 | 22.2 | 20.0 | to | 24.6 | 1.06 | 1.03 | to | 1.08 | 374 | 47 |
| Commercial/Ind. | 123.7 | 103.9 | to | 147.5 | 20.0 | 14.2 | to | 36.8 | 1.11 | 1.03 | to | 1.25 | 12 | 1 |
| Vacant Lot | 97.5 | - | N/A | - | 116.7 | - | N/A | - | 2.30 | - | N/A | - | 13 | 2 |
| Farm & Home | 68.4 | - | N/A | - | 42.1 | - | N/A | - | 1.02 | - | N/A | - | 12 | 0 |
| Ag. Land Only | 5.0 | - | N/A | - | 30.5 | - | N/A | - | 0.93 | - | N/A | - | 10 | 1 |
| Ag. (Impr.+ Land) | 5.4 | - | N/A | - | 28.5 | - | N/A | - | 0.98 | - | N/A | - | 14 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 101.3 | - | N/A | - | 24.9 | - | N/A | - | 1.09 | - | N/A | - | 425 | 60 |
| Total Market | 102.8 | - | N/A | - | 25.0 | - | N/A | - | 1.07 | - | N/A | - | 399 | 43 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

064 : MORRIS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 103.3 | 86.0 | to 113.1 | 24.0 | 18.5 | to 32.2 | 1.05 | 0.99 | to 1.13 | 46 | 4 | | |
| Commercial/Ind. | 127.4 | 98.7 | to 167.6 | 24.5 | 2.0 | to 25.5 | 1.18 | 0.98 | to 1.30 | 4 | 0 | | |
| Vacant Lot | 98.3 | - | N/A | - | 40.4 | - | N/A | - | 1.13 | - | N/A | 3 | 0 |
| Farm & Home | 51.6 | - | N/A | - | 16.3 | - | N/A | - | 1.02 | - | N/A | 2 | 0 |
| Ag. Land Only | 11.4 | - | N/A | - | 38.9 | - | N/A | - | 0.72 | - | N/A | 5 | 0 |
| Ag. (Impr.+ Land) | 11.4 | - | N/A | - | 38.9 | - | N/A | - | 0.72 | - | N/A | 5 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 99.2 | - | N/A | - | 33.0 | - | N/A | - | 1.21 | - | N/A | 60 | 4 |
| Total Market | 102.1 | - | N/A | - | 25.7 | - | N/A | - | 1.08 | - | N/A | 53 | 4 |

065 : MORTON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|---------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 101.0 | 93.2 | to 125.9 | 18.9 | 12.5 | to 32.7 | 1.06 | 1.00 | to 1.18 | 17 | 1 | | |
| Commercial/Ind. S-4 | 91.4 | 66.7 | to 128.9 | 21.8 | 6.1 | to 27.7 | 1.27 | 1.05 | to 1.39 | 4 | 0 | | |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 31.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Ag. Land Only | 8.0 | - | N/A | - | 16.8 | - | N/A | - | 1.05 | - | N/A | 2 | 0 |
| Ag. (Impr.+ Land) | 8.0 | - | N/A | - | 16.8 | - | N/A | - | 1.05 | - | N/A | 2 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 99.3 | - | N/A | - | 21.8 | - | N/A | - | 1.16 | - | N/A | 24 | 3 |
| Total Market | 100.7 | - | N/A | - | 19.4 | - | N/A | - | 1.11 | - | N/A | 21 | 1 |

066 : NEMAHA COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 97.9 | 93.3 | to 101.4 | 16.8 | 14.2 | to 20.2 | 1.03 | 1.00 | to 1.07 | 112 | 13 | | |
| Commercial/Ind. | 81.1 | 58.2 | to 99.6 | 18.3 | 12.1 | to 29.2 | 1.09 | 1.02 | to 1.21 | 11 | 1 | | |
| Vacant Lot | 79.1 | - | N/A | - | 29.6 | - | N/A | - | 1.31 | - | N/A | 4 | 0 |
| Farm & Home | 79.9 | - | N/A | - | 22.1 | - | N/A | - | 1.06 | - | N/A | 10 | 0 |
| Ag. Land Only | 12.5 | - | N/A | - | 38.1 | - | N/A | - | 0.84 | - | N/A | 21 | 2 |
| Ag. (Impr.+ Land) | 12.5 | - | N/A | - | 35.4 | - | N/A | - | 0.85 | - | N/A | 22 | 2 |
| Other/Ex/Ut/NP/M | 162.1 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Total w/Ag.&F&H | 91.6 | - | N/A | - | 26.4 | - | N/A | - | 1.32 | - | N/A | 160 | 19 |
| Total Market | 96.4 | - | N/A | - | 18.2 | - | N/A | - | 1.04 | - | N/A | 128 | 14 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

067 : NEOSHO COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 101.7 | 99.1 | to 108.5 | 16.5 | 14.1 | to 19.6 | 1.06 | 1.04 | to 1.09 | 149 | 21 | | |
| Commercial/Ind. | 100.9 | 87.5 | to 139.0 | 18.5 | 10.4 | to 33.0 | 1.06 | 0.96 | to 1.28 | 8 | 1 | | |
| Vacant Lot | 54.6 | - | N/A | - | 78.3 | - | N/A | - | 3.73 | - | N/A | 10 | 0 |
| Farm & Home | 80.9 | - | N/A | - | 33.3 | - | N/A | - | 0.90 | - | N/A | 6 | 0 |
| Ag. Land Only | 5.7 | - | N/A | - | 56.7 | - | N/A | - | 1.20 | - | N/A | 15 | 0 |
| Ag. (Impr.+ Land) | 5.6 | - | N/A | - | 53.6 | - | N/A | - | 1.22 | - | N/A | 18 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 99.1 | - | N/A | - | 23.4 | - | N/A | - | 1.06 | - | N/A | 191 | 32 |
| Total Market | 101.0 | - | N/A | - | 18.5 | - | N/A | - | 1.06 | - | N/A | 167 | 24 |

068 : NESS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 99.6 | 95.1 | to 107.4 | 15.9 | 10.7 | to 23.1 | 1.06 | 1.02 | to 1.13 | 29 | 3 | | |
| Commercial/Ind. | 73.9 | 59.4 | to 99.6 | 19.0 | 4.8 | to 22.6 | 0.96 | 0.86 | to 1.05 | 4 | 0 | | |
| Vacant Lot | 418.3 | - | N/A | - | 78.1 | - | N/A | - | 2.77 | - | N/A | 2 | 0 |
| Farm & Home | 45.0 | - | N/A | - | 40.1 | - | N/A | - | 1.11 | - | N/A | 4 | 0 |
| Ag. Land Only | 15.1 | - | N/A | - | 35.8 | - | N/A | - | 0.99 | - | N/A | 6 | 0 |
| Ag. (Impr.+ Land) | 15.3 | - | N/A | - | 34.6 | - | N/A | - | 0.92 | - | N/A | 8 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 91.2 | - | N/A | - | 35.1 | - | N/A | - | 1.28 | - | N/A | 47 | 4 |
| Total Market | 99.3 | - | N/A | - | 16.7 | - | N/A | - | 1.06 | - | N/A | 35 | 4 |

069 : NORTON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|---------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 88.4 | 84.5 | to 96.0 | 18.3 | 14.8 | to 22.5 | 1.04 | 0.99 | to 1.09 | 65 | 3 | | |
| Commercial/Ind. S-3 | 132.7 | 58.0 | to 155.7 | 22.3 | 5.1 | to 41.1 | 1.66 | 1.00 | to 2.08 | 5 | 0 | | |
| Vacant Lot | 48.0 | - | N/A | - | 7.8 | - | N/A | - | 1.02 | - | N/A | 2 | 0 |
| Farm & Home | 69.0 | - | N/A | - | 71.3 | - | N/A | - | 1.80 | - | N/A | 5 | 0 |
| Ag. Land Only | 11.1 | - | N/A | - | 47.4 | - | N/A | - | 1.13 | - | N/A | 8 | 0 |
| Ag. (Impr.+ Land) | 12.4 | - | N/A | - | 47.1 | - | N/A | - | 1.20 | - | N/A | 10 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 86.1 | - | N/A | - | 29.6 | - | N/A | - | 1.18 | - | N/A | 87 | 6 |
| Total Market | 88.5 | - | N/A | - | 20.6 | - | N/A | - | 1.05 | - | N/A | 72 | 4 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

070 : OSAGE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 95.5 | 92.9 | to | 100.2 | 16.8 | 14.7 | to | 19.3 | 1.03 | 1.01 | to | 1.05 | 200 | 24 |
| Commercial/Ind. | 97.1 | 60.1 | to | 126.9 | 36.7 | 20.4 | to | 70.9 | 1.36 | 1.10 | to | 1.68 | 12 | 1 |
| Vacant Lot | 163.0 | - | N/A | - | 94.4 | - | N/A | - | 1.82 | - | N/A | - | 13 | 0 |
| Farm & Home | 68.2 | - | N/A | - | 38.8 | - | N/A | - | 1.14 | - | N/A | - | 35 | 1 |
| Ag. Land Only | 5.7 | - | N/A | - | 78.5 | - | N/A | - | 1.26 | - | N/A | - | 31 | 0 |
| Ag. (Impr.+ Land) | 8.6 | - | N/A | - | 67.7 | - | N/A | - | 1.09 | - | N/A | - | 43 | 0 |
| Other/Ex/Ut/NP/M | 112.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 90.4 | - | N/A | - | 34.5 | - | N/A | - | 1.29 | - | N/A | - | 304 | 26 |
| Total Market | 96.0 | - | N/A | - | 19.8 | - | N/A | - | 1.07 | - | N/A | - | 226 | 27 |

071 : OSBORNE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 92.9 | 79.0 | to | 103.8 | 18.7 | 13.4 | to | 27.5 | 1.04 | 0.99 | to | 1.10 | 25 | 0 |
| Commercial/Ind. S-3 | 119.3 | 71.9 | to | 163.7 | 30.3 | 15.3 | to | 80.9 | 0.95 | 0.79 | to | 1.08 | 6 | 0 |
| Vacant Lot | 57.2 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 49.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 13.6 | - | N/A | - | 26.2 | - | N/A | - | 0.92 | - | N/A | - | 5 | 0 |
| Ag. (Impr.+ Land) | 13.7 | - | N/A | - | 23.4 | - | N/A | - | 0.93 | - | N/A | - | 6 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 88.3 | - | N/A | - | 35.7 | - | N/A | - | 1.40 | - | N/A | - | 39 | 0 |
| Total Market | 94.8 | - | N/A | - | 21.2 | - | N/A | - | 1.01 | - | N/A | - | 32 | 1 |

072 : OTTAWA COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 100.7 | 93.0 | to | 102.7 | 14.9 | 11.7 | to | 19.0 | 1.03 | 1.00 | to | 1.07 | 63 | 8 |
| Commercial/Ind. S-3 | 120.6 | 109.1 | to | 150.9 | 10.1 | 3.0 | to | 13.9 | 1.05 | 0.99 | to | 1.08 | 5 | 0 |
| Vacant Lot | 64.0 | - | N/A | - | 30.1 | - | N/A | - | 1.19 | - | N/A | - | 4 | 0 |
| Farm & Home | 62.8 | - | N/A | - | 44.3 | - | N/A | - | 1.22 | - | N/A | - | 4 | 0 |
| Ag. Land Only | 11.5 | - | N/A | - | 41.7 | - | N/A | - | 1.29 | - | N/A | - | 18 | 0 |
| Ag. (Impr.+ Land) | 12.4 | - | N/A | - | 31.4 | - | N/A | - | 1.14 | - | N/A | - | 23 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 89.1 | - | N/A | - | 42.4 | - | N/A | - | 1.58 | - | N/A | - | 99 | 2 |
| Total Market | 100.7 | - | N/A | - | 17.2 | - | N/A | - | 1.04 | - | N/A | - | 72 | 8 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

073 : PAWNEE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|---------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|---|
| Residential | 100.2 | 96.4 | to 104.9 | 19.8 | 16.2 | to 24.3 | 1.05 | 1.00 | to 1.10 | 79 | 5 | | |
| Commercial/Ind. S-8 | 101.0 | 63.4 | to 176.0 | 38.5 | 21.6 | to 64.5 | 1.32 | 0.96 | to 1.70 | 9 | 0 | | |
| Vacant Lot | 114.6 | - | N/A | - | 52.0 | - | N/A | - | 1.19 | - | N/A | 2 | 0 |
| Farm & Home | 36.4 | - | N/A | - | 76.3 | - | N/A | - | 1.16 | - | N/A | 3 | 0 |
| Ag. Land Only | 14.3 | - | N/A | - | 19.1 | - | N/A | - | 1.12 | - | N/A | 13 | 2 |
| Ag. (Impr.+ Land) | 13.9 | - | N/A | - | 24.8 | - | N/A | - | 0.98 | - | N/A | 17 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 97.0 | - | N/A | - | 35.6 | - | N/A | - | 1.47 | - | N/A | 110 | 3 |
| Total Market | 100.3 | - | N/A | - | 22.6 | - | N/A | - | 1.08 | - | N/A | 90 | 5 |

074 : PHILLIPS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|---------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|---|
| Residential | 87.4 | 79.3 | to 90.5 | 14.6 | 11.7 | to 18.7 | 1.02 | 1.00 | to 1.05 | 54 | 4 | | |
| Commercial/Ind. | 52.5 | 32.4 | to 93.1 | 35.3 | 9.4 | to 48.0 | 1.15 | 0.97 | to 1.30 | 5 | 0 | | |
| Vacant Lot | 47.4 | - | N/A | - | 48.9 | - | N/A | - | 3.15 | - | N/A | 4 | 0 |
| Farm & Home | 20.5 | - | N/A | - | 21.9 | - | N/A | - | 1.04 | - | N/A | 2 | 0 |
| Ag. Land Only | 14.0 | - | N/A | - | 96.3 | - | N/A | - | 0.92 | - | N/A | 8 | 0 |
| Ag. (Impr.+ Land) | 14.0 | - | N/A | - | 96.3 | - | N/A | - | 0.92 | - | N/A | 8 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 78.6 | - | N/A | - | 25.5 | - | N/A | - | 1.14 | - | N/A | 73 | 6 |
| Total Market | 83.2 | - | N/A | - | 16.6 | - | N/A | - | 1.03 | - | N/A | 63 | 6 |

075 : POTTAWATOMIE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|-----|----|
| Residential | 99.5 | 97.4 | to 100.6 | 7.7 | 7.0 | to 8.6 | 1.00 | 1.00 | to 1.01 | 301 | 33 | | |
| Commercial/Ind. | 84.8 | 66.7 | to 100.4 | 18.6 | 13.0 | to 27.6 | 0.85 | 0.77 | to 1.08 | 14 | 0 | | |
| Vacant Lot | 79.4 | - | N/A | - | 39.9 | - | N/A | - | 0.86 | - | N/A | 31 | 2 |
| Farm & Home | 75.3 | - | N/A | - | 27.4 | - | N/A | - | 1.07 | - | N/A | 13 | 1 |
| Ag. Land Only | 3.8 | - | N/A | - | 132.1 | - | N/A | - | 1.05 | - | N/A | 20 | 1 |
| Ag. (Impr.+ Land) | 4.3 | - | N/A | - | 120.4 | - | N/A | - | 1.08 | - | N/A | 24 | 1 |
| Other/Ex/Ut/NP/M | 40.8 | - | N/A | - | - | - | N/A | - | - | - | N/A | 1 | 0 |
| Total w/Ag.&F&H | 96.9 | - | N/A | - | 11.1 | - | N/A | - | 1.00 | - | N/A | 384 | 53 |
| Total Market | 98.1 | - | N/A | - | 9.4 | - | N/A | - | 1.00 | - | N/A | 347 | 39 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

076 : PRATT COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 100.6 | 96.0 | to | 103.2 | 9.9 | 8.3 | to | 12.2 | 1.01 | 1.00 | to | 1.03 | 104 | 19 |
| Commercial/Ind. | 107.9 | 101.1 | to | 173.9 | 27.1 | 12.4 | to | 51.4 | 0.90 | 0.72 | to | 1.12 | 7 | 0 |
| Vacant Lot | 117.6 | - | N/A | - | 11.6 | - | N/A | - | 0.93 | - | N/A | - | 2 | 0 |
| Farm & Home | 86.5 | - | N/A | - | 74.0 | - | N/A | - | 3.13 | - | N/A | - | 4 | 0 |
| Ag. Land Only | 13.8 | - | N/A | - | 31.2 | - | N/A | - | 1.25 | - | N/A | - | 10 | 1 |
| Ag. (Impr.+ Land) | 13.8 | - | N/A | - | 31.2 | - | N/A | - | 1.25 | - | N/A | - | 10 | 1 |
| Other/Ex/Ut/NP/M | 188.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 100.6 | - | N/A | - | 12.5 | - | N/A | - | 1.02 | - | N/A | - | 128 | 25 |
| Total Market | 101.2 | - | N/A | - | 10.6 | - | N/A | - | 1.02 | - | N/A | - | 114 | 20 |

077 : RAWLINS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 101.3 | 90.4 | to | 118.2 | 14.8 | 10.1 | to | 25.7 | 1.05 | 1.01 | to | 1.11 | 17 | 2 |
| Commercial/Ind. S-4 | 64.4 | 59.5 | to | 101.8 | 18.7 | 1.5 | to | 24.8 | 1.17 | 1.01 | to | 1.30 | 4 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 73.7 | - | N/A | - | 23.1 | - | N/A | - | 1.04 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 10.2 | - | N/A | - | 32.1 | - | N/A | - | 0.96 | - | N/A | - | 4 | 0 |
| Ag. (Impr.+ Land) | 10.2 | - | N/A | - | 46.7 | - | N/A | - | 1.19 | - | N/A | - | 6 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 90.4 | - | N/A | - | 35.2 | - | N/A | - | 1.34 | - | N/A | - | 29 | 2 |
| Total Market | 96.7 | - | N/A | - | 17.7 | - | N/A | - | 1.07 | - | N/A | - | 21 | 2 |

078 : RENO COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 96.2 | 95.0 | to | 98.4 | 8.2 | 7.0 | to | 9.8 | 1.01 | 0.99 | to | 1.03 | 132 | 24 |
| Commercial/Ind. | 109.6 | 86.8 | to | 131.6 | 23.0 | 16.7 | to | 34.1 | 1.04 | 0.95 | to | 1.22 | 18 | 0 |
| Vacant Lot | 64.6 | - | N/A | - | 43.1 | - | N/A | - | 1.26 | - | N/A | - | 13 | 2 |
| Farm & Home | 46.2 | - | N/A | - | 39.4 | - | N/A | - | 1.23 | - | N/A | - | 8 | 0 |
| Ag. Land Only | 4.3 | - | N/A | - | 185.7 | - | N/A | - | 0.96 | - | N/A | - | 17 | 1 |
| Ag. (Impr.+ Land) | 4.3 | - | N/A | - | 127.7 | - | N/A | - | 0.95 | - | N/A | - | 19 | 1 |
| Other/Ex/Ut/NP/M | 179.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 94.3 | - | N/A | - | 16.9 | - | N/A | - | 1.01 | - | N/A | - | 191 | 35 |
| Total Market | 96.1 | - | N/A | - | 12.1 | - | N/A | - | 1.01 | - | N/A | - | 164 | 28 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

079 : REPUBLIC COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|-------|------|---------------------|-----|------|-------------|------------|
| Residential | 86.6 | 78.6 | to | 94.1 | 20.8 | 15.5 | to | 28.7 | 1.07 | 1.01 | to | 1.18 | 36 | 3 |
| Commercial/Ind. | 117.9 | 46.3 | to | 369.3 | 91.1 | 14.3 | to | 118.8 | 2.34 | 1.15 | to | 3.64 | 4 | 0 |
| Vacant Lot | 182.5 | - | N/A | - | 25.1 | - | N/A | - | 0.89 | - | N/A | - | 2 | 0 |
| Farm & Home | 60.4 | - | N/A | - | 42.5 | - | N/A | - | 1.80 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 13.5 | - | N/A | - | 24.7 | - | N/A | - | 0.91 | - | N/A | - | 11 | 0 |
| Ag. (Impr.+ Land) | 13.5 | - | N/A | - | 24.7 | - | N/A | - | 0.91 | - | N/A | - | 11 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 79.6 | - | N/A | - | 41.9 | - | N/A | - | 1.76 | - | N/A | - | 56 | 5 |
| Total Market | 87.1 | - | N/A | - | 24.5 | - | N/A | - | 1.10 | - | N/A | - | 42 | 5 |

080 : RICE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 96.6 | 93.3 | to | 99.7 | 11.9 | 9.7 | to | 14.9 | 1.01 | 0.99 | to | 1.03 | 87 | 16 |
| Commercial/Ind. | 108.2 | 84.5 | to | 218.1 | 43.2 | 12.7 | to | 93.6 | 1.02 | 0.90 | to | 1.09 | 6 | 0 |
| Vacant Lot | 224.4 | - | N/A | - | 7.0 | - | N/A | - | 1.04 | - | N/A | - | 2 | 0 |
| Farm & Home | 163.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 11.7 | - | N/A | - | 48.2 | - | N/A | - | 0.92 | - | N/A | - | 17 | 1 |
| Ag. (Impr.+ Land) | 13.4 | - | N/A | - | 48.6 | - | N/A | - | 0.72 | - | N/A | - | 18 | 1 |
| Other/Ex/Ut/NP/M | 126.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 95.6 | - | N/A | - | 26.8 | - | N/A | - | 1.39 | - | N/A | - | 115 | 13 |
| Total Market | 97.8 | - | N/A | - | 15.0 | - | N/A | - | 1.02 | - | N/A | - | 96 | 13 |

081 : RILEY COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 98.8 | 97.9 | to | 100.2 | 5.8 | 5.1 | to | 6.6 | 1.00 | 1.00 | to | 1.01 | 192 | 22 |
| Commercial/Ind. | 75.0 | 66.5 | to | 94.2 | 16.6 | 10.8 | to | 33.9 | 0.85 | 0.77 | to | 0.99 | 7 | 0 |
| Vacant Lot | 27.8 | - | N/A | - | 28.9 | - | N/A | - | 0.88 | - | N/A | - | 19 | 1 |
| Farm & Home | 68.8 | - | N/A | - | 17.6 | - | N/A | - | 1.10 | - | N/A | - | 6 | 0 |
| Ag. Land Only | 3.4 | - | N/A | - | 49.5 | - | N/A | - | 0.69 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 4.4 | - | N/A | - | 41.2 | - | N/A | - | 0.81 | - | N/A | - | 4 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 97.4 | - | N/A | - | 7.9 | - | N/A | - | 1.01 | - | N/A | - | 228 | 37 |
| Total Market | 97.9 | - | N/A | - | 6.7 | - | N/A | - | 1.01 | - | N/A | - | 218 | 36 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

082 : ROOKS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 95.3 | 86.5 | to | 108.6 | 24.3 | 18.8 | to | 32.2 | 1.09 | 1.03 | to | 1.16 | 51 | 5 |
| Commercial/Ind. S-5 | 56.9 | 50.9 | to | 109.7 | 37.8 | 21.9 | to | 63.9 | 1.16 | 0.93 | to | 1.37 | 7 | 0 |
| Vacant Lot | 36.3 | - | N/A | - | 59.8 | - | N/A | - | 1.84 | - | N/A | - | 2 | 0 |
| Farm & Home | 37.7 | - | N/A | - | 36.2 | - | N/A | - | 0.79 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 14.2 | - | N/A | - | 45.7 | - | N/A | - | 1.04 | - | N/A | - | 13 | 0 |
| Ag. (Impr.+ Land) | 12.4 | - | N/A | - | 50.9 | - | N/A | - | 1.04 | - | N/A | - | 15 | 0 |
| Other/Ex/Ut/NP/M | 123.7 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 83.1 | - | N/A | - | 44.0 | - | N/A | - | 1.27 | - | N/A | - | 78 | 5 |
| Total Market | 92.8 | - | N/A | - | 28.1 | - | N/A | - | 1.06 | - | N/A | - | 61 | 5 |

083 : RUSH COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 107.4 | 93.9 | to | 116.7 | 21.8 | 15.8 | to | 32.1 | 1.05 | 1.00 | to | 1.15 | 35 | 5 |
| Commercial/Ind. S-3 | 77.0 | 46.0 | to | 106.3 | 29.2 | 7.6 | to | 37.0 | 1.22 | 1.03 | to | 1.39 | 4 | 0 |
| Vacant Lot | 219.3 | - | N/A | - | 12.2 | - | N/A | - | 0.99 | - | N/A | - | 2 | 0 |
| Farm & Home | 71.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 13.2 | - | N/A | - | 2.6 | - | N/A | - | 1.00 | - | N/A | - | 5 | 0 |
| Ag. (Impr.+ Land) | 13.2 | - | N/A | - | 2.6 | - | N/A | - | 1.00 | - | N/A | - | 5 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 99.1 | - | N/A | - | 35.5 | - | N/A | - | 1.37 | - | N/A | - | 47 | 5 |
| Total Market | 107.1 | - | N/A | - | 26.8 | - | N/A | - | 1.12 | - | N/A | - | 41 | 5 |

084 : RUSSELL COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|----|
| Residential | 89.1 | 85.7 | to | 93.0 | 14.6 | 11.9 | to | 18.3 | 1.02 | 0.99 | to | 1.06 | 74 | 7 |
| Commercial/Ind. | 78.5 | 41.9 | to | 92.3 | 22.4 | 5.1 | to | 38.8 | 1.32 | 0.94 | to | 1.54 | 5 | 0 |
| Vacant Lot | 341.7 | - | N/A | - | 79.7 | - | N/A | - | 4.46 | - | N/A | - | 2 | 0 |
| Farm & Home | 64.4 | - | N/A | - | 19.3 | - | N/A | - | 0.97 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 8.0 | - | N/A | - | 69.5 | - | N/A | - | 1.00 | - | N/A | - | 5 | 0 |
| Ag. (Impr.+ Land) | 8.0 | - | N/A | - | 69.5 | - | N/A | - | 1.00 | - | N/A | - | 5 | 0 |
| Other/Ex/Ut/NP/M | 52.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 87.1 | - | N/A | - | 16.1 | - | N/A | - | 1.07 | - | N/A | - | 89 | 13 |
| Total Market | 88.2 | - | N/A | - | 15.2 | - | N/A | - | 1.02 | - | N/A | - | 82 | 9 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

085 : SALINE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 97.1 | 95.4 | to | 100.5 | 10.8 | 9.5 | to | 12.4 | 1.01 | 1.00 | to | 1.03 | 154 | 12 |
| Commercial/Ind. | 90.2 | 79.5 | to | 105.9 | 26.0 | 20.0 | to | 35.0 | 1.07 | 0.97 | to | 1.21 | 28 | 1 |
| Vacant Lot | 114.6 | - | N/A | - | 30.8 | - | N/A | - | 1.24 | - | N/A | - | 8 | 1 |
| Farm & Home | 73.6 | - | N/A | - | 19.4 | - | N/A | - | 1.02 | - | N/A | - | 12 | 0 |
| Ag. Land Only | 10.7 | - | N/A | - | 52.4 | - | N/A | - | 0.95 | - | N/A | - | 26 | 0 |
| Ag. (Impr.+ Land) | 10.3 | - | N/A | - | 58.8 | - | N/A | - | 0.88 | - | N/A | - | 29 | 0 |
| Other/Ex/Ut/NP/M | 115.2 | - | N/A | - | 19.4 | - | N/A | - | 0.88 | - | N/A | - | 3 | 0 |
| Total w/Ag.&F&H | 94.7 | - | N/A | - | 14.4 | - | N/A | - | 1.04 | - | N/A | - | 234 | 44 |
| Total Market | 97.1 | - | N/A | - | 13.7 | - | N/A | - | 1.03 | - | N/A | - | 193 | 14 |

086 : SCOTT COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 90.0 | 87.1 | to | 93.6 | 10.6 | 8.0 | to | 14.2 | 1.01 | 0.99 | to | 1.04 | 44 | 3 |
| Commercial/Ind. | 65.6 | 59.0 | to | 108.3 | 24.9 | 3.9 | to | 31.5 | 0.98 | 0.89 | to | 1.07 | 5 | 0 |
| Vacant Lot | 55.6 | - | N/A | - | 11.0 | - | N/A | - | 1.00 | - | N/A | - | 3 | 0 |
| Farm & Home | 69.1 | - | N/A | - | 15.4 | - | N/A | - | 1.01 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 15.5 | - | N/A | - | 21.6 | - | N/A | - | 0.87 | - | N/A | - | 6 | 0 |
| Ag. (Impr.+ Land) | 15.5 | - | N/A | - | 21.6 | - | N/A | - | 0.87 | - | N/A | - | 6 | 0 |
| Other/Ex/Ut/NP/M | 78.8 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 87.1 | - | N/A | - | 20.1 | - | N/A | - | 1.03 | - | N/A | - | 61 | 4 |
| Total Market | 89.3 | - | N/A | - | 13.1 | - | N/A | - | 0.99 | - | N/A | - | 53 | 4 |

087 : SEDGWICK COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 90.6 | 88.2 | to | 92.3 | 10.2 | 9.1 | to | 11.4 | 0.99 | 0.98 | to | 1.00 | 234 | 25 |
| Commercial/Ind. | 85.3 | 77.0 | to | 90.6 | 23.0 | 20.0 | to | 26.2 | 1.13 | 1.06 | to | 1.22 | 136 | 3 |
| Vacant Lot | 48.0 | - | N/A | - | 44.9 | - | N/A | - | 1.16 | - | N/A | - | 357 | 20 |
| Farm & Home | 69.3 | - | N/A | - | 33.6 | - | N/A | - | 0.89 | - | N/A | - | 30 | 1 |
| Ag. Land Only | 2.1 | - | N/A | - | 134.1 | - | N/A | - | 0.91 | - | N/A | - | 62 | 3 |
| Ag. (Impr.+ Land) | 2.0 | - | N/A | - | 132.4 | - | N/A | - | 0.89 | - | N/A | - | 65 | 3 |
| Other/Ex/Ut/NP/M | 62.0 | - | N/A | - | 36.8 | - | N/A | - | 1.00 | - | N/A | - | 5 | 0 |
| Total w/Ag.&F&H | 67.7 | - | N/A | - | 44.8 | - | N/A | - | 0.89 | - | N/A | - | 827 | 18 |
| Total Market | 72.7 | - | N/A | - | 37.9 | - | N/A | - | 0.91 | - | N/A | - | 732 | 18 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

088 : SEWARD COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|
| Residential | 98.8 | 95.8 | to 100.8 | 9.3 | 8.0 | to 11.1 | 1.02 | 1.00 | to 1.04 | 119 | 16 | |
| Commercial/Ind. | 81.5 | 65.3 | to 94.8 | 28.2 | 19.7 | to 45.9 | 0.97 | 0.88 | to 1.07 | 21 | 0 | |
| Vacant Lot | 66.1 | - | N/A | - | 27.3 | - | N/A | - | N/A | - | 2 | 0 |
| Farm & Home | 56.4 | - | N/A | - | 52.6 | - | N/A | - | N/A | - | 3 | 0 |
| Ag. Land Only | 7.7 | - | N/A | - | 55.8 | - | N/A | - | N/A | - | 15 | 1 |
| Ag. (Impr.+ Land) | 7.7 | - | N/A | - | 55.8 | - | N/A | - | N/A | - | 15 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 95.4 | - | N/A | - | 13.7 | - | N/A | - | N/A | - | 160 | 28 |
| Total Market | 96.1 | - | N/A | - | 11.2 | - | N/A | - | N/A | - | 142 | 20 |

089 : SHAWNEE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | |
|-------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|----|
| Residential | 96.4 | 94.7 | to 98.1 | 9.0 | 8.1 | to 10.1 | 1.01 | 1.01 | to 1.03 | 236 | 29 | |
| Commercial/Ind. | 95.5 | 87.3 | to 100.1 | 17.2 | 13.1 | to 22.5 | 1.09 | 1.02 | to 1.16 | 46 | 3 | |
| Vacant Lot | 82.1 | - | N/A | - | 42.6 | - | N/A | - | N/A | - | 72 | 4 |
| Farm & Home | 76.6 | - | N/A | - | 15.1 | - | N/A | - | N/A | - | 12 | 0 |
| Ag. Land Only | 6.4 | - | N/A | - | 97.7 | - | N/A | - | N/A | - | 28 | 1 |
| Ag. (Impr.+ Land) | 5.5 | - | N/A | - | 95.2 | - | N/A | - | N/A | - | 34 | 1 |
| Other/Ex/Ut/NP/M | 96.3 | - | N/A | - | 34.9 | - | N/A | - | N/A | - | 5 | 0 |
| Total w/Ag.&F&H | 92.8 | - | N/A | - | 13.5 | - | N/A | - | N/A | - | 405 | 79 |
| Total Market | 95.2 | - | N/A | - | 10.5 | - | N/A | - | N/A | - | 359 | 69 |

090 : SHERIDAN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | |
|---------------------|--------------|---------------------|----------|------|---------------------|---------|------|---------------------|---------|-------------|------------|---|
| Residential | 89.4 | 73.3 | to 102.6 | 20.2 | 15.0 | to 27.8 | 1.02 | 0.97 | to 1.09 | 24 | 2 | |
| Commercial/Ind. S-2 | 96.7 | 77.5 | to 136.2 | 21.7 | 7.1 | to 21.7 | 1.07 | 0.93 | to 1.14 | 3 | 0 | |
| Vacant Lot | 180.0 | - | N/A | - | - | - | N/A | - | N/A | - | 1 | 0 |
| Farm & Home | 56.9 | - | N/A | - | 22.8 | - | N/A | - | N/A | - | 2 | 0 |
| Ag. Land Only | 11.0 | - | N/A | - | 19.0 | - | N/A | - | N/A | - | 5 | 0 |
| Ag. (Impr.+ Land) | 12.0 | - | N/A | - | 40.1 | - | N/A | - | N/A | - | 6 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 76.5 | - | N/A | - | 36.4 | - | N/A | - | N/A | - | 36 | 3 |
| Total Market | 90.5 | - | N/A | - | 20.6 | - | N/A | - | N/A | - | 28 | 3 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

091 : SHERMAN COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 94.9 | 90.4 | to | 99.8 | 14.5 | 11.8 | to | 18.0 | 1.01 | 0.98 | to | 1.04 | 82 | 9 |
| Commercial/Ind. | 88.8 | 68.5 | to | 199.1 | 52.5 | 8.2 | to | 52.5 | 1.72 | 1.10 | to | 1.72 | 3 | 0 |
| Vacant Lot | 105.7 | - | N/A | - | 23.0 | - | N/A | - | 1.11 | - | N/A | - | 3 | 0 |
| Farm & Home | 56.0 | - | N/A | - | 38.0 | - | N/A | - | 0.90 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 10.4 | - | N/A | - | 0.3 | - | N/A | - | 1.00 | - | N/A | - | 2 | 0 |
| Ag. (Impr.+ Land) | 10.4 | - | N/A | - | 0.3 | - | N/A | - | 1.00 | - | N/A | - | 2 | 0 |
| Other/Ex/Ut/NP/M | 123.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 94.0 | - | N/A | - | 16.1 | - | N/A | - | 1.06 | - | N/A | - | 94 | 12 |
| Total Market | 95.1 | - | N/A | - | 15.2 | - | N/A | - | 1.07 | - | N/A | - | 89 | 10 |

092 : SMITH COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|-------------------|--------------|---------------------|-----|-------|------|---------------------|-----|-------|------|---------------------|-----|------|-------------|------------|
| Residential | 93.6 | 83.5 | to | 104.1 | 21.6 | 17.7 | to | 28.2 | 1.06 | 1.01 | to | 1.13 | 49 | 3 |
| Commercial/Ind. | 58.2 | 39.0 | to | 204.8 | 89.9 | 12.0 | to | 108.4 | 0.85 | 0.67 | to | 1.39 | 4 | 0 |
| Vacant Lot | 98.6 | - | N/A | - | 33.2 | - | N/A | - | 1.37 | - | N/A | - | 2 | 0 |
| Farm & Home | 37.9 | - | N/A | - | 64.8 | - | N/A | - | 0.84 | - | N/A | - | 4 | 0 |
| Ag. Land Only | 13.0 | - | N/A | - | 16.0 | - | N/A | - | 1.05 | - | N/A | - | 11 | 2 |
| Ag. (Impr.+ Land) | 13.7 | - | N/A | - | 22.5 | - | N/A | - | 1.03 | - | N/A | - | 12 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 82.2 | - | N/A | - | 41.8 | - | N/A | - | 1.65 | - | N/A | - | 71 | 2 |
| Total Market | 91.4 | - | N/A | - | 23.6 | - | N/A | - | 1.05 | - | N/A | - | 55 | 4 |

093 : STAFFORD COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | | COD | Confidence Interval | | | PRD | Confidence Interval | | | Valid Sales | Trim Sales |
|---------------------|--------------|---------------------|-----|-------|------|---------------------|-----|------|------|---------------------|-----|------|-------------|------------|
| Residential | 101.9 | 96.8 | to | 111.9 | 18.1 | 13.3 | to | 25.2 | 1.04 | 0.99 | to | 1.12 | 38 | 2 |
| Commercial/Ind. S-3 | 101.4 | 100.3 | to | 159.4 | 13.7 | 0.4 | to | 26.2 | 1.08 | 0.98 | to | 1.18 | 5 | 0 |
| Vacant Lot | 109.5 | - | N/A | - | 53.5 | - | N/A | - | 1.44 | - | N/A | - | 3 | 0 |
| Farm & Home | 99.0 | - | N/A | - | 13.2 | - | N/A | - | 1.18 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 11.8 | - | N/A | - | 60.1 | - | N/A | - | 0.99 | - | N/A | - | 14 | 0 |
| Ag. (Impr.+ Land) | 8.3 | - | N/A | - | 84.3 | - | N/A | - | 1.00 | - | N/A | - | 16 | 0 |
| Other/Ex/Ut/NP/M | 94.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 98.6 | - | N/A | - | 39.2 | - | N/A | - | 1.83 | - | N/A | - | 66 | 0 |
| Total Market | 101.9 | - | N/A | - | 14.4 | - | N/A | - | 1.02 | - | N/A | - | 47 | 6 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

094 : STANTON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 102.2 | 93.2 | to | 113.2 | 13.8 | 8.5 | to | 22.8 | 1.02 | 0.97 | to | 1.10 | 20 | 3 |
| Commercial/Ind. S-4 | 96.4 | 68.7 | to | 110.5 | 17.1 | 5.0 | to | 22.8 | 1.07 | 0.95 | to | 1.16 | 4 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 28.0 | - | N/A | - | 60.8 | - | N/A | - | 1.47 | - | N/A | - | 2 | 0 |
| Ag. (Impr.+ Land) | 28.0 | - | N/A | - | 60.8 | - | N/A | - | 1.47 | - | N/A | - | 2 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 101.3 | - | N/A | - | 17.9 | - | N/A | - | 1.07 | - | N/A | - | 26 | 3 |
| Total Market | 102.2 | - | N/A | - | 14.3 | - | N/A | - | 1.06 | - | N/A | - | 24 | 3 |

095 : STEVENS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 95.0 | 92.0 | to | 101.3 | 15.0 | 11.3 | to | 21.0 | 1.02 | 0.98 | to | 1.08 | 41 | 3 |
| Commercial/Ind. S-2 | 94.6 | 67.0 | to | 100.2 | 10.5 | 1.4 | to | 19.4 | 0.98 | 0.96 | to | 1.00 | 4 | 0 |
| Vacant Lot | 68.7 | - | N/A | - | 77.4 | - | N/A | - | 1.12 | - | N/A | - | 2 | 0 |
| Farm & Home | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Ag. Land Only | 5.3 | - | N/A | - | 74.4 | - | N/A | - | 0.88 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 5.3 | - | N/A | - | 65.9 | - | N/A | - | 0.77 | - | N/A | - | 5 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 93.4 | - | N/A | - | 19.4 | - | N/A | - | 0.98 | - | N/A | - | 52 | 6 |
| Total Market | 95.0 | - | N/A | - | 14.9 | - | N/A | - | 1.02 | - | N/A | - | 47 | 4 |

096 : SUMNER COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 96.3 | 92.0 | to | 98.9 | 17.8 | 15.6 | to | 20.2 | 1.04 | 1.02 | to | 1.06 | 207 | 18 |
| Commercial/Ind. | 111.5 | 92.3 | to | 128.2 | 19.7 | 13.3 | to | 31.9 | 1.10 | 1.02 | to | 1.27 | 15 | 1 |
| Vacant Lot | 115.5 | - | N/A | - | 42.3 | - | N/A | - | 1.81 | - | N/A | - | 17 | 2 |
| Farm & Home | 71.5 | - | N/A | - | 31.7 | - | N/A | - | 0.92 | - | N/A | - | 13 | 0 |
| Ag. Land Only | 10.4 | - | N/A | - | 30.5 | - | N/A | - | 0.93 | - | N/A | - | 35 | 2 |
| Ag. (Impr.+ Land) | 10.7 | - | N/A | - | 31.3 | - | N/A | - | 0.94 | - | N/A | - | 42 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 91.4 | - | N/A | - | 26.7 | - | N/A | - | 1.14 | - | N/A | - | 294 | 40 |
| Total Market | 97.3 | - | N/A | - | 19.6 | - | N/A | - | 1.06 | - | N/A | - | 239 | 20 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

097 : THOMAS COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 96.1 | 91.5 | to | 99.9 | 10.9 | 9.0 | to | 13.3 | 1.02 | 1.00 | to | 1.04 | 89 | 11 |
| Commercial/Ind. | 86.5 | 54.0 | to | 125.6 | 30.4 | 15.9 | to | 93.2 | 0.96 | 0.88 | to | 1.18 | 6 | 0 |
| Vacant Lot | 53.6 | - | N/A | - | 83.3 | - | N/A | - | 4.75 | - | N/A | - | 2 | 0 |
| Farm & Home | 38.4 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 9.7 | - | N/A | - | 11.0 | - | N/A | - | 0.97 | - | N/A | - | 13 | 2 |
| Ag. (Impr.+ Land) | 9.7 | - | N/A | - | 15.6 | - | N/A | - | 0.92 | - | N/A | - | 14 | 2 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 91.9 | - | N/A | - | 14.2 | - | N/A | - | 1.03 | - | N/A | - | 112 | 20 |
| Total Market | 95.6 | - | N/A | - | 12.6 | - | N/A | - | 1.03 | - | N/A | - | 97 | 9 |

098 : TREGO COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 97.9 | 87.3 | to | 101.4 | 11.7 | 8.3 | to | 16.4 | 1.02 | 0.99 | to | 1.06 | 31 | 6 |
| Commercial/Ind. S-4 | 95.1 | 67.6 | to | 312.9 | 18.8 | 5.0 | to | 31.3 | 1.10 | 0.93 | to | 1.35 | 6 | 1 |
| Vacant Lot | 487.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 64.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 13.8 | - | N/A | - | 34.5 | - | N/A | - | 1.09 | - | N/A | - | 4 | 0 |
| Ag. (Impr.+ Land) | 16.6 | - | N/A | - | 34.1 | - | N/A | - | 1.24 | - | N/A | - | 5 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 93.8 | - | N/A | - | 22.5 | - | N/A | - | 1.04 | - | N/A | - | 44 | 8 |
| Total Market | 97.9 | - | N/A | - | 14.8 | - | N/A | - | 1.05 | - | N/A | - | 38 | 7 |

099 : WABAUNSEE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|----|
| Residential | 93.4 | 90.5 | to | 96.5 | 11.0 | 8.5 | to | 14.0 | 1.03 | 1.00 | to | 1.05 | 68 | 10 |
| Commercial/Ind. | 72.7 | 42.8 | to | 94.5 | 20.1 | 6.4 | to | 33.3 | 0.99 | 0.87 | to | 1.10 | 5 | 0 |
| Vacant Lot | 167.9 | - | N/A | - | 51.8 | - | N/A | - | 1.76 | - | N/A | - | 4 | 0 |
| Farm & Home | 67.4 | - | N/A | - | 23.5 | - | N/A | - | 0.99 | - | N/A | - | 10 | 0 |
| Ag. Land Only | 1.8 | - | N/A | - | 28.9 | - | N/A | - | 0.88 | - | N/A | - | 6 | 0 |
| Ag. (Impr.+ Land) | 2.5 | - | N/A | - | 76.1 | - | N/A | - | 1.01 | - | N/A | - | 10 | 0 |
| Other/Ex/Ut/NP/M | 4344.3 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 90.0 | - | N/A | - | 17.7 | - | N/A | - | 1.07 | - | N/A | - | 98 | 17 |
| Total Market | 93.4 | - | N/A | - | 12.0 | - | N/A | - | 1.05 | - | N/A | - | 78 | 13 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

100 : WALLACE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 97.8 | 75.3 | to | 118.1 | 19.7 | 11.3 | to | 40.0 | 1.01 | 0.94 | to | 1.09 | 7 | 0 |
| Commercial/Ind. S-3 | 67.8 | 53.5 | to | 90.5 | 19.5 | 7.5 | to | 19.5 | 0.81 | 0.82 | to | 0.94 | 3 | 0 |
| Vacant Lot | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Farm & Home | 72.5 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Ag. Land Only | 12.0 | - | N/A | - | 38.3 | - | N/A | - | 1.11 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 12.4 | - | N/A | - | 29.4 | - | N/A | - | 1.10 | - | N/A | - | 4 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 72.5 | - | N/A | - | 44.9 | - | N/A | - | 0.99 | - | N/A | - | 15 | 0 |
| Total Market | 94.9 | - | N/A | - | 22.7 | - | N/A | - | 0.94 | - | N/A | - | 10 | 0 |

101 : WASHINGTON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 99.4 | 91.1 | to | 112.7 | 25.9 | 19.4 | to | 34.9 | 1.11 | 1.04 | to | 1.22 | 43 | 4 |
| Commercial/Ind. S-4 | 83.2 | 53.5 | to | 133.2 | 25.8 | 8.0 | to | 41.2 | 1.23 | 0.95 | to | 1.42 | 5 | 0 |
| Vacant Lot | 32.9 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 37.3 | - | N/A | - | 46.6 | - | N/A | - | 1.20 | - | N/A | - | 2 | 0 |
| Ag. Land Only | 9.2 | - | N/A | - | 36.5 | - | N/A | - | 1.06 | - | N/A | - | 13 | 0 |
| Ag. (Impr.+ Land) | 8.6 | - | N/A | - | 39.6 | - | N/A | - | 1.05 | - | N/A | - | 14 | 0 |
| Other/Ex/Ut/NP/M | 40.0 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Total w/Ag.&F&H | 85.7 | - | N/A | - | 49.5 | - | N/A | - | 1.91 | - | N/A | - | 66 | 3 |
| Total Market | 98.0 | - | N/A | - | 28.6 | - | N/A | - | 1.11 | - | N/A | - | 50 | 4 |

102 : WICHITA COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|-----|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 91.5 | 87.8 | to | 104.0 | 13.1 | 9.5 | to | 18.4 | 1.01 | 0.97 | to | 1.05 | 22 | 1 |
| Commercial/Ind. S-2 | 92.1 | 33.0 | to | 108.3 | 22.3 | 3.5 | to | 57.8 | 1.12 | 1.00 | to | 1.31 | 4 | 0 |
| Vacant Lot | 34.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 94.4 | - | N/A | - | 31.9 | - | N/A | - | 1.62 | - | N/A | - | 3 | 0 |
| Ag. Land Only | 15.2 | - | N/A | - | 23.2 | - | N/A | - | 0.97 | - | N/A | - | 3 | 0 |
| Ag. (Impr.+ Land) | 17.1 | - | N/A | - | 748.5 | - | N/A | - | 8.11 | - | N/A | - | 4 | 0 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 90.9 | - | N/A | - | 17.9 | - | N/A | - | 1.00 | - | N/A | - | 34 | 5 |
| Total Market | 91.4 | - | N/A | - | 12.4 | - | N/A | - | 1.01 | - | N/A | - | 27 | 3 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

103 : WILSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|---------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|----|
| Residential | 128.7 | 109.7 | to | 139.1 | 33.9 | 26.3 | to | 45.9 | 1.33 | 1.23 | to | 1.47 | 57 | 6 |
| Commercial/Ind. S-3 | 81.3 | 59.7 | to | 91.9 | 14.1 | 6.1 | to | 28.8 | 1.03 | 0.92 | to | 1.15 | 6 | 0 |
| Vacant Lot | 129.7 | - | N/A | - | 13.1 | - | N/A | - | 1.04 | - | N/A | - | 9 | 1 |
| Farm & Home | 60.0 | - | N/A | - | 31.3 | - | N/A | - | 1.12 | - | N/A | - | 9 | 0 |
| Ag. Land Only | 12.2 | - | N/A | - | 54.5 | - | N/A | - | 1.20 | - | N/A | - | 12 | 1 |
| Ag. (Impr.+ Land) | 12.2 | - | N/A | - | 54.5 | - | N/A | - | 1.20 | - | N/A | - | 12 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 103.9 | - | N/A | - | 44.0 | - | N/A | - | 1.49 | - | N/A | - | 93 | 9 |
| Total Market | 126.7 | - | N/A | - | 26.3 | - | N/A | - | 1.24 | - | N/A | - | 72 | 11 |

104 : WOODSON COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|-------|---------------------|------|-----|---------------------|------|-------------|------------|------|----|---|
| Residential | 104.0 | 87.7 | to | 118.9 | 27.3 | 20.7 | to | 39.5 | 1.10 | 1.02 | to | 1.18 | 33 | 2 |
| Commercial/Ind. | 95.8 | 68.4 | to | 277.2 | 59.4 | 6.7 | to | 75.4 | 1.86 | 1.02 | to | 2.42 | 4 | 0 |
| Vacant Lot | 30.6 | - | N/A | - | - | - | N/A | - | - | - | N/A | - | 1 | 0 |
| Farm & Home | 34.1 | - | N/A | - | 80.9 | - | N/A | - | 1.63 | - | N/A | - | 5 | 0 |
| Ag. Land Only | 4.2 | - | N/A | - | 13.1 | - | N/A | - | 0.95 | - | N/A | - | 6 | 0 |
| Ag. (Impr.+ Land) | 4.5 | - | N/A | - | 32.1 | - | N/A | - | 0.89 | - | N/A | - | 9 | 1 |
| Other/Ex/Ut/NP/M | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - |
| Total w/Ag.&F&H | 87.7 | - | N/A | - | 46.2 | - | N/A | - | 1.77 | - | N/A | - | 52 | 3 |
| Total Market | 100.0 | - | N/A | - | 27.5 | - | N/A | - | 1.17 | - | N/A | - | 38 | 3 |

105 : WYANDOTTE COUNTY

| PROPERTY CLASS | Median Ratio | Confidence Interval | | COD | Confidence Interval | | PRD | Confidence Interval | | Valid Sales | Trim Sales | | | |
|-------------------|--------------|---------------------|-----|------|---------------------|------|-----|---------------------|------|-------------|------------|------|-----|----|
| Residential | 91.4 | 89.5 | to | 94.2 | 18.8 | 16.8 | to | 21.1 | 1.02 | 1.00 | to | 1.04 | 282 | 32 |
| Commercial/Ind. | 80.0 | 74.1 | to | 90.2 | 24.1 | 19.8 | to | 30.2 | 1.17 | 1.01 | to | 1.48 | 56 | 2 |
| Vacant Lot | 67.4 | - | N/A | - | 41.2 | - | N/A | - | 1.06 | - | N/A | - | 98 | 4 |
| Farm & Home | 71.8 | - | N/A | - | 24.2 | - | N/A | - | 1.00 | - | N/A | - | 11 | 0 |
| Ag. Land Only | 0.6 | - | N/A | - | 53.0 | - | N/A | - | 0.87 | - | N/A | - | 10 | 2 |
| Ag. (Impr.+ Land) | 0.4 | - | N/A | - | 55.8 | - | N/A | - | 0.84 | - | N/A | - | 11 | 2 |
| Other/Ex/Ut/NP/M | 98.0 | - | N/A | - | 45.3 | - | N/A | - | 1.01 | - | N/A | - | 8 | 1 |
| Total w/Ag.&F&H | 86.0 | - | N/A | - | 24.9 | - | N/A | - | 1.07 | - | N/A | - | 466 | 50 |
| Total Market | 87.7 | - | N/A | - | 23.9 | - | N/A | - | 1.08 | - | N/A | - | 444 | 45 |

Confidence intervals have been calculated for the Residential and Commercial/Industrial subclasses only

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

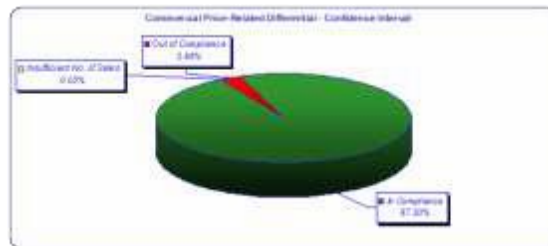
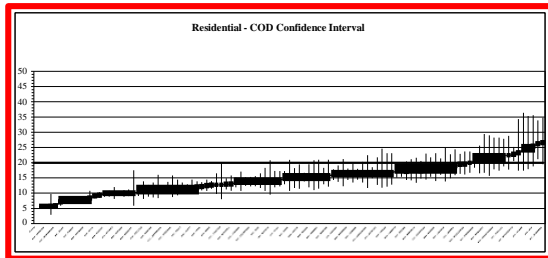
| STATEWIDE TOTALS | | | | | | | | |
|--------------------------|--------------|---------------------|------|---------------------|------|---------------------|-------------|------------|
| PROPERTY CLASS | Median Ratio | Confidence Interval | COD | Confidence Interval | PRD | Confidence Interval | Valid Sales | Trim Sales |
| Residential ¹ | 94.6 | N/A | 11.9 | N/A | 1.02 | N/A | 11,069 | 1,191 |
| Comm./Ind. ² | 90.7 | N/A | 24.8 | N/A | 1.11 | N/A | 1,157 | 32 |
| Vacant Lot | 64.6 | N/A | 41.7 | N/A | 4.13 | N/A | 2,357 | 174 |
| Farm & Home | 62.6 | N/A | 35.4 | N/A | 1.03 | N/A | 874 | 21 |
| Ag. Land Only | 7.5 | N/A | 73.8 | N/A | 0.94 | N/A | 1,303 | 45 |
| Ag. (Impr.+ Land) | 7.5 | N/A | 73.2 | N/A | 0.95 | N/A | 1,509 | 57 |
| Other/Ex/Ut/NP/M | 103.9 | N/A | 39.6 | N/A | 1.20 | N/A | 73 | 9 |
| Total w/Ag.&F&H | 90.5 | N/A | 23.7 | N/A | 1.07 | N/A | 17,039 | 2,118 |
| Total Market | 93.9 | N/A | 17.7 | N/A | 1.04 | N/A | 14,656 | 1,746 |

¹ Statewide Residential performance measures are weighted by county parcel counts within the subclass

² Statewide Commercial/Indu. performance measures are weighted by county parcel counts within the subclass and may include supplemental sales from previous study years in small counties.



Charts & Graphs



Charts

Overview

The summary statistics provided in this ratio study report include the standard industry measures used to evaluate appraisal performance: these consist of the Median Ratio, Coefficient of Dispersion (*COD*), Price-Related Differential (*PRD*) and their 95% confidence intervals. This study also uses supplemental sales where needed to increase the sample size of the commercial/industrial subclass. Additional sales validation documentation has been reviewed and outliers have been trimmed for the uniformity measurements (*COD and PRD*).

The information provided by this 2018 Final Ratio Study, *pages 15-49*, indicates that a large portion statewide property value estimates in the residential and commercial/industrial subclasses of property meet the state mandated mass appraisal performance standards.

GRAPHICS:

The following pie charts depict an overall appraisal performance for residential and commercial properties based on state standards. Value weighting calculations are based on the 2018 certified assessed values. These numbers are proportional to county abstract assessed valuation.

1. *Exhibit I* depicts the residential and commercial *median ratios*. The residential and commercial charts indicate that greater than 99 percent of the residential and commercial value statewide falls within a range of 90.0 percent to 110.0 percent which is the recognized standard according to IAAO (*International Association of Assessing Officers*).
2. *Exhibit II* presents the residential and commercial *coefficient of dispersion (COD)*. The acceptable standard for Kansas is a range of 0 to 20.0 for the COD. This chart indicates that more than 99 percent of the residential property value and more than 98 percent of the commercial/industrial property values are found in counties that meet the state performance standard COD of 20.0 or less.
3. *Exhibit III* is a display of residential and commercial appraisal bias. The *price-related differential* provides only an indication, not proof, of appraisal bias. When sample sizes are small, a price-related differential outside the acceptable range may occur simply

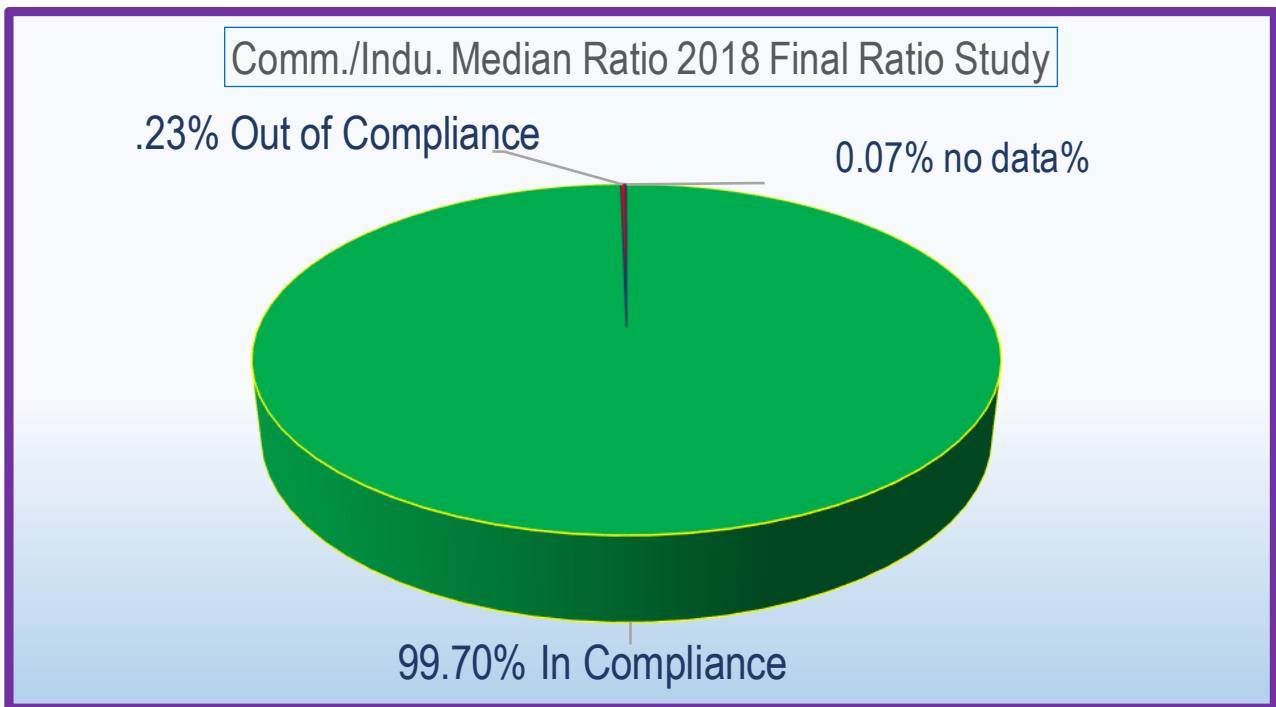
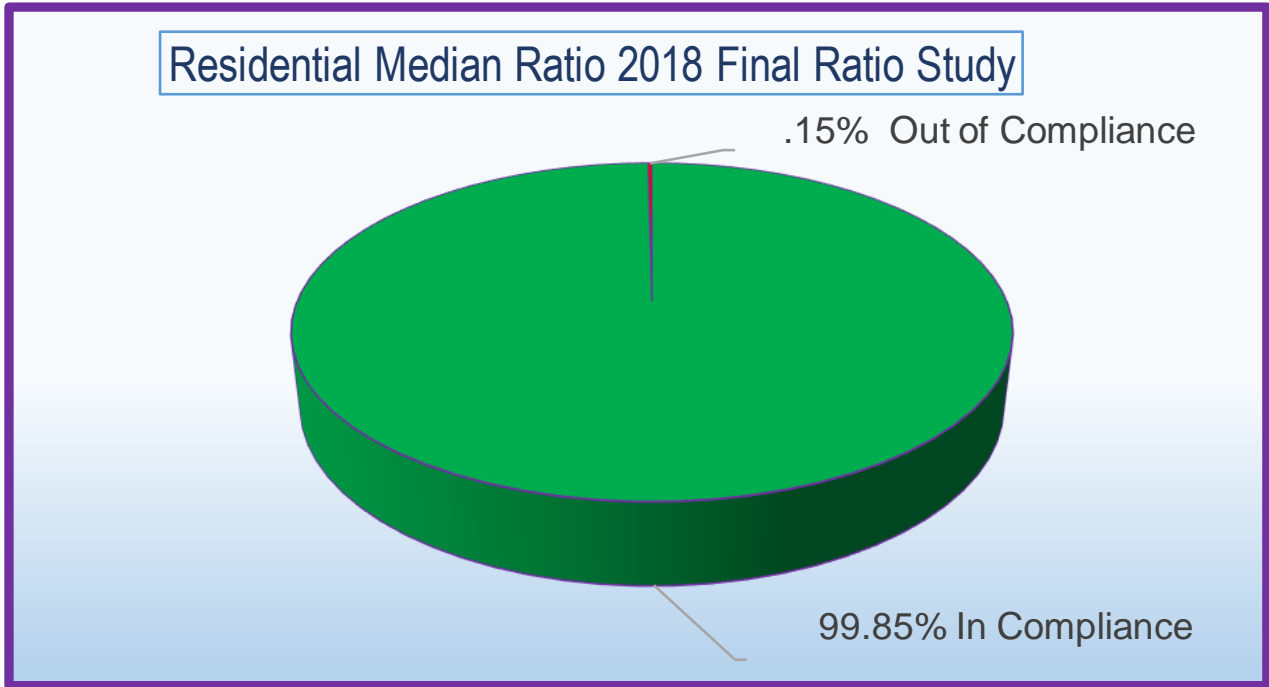
because of random sampling error¹. The acceptable range for the PRD is between .98 and 1.03. This chart indicates that 81% percent of the commercial / industrial property value and greater than 98 percent of the residential property values statewide fall within the acceptable range for the PRD.

4. Residential and commercial bar charts have been prepared to show the confidence interval widths for the Median Ratio, Coefficient of Dispersion (*COD*) and the Price-Related Differential (*PRD*). Confidence intervals provide a range of values that can be used to estimate performance measures for each county with a specified degree of probability (95% is the level of confidence adopted for ratio study measures). A county with many sales in the study will tend to have a more compressed confidence interval range. A county with fewer sales and greater dispersion in the real estate market will tend to have wider confidence intervals.

¹ International Association of Assessing Officers, 1990. *Property appraisal & assessment administration*. Chicago: International Association of Assessing Officers.

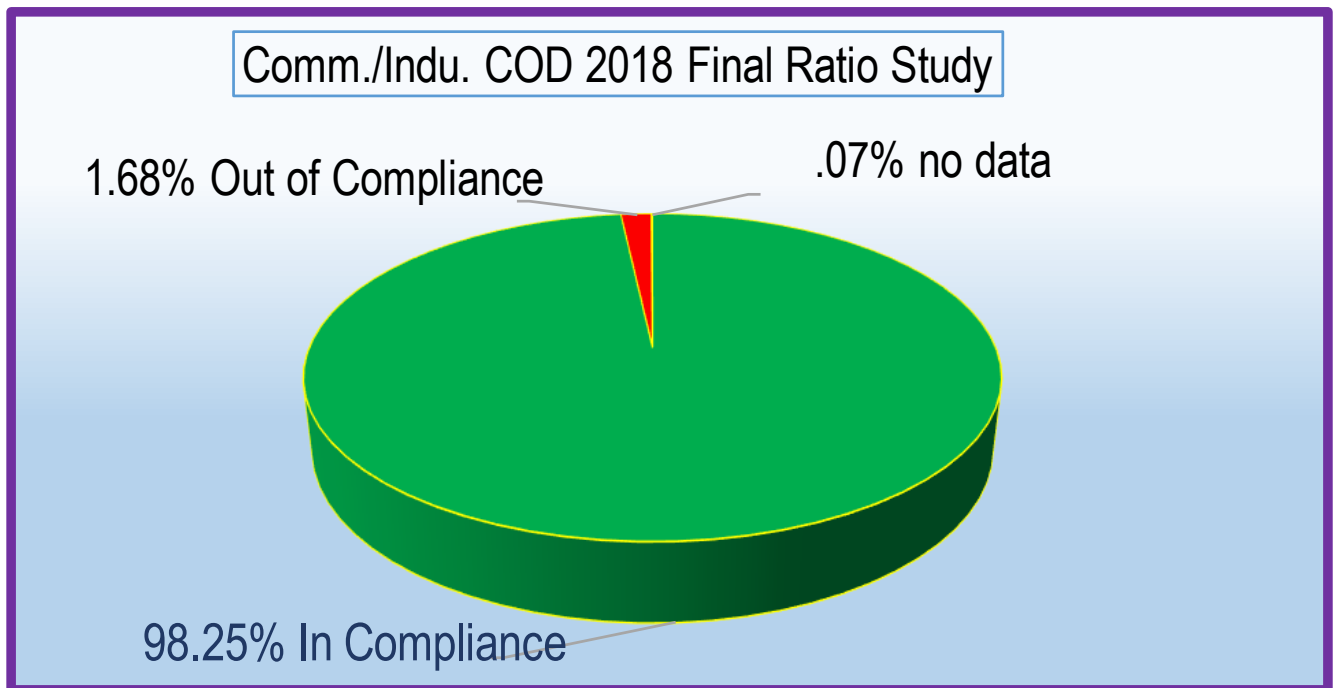
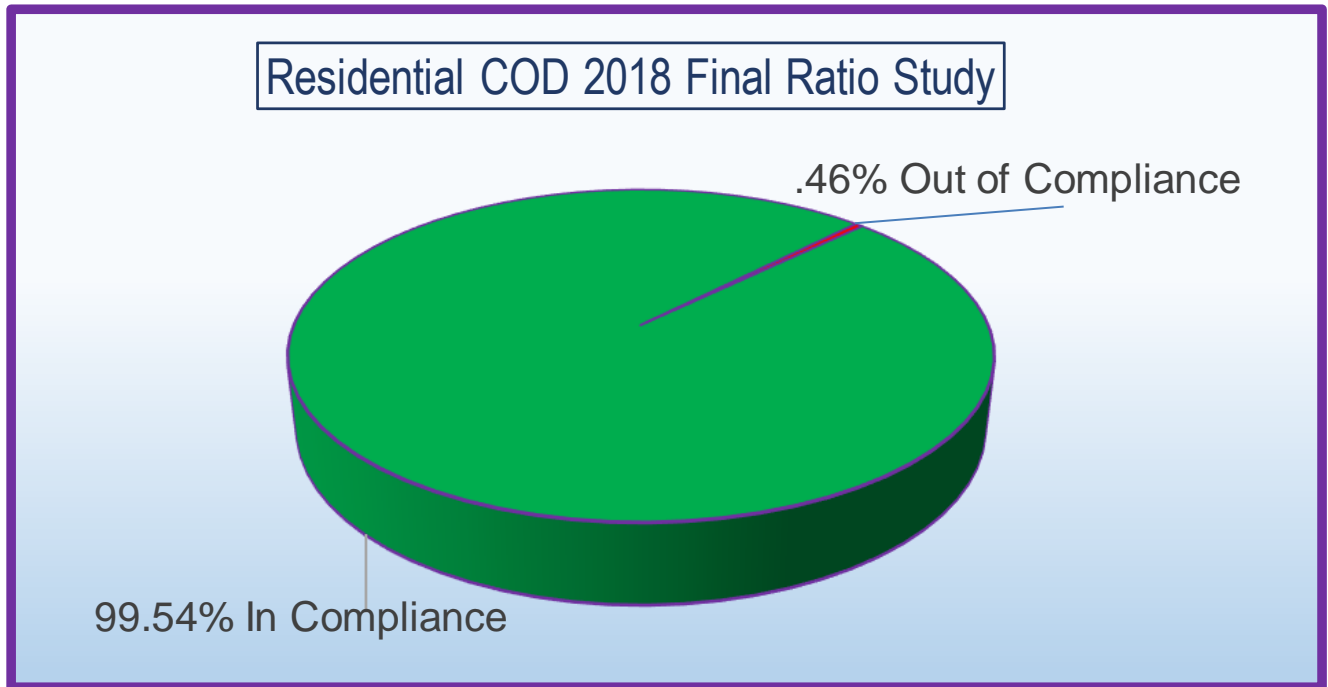
Pie Charts Based Upon Statewide Proportion of Appraised Value

Exhibit 1



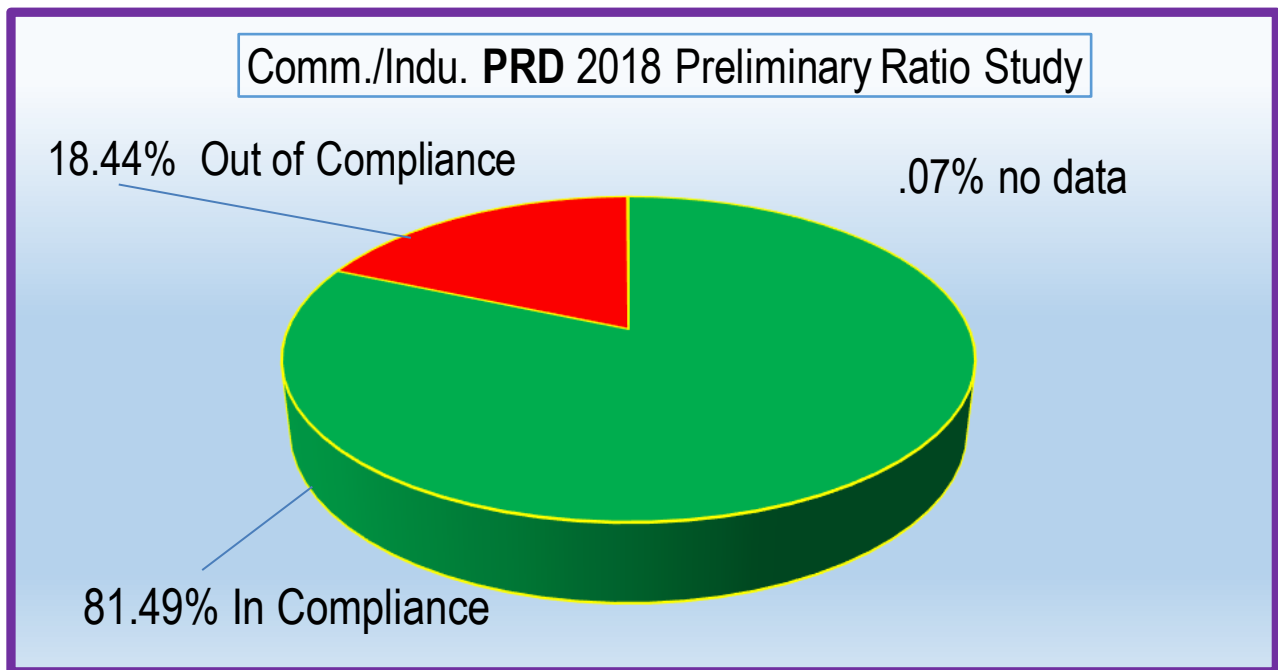
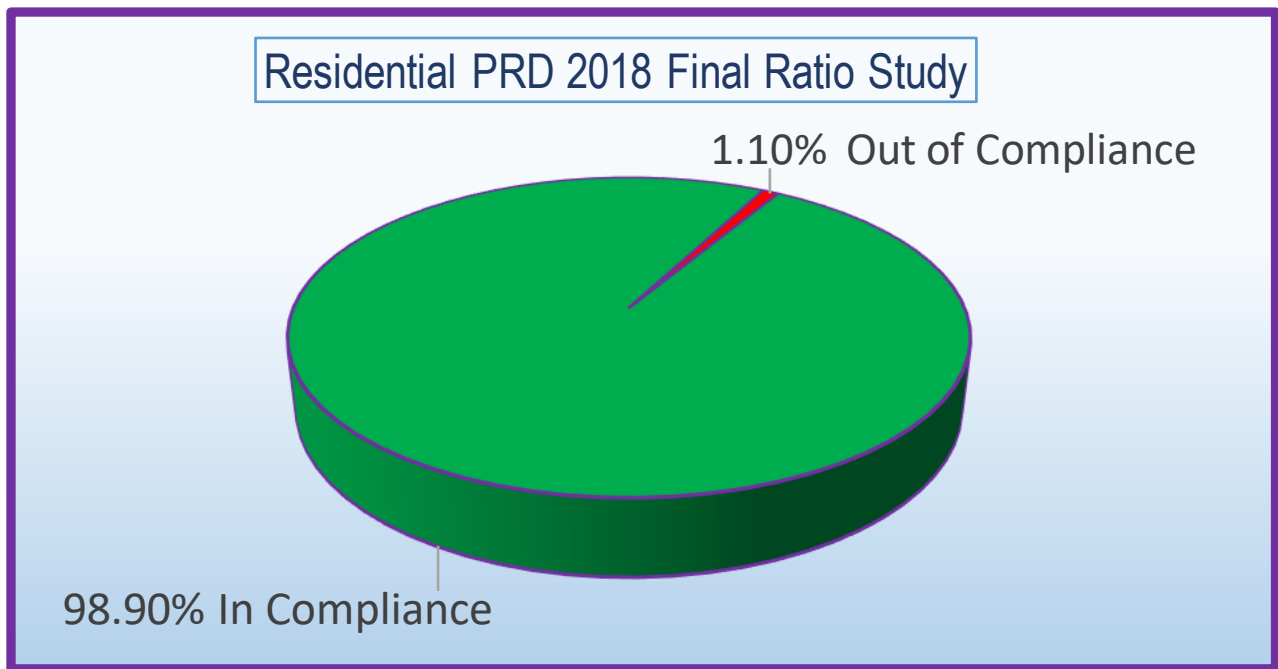
Pie Charts Based Upon Statewide Proportion of Appraised Value

Exhibit 2

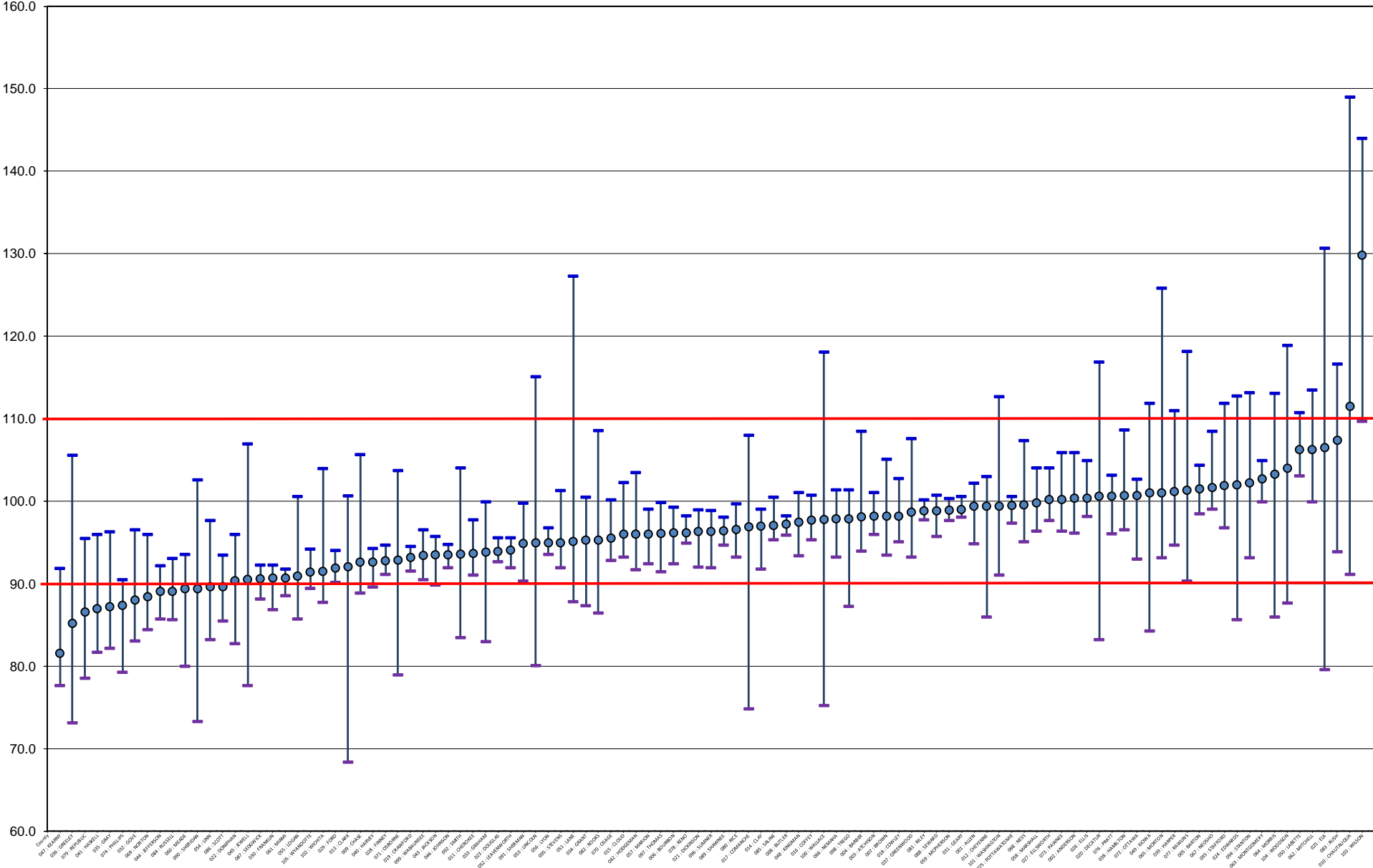


Pie Charts Based Upon Statewide Proportion of Appraised Value

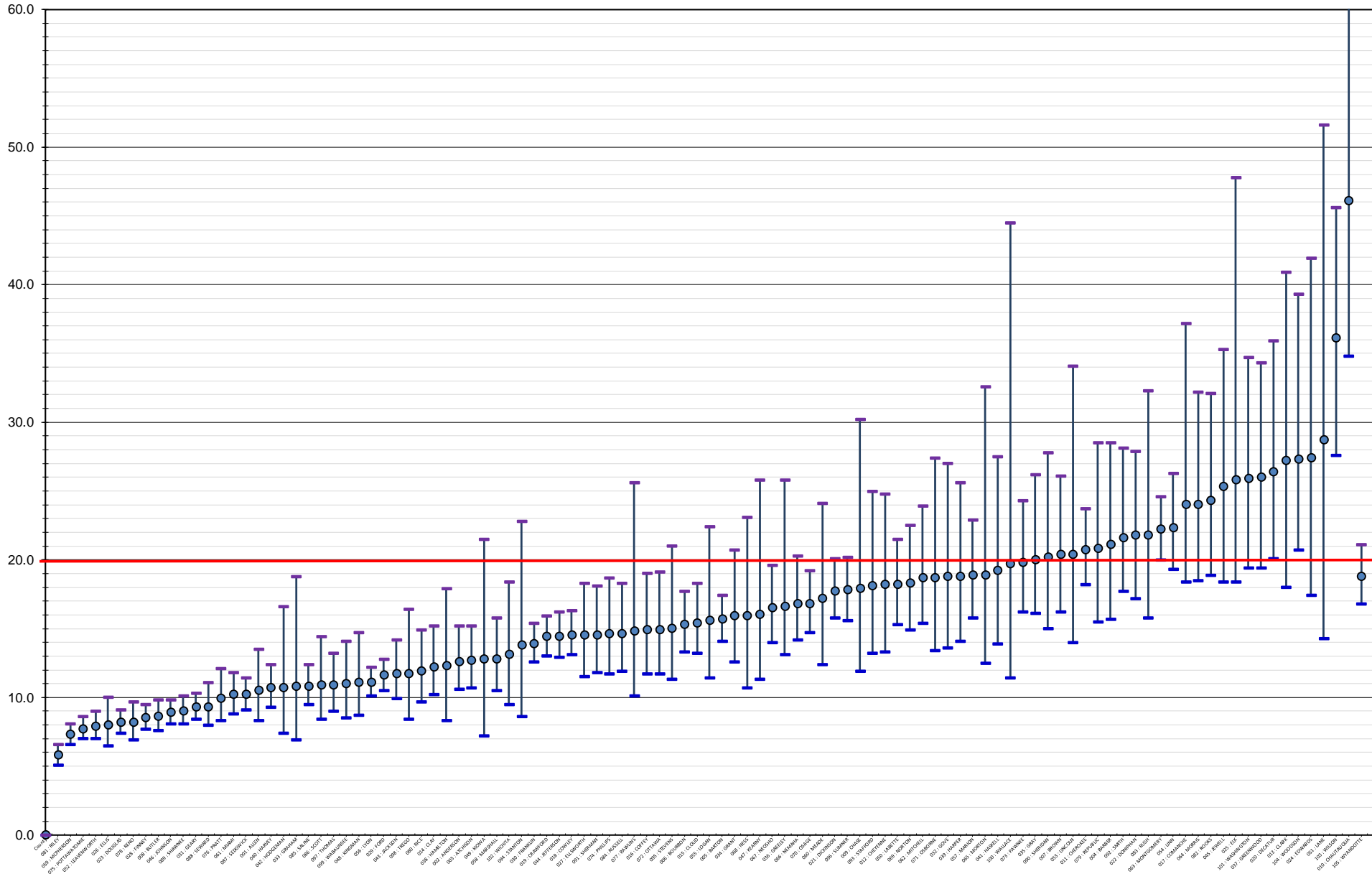
Exhibit 3



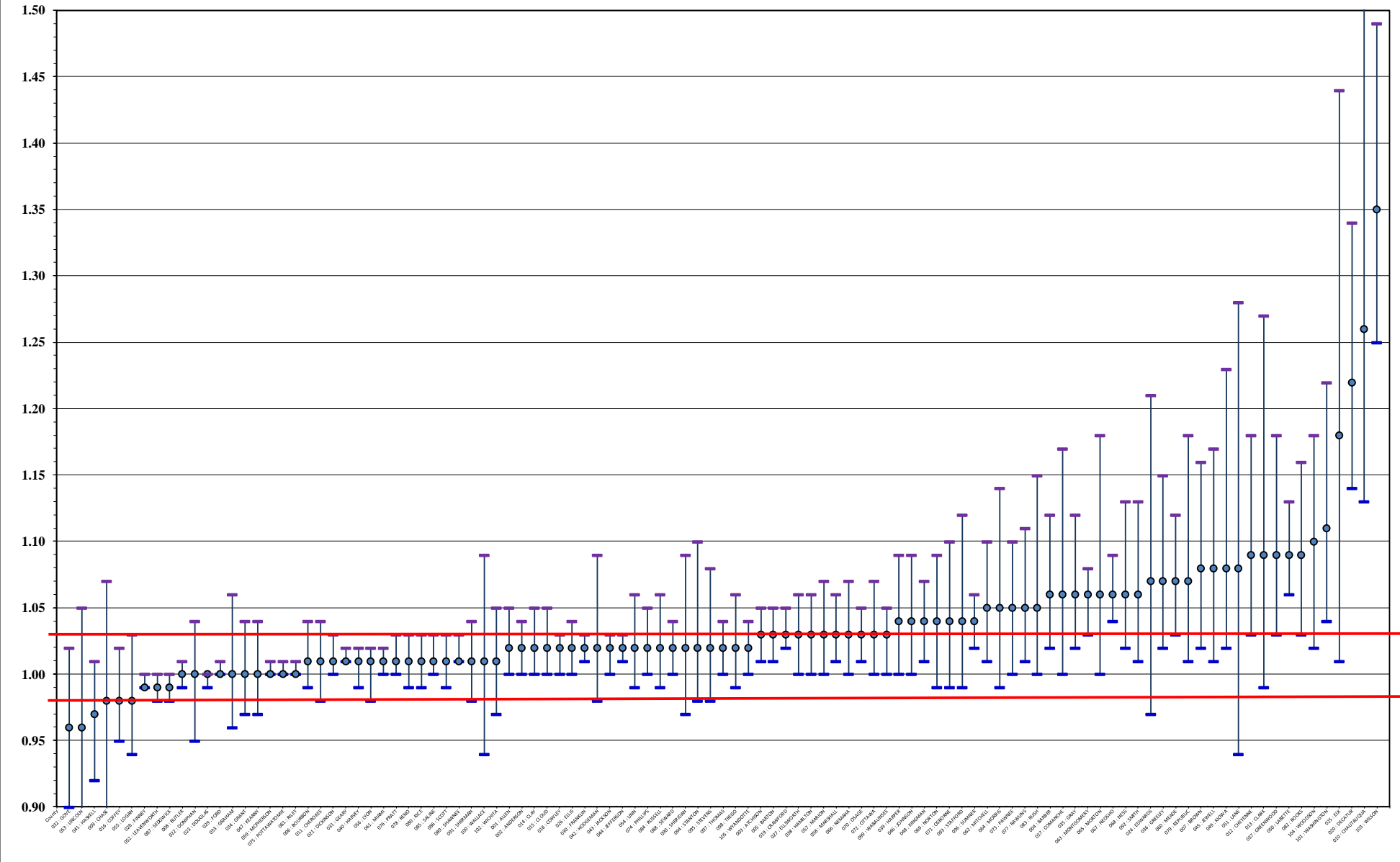
Residential - Median Ratio Confidence Interval



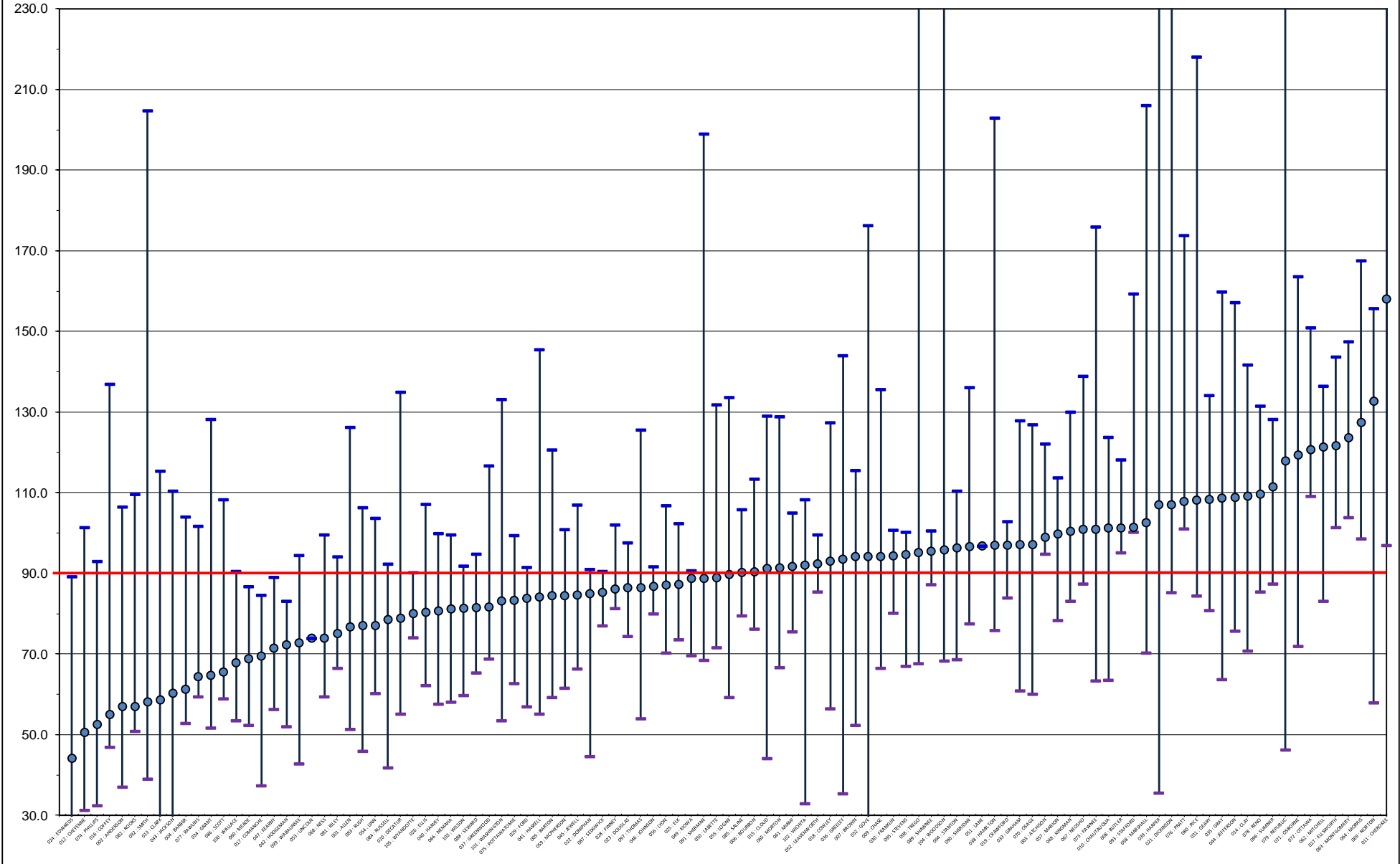
Residential - COD Confidence Interval



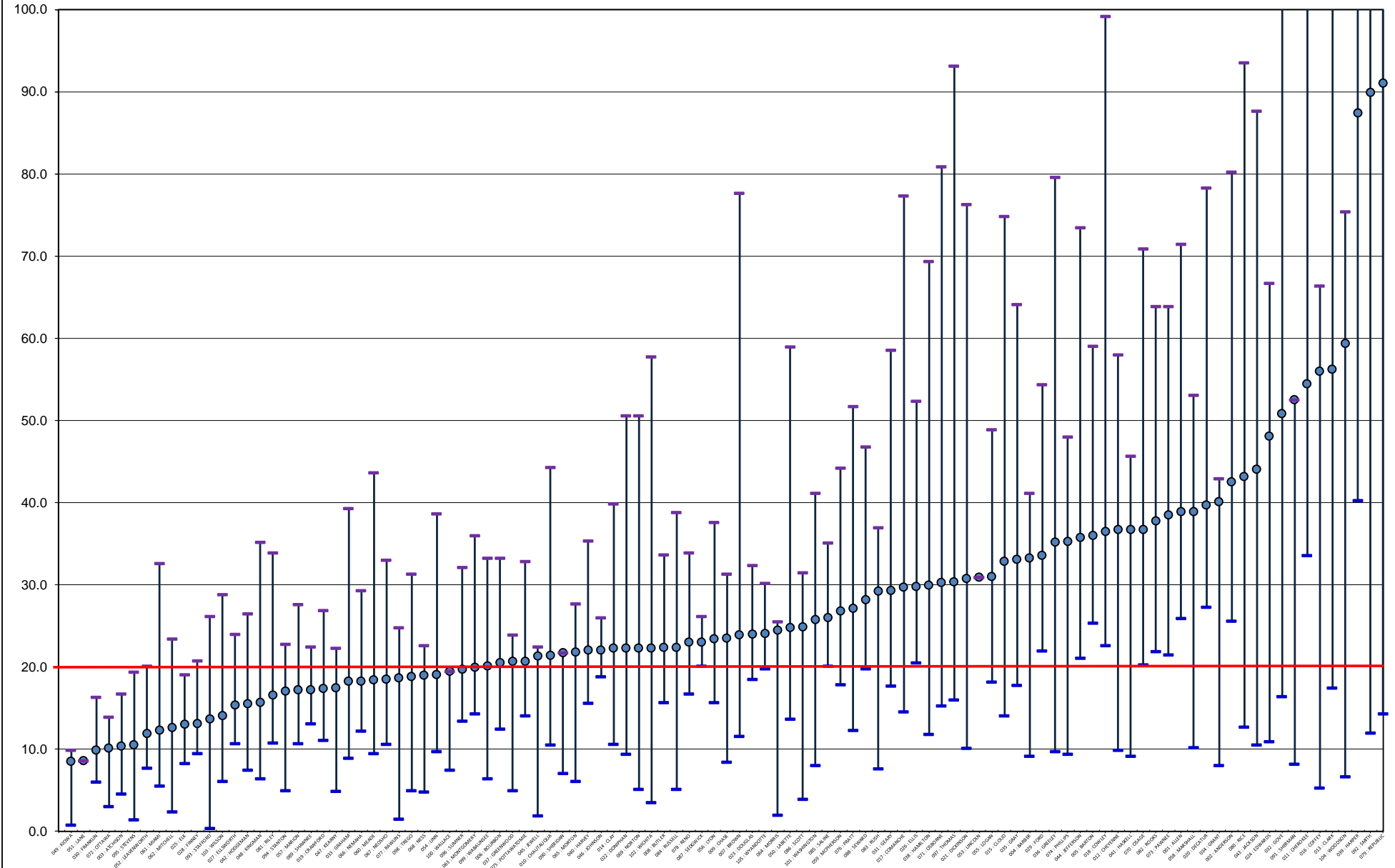
Residential - PRD Confidence Interval



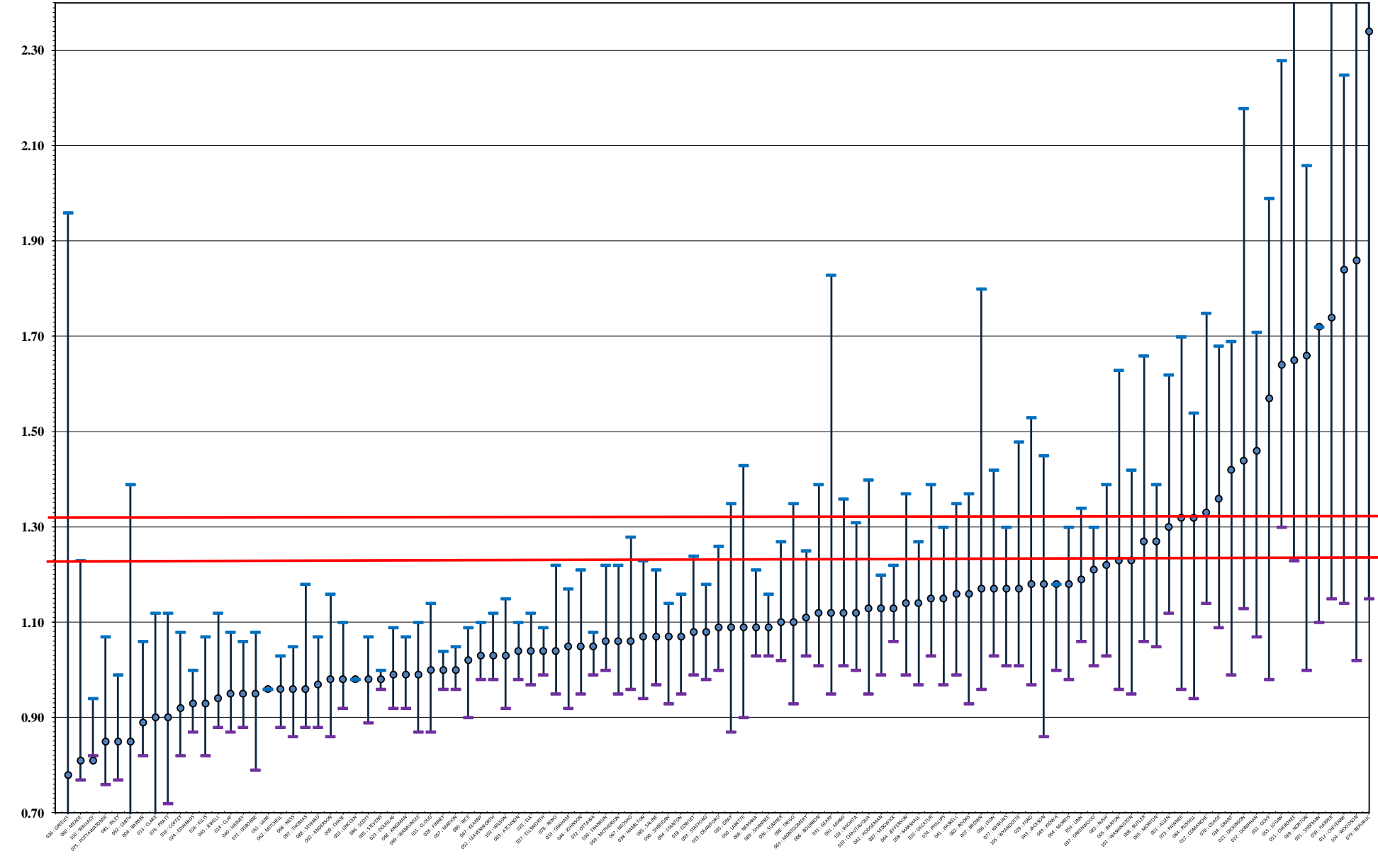
Commercial/Industrial - Median Ratio Confidence Interval



Commercial/Industrial - COD Confidence Interval



Commercial/Industrial - PRD Confidence Interval



Detailed Statistics

Residential and Commercial/Industrial

Subclass



Detailed Sample Statistics for the Residential and Commercial Subclasses

| 001 : ALLEN | | | 002 : ANDERSON | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 59 | 9 | Original Number of Sales | 87 | 6 |
| Trimmed Outliers | 8 | 0 | Trimmed Outliers | 11 | 0 |
| Number of Ratios: Outliers Removed | 51 | 9 | Number of Ratios: Outliers Removed | 76 | 6 |
| Minimum Ratio | 63.0 | 50.6 | Minimum Ratio | 11.5 | 33.7 |
| Maximum Ratio | 355.7 | 157.1 | Maximum Ratio | 180.7 | 119.6 |
| Minimum Sale Price | 3,000 | 10,800 | Minimum Sale Price | 14,000 | 13,000 |
| Maximum Sale Price | 233,500 | 1,030,000 | Maximum Sale Price | 265,000 | 80,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 99.4 | 76.7 | Median Ratio | 100.4 | 56.9 |
| Lower Median Confidence Interval | 94.9 | 51.3 | Lower Median Confidence Interval | 96.2 | 37.0 |
| Upper Median Confidence Interval | 102.2 | 126.2 | Upper Median Confidence Interval | 105.9 | 106.6 |
| Broadened Median Ratio | 99.5 | 81.7 | Broadened Median Ratio | 100.3 | 60.3 |
| Coefficient of Dispersion (COD) | 10.5 | 38.9 | Coefficient of Dispersion (COD) | 12.6 | 42.5 |
| Lower COD Confidence Interval | 8.3 | 25.9 | Lower COD Confidence Interval | 10.6 | 25.6 |
| Upper COD Confidence Interval | 13.5 | 71.5 | Upper COD Confidence Interval | 15.2 | 80.3 |
| Value Weighted COD | 9.5 | 23.6 | Value Weighted COD | 11.4 | 44.3 |
| Coefficient of Concentration @10% | 49.2 | 11.1 | Coefficient of Concentration @10% | 42.5 | 33.3 |
| Coefficient of Concentration @15% | 64.4 | 11.1 | Coefficient of Concentration @15% | 55.2 | 33.3 |
| Coefficient of Concentration @20% | 76.3 | 22.2 | Coefficient of Concentration @20% | 67.8 | 33.3 |
| Coefficient of Concentration @50% | 91.5 | 77.8 | Coefficient of Concentration @50% | 92.0 | 66.7 |
| Coefficient of Concentration @100% | 96.6 | 88.9 | Coefficient of Concentration @100% | 100.0 | 83.3 |
| Coefficient of Interquartile Deviation | 10.7 | 39.4 | Coefficient of Interquartile Deviation | 11.4 | 53.9 |
| Median Percent Deviation | 10.1 | 33.9 | Median Percent Deviation | 10.9 | 35.0 |
| Lower Quartile (25 th Percentile) | 89.9 | 55.5 | Lower Quartile (25 th Percentile) | 89.6 | 38.6 |
| Upper Quartile (75 th Percentile) | 111.2 | 115.9 | Upper Quartile (75 th Percentile) | 112.5 | 100.1 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.01 | 0.62 | Relative Skewness | 0.09 | 0.65 |
| Relative Kurtosis | 3.54 | 2.16 | Relative Kurtosis | 2.94 | 1.97 |
| Arithmetic Mean Ratio | 96.6 | 88.4 | Arithmetic Mean Ratio | 99.0 | 66.8 |
| Weighted Mean Ratio | 94.5 | 67.9 | Weighted Mean Ratio | 97.0 | 67.9 |
| Geometric Mean Ratio | 95.7 | 81.9 | Geometric Mean Ratio | 97.6 | 60.5 |
| Harmonic Mean Ratio | 94.7 | 76.2 | Harmonic Mean Ratio | 96.3 | 55.2 |
| Standard Deviation | 13.6 | 37.2 | Standard Deviation | 16.0 | 33.2 |
| Coefficient of Variation (COV) | 14.1 | 42.1 | Coefficient of Variation (COV) | 16.2 | 49.7 |
| Price-Related Differential (PRD) | 1.02 | 1.30 | Price-Related Differential (PRD) | 1.02 | 0.98 |
| Lower PRD Confidence Interval | 1.00 | 1.12 | Lower PRD Confidence Interval | 1.00 | 0.86 |
| Upper PRD Confidence interval | 1.05 | 1.62 | Upper PRD Confidence interval | 1.04 | 1.16 |
| Coef. of Price-Related Bias (PRB) | -0.11 | -0.11 | Coef. of Price-Related Bias (PRB) | -0.09 | 0.22 |
| Lower PRB Confidence Interval | -0.19 | -0.35 | Lower PRB Confidence Interval | -0.14 | -0.44 |
| Upper PRB Confidence Interval | -0.03 | 0.13 | Upper PRB Confidence Interval | -0.03 | 0.88 |
| Average Sale Price | 68,140 | 137,959 | Average Sale Price | 90,291 | 173,122 |
| Average Appraised Value | 64,363 | 117,298 | Average Appraised Value | 87,565 | 149,605 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 003 : ATCHISON | | | 004 : BARBER | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-3 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 132 | 7 | Original Number of Sales | 43 | 7 |
| Trimmed Outliers | 18 | 0 | Trimmed Outliers | 4 | 0 |
| Number of Ratios: Outliers Removed | 114 | 7 | Number of Ratios: Outliers Removed | 39 | 7 |
| Minimum Ratio | 10.1 | 86.3 | Minimum Ratio | 46.7 | 51.9 |
| Maximum Ratio | 5866.0 | 126.8 | Maximum Ratio | 829.5 | 110.2 |
| Minimum Sale Price | 500 | 15,000 | Minimum Sale Price | 1,750 | 20,000 |
| Maximum Sale Price | 390,000 | 242,000 | Maximum Sale Price | 240,000 | 130,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 98.2 | 99.0 | Median Ratio | 98.1 | 61.2 |
| Lower Median Confidence Interval | 96.0 | 94.9 | Lower Median Confidence Interval | 94.0 | 52.8 |
| Upper Median Confidence Interval | 101.1 | 122.1 | Upper Median Confidence Interval | 108.5 | 104.0 |
| Broadened Median Ratio | 98.3 | 98.3 | Broadened Median Ratio | 98.3 | 67.3 |
| Coefficient of Dispersion (COD) | 12.7 | 10.4 | Coefficient of Dispersion (COD) | 21.1 | 33.3 |
| Lower COD Confidence Interval | 10.7 | 4.6 | Lower COD Confidence Interval | 15.7 | 9.2 |
| Upper COD Confidence Interval | 15.2 | 16.7 | Upper COD Confidence Interval | 28.5 | 41.2 |
| Value Weighted COD | 11.1 | 4.7 | Value Weighted COD | 18.4 | 46.0 |
| Coefficient of Concentration @10% | 45.5 | 57.1 | Coefficient of Concentration @10% | 32.6 | 14.3 |
| Coefficient of Concentration @15% | 58.3 | 71.4 | Coefficient of Concentration @15% | 44.2 | 42.9 |
| Coefficient of Concentration @20% | 66.7 | 71.4 | Coefficient of Concentration @20% | 55.8 | 57.1 |
| Coefficient of Concentration @50% | 86.4 | 100.0 | Coefficient of Concentration @50% | 81.4 | 71.4 |
| Coefficient of Concentration @100% | 92.4 | 100.0 | Coefficient of Concentration @100% | 90.7 | 100.0 |
| Coefficient of Interquartile Deviation | 12.4 | 13.8 | Coefficient of Interquartile Deviation | 19.1 | 41.9 |
| Median Percent Deviation | 12.4 | 4.2 | Median Percent Deviation | 16.3 | 15.2 |
| Lower Quartile (25 th Percentile) | 86.3 | 94.9 | Lower Quartile (25 th Percentile) | 84.9 | 52.8 |
| Upper Quartile (75 th Percentile) | 110.6 | 122.1 | Upper Quartile (75 th Percentile) | 122.3 | 104.0 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | RejectA | Normality Test | RejectK | RejectW |
| Relative Skewness | 0.00 | 0.67 | Relative Skewness | 0.43 | 0.45 |
| Relative Kurtosis | 3.58 | 1.95 | Relative Kurtosis | 3.28 | 1.45 |
| Arithmetic Mean Ratio | 96.5 | 103.6 | Arithmetic Mean Ratio | 99.3 | 74.4 |
| Weighted Mean Ratio | 93.9 | 100.0 | Weighted Mean Ratio | 93.4 | 83.3 |
| Geometric Mean Ratio | 94.9 | 102.7 | Geometric Mean Ratio | 95.2 | 70.9 |
| Harmonic Mean Ratio | 93.3 | 101.9 | Harmonic Mean Ratio | 90.8 | 67.7 |
| Standard Deviation | 16.9 | 15.0 | Standard Deviation | 28.7 | 25.4 |
| Coefficient of Variation (COV) | 17.5 | 14.5 | Coefficient of Variation (COV) | 28.9 | 34.2 |
| Price-Related Differential (PRD) | 1.03 | 1.04 | Price-Related Differential (PRD) | 1.06 | 0.89 |
| Lower PRD Confidence Interval | 1.01 | 0.98 | Lower PRD Confidence Interval | 1.02 | 0.82 |
| Upper PRD Confidence interval | 1.05 | 1.10 | Upper PRD Confidence interval | 1.12 | 1.06 |
| Coef. of Price-Related Bias (PRB) | -0.83 | -0.06 | Coef. of Price-Related Bias (PRB) | -0.47 | 0.25 |
| Lower PRB Confidence Interval | -1.50 | -0.19 | Lower PRB Confidence Interval | -0.77 | -0.08 |
| Upper PRB Confidence Interval | -0.17 | 0.07 | Upper PRB Confidence Interval | -0.18 | 0.59 |
| Average Sale Price | 112,175 | 36,583 | Average Sale Price | 71,891 | 208,469 |
| Average Appraised Value | 105,322 | 36,507 | Average Appraised Value | 67,182 | 202,631 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 005 : BARTON | | | 006 : BOURBON | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-4 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 276 | 14 | Original Number of Sales | 170 | 8 |
| Trimmed Outliers | 27 | 0 | Trimmed Outliers | 25 | 0 |
| Number of Ratios: Outliers Removed | 249 | 14 | Number of Ratios: Outliers Removed | 145 | 8 |
| Minimum Ratio | 16.6 | 40.5 | Minimum Ratio | 20.9 | 75.0 |
| Maximum Ratio | 444.5 | 152.8 | Maximum Ratio | 1067.0 | 145.1 |
| Minimum Sale Price | 2,000 | 23,000 | Minimum Sale Price | 1,000 | 15,000 |
| Maximum Sale Price | 400,000 | 1,632,653 | Maximum Sale Price | 450,000 | 1,100,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.5 | 84.4 | Median Ratio | 96.2 | 90.4 |
| Lower Median Confidence Interval | 98.5 | 59.2 | Lower Median Confidence Interval | 92.5 | 76.2 |
| Upper Median Confidence Interval | 104.4 | 120.6 | Upper Median Confidence Interval | 99.3 | 113.5 |
| Broadened Median Ratio | 101.4 | 86.3 | Broadened Median Ratio | 96.2 | 90.1 |
| Coefficient of Dispersion (COD) | 15.7 | 36.0 | Coefficient of Dispersion (COD) | 15.3 | 20.5 |
| Lower COD Confidence Interval | 14.1 | 25.4 | Lower COD Confidence Interval | 13.3 | 12.5 |
| Upper COD Confidence Interval | 17.4 | 59.1 | Upper COD Confidence Interval | 17.7 | 33.3 |
| Value Weighted COD | 13.8 | 36.2 | Value Weighted COD | 13.0 | 15.0 |
| Coefficient of Concentration @10% | 40.6 | 14.3 | Coefficient of Concentration @10% | 41.2 | 0.0 |
| Coefficient of Concentration @15% | 52.5 | 21.4 | Coefficient of Concentration @15% | 51.2 | 50.0 |
| Coefficient of Concentration @20% | 62.3 | 21.4 | Coefficient of Concentration @20% | 60.6 | 75.0 |
| Coefficient of Concentration @50% | 88.4 | 78.6 | Coefficient of Concentration @50% | 83.5 | 87.5 |
| Coefficient of Concentration @100% | 94.6 | 100.0 | Coefficient of Concentration @100% | 94.1 | 100.0 |
| Coefficient of Interquartile Deviation | 14.8 | 37.7 | Coefficient of Interquartile Deviation | 14.6 | 18.5 |
| Median Percent Deviation | 13.3 | 33.8 | Median Percent Deviation | 14.4 | 14.3 |
| Lower Quartile (25 th Percentile) | 90.8 | 58.4 | Lower Quartile (25 th Percentile) | 82.1 | 76.8 |
| Upper Quartile (75 th Percentile) | 120.8 | 122.0 | Upper Quartile (75 th Percentile) | 110.1 | 110.3 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.25 | 0.35 | Relative Skewness | 0.06 | 1.03 |
| Relative Kurtosis | 3.25 | 1.83 | Relative Kurtosis | 3.36 | 2.99 |
| Arithmetic Mean Ratio | 101.4 | 91.4 | Arithmetic Mean Ratio | 92.6 | 96.2 |
| Weighted Mean Ratio | 98.6 | 74.2 | Weighted Mean Ratio | 91.5 | 85.6 |
| Geometric Mean Ratio | 99.3 | 84.5 | Geometric Mean Ratio | 90.6 | 93.8 |
| Harmonic Mean Ratio | 97.1 | 78.0 | Harmonic Mean Ratio | 88.5 | 91.7 |
| Standard Deviation | 20.3 | 36.7 | Standard Deviation | 18.7 | 24.2 |
| Coefficient of Variation (COV) | 20.1 | 40.2 | Coefficient of Variation (COV) | 20.2 | 25.2 |
| Price-Related Differential (PRD) | 1.03 | 1.23 | Price-Related Differential (PRD) | 1.01 | 1.12 |
| Lower PRD Confidence Interval | 1.01 | 0.96 | Lower PRD Confidence Interval | 0.99 | 1.01 |
| Upper PRD Confidence interval | 1.05 | 1.63 | Upper PRD Confidence interval | 1.04 | 1.39 |
| Coef. of Price-Related Bias (PRB) | -0.13 | -0.05 | Coef. of Price-Related Bias (PRB) | -0.23 | -0.05 |
| Lower PRB Confidence Interval | -0.17 | -0.19 | Lower PRB Confidence Interval | -0.34 | -0.18 |
| Upper PRB Confidence Interval | -0.09 | 0.09 | Upper PRB Confidence Interval | -0.13 | 0.08 |
| Average Sale Price | 100,457 | 153,000 | Average Sale Price | 95,644 | 111,292 |
| Average Appraised Value | 99,094 | 129,994 | Average Appraised Value | 87,479 | 109,256 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 007 : BROWN | | | 008 : BUTLER | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-7 | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 72 | 9 | Original Number of Sales | 221 | 24 |
| Trimmed Outliers | 11 | 0 | Trimmed Outliers | 25 | 1 |
| Number of Ratios: Outliers Removed | 61 | 9 | Number of Ratios: Outliers Removed | 196 | 23 |
| Minimum Ratio | | 17.8 | Minimum Ratio | 46.6 | 33.9 |
| Maximum Ratio | 2010.0 | 117.4 | Maximum Ratio | 269.1 | 212.7 |
| Minimum Sale Price | 500 | 16,000 | Minimum Sale Price | 2,500 | 10,000 |
| Maximum Sale Price | 560,000 | 200,000 | Maximum Sale Price | 1,500,000 | 750,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 98.2 | 94.1 | Median Ratio | 97.2 | 101.3 |
| Lower Median Confidence Interval | 93.5 | 52.3 | Lower Median Confidence Interval | 95.9 | 95.2 |
| Upper Median Confidence Interval | 105.1 | 115.5 | Upper Median Confidence Interval | 98.3 | 118.2 |
| Broadened Median Ratio | 98.2 | 95.8 | Broadened Median Ratio | 97.2 | 101.1 |
| Coefficient of Dispersion (COD) | 20.4 | 23.9 | Coefficient of Dispersion (COD) | 8.6 | 22.4 |
| Lower COD Confidence Interval | 16.2 | 11.6 | Lower COD Confidence Interval | 7.6 | 15.7 |
| Upper COD Confidence Interval | 26.1 | 77.7 | Upper COD Confidence Interval | 9.8 | 33.7 |
| Value Weighted COD | 17.5 | 28.1 | Value Weighted COD | 7.8 | 28.2 |
| Coefficient of Concentration @10% | 33.3 | 33.3 | Coefficient of Concentration @10% | 61.1 | 37.5 |
| Coefficient of Concentration @15% | 43.1 | 33.3 | Coefficient of Concentration @15% | 73.8 | 45.8 |
| Coefficient of Concentration @20% | 52.8 | 55.6 | Coefficient of Concentration @20% | 79.6 | 54.2 |
| Coefficient of Concentration @50% | 76.4 | 88.9 | Coefficient of Concentration @50% | 95.9 | 83.3 |
| Coefficient of Concentration @100% | 88.9 | 100.0 | Coefficient of Concentration @100% | 99.5 | 95.8 |
| Coefficient of Interquartile Deviation | 19.0 | 25.4 | Coefficient of Interquartile Deviation | 8.1 | 19.3 |
| Median Percent Deviation | 17.9 | 17.2 | Median Percent Deviation | 8.2 | 18.0 |
| Lower Quartile (25 th Percentile) | 82.8 | 65.1 | Lower Quartile (25 th Percentile) | 89.0 | 88.0 |
| Upper Quartile (75 th Percentile) | 120.2 | 112.8 | Upper Quartile (75 th Percentile) | 104.8 | 127.1 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptK |
| Relative Skewness | 0.19 | -1.10 | Relative Skewness | 0.09 | -0.11 |
| Relative Kurtosis | 3.71 | 3.11 | Relative Kurtosis | 3.74 | 3.05 |
| Arithmetic Mean Ratio | 94.6 | 86.5 | Arithmetic Mean Ratio | 96.5 | 100.1 |
| Weighted Mean Ratio | 87.8 | 74.0 | Weighted Mean Ratio | 96.1 | 79.0 |
| Geometric Mean Ratio | 90.6 | 77.0 | Geometric Mean Ratio | 95.8 | 94.8 |
| Harmonic Mean Ratio | 86.0 | 61.7 | Harmonic Mean Ratio | 95.1 | 88.2 |
| Standard Deviation | 26.5 | 32.8 | Standard Deviation | 11.2 | 30.8 |
| Coefficient of Variation (COV) | 28.0 | 37.9 | Coefficient of Variation (COV) | 11.7 | 30.7 |
| Price-Related Differential (PRD) | 1.08 | 1.17 | Price-Related Differential (PRD) | 1.00 | 1.27 |
| Lower PRD Confidence Interval | 1.02 | 0.96 | Lower PRD Confidence Interval | 0.99 | 1.06 |
| Upper PRD Confidence interval | 1.16 | 1.80 | Upper PRD Confidence interval | 1.01 | 1.66 |
| Coef. of Price-Related Bias (PRB) | -0.84 | -0.05 | Coef. of Price-Related Bias (PRB) | -0.02 | -0.11 |
| Lower PRB Confidence Interval | -1.24 | -0.30 | Lower PRB Confidence Interval | -0.05 | -0.22 |
| Upper PRB Confidence Interval | -0.45 | 0.20 | Upper PRB Confidence Interval | 0.01 | 0.01 |
| Average Sale Price | 101,501 | 210,918 | Average Sale Price | 151,706 | 48,000 |
| Average Appraised Value | 89,084 | 181,105 | Average Appraised Value | 145,792 | 47,912 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 009 : CHASE | | | 010 : CHAUTAUQUA | | |
|--|-------------|-----------|--|-------------|-----------|
| | <i>S-4</i> | | | <i>S-5</i> | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 23 | 5 | Original Number of Sales | 26 | 6 |
| Trimmed Outliers | 4 | 0 | Trimmed Outliers | 0 | 0 |
| Number of Ratios: Outliers Removed | 19 | 5 | Number of Ratios: Outliers Removed | 26 | 6 |
| Minimum Ratio | 30.9 | 65.9 | Minimum Ratio | 18.4 | 51.9 |
| Maximum Ratio | 288.5 | 139.4 | Maximum Ratio | 296.0 | 128.1 |
| Minimum Sale Price | 3,500 | 1,000 | Minimum Sale Price | 1,000 | 3,500 |
| Maximum Sale Price | 260,000 | 24,900 | Maximum Sale Price | 175,000 | 70,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 92.6 | 94.2 | Median Ratio | 111.5 | 101.2 |
| Lower Median Confidence Interval | 88.9 | 66.5 | Lower Median Confidence Interval | 91.2 | 63.5 |
| Upper Median Confidence Interval | 105.7 | 135.7 | Upper Median Confidence Interval | 149.0 | 123.8 |
| Broadened Median Ratio | 95.1 | 91.0 | Broadened Median Ratio | 112.7 | 99.9 |
| Coefficient of Dispersion (COD) | 17.9 | 23.5 | Coefficient of Dispersion (COD) | 46.1 | 21.4 |
| Lower COD Confidence Interval | 11.9 | 8.4 | Lower COD Confidence Interval | 34.8 | 10.5 |
| Upper COD Confidence Interval | 30.2 | 31.3 | Upper COD Confidence Interval | 70.7 | 44.3 |
| Value Weighted COD | 14.4 | 22.5 | Value Weighted COD | 31.6 | 32.8 |
| Coefficient of Concentration @10% | 30.4 | 20.0 | Coefficient of Concentration @10% | 15.4 | 33.3 |
| Coefficient of Concentration @15% | 43.5 | 40.0 | Coefficient of Concentration @15% | 26.9 | 33.3 |
| Coefficient of Concentration @20% | 47.8 | 40.0 | Coefficient of Concentration @20% | 30.8 | 50.0 |
| Coefficient of Concentration @50% | 78.3 | 100.0 | Coefficient of Concentration @50% | 73.1 | 100.0 |
| Coefficient of Concentration @100% | 82.6 | 100.0 | Coefficient of Concentration @100% | 88.5 | 100.0 |
| Coefficient of Interquartile Deviation | 21.7 | 29.4 | Coefficient of Interquartile Deviation | 41.3 | 25.8 |
| Median Percent Deviation | 20.1 | 24.9 | Median Percent Deviation | 42.2 | 21.9 |
| Lower Quartile (25 th Percentile) | 74.0 | 68.3 | Lower Quartile (25 th Percentile) | 72.3 | 69.4 |
| Upper Quartile (75 th Percentile) | 114.1 | 123.7 | Upper Quartile (75 th Percentile) | 164.4 | 121.7 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.73 | 0.46 | Relative Skewness | 0.78 | -0.48 |
| Relative Kurtosis | 3.44 | 1.90 | Relative Kurtosis | 3.00 | 1.96 |
| Arithmetic Mean Ratio | 87.2 | 95.7 | Arithmetic Mean Ratio | 127.6 | 96.2 |
| Weighted Mean Ratio | 88.8 | 97.4 | Weighted Mean Ratio | 101.2 | 85.2 |
| Geometric Mean Ratio | 83.8 | 92.1 | Geometric Mean Ratio | 109.8 | 92.1 |
| Harmonic Mean Ratio | 79.2 | 88.7 | Harmonic Mean Ratio | 89.5 | 87.5 |
| Standard Deviation | 22.1 | 29.9 | Standard Deviation | 67.8 | 28.5 |
| Coefficient of Variation (COV) | 25.4 | 31.3 | Coefficient of Variation (COV) | 53.2 | 29.6 |
| Price-Related Differential (PRD) | 0.98 | 0.98 | Price-Related Differential (PRD) | 1.26 | 1.13 |
| Lower PRD Confidence Interval | 0.89 | 0.92 | Lower PRD Confidence Interval | 1.13 | 0.95 |
| Upper PRD Confidence interval | 1.07 | 1.10 | Upper PRD Confidence interval | 1.51 | 1.40 |
| Coef. of Price-Related Bias (PRB) | -0.07 | 0.01 | Coef. of Price-Related Bias (PRB) | -0.19 | -0.04 |
| Lower PRB Confidence Interval | -0.23 | -0.31 | Lower PRB Confidence Interval | -0.35 | -0.29 |
| Upper PRB Confidence Interval | 0.10 | 0.32 | Upper PRB Confidence Interval | -0.04 | 0.22 |
| Average Sale Price | 106,642 | 18,000 | Average Sale Price | 36,104 | 81,750 |
| Average Appraised Value | 94,666 | 19,330 | Average Appraised Value | 36,555 | 77,815 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 011 : CHEROKEE | | | 012 : CHEYENNE | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-2 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 188 | 8 | Original Number of Sales | 39 | 4 |
| Trimmed Outliers | 21 | 0 | Trimmed Outliers | 2 | 0 |
| Number of Ratios: Outliers Removed | 167 | 8 | Number of Ratios: Outliers Removed | 37 | 4 |
| Minimum Ratio | 11.7 | 71.6 | Minimum Ratio | 28.3 | 30.3 |
| Maximum Ratio | 554.0 | 397.5 | Maximum Ratio | 153.4 | 104.1 |
| Minimum Sale Price | 3,000 | 4,400 | Minimum Sale Price | 500 | 12,000 |
| Maximum Sale Price | 349,000 | 200,000 | Maximum Sale Price | 250,000 | 1,425,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 93.7 | 158.0 | Median Ratio | 99.4 | 50.6 |
| Lower Median Confidence Interval | 91.1 | 96.9 | Lower Median Confidence Interval | 86.0 | 31.3 |
| Upper Median Confidence Interval | 97.8 | 390.7 | Upper Median Confidence Interval | 103.0 | 101.4 |
| Broadened Median Ratio | 93.7 | 165.3 | Broadened Median Ratio | 98.3 | 56.1 |
| Coefficient of Dispersion (COD) | 20.7 | 54.5 | Coefficient of Dispersion (COD) | 18.2 | 36.7 |
| Lower COD Confidence Interval | 18.2 | 33.6 | Lower COD Confidence Interval | 13.3 | 9.9 |
| Upper COD Confidence Interval | 23.7 | 122.0 | Upper COD Confidence Interval | 24.8 | 58.0 |
| Value Weighted COD | 17.5 | 38.4 | Value Weighted COD | 19.2 | 38.4 |
| Coefficient of Concentration @10% | 31.9 | 37.5 | Coefficient of Concentration @10% | 35.9 | 50.0 |
| Coefficient of Concentration @15% | 45.7 | 37.5 | Coefficient of Concentration @15% | 53.8 | 50.0 |
| Coefficient of Concentration @20% | 51.6 | 37.5 | Coefficient of Concentration @20% | 64.1 | 50.0 |
| Coefficient of Concentration @50% | 83.5 | 62.5 | Coefficient of Concentration @50% | 89.7 | 75.0 |
| Coefficient of Concentration @100% | 91.0 | 75.0 | Coefficient of Concentration @100% | 100.0 | 75.0 |
| Coefficient of Interquartile Deviation | 19.1 | 74.3 | Coefficient of Interquartile Deviation | 14.4 | 54.8 |
| Median Percent Deviation | 18.9 | 35.5 | Median Percent Deviation | 13.5 | 20.2 |
| Lower Quartile (25 th Percentile) | 77.6 | 110.4 | Lower Quartile (25 th Percentile) | 81.8 | 35.3 |
| Upper Quartile (75 th Percentile) | 113.4 | 345.3 | Upper Quartile (75 th Percentile) | 110.4 | 90.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.43 | 0.78 | Relative Skewness | -0.15 | 0.83 |
| Relative Kurtosis | 3.38 | 2.09 | Relative Kurtosis | 2.75 | 2.16 |
| Arithmetic Mean Ratio | 91.6 | 204.1 | Arithmetic Mean Ratio | 94.5 | 58.9 |
| Weighted Mean Ratio | 90.8 | 123.4 | Weighted Mean Ratio | 86.7 | 32.0 |
| Geometric Mean Ratio | 88.2 | 174.2 | Geometric Mean Ratio | 91.2 | 53.3 |
| Harmonic Mean Ratio | 84.6 | 149.7 | Harmonic Mean Ratio | 87.7 | 48.7 |
| Standard Deviation | 24.9 | 124.5 | Standard Deviation | 23.9 | 31.6 |
| Coefficient of Variation (COV) | 27.2 | 61.0 | Coefficient of Variation (COV) | 25.3 | 53.7 |
| Price-Related Differential (PRD) | 1.01 | 1.65 | Price-Related Differential (PRD) | 1.09 | 1.84 |
| Lower PRD Confidence Interval | 0.98 | 1.23 | Lower PRD Confidence Interval | 1.03 | 1.14 |
| Upper PRD Confidence interval | 1.04 | 2.43 | Upper PRD Confidence interval | 1.18 | 2.25 |
| Coef. of Price-Related Bias (PRB) | -0.20 | -0.44 | Coef. of Price-Related Bias (PRB) | -0.06 | 0.00 |
| Lower PRB Confidence Interval | -0.28 | -0.87 | Lower PRB Confidence Interval | -0.12 | 0.00 |
| Upper PRB Confidence Interval | -0.12 | -0.01 | Upper PRB Confidence Interval | 0.00 | 0.00 |
| Average Sale Price | 81,504 | 211,938 | Average Sale Price | 73,421 | 48,600 |
| Average Appraised Value | 73,999 | 81,939 | Average Appraised Value | 63,619 | 29,774 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 013 : CLARK | | | 014 : CLAY | | |
|--|-------------|-----------|--|-------------|-----------|
| S-3 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 22 | 5 | Original Number of Sales | 87 | 6 |
| Trimmed Outliers | 1 | 0 | Trimmed Outliers | 13 | 0 |
| Number of Ratios: Outliers Removed | 21 | 5 | Number of Ratios: Outliers Removed | 74 | 6 |
| Minimum Ratio | 49.1 | 14.4 | Minimum Ratio | 16.4 | 67.0 |
| Maximum Ratio | 230.6 | 118.2 | Maximum Ratio | 352.5 | 156.3 |
| Minimum Sale Price | 4,500 | 10,000 | Minimum Sale Price | 5,000 | 1,500 |
| Maximum Sale Price | 205,000 | 95,000 | Maximum Sale Price | 350,000 | 60,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 92.1 | 58.7 | Median Ratio | 97.0 | 109.1 |
| Lower Median Confidence Interval | 68.4 | 16.7 | Lower Median Confidence Interval | 91.8 | 70.8 |
| Upper Median Confidence Interval | 100.7 | 115.4 | Upper Median Confidence Interval | 99.1 | 141.8 |
| Broadened Median Ratio | 90.0 | 62.4 | Broadened Median Ratio | 96.8 | 106.4 |
| Coefficient of Dispersion (COD) | 27.2 | 56.2 | Coefficient of Dispersion (COD) | 12.2 | 22.3 |
| Lower COD Confidence Interval | 18.0 | 17.5 | Lower COD Confidence Interval | 10.2 | 10.6 |
| Upper COD Confidence Interval | 40.9 | 123.3 | Upper COD Confidence Interval | 15.2 | 39.9 |
| Value Weighted COD | 18.8 | 38.6 | Value Weighted COD | 11.7 | 18.0 |
| Coefficient of Concentration @10% | 31.8 | 20.0 | Coefficient of Concentration @10% | 47.1 | 33.3 |
| Coefficient of Concentration @15% | 36.4 | 20.0 | Coefficient of Concentration @15% | 58.6 | 33.3 |
| Coefficient of Concentration @20% | 36.4 | 20.0 | Coefficient of Concentration @20% | 71.3 | 50.0 |
| Coefficient of Concentration @50% | 86.4 | 40.0 | Coefficient of Concentration @50% | 86.2 | 100.0 |
| Coefficient of Concentration @100% | 95.5 | 80.0 | Coefficient of Concentration @100% | 94.3 | 100.0 |
| Coefficient of Interquartile Deviation | 28.4 | 70.2 | Coefficient of Interquartile Deviation | 11.2 | 28.4 |
| Median Percent Deviation | 26.9 | 61.5 | Median Percent Deviation | 11.0 | 24.2 |
| Lower Quartile (25 th Percentile) | 64.4 | 24.0 | Lower Quartile (25 th Percentile) | 84.5 | 72.7 |
| Upper Quartile (75 th Percentile) | 116.8 | 106.5 | Upper Quartile (75 th Percentile) | 106.2 | 134.6 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | 1.11 | 0.14 | Relative Skewness | -0.52 | 0.16 |
| Relative Kurtosis | 3.95 | 1.54 | Relative Kurtosis | 2.97 | 1.92 |
| Arithmetic Mean Ratio | 91.9 | 64.0 | Arithmetic Mean Ratio | 92.2 | 107.2 |
| Weighted Mean Ratio | 84.4 | 71.0 | Weighted Mean Ratio | 90.1 | 112.5 |
| Geometric Mean Ratio | 86.8 | 50.2 | Geometric Mean Ratio | 90.9 | 102.8 |
| Harmonic Mean Ratio | 82.4 | 37.0 | Harmonic Mean Ratio | 89.5 | 98.5 |
| Standard Deviation | 33.3 | 42.7 | Standard Deviation | 14.6 | 33.2 |
| Coefficient of Variation (COV) | 36.3 | 66.8 | Coefficient of Variation (COV) | 15.9 | 31.0 |
| Price-Related Differential (PRD) | 1.09 | 0.90 | Price-Related Differential (PRD) | 1.02 | 0.95 |
| Lower PRD Confidence Interval | 0.99 | 0.66 | Lower PRD Confidence Interval | 1.00 | 0.87 |
| Upper PRD Confidence interval | 1.27 | 1.12 | Upper PRD Confidence interval | 1.05 | 1.08 |
| Coef. of Price-Related Bias (PRB) | -0.16 | 0.29 | Coef. of Price-Related Bias (PRB) | -0.22 | 0.02 |
| Lower PRB Confidence Interval | -0.31 | -0.33 | Lower PRB Confidence Interval | -0.33 | -0.20 |
| Upper PRB Confidence Interval | -0.01 | 0.92 | Upper PRB Confidence Interval | -0.12 | 0.23 |
| Average Sale Price | 66,795 | 106,700 | Average Sale Price | 120,693 | 144,955 |
| Average Appraised Value | 56,364 | 96,066 | Average Appraised Value | 108,692 | 110,967 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 015 : CLOUD | | | 016 : COFFEY | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 113 | 6 | Original Number of Sales | 86 | 6 |
| Trimmed Outliers | 9 | 0 | Trimmed Outliers | 16 | 0 |
| Number of Ratios: Outliers Removed | 104 | 6 | Number of Ratios: Outliers Removed | 70 | 6 |
| Minimum Ratio | 50.0 | 33.3 | Minimum Ratio | 29.1 | 44.7 |
| Maximum Ratio | 7440.0 | 147.1 | Maximum Ratio | 509.0 | 149.4 |
| Minimum Sale Price | 500 | 9,000 | Minimum Sale Price | 5,500 | 42,500 |
| Maximum Sale Price | 298,000 | 48,000 | Maximum Sale Price | 380,000 | 130,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 96.0 | 91.2 | Median Ratio | 97.7 | 55.0 |
| Lower Median Confidence Interval | 93.3 | 44.1 | Lower Median Confidence Interval | 95.4 | 47.0 |
| Upper Median Confidence Interval | 102.3 | 129.1 | Upper Median Confidence Interval | 100.8 | 137.0 |
| Broadened Median Ratio | 96.1 | 88.5 | Broadened Median Ratio | 97.8 | 65.6 |
| Coefficient of Dispersion (COD) | 15.4 | 32.9 | Coefficient of Dispersion (COD) | 14.9 | 56.0 |
| Lower COD Confidence Interval | 13.2 | 14.1 | Lower COD Confidence Interval | 11.7 | 5.3 |
| Upper COD Confidence Interval | 18.3 | 74.9 | Upper COD Confidence Interval | 19.0 | 66.4 |
| Value Weighted COD | 14.2 | 28.9 | Value Weighted COD | 10.3 | 67.7 |
| Coefficient of Concentration @10% | 42.5 | 33.3 | Coefficient of Concentration @10% | 34.9 | 33.3 |
| Coefficient of Concentration @15% | 57.5 | 33.3 | Coefficient of Concentration @15% | 53.5 | 50.0 |
| Coefficient of Concentration @20% | 66.4 | 33.3 | Coefficient of Concentration @20% | 61.6 | 66.7 |
| Coefficient of Concentration @50% | 91.2 | 66.7 | Coefficient of Concentration @50% | 79.1 | 66.7 |
| Coefficient of Concentration @100% | 96.5 | 100.0 | Coefficient of Concentration @100% | 90.7 | 66.7 |
| Coefficient of Interquartile Deviation | 12.4 | 38.7 | Coefficient of Interquartile Deviation | 13.5 | 75.2 |
| Median Percent Deviation | 12.4 | 30.8 | Median Percent Deviation | 13.7 | 14.4 |
| Lower Quartile (25 th Percentile) | 86.8 | 49.5 | Lower Quartile (25 th Percentile) | 85.9 | 48.2 |
| Upper Quartile (75 th Percentile) | 110.6 | 120.1 | Upper Quartile (75 th Percentile) | 112.2 | 130.9 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectW |
| Relative Skewness | 0.30 | 0.05 | Relative Skewness | -0.19 | 0.77 |
| Relative Kurtosis | 3.21 | 2.03 | Relative Kurtosis | 3.69 | 1.76 |
| Arithmetic Mean Ratio | 96.9 | 88.1 | Arithmetic Mean Ratio | 94.1 | 79.7 |
| Weighted Mean Ratio | 94.6 | 88.1 | Weighted Mean Ratio | 95.6 | 86.5 |
| Geometric Mean Ratio | 95.0 | 79.3 | Geometric Mean Ratio | 91.7 | 70.6 |
| Harmonic Mean Ratio | 93.0 | 69.7 | Harmonic Mean Ratio | 89.0 | 64.0 |
| Standard Deviation | 19.2 | 40.5 | Standard Deviation | 20.3 | 45.3 |
| Coefficient of Variation (COV) | 19.8 | 45.9 | Coefficient of Variation (COV) | 21.6 | 56.9 |
| Price-Related Differential (PRD) | 1.02 | 1.00 | Price-Related Differential (PRD) | 0.98 | 0.92 |
| Lower PRD Confidence Interval | 1.00 | 0.87 | Lower PRD Confidence Interval | 0.95 | 0.82 |
| Upper PRD Confidence interval | 1.05 | 1.14 | Upper PRD Confidence interval | 1.02 | 1.08 |
| Coef. of Price-Related Bias (PRB) | -0.77 | 0.12 | Coef. of Price-Related Bias (PRB) | -0.09 | 0.73 |
| Lower PRB Confidence Interval | -1.88 | -0.52 | Lower PRB Confidence Interval | -0.21 | -0.11 |
| Upper PRB Confidence Interval | 0.35 | 0.75 | Upper PRB Confidence Interval | 0.03 | 1.57 |
| Average Sale Price | 76,347 | 65,500 | Average Sale Price | 105,927 | 33,313 |
| Average Appraised Value | 72,189 | 70,510 | Average Appraised Value | 101,237 | 20,823 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 017 : COMANCHE | | | 018 : COWLEY | | |
|--|-------------|------------|--|-------------|-----------|
| | | <i>S-4</i> | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 19 | 7 | Original Number of Sales | 260 | 7 |
| Trimmed Outliers | 2 | 0 | Trimmed Outliers | 31 | 0 |
| Number of Ratios: Outliers Removed | 17 | 7 | Number of Ratios: Outliers Removed | 229 | 7 |
| Minimum Ratio | 56.0 | 24.0 | Minimum Ratio | | 49.6 |
| Maximum Ratio | 460.0 | 100.4 | Maximum Ratio | 1706.0 | 182.7 |
| Minimum Sale Price | 1,500 | 10,000 | Minimum Sale Price | 1,000 | 62,500 |
| Maximum Sale Price | 89,000 | 140,000 | Maximum Sale Price | 619,000 | 200,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 96.9 | 69.5 | Median Ratio | 98.2 | 93.1 |
| Lower Median Confidence Interval | 74.9 | 37.4 | Lower Median Confidence Interval | 95.1 | 56.5 |
| Upper Median Confidence Interval | 108.0 | 84.6 | Upper Median Confidence Interval | 102.8 | 127.5 |
| Broadened Median Ratio | 91.5 | 65.9 | Broadened Median Ratio | 98.2 | 99.6 |
| Coefficient of Dispersion (COD) | 24.0 | 29.7 | Coefficient of Dispersion (COD) | 14.5 | 36.5 |
| Lower COD Confidence Interval | 18.4 | 14.6 | Lower COD Confidence Interval | 13.1 | 22.6 |
| Upper COD Confidence Interval | 37.2 | 77.4 | Upper COD Confidence Interval | 16.3 | 99.2 |
| Value Weighted COD | 17.9 | 40.0 | Value Weighted COD | 12.5 | 37.9 |
| Coefficient of Concentration @10% | 15.8 | 28.6 | Coefficient of Concentration @10% | 39.6 | 28.6 |
| Coefficient of Concentration @15% | 36.8 | 28.6 | Coefficient of Concentration @15% | 57.3 | 28.6 |
| Coefficient of Concentration @20% | 47.4 | 28.6 | Coefficient of Concentration @20% | 66.9 | 28.6 |
| Coefficient of Concentration @50% | 89.5 | 85.7 | Coefficient of Concentration @50% | 87.7 | 85.7 |
| Coefficient of Concentration @100% | 89.5 | 100.0 | Coefficient of Concentration @100% | 96.2 | 100.0 |
| Coefficient of Interquartile Deviation | 22.3 | 34.0 | Coefficient of Interquartile Deviation | 13.1 | 38.1 |
| Median Percent Deviation | 22.6 | 22.6 | Median Percent Deviation | 12.6 | 37.0 |
| Lower Quartile (25 th Percentile) | 68.0 | 37.4 | Lower Quartile (25 th Percentile) | 86.3 | 56.5 |
| Upper Quartile (75 th Percentile) | 111.2 | 84.6 | Upper Quartile (75 th Percentile) | 111.9 | 127.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.44 | -0.17 | Relative Skewness | 0.05 | 0.56 |
| Relative Kurtosis | 2.41 | 1.88 | Relative Kurtosis | 3.38 | 2.40 |
| Arithmetic Mean Ratio | 88.1 | 63.5 | Arithmetic Mean Ratio | 97.4 | 102.2 |
| Weighted Mean Ratio | 82.9 | 47.6 | Weighted Mean Ratio | 95.8 | 94.4 |
| Geometric Mean Ratio | 85.1 | 57.7 | Geometric Mean Ratio | 95.7 | 93.5 |
| Harmonic Mean Ratio | 82.2 | 51.3 | Harmonic Mean Ratio | 93.8 | 85.5 |
| Standard Deviation | 23.9 | 26.8 | Standard Deviation | 18.0 | 45.9 |
| Coefficient of Variation (COV) | 27.2 | 42.2 | Coefficient of Variation (COV) | 18.5 | 44.9 |
| Price-Related Differential (PRD) | 1.06 | 1.33 | Price-Related Differential (PRD) | 1.02 | 1.08 |
| Lower PRD Confidence Interval | 1.00 | 1.14 | Lower PRD Confidence Interval | 1.00 | 0.99 |
| Upper PRD Confidence interval | 1.17 | 1.75 | Upper PRD Confidence interval | 1.03 | 1.24 |
| Coef. of Price-Related Bias (PRB) | -0.51 | -0.14 | Coef. of Price-Related Bias (PRB) | -0.21 | 0.14 |
| Lower PRB Confidence Interval | -0.83 | -0.43 | Lower PRB Confidence Interval | -0.32 | -0.86 |
| Upper PRB Confidence Interval | -0.19 | 0.15 | Upper PRB Confidence Interval | -0.10 | 1.13 |
| Average Sale Price | 45,441 | 277,050 | Average Sale Price | 106,361 | 190,811 |
| Average Appraised Value | 37,675 | 173,264 | Average Appraised Value | 101,917 | 152,964 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 019 : CRAWFORD | | | 020 : DECATUR | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-6 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 347 | 20 | Original Number of Sales | 30 | 9 |
| Trimmed Outliers | 35 | 0 | Trimmed Outliers | 1 | 0 |
| Number of Ratios: Outliers Removed | 312 | 20 | Number of Ratios: Outliers Removed | 29 | 9 |
| Minimum Ratio | 21.8 | 51.5 | Minimum Ratio | 47.8 | 50.7 |
| Maximum Ratio | 1985.0 | 149.7 | Maximum Ratio | 226.5 | 169.9 |
| Minimum Sale Price | 1,000 | 9,500 | Minimum Sale Price | 10,200 | 15,000 |
| Maximum Sale Price | 2,200,000 | 588,408 | Maximum Sale Price | 176,000 | 105,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 93.2 | 97.0 | Median Ratio | 100.6 | 78.9 |
| Lower Median Confidence Interval | 91.6 | 84.0 | Lower Median Confidence Interval | 83.3 | 55.2 |
| Upper Median Confidence Interval | 94.6 | 102.9 | Upper Median Confidence Interval | 116.9 | 135.0 |
| Broadened Median Ratio | 93.3 | 96.2 | Broadened Median Ratio | 100.9 | 82.6 |
| Coefficient of Dispersion (COD) | 14.4 | 17.4 | Coefficient of Dispersion (COD) | 26.4 | 39.7 |
| Lower COD Confidence Interval | 13.0 | 11.1 | Lower COD Confidence Interval | 20.1 | 27.3 |
| Upper COD Confidence Interval | 15.9 | 26.9 | Upper COD Confidence Interval | 35.9 | 78.3 |
| Value Weighted COD | 12.5 | 18.7 | Value Weighted COD | 24.8 | 36.3 |
| Coefficient of Concentration @10% | 43.5 | 55.0 | Coefficient of Concentration @10% | 16.7 | 22.2 |
| Coefficient of Concentration @15% | 56.5 | 60.0 | Coefficient of Concentration @15% | 26.7 | 22.2 |
| Coefficient of Concentration @20% | 66.6 | 65.0 | Coefficient of Concentration @20% | 43.3 | 22.2 |
| Coefficient of Concentration @50% | 88.5 | 95.0 | Coefficient of Concentration @50% | 80.0 | 66.7 |
| Coefficient of Concentration @100% | 95.4 | 100.0 | Coefficient of Concentration @100% | 96.7 | 88.9 |
| Coefficient of Interquartile Deviation | 12.9 | 15.7 | Coefficient of Interquartile Deviation | 24.9 | 43.6 |
| Median Percent Deviation | 12.0 | 8.4 | Median Percent Deviation | 24.2 | 30.1 |
| Lower Quartile (25 th Percentile) | 83.2 | 74.0 | Lower Quartile (25 th Percentile) | 76.2 | 58.2 |
| Upper Quartile (75 th Percentile) | 107.3 | 104.3 | Upper Quartile (75 th Percentile) | 126.3 | 127.0 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.32 | 0.45 | Relative Skewness | 0.50 | 0.72 |
| Relative Kurtosis | 3.49 | 3.43 | Relative Kurtosis | 2.36 | 2.30 |
| Arithmetic Mean Ratio | 92.9 | 93.5 | Arithmetic Mean Ratio | 103.4 | 93.2 |
| Weighted Mean Ratio | 89.8 | 85.5 | Weighted Mean Ratio | 84.9 | 81.3 |
| Geometric Mean Ratio | 91.2 | 90.8 | Geometric Mean Ratio | 98.5 | 86.0 |
| Harmonic Mean Ratio | 89.4 | 88.0 | Harmonic Mean Ratio | 93.7 | 79.8 |
| Standard Deviation | 17.8 | 23.2 | Standard Deviation | 32.9 | 40.7 |
| Coefficient of Variation (COV) | 19.1 | 24.8 | Coefficient of Variation (COV) | 31.8 | 43.7 |
| Price-Related Differential (PRD) | 1.03 | 1.09 | Price-Related Differential (PRD) | 1.22 | 1.15 |
| Lower PRD Confidence Interval | 1.02 | 1.00 | Lower PRD Confidence Interval | 1.14 | 1.03 |
| Upper PRD Confidence interval | 1.05 | 1.26 | Upper PRD Confidence interval | 1.34 | 1.39 |
| Coef. of Price-Related Bias (PRB) | -0.19 | -0.09 | Coef. of Price-Related Bias (PRB) | -0.22 | -0.13 |
| Lower PRB Confidence Interval | -0.29 | -0.16 | Lower PRB Confidence Interval | -0.33 | -0.67 |
| Upper PRB Confidence Interval | -0.09 | -0.01 | Upper PRB Confidence Interval | -0.11 | 0.42 |
| Average Sale Price | 99,227 | 44,071 | Average Sale Price | 63,543 | 181,750 |
| Average Appraised Value | 89,106 | 31,570 | Average Appraised Value | 53,960 | 164,945 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 021 : DICKINSON | | | 022 : DONIPHAN | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 194 | 9 | Original Number of Sales | 59 | 7 |
| Trimmed Outliers | 11 | 1 | Trimmed Outliers | 4 | 0 |
| Number of Ratios: Outliers Removed | 183 | 8 | Number of Ratios: Outliers Removed | 55 | 7 |
| Minimum Ratio | 40.2 | 64.8 | Minimum Ratio | 11.3 | 42.4 |
| Maximum Ratio | 3622.0 | 438.0 | Maximum Ratio | 219.1 | 104.6 |
| Minimum Sale Price | 500 | 5,000 | Minimum Sale Price | 8,000 | 12,500 |
| Maximum Sale Price | 368,000 | 1,225,000 | Maximum Sale Price | 325,000 | 822,420 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 96.3 | 107.1 | Median Ratio | 90.4 | 85.0 |
| Lower Median Confidence Interval | 92.1 | 85.3 | Lower Median Confidence Interval | 82.8 | 44.6 |
| Upper Median Confidence Interval | 99.0 | 263.6 | Upper Median Confidence Interval | 96.0 | 91.1 |
| Broadened Median Ratio | 96.3 | 107.1 | Broadened Median Ratio | 90.9 | 79.9 |
| Coefficient of Dispersion (COD) | 17.7 | 30.8 | Coefficient of Dispersion (COD) | 21.8 | 22.3 |
| Lower COD Confidence Interval | 15.8 | 10.1 | Lower COD Confidence Interval | 17.2 | 9.4 |
| Upper COD Confidence Interval | 20.1 | 76.3 | Upper COD Confidence Interval | 27.9 | 50.6 |
| Value Weighted COD | 15.5 | 25.9 | Value Weighted COD | 17.5 | 42.6 |
| Coefficient of Concentration @10% | 38.1 | 33.3 | Coefficient of Concentration @10% | 33.9 | 42.9 |
| Coefficient of Concentration @15% | 47.9 | 33.3 | Coefficient of Concentration @15% | 47.5 | 42.9 |
| Coefficient of Concentration @20% | 60.3 | 55.6 | Coefficient of Concentration @20% | 55.9 | 42.9 |
| Coefficient of Concentration @50% | 91.8 | 77.8 | Coefficient of Concentration @50% | 84.7 | 85.7 |
| Coefficient of Concentration @100% | 94.8 | 77.8 | Coefficient of Concentration @100% | 94.9 | 100.0 |
| Coefficient of Interquartile Deviation | 16.1 | 50.9 | Coefficient of Interquartile Deviation | 17.0 | 27.4 |
| Median Percent Deviation | 15.5 | 19.8 | Median Percent Deviation | 16.2 | 23.0 |
| Lower Quartile (25 th Percentile) | 82.3 | 86.9 | Lower Quartile (25 th Percentile) | 74.2 | 44.6 |
| Upper Quartile (75 th Percentile) | 113.4 | 195.9 | Upper Quartile (75 th Percentile) | 105.0 | 91.1 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | AcceptK | AcceptW |
| Relative Skewness | 0.37 | 1.84 | Relative Skewness | -0.01 | -0.32 |
| Relative Kurtosis | 3.09 | 5.13 | Relative Kurtosis | 2.72 | 1.61 |
| Arithmetic Mean Ratio | 96.7 | 119.0 | Arithmetic Mean Ratio | 88.5 | 74.6 |
| Weighted Mean Ratio | 95.3 | 82.4 | Weighted Mean Ratio | 88.7 | 51.2 |
| Geometric Mean Ratio | 94.2 | 109.3 | Geometric Mean Ratio | 84.3 | 70.8 |
| Harmonic Mean Ratio | 91.7 | 102.5 | Harmonic Mean Ratio | 79.7 | 66.8 |
| Standard Deviation | 21.8 | 61.4 | Standard Deviation | 25.9 | 24.2 |
| Coefficient of Variation (COV) | 22.6 | 51.6 | Coefficient of Variation (COV) | 29.3 | 32.5 |
| Price-Related Differential (PRD) | 1.01 | 1.44 | Price-Related Differential (PRD) | 1.00 | 1.46 |
| Lower PRD Confidence Interval | 1.00 | 1.13 | Lower PRD Confidence Interval | 0.95 | 1.07 |
| Upper PRD Confidence interval | 1.03 | 2.18 | Upper PRD Confidence interval | 1.04 | 1.71 |
| Coef. of Price-Related Bias (PRB) | -0.78 | -0.33 | Coef. of Price-Related Bias (PRB) | -0.03 | -0.10 |
| Lower PRB Confidence Interval | -1.11 | -0.68 | Lower PRB Confidence Interval | -0.13 | -0.25 |
| Upper PRB Confidence Interval | -0.45 | 0.01 | Upper PRB Confidence Interval | 0.07 | 0.04 |
| Average Sale Price | 120,169 | 64,447 | Average Sale Price | 106,144 | 1,276,268 |
| Average Appraised Value | 114,507 | 90,279 | Average Appraised Value | 94,147 | 1,041,219 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 023 : DOUGLAS | | | 024 : EDWARDS | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-3 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 238 | 28 | Original Number of Sales | 22 | 4 |
| Trimmed Outliers | 20 | 0 | Trimmed Outliers | 1 | 0 |
| Number of Ratios: Outliers Removed | 218 | 28 | Number of Ratios: Outliers Removed | 21 | 4 |
| Minimum Ratio | 37.1 | 49.0 | Minimum Ratio | 38.1 | 22.1 |
| Maximum Ratio | 331.0 | 149.5 | Maximum Ratio | 306.7 | 91.2 |
| Minimum Sale Price | 30,000 | 70,000 | Minimum Sale Price | 1,500 | 30,000 |
| Maximum Sale Price | 950,000 | 4,275,000 | Maximum Sale Price | 130,000 | 51,751 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 93.9 | 86.4 | Median Ratio | 102.0 | 44.1 |
| Lower Median Confidence Interval | 92.7 | 74.5 | Lower Median Confidence Interval | 85.7 | 22.8 |
| Upper Median Confidence Interval | 95.6 | 97.7 | Upper Median Confidence Interval | 112.8 | 89.2 |
| Broadened Median Ratio | 93.8 | 86.5 | Broadened Median Ratio | 102.2 | 48.3 |
| Coefficient of Dispersion (COD) | 8.2 | 24.0 | Coefficient of Dispersion (COD) | 27.4 | 48.1 |
| Lower COD Confidence Interval | 7.4 | 18.5 | Lower COD Confidence Interval | 17.4 | 10.9 |
| Upper COD Confidence Interval | 9.1 | 32.4 | Upper COD Confidence Interval | 41.9 | 66.7 |
| Value Weighted COD | 8.1 | 24.3 | Value Weighted COD | 21.9 | 51.2 |
| Coefficient of Concentration @10% | 63.4 | 25.0 | Coefficient of Concentration @10% | 36.4 | 0.0 |
| Coefficient of Concentration @15% | 77.3 | 42.9 | Coefficient of Concentration @15% | 40.9 | 0.0 |
| Coefficient of Concentration @20% | 85.3 | 46.4 | Coefficient of Concentration @20% | 40.9 | 50.0 |
| Coefficient of Concentration @50% | 95.8 | 96.4 | Coefficient of Concentration @50% | 77.3 | 75.0 |
| Coefficient of Concentration @100% | 98.7 | 100.0 | Coefficient of Concentration @100% | 95.5 | 75.0 |
| Coefficient of Interquartile Deviation | 7.5 | 24.2 | Coefficient of Interquartile Deviation | 23.5 | 63.2 |
| Median Percent Deviation | 7.5 | 22.8 | Median Percent Deviation | 22.5 | 33.9 |
| Lower Quartile (25 th Percentile) | 86.4 | 67.8 | Lower Quartile (25 th Percentile) | 79.2 | 25.7 |
| Upper Quartile (75 th Percentile) | 100.5 | 109.6 | Upper Quartile (75 th Percentile) | 127.2 | 81.4 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.11 | 0.45 | Relative Skewness | 0.80 | 0.62 |
| Relative Kurtosis | 2.89 | 2.43 | Relative Kurtosis | 3.31 | 1.94 |
| Arithmetic Mean Ratio | 93.1 | 89.4 | Arithmetic Mean Ratio | 104.9 | 50.4 |
| Weighted Mean Ratio | 93.4 | 90.1 | Weighted Mean Ratio | 98.3 | 54.1 |
| Geometric Mean Ratio | 92.6 | 85.8 | Geometric Mean Ratio | 97.9 | 44.2 |
| Harmonic Mean Ratio | 92.0 | 82.3 | Harmonic Mean Ratio | 90.9 | 38.8 |
| Standard Deviation | 9.7 | 26.0 | Standard Deviation | 39.9 | 29.8 |
| Coefficient of Variation (COV) | 10.5 | 29.1 | Coefficient of Variation (COV) | 38.0 | 59.2 |
| Price-Related Differential (PRD) | 1.00 | 0.99 | Price-Related Differential (PRD) | 1.07 | 0.93 |
| Lower PRD Confidence Interval | 0.99 | 0.92 | Lower PRD Confidence Interval | 0.97 | 0.87 |
| Upper PRD Confidence interval | 1.00 | 1.09 | Upper PRD Confidence interval | 1.21 | 1.00 |
| Coef. of Price-Related Bias (PRB) | -0.07 | 0.03 | Coef. of Price-Related Bias (PRB) | -0.17 | 0.00 |
| Lower PRB Confidence Interval | -0.11 | -0.06 | Lower PRB Confidence Interval | -0.33 | 0.00 |
| Upper PRB Confidence Interval | -0.02 | 0.11 | Upper PRB Confidence Interval | -0.01 | 0.00 |
| Average Sale Price | 233,315 | 26,107 | Average Sale Price | 45,214 | 17,500 |
| Average Appraised Value | 218,002 | 24,391 | Average Appraised Value | 44,430 | 16,941 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 025 : ELK | | | 026 : ELLIS | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-5 | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 15 | 6 | Original Number of Sales | 68 | 12 |
| Trimmed Outliers | 2 | 0 | Trimmed Outliers | 4 | 0 |
| Number of Ratios: Outliers Removed | 13 | 6 | Number of Ratios: Outliers Removed | 64 | 12 |
| Minimum Ratio | 50.0 | 73.1 | Minimum Ratio | 75.9 | 29.2 |
| Maximum Ratio | 235.3 | 108.3 | Maximum Ratio | 226.0 | 137.0 |
| Minimum Sale Price | 2,900 | 7,000 | Minimum Sale Price | 5,000 | 18,500 |
| Maximum Sale Price | 121,500 | 45,000 | Maximum Sale Price | 790,000 | 1,100,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 106.5 | 87.2 | Median Ratio | 100.4 | 80.3 |
| Lower Median Confidence Interval | 79.6 | 73.6 | Lower Median Confidence Interval | 98.2 | 62.2 |
| Upper Median Confidence Interval | 130.7 | 102.4 | Upper Median Confidence Interval | 105.0 | 107.2 |
| Broadened Median Ratio | 103.5 | 86.6 | Broadened Median Ratio | 100.5 | 81.1 |
| Coefficient of Dispersion (COD) | 25.8 | 13.0 | Coefficient of Dispersion (COD) | 8.0 | 29.8 |
| Lower COD Confidence Interval | 18.4 | 8.3 | Lower COD Confidence Interval | 6.5 | 20.5 |
| Upper COD Confidence Interval | 47.8 | 19.1 | Upper COD Confidence Interval | 10.0 | 52.4 |
| Value Weighted COD | 29.2 | 13.7 | Value Weighted COD | 8.0 | 33.3 |
| Coefficient of Concentration @10% | 20.0 | 33.3 | Coefficient of Concentration @10% | 63.2 | 16.7 |
| Coefficient of Concentration @15% | 33.3 | 50.0 | Coefficient of Concentration @15% | 80.9 | 25.0 |
| Coefficient of Concentration @20% | 40.0 | 83.3 | Coefficient of Concentration @20% | 86.8 | 41.7 |
| Coefficient of Concentration @50% | 73.3 | 100.0 | Coefficient of Concentration @50% | 97.1 | 83.3 |
| Coefficient of Concentration @100% | 86.7 | 100.0 | Coefficient of Concentration @100% | 98.5 | 100.0 |
| Coefficient of Interquartile Deviation | 24.0 | 14.7 | Coefficient of Interquartile Deviation | 7.6 | 31.1 |
| Median Percent Deviation | 24.1 | 12.9 | Median Percent Deviation | 5.8 | 26.5 |
| Lower Quartile (25 th Percentile) | 79.6 | 73.8 | Lower Quartile (25 th Percentile) | 95.7 | 60.3 |
| Upper Quartile (75 th Percentile) | 130.7 | 99.5 | Upper Quartile (75 th Percentile) | 110.9 | 110.3 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | AcceptW | Normality Test | RejectK | AcceptK |
| Relative Skewness | -0.06 | 0.30 | Relative Skewness | 0.37 | 0.05 |
| Relative Kurtosis | 2.04 | 1.76 | Relative Kurtosis | 3.79 | 2.36 |
| Arithmetic Mean Ratio | 95.5 | 87.7 | Arithmetic Mean Ratio | 101.7 | 83.3 |
| Weighted Mean Ratio | 81.1 | 84.2 | Weighted Mean Ratio | 99.9 | 89.8 |
| Geometric Mean Ratio | 91.0 | 86.9 | Geometric Mean Ratio | 101.2 | 77.5 |
| Harmonic Mean Ratio | 86.2 | 86.0 | Harmonic Mean Ratio | 100.7 | 70.9 |
| Standard Deviation | 29.2 | 13.8 | Standard Deviation | 10.6 | 30.2 |
| Coefficient of Variation (COV) | 30.6 | 15.7 | Coefficient of Variation (COV) | 10.4 | 36.3 |
| Price-Related Differential (PRD) | 1.18 | 1.04 | Price-Related Differential (PRD) | 1.02 | 0.93 |
| Lower PRD Confidence Interval | 1.01 | 0.97 | Lower PRD Confidence Interval | 1.00 | 0.82 |
| Upper PRD Confidence interval | 1.44 | 1.12 | Upper PRD Confidence interval | 1.04 | 1.07 |
| Coef. of Price-Related Bias (PRB) | -0.20 | -0.01 | Coef. of Price-Related Bias (PRB) | -0.15 | 0.07 |
| Lower PRB Confidence Interval | -0.42 | -0.23 | Lower PRB Confidence Interval | -0.19 | -0.08 |
| Upper PRB Confidence Interval | 0.01 | 0.21 | Upper PRB Confidence Interval | -0.10 | 0.22 |
| Average Sale Price | 31,915 | 386,342 | Average Sale Price | 175,804 | 106,286 |
| Average Appraised Value | 25,888 | 376,914 | Average Appraised Value | 175,632 | 70,654 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 027 : ELLSWORTH | | | 028 : FINNEY | | |
|--|-------------|-----------|--|-------------|-----------|
| S-5 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 59 | 8 | Original Number of Sales | 259 | 15 |
| Trimmed Outliers | 5 | 0 | Trimmed Outliers | 22 | 0 |
| Number of Ratios: Outliers Removed | 54 | 8 | Number of Ratios: Outliers Removed | 237 | 15 |
| Minimum Ratio | 21.0 | 99.1 | Minimum Ratio | 5.4 | 58.6 |
| Maximum Ratio | 466.2 | 164.5 | Maximum Ratio | 700.3 | 105.9 |
| Minimum Sale Price | 4,850 | 30,000 | Minimum Sale Price | 15,000 | 45,000 |
| Maximum Sale Price | 237,500 | 300,000 | Maximum Sale Price | 900,000 | 475,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 100.2 | 121.7 | Median Ratio | 92.8 | 86.1 |
| Lower Median Confidence Interval | 97.7 | 101.4 | Lower Median Confidence Interval | 91.2 | 81.4 |
| Upper Median Confidence Interval | 104.1 | 143.8 | Upper Median Confidence Interval | 94.7 | 102.1 |
| Broadened Median Ratio | 100.0 | 121.5 | Broadened Median Ratio | 92.9 | 88.4 |
| Coefficient of Dispersion (COD) | 14.5 | 15.4 | Coefficient of Dispersion (COD) | 8.5 | 13.1 |
| Lower COD Confidence Interval | 11.5 | 10.7 | Lower COD Confidence Interval | 7.7 | 9.5 |
| Upper COD Confidence Interval | 18.3 | 24.0 | Upper COD Confidence Interval | 9.5 | 20.8 |
| Value Weighted COD | 13.6 | 11.5 | Value Weighted COD | 8.6 | 8.9 |
| Coefficient of Concentration @10% | 44.1 | 25.0 | Coefficient of Concentration @10% | 59.5 | 46.7 |
| Coefficient of Concentration @15% | 54.2 | 50.0 | Coefficient of Concentration @15% | 74.5 | 46.7 |
| Coefficient of Concentration @20% | 67.8 | 87.5 | Coefficient of Concentration @20% | 84.9 | 66.7 |
| Coefficient of Concentration @50% | 91.5 | 100.0 | Coefficient of Concentration @50% | 96.9 | 100.0 |
| Coefficient of Concentration @100% | 94.9 | 100.0 | Coefficient of Concentration @100% | 99.2 | 100.0 |
| Coefficient of Interquartile Deviation | 12.7 | 16.4 | Coefficient of Interquartile Deviation | 7.8 | 12.0 |
| Median Percent Deviation | 12.7 | 15.2 | Median Percent Deviation | 7.9 | 16.2 |
| Lower Quartile (25 th Percentile) | 87.1 | 102.3 | Lower Quartile (25 th Percentile) | 86.1 | 81.4 |
| Upper Quartile (75 th Percentile) | 112.5 | 142.2 | Upper Quartile (75 th Percentile) | 100.5 | 102.1 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | RejectK | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.07 | 0.48 | Relative Skewness | -0.31 | -0.52 |
| Relative Kurtosis | 2.84 | 2.04 | Relative Kurtosis | 2.98 | 2.36 |
| Arithmetic Mean Ratio | 99.6 | 124.3 | Arithmetic Mean Ratio | 92.2 | 88.1 |
| Weighted Mean Ratio | 96.6 | 119.7 | Weighted Mean Ratio | 92.9 | 88.1 |
| Geometric Mean Ratio | 97.6 | 122.5 | Geometric Mean Ratio | 91.6 | 86.9 |
| Harmonic Mean Ratio | 95.6 | 120.7 | Harmonic Mean Ratio | 91.0 | 85.6 |
| Standard Deviation | 19.4 | 23.2 | Standard Deviation | 10.1 | 14.4 |
| Coefficient of Variation (COV) | 19.4 | 18.7 | Coefficient of Variation (COV) | 11.0 | 16.4 |
| Price-Related Differential (PRD) | 1.03 | 1.04 | Price-Related Differential (PRD) | 0.99 | 1.00 |
| Lower PRD Confidence Interval | 1.00 | 0.99 | Lower PRD Confidence Interval | 0.99 | 0.96 |
| Upper PRD Confidence interval | 1.06 | 1.09 | Upper PRD Confidence interval | 1.00 | 1.04 |
| Coef. of Price-Related Bias (PRB) | -0.31 | -0.04 | Coef. of Price-Related Bias (PRB) | 0.00 | 0.02 |
| Lower PRB Confidence Interval | -0.45 | -0.22 | Lower PRB Confidence Interval | -0.07 | -0.07 |
| Upper PRB Confidence Interval | -0.17 | 0.14 | Upper PRB Confidence Interval | 0.08 | 0.11 |
| Average Sale Price | 92,137 | 274,409 | Average Sale Price | 181,157 | 279,105 |
| Average Appraised Value | 89,022 | 220,734 | Average Appraised Value | 168,361 | 260,705 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 029 : FORD | | | 030 : FRANKLIN | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 306 | 19 | Original Number of Sales | 297 | 15 |
| Trimmed Outliers | 33 | 1 | Trimmed Outliers | 35 | 2 |
| Number of Ratios: Outliers Removed | 273 | 18 | Number of Ratios: Outliers Removed | 262 | 13 |
| Minimum Ratio | 7.5 | 30.9 | Minimum Ratio | 5.2 | 48.3 |
| Maximum Ratio | 441.2 | 246.4 | Maximum Ratio | 341.0 | 189.0 |
| Minimum Sale Price | 3,000 | 52,000 | Minimum Sale Price | 4,300 | 15,000 |
| Maximum Sale Price | 425,000 | 1,289,163 | Maximum Sale Price | 388,500 | 1,350,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 91.9 | 83.8 | Median Ratio | 90.7 | 94.3 |
| Lower Median Confidence Interval | 90.2 | 56.9 | Lower Median Confidence Interval | 86.9 | 80.2 |
| Upper Median Confidence Interval | 94.1 | 91.5 | Upper Median Confidence Interval | 92.3 | 100.8 |
| Broadened Median Ratio | 91.9 | 77.5 | Broadened Median Ratio | 90.5 | 94.8 |
| Coefficient of Dispersion (COD) | 11.6 | 33.6 | Coefficient of Dispersion (COD) | 13.9 | 9.9 |
| Lower COD Confidence Interval | 10.5 | 22.0 | Lower COD Confidence Interval | 12.6 | 6.0 |
| Upper COD Confidence Interval | 12.8 | 54.4 | Upper COD Confidence Interval | 15.4 | 16.3 |
| Value Weighted COD | 10.6 | 39.6 | Value Weighted COD | 13.0 | 10.0 |
| Coefficient of Concentration @10% | 48.4 | 26.3 | Coefficient of Concentration @10% | 41.1 | 53.3 |
| Coefficient of Concentration @15% | 63.7 | 26.3 | Coefficient of Concentration @15% | 57.9 | 60.0 |
| Coefficient of Concentration @20% | 72.2 | 36.8 | Coefficient of Concentration @20% | 67.3 | 73.3 |
| Coefficient of Concentration @50% | 92.5 | 68.4 | Coefficient of Concentration @50% | 88.2 | 93.3 |
| Coefficient of Concentration @100% | 98.0 | 94.7 | Coefficient of Concentration @100% | 95.3 | 93.3 |
| Coefficient of Interquartile Deviation | 10.6 | 30.0 | Coefficient of Interquartile Deviation | 12.0 | 10.9 |
| Median Percent Deviation | 10.4 | 28.3 | Median Percent Deviation | 12.2 | 6.9 |
| Lower Quartile (25 th Percentile) | 82.0 | 47.4 | Lower Quartile (25 th Percentile) | 78.6 | 80.2 |
| Upper Quartile (75 th Percentile) | 101.4 | 97.7 | Upper Quartile (75 th Percentile) | 100.4 | 100.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptK |
| Relative Skewness | 0.15 | 0.45 | Relative Skewness | 0.02 | 0.02 |
| Relative Kurtosis | 3.14 | 2.54 | Relative Kurtosis | 3.12 | 2.92 |
| Arithmetic Mean Ratio | 91.0 | 75.2 | Arithmetic Mean Ratio | 87.6 | 93.6 |
| Weighted Mean Ratio | 90.8 | 63.5 | Weighted Mean Ratio | 85.9 | 87.9 |
| Geometric Mean Ratio | 90.0 | 68.6 | Geometric Mean Ratio | 86.1 | 92.7 |
| Harmonic Mean Ratio | 89.0 | 62.1 | Harmonic Mean Ratio | 84.7 | 91.8 |
| Standard Deviation | 13.5 | 31.8 | Standard Deviation | 15.4 | 13.1 |
| Coefficient of Variation (COV) | 14.8 | 42.3 | Coefficient of Variation (COV) | 17.6 | 14.0 |
| Price-Related Differential (PRD) | 1.00 | 1.18 | Price-Related Differential (PRD) | 1.02 | 1.06 |
| Lower PRD Confidence Interval | 1.00 | 0.97 | Lower PRD Confidence Interval | 1.01 | 1.00 |
| Upper PRD Confidence interval | 1.01 | 1.53 | Upper PRD Confidence interval | 1.03 | 1.22 |
| Coef. of Price-Related Bias (PRB) | -0.09 | 0.15 | Coef. of Price-Related Bias (PRB) | -0.22 | -0.05 |
| Lower PRB Confidence Interval | -0.14 | -0.07 | Lower PRB Confidence Interval | -0.26 | -0.16 |
| Upper PRB Confidence Interval | -0.05 | 0.37 | Upper PRB Confidence Interval | -0.17 | 0.06 |
| Average Sale Price | 139,750 | 159,300 | Average Sale Price | 145,605 | 87,200 |
| Average Appraised Value | 126,894 | 192,268 | Average Appraised Value | 125,012 | 77,604 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 031 : GEARY | | | 032 : GOVE | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 311 | 14 | Original Number of Sales | 33 | 5 |
| Trimmed Outliers | 41 | 2 | Trimmed Outliers | 2 | 0 |
| Number of Ratios: Outliers Removed | 270 | 12 | Number of Ratios: Outliers Removed | 31 | 5 |
| Minimum Ratio | 13.3 | 27.5 | Minimum Ratio | 32.1 | 19.9 |
| Maximum Ratio | 635.8 | 456.7 | Maximum Ratio | 501.4 | 181.8 |
| Minimum Sale Price | 10,000 | 2,400 | Minimum Sale Price | 5,000 | 12,500 |
| Maximum Sale Price | 425,000 | 4,725,000 | Maximum Sale Price | 150,000 | 1,022,858 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 99.0 | 108.4 | Median Ratio | 88.0 | 94.1 |
| Lower Median Confidence Interval | 98.1 | 80.8 | Lower Median Confidence Interval | 83.1 | 24.7 |
| Upper Median Confidence Interval | 100.6 | 134.2 | Upper Median Confidence Interval | 96.6 | 176.4 |
| Broadened Median Ratio | 98.9 | 106.5 | Broadened Median Ratio | 88.2 | 96.8 |
| Coefficient of Dispersion (COD) | 9.3 | 29.3 | Coefficient of Dispersion (COD) | 18.8 | 50.8 |
| Lower COD Confidence Interval | 8.4 | 17.7 | Lower COD Confidence Interval | 13.6 | 16.4 |
| Upper COD Confidence Interval | 10.3 | 58.6 | Upper COD Confidence Interval | 27.0 | 114.2 |
| Value Weighted COD | 8.5 | 24.9 | Value Weighted COD | 14.9 | 38.4 |
| Coefficient of Concentration @10% | 54.3 | 21.4 | Coefficient of Concentration @10% | 36.4 | 20.0 |
| Coefficient of Concentration @15% | 68.5 | 35.7 | Coefficient of Concentration @15% | 45.5 | 20.0 |
| Coefficient of Concentration @20% | 77.5 | 35.7 | Coefficient of Concentration @20% | 51.5 | 20.0 |
| Coefficient of Concentration @50% | 89.1 | 64.3 | Coefficient of Concentration @50% | 84.8 | 60.0 |
| Coefficient of Concentration @100% | 95.5 | 85.7 | Coefficient of Concentration @100% | 93.9 | 100.0 |
| Coefficient of Interquartile Deviation | 9.2 | 29.4 | Coefficient of Interquartile Deviation | 18.8 | 63.5 |
| Median Percent Deviation | 8.7 | 24.6 | Median Percent Deviation | 17.1 | 45.3 |
| Lower Quartile (25 th Percentile) | 92.2 | 78.9 | Lower Quartile (25 th Percentile) | 72.3 | 39.7 |
| Upper Quartile (75 th Percentile) | 110.3 | 142.5 | Upper Quartile (75 th Percentile) | 105.4 | 159.3 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.05 | -0.12 | Relative Skewness | -0.78 | 0.10 |
| Relative Kurtosis | 3.35 | 2.67 | Relative Kurtosis | 3.22 | 1.75 |
| Arithmetic Mean Ratio | 99.0 | 96.8 | Arithmetic Mean Ratio | 84.8 | 98.4 |
| Weighted Mean Ratio | 97.8 | 86.4 | Weighted Mean Ratio | 88.1 | 62.9 |
| Geometric Mean Ratio | 98.3 | 88.0 | Geometric Mean Ratio | 81.1 | 77.4 |
| Harmonic Mean Ratio | 97.5 | 76.7 | Harmonic Mean Ratio | 76.2 | 55.3 |
| Standard Deviation | 12.1 | 38.5 | Standard Deviation | 22.4 | 63.5 |
| Coefficient of Variation (COV) | 12.2 | 39.8 | Coefficient of Variation (COV) | 26.4 | 64.5 |
| Price-Related Differential (PRD) | 1.01 | 1.12 | Price-Related Differential (PRD) | 0.96 | 1.57 |
| Lower PRD Confidence Interval | 1.01 | 0.95 | Lower PRD Confidence Interval | 0.90 | 0.98 |
| Upper PRD Confidence interval | 1.02 | 1.83 | Upper PRD Confidence interval | 1.02 | 1.99 |
| Coef. of Price-Related Bias (PRB) | -0.36 | -0.30 | Coef. of Price-Related Bias (PRB) | -0.08 | -0.10 |
| Lower PRB Confidence Interval | -0.44 | -0.52 | Lower PRB Confidence Interval | -0.33 | -0.61 |
| Upper PRB Confidence Interval | -0.29 | -0.08 | Upper PRB Confidence Interval | 0.17 | 0.42 |
| Average Sale Price | 163,560 | 51,160 | Average Sale Price | 63,655 | 33,167 |
| Average Appraised Value | 159,994 | 32,552 | Average Appraised Value | 56,105 | 28,305 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 033 : GRAHAM | | | 034 : GRANT | | |
|--|-------------|-----------|--|-------------|-----------|
| S-7 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 17 | 8 | Original Number of Sales | 50 | 4 |
| Trimmed Outliers | 2 | 1 | Trimmed Outliers | 4 | 0 |
| Number of Ratios: Outliers Removed | 15 | 7 | Number of Ratios: Outliers Removed | 46 | 4 |
| Minimum Ratio | 13.2 | 60.7 | Minimum Ratio | 7.8 | 51.7 |
| Maximum Ratio | 118.8 | 487.3 | Maximum Ratio | 608.4 | 131.0 |
| Minimum Sale Price | 4,000 | 1,500 | Minimum Sale Price | 15,000 | 47,500 |
| Maximum Sale Price | 180,000 | 75,000 | Maximum Sale Price | 375,000 | 2,100,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 93.8 | 97.1 | Median Ratio | 95.3 | 64.7 |
| Lower Median Confidence Interval | 83.0 | 61.0 | Lower Median Confidence Interval | 87.4 | 51.7 |
| Upper Median Confidence Interval | 100.0 | 127.9 | Upper Median Confidence Interval | 100.5 | 128.3 |
| Broadened Median Ratio | 92.6 | 95.8 | Broadened Median Ratio | 94.5 | 73.6 |
| Coefficient of Dispersion (COD) | 10.8 | 18.3 | Coefficient of Dispersion (COD) | 15.9 | 40.1 |
| Lower COD Confidence Interval | 6.9 | 8.9 | Lower COD Confidence Interval | 12.6 | 8.0 |
| Upper COD Confidence Interval | 18.8 | 39.3 | Upper COD Confidence Interval | 20.7 | 42.9 |
| Value Weighted COD | 8.3 | 22.5 | Value Weighted COD | 13.5 | 20.8 |
| Coefficient of Concentration @10% | 52.9 | 37.5 | Coefficient of Concentration @10% | 38.0 | 0.0 |
| Coefficient of Concentration @15% | 64.7 | 50.0 | Coefficient of Concentration @15% | 50.0 | 0.0 |
| Coefficient of Concentration @20% | 70.6 | 50.0 | Coefficient of Concentration @20% | 62.0 | 50.0 |
| Coefficient of Concentration @50% | 94.1 | 87.5 | Coefficient of Concentration @50% | 92.0 | 75.0 |
| Coefficient of Concentration @100% | 100.0 | 87.5 | Coefficient of Concentration @100% | 98.0 | 75.0 |
| Coefficient of Interquartile Deviation | 9.1 | 27.7 | Coefficient of Interquartile Deviation | 13.8 | 50.7 |
| Median Percent Deviation | 7.0 | 21.7 | Median Percent Deviation | 14.0 | 19.5 |
| Lower Quartile (25 th Percentile) | 83.0 | 67.2 | Lower Quartile (25 th Percentile) | 80.2 | 51.9 |
| Upper Quartile (75 th Percentile) | 100.1 | 121.1 | Upper Quartile (75 th Percentile) | 106.5 | 117.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | AcceptK | AcceptW |
| Relative Skewness | -0.53 | 0.09 | Relative Skewness | -0.08 | 0.85 |
| Relative Kurtosis | 3.82 | 2.16 | Relative Kurtosis | 3.05 | 2.03 |
| Arithmetic Mean Ratio | 94.4 | 90.0 | Arithmetic Mean Ratio | 95.7 | 78.0 |
| Weighted Mean Ratio | 94.1 | 86.1 | Weighted Mean Ratio | 95.2 | 55.0 |
| Geometric Mean Ratio | 93.2 | 87.3 | Geometric Mean Ratio | 93.5 | 72.3 |
| Harmonic Mean Ratio | 91.9 | 84.4 | Harmonic Mean Ratio | 91.0 | 67.7 |
| Standard Deviation | 14.7 | 23.7 | Standard Deviation | 20.1 | 37.2 |
| Coefficient of Variation (COV) | 15.6 | 26.4 | Coefficient of Variation (COV) | 21.0 | 47.7 |
| Price-Related Differential (PRD) | 1.00 | 1.05 | Price-Related Differential (PRD) | 1.00 | 1.42 |
| Lower PRD Confidence Interval | 0.96 | 0.92 | Lower PRD Confidence Interval | 0.97 | 0.99 |
| Upper PRD Confidence interval | 1.06 | 1.17 | Upper PRD Confidence interval | 1.04 | 1.69 |
| Coef. of Price-Related Bias (PRB) | 0.05 | -0.73 | Coef. of Price-Related Bias (PRB) | -0.07 | 0.00 |
| Lower PRB Confidence Interval | -0.06 | -1.63 | Lower PRB Confidence Interval | -0.30 | 0.00 |
| Upper PRB Confidence Interval | 0.15 | 0.16 | Upper PRB Confidence Interval | 0.17 | 0.00 |
| Average Sale Price | 64,633 | 268,451 | Average Sale Price | 132,908 | 180,802 |
| Average Appraised Value | 60,802 | 250,000 | Average Appraised Value | 126,534 | 130,548 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 035 : GRAY | | | 036 : GREELEY | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-4 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 45 | 6 | Original Number of Sales | 13 | 5 |
| Trimmed Outliers | 1 | 0 | Trimmed Outliers | 0 | 0 |
| Number of Ratios: Outliers Removed | 44 | 6 | Number of Ratios: Outliers Removed | 13 | 5 |
| Minimum Ratio | 47.2 | 53.9 | Minimum Ratio | 62.8 | 28.6 |
| Maximum Ratio | 159.5 | 177.3 | Maximum Ratio | 114.2 | 145.6 |
| Minimum Sale Price | 7,000 | 20,000 | Minimum Sale Price | 20,000 | 7,500 |
| Maximum Sale Price | 247,000 | 275,000 | Maximum Sale Price | 185,000 | 1,185,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 87.2 | 108.6 | Median Ratio | 85.2 | 93.5 |
| Lower Median Confidence Interval | 82.2 | 63.8 | Lower Median Confidence Interval | 73.2 | 35.4 |
| Upper Median Confidence Interval | 96.3 | 159.8 | Upper Median Confidence Interval | 105.6 | 144.1 |
| Broadened Median Ratio | 87.7 | 108.4 | Broadened Median Ratio | 90.3 | 104.1 |
| Coefficient of Dispersion (COD) | 20.0 | 33.1 | Coefficient of Dispersion (COD) | 16.6 | 35.2 |
| Lower COD Confidence Interval | 16.1 | 17.8 | Lower COD Confidence Interval | 13.1 | 9.7 |
| Upper COD Confidence Interval | 26.2 | 64.1 | Upper COD Confidence Interval | 25.8 | 79.6 |
| Value Weighted COD | 16.6 | 31.2 | Value Weighted COD | 14.4 | 43.7 |
| Coefficient of Concentration @10% | 28.9 | 0.0 | Coefficient of Concentration @10% | 23.1 | 40.0 |
| Coefficient of Concentration @15% | 51.1 | 33.3 | Coefficient of Concentration @15% | 38.5 | 40.0 |
| Coefficient of Concentration @20% | 55.6 | 33.3 | Coefficient of Concentration @20% | 53.8 | 40.0 |
| Coefficient of Concentration @50% | 93.3 | 66.7 | Coefficient of Concentration @50% | 100.0 | 60.0 |
| Coefficient of Concentration @100% | 100.0 | 100.0 | Coefficient of Concentration @100% | 100.0 | 100.0 |
| Coefficient of Interquartile Deviation | 17.6 | 37.9 | Coefficient of Interquartile Deviation | 19.4 | 44.1 |
| Median Percent Deviation | 14.1 | 31.6 | Median Percent Deviation | 15.5 | 42.6 |
| Lower Quartile (25 th Percentile) | 77.6 | 68.7 | Lower Quartile (25 th Percentile) | 72.7 | 57.0 |
| Upper Quartile (75 th Percentile) | 108.4 | 151.0 | Upper Quartile (75 th Percentile) | 105.8 | 139.4 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | AcceptK | AcceptW |
| Relative Skewness | 0.52 | 0.21 | Relative Skewness | -0.07 | -0.48 |
| Relative Kurtosis | 3.25 | 1.86 | Relative Kurtosis | 1.65 | 2.04 |
| Arithmetic Mean Ratio | 90.8 | 110.7 | Arithmetic Mean Ratio | 89.6 | 97.3 |
| Weighted Mean Ratio | 85.8 | 101.9 | Weighted Mean Ratio | 83.8 | 124.2 |
| Geometric Mean Ratio | 88.1 | 102.6 | Geometric Mean Ratio | 88.1 | 85.0 |
| Harmonic Mean Ratio | 85.3 | 94.6 | Harmonic Mean Ratio | 86.6 | 69.7 |
| Standard Deviation | 22.7 | 45.4 | Standard Deviation | 16.6 | 46.1 |
| Coefficient of Variation (COV) | 25.0 | 41.0 | Coefficient of Variation (COV) | 18.6 | 47.4 |
| Price-Related Differential (PRD) | 1.06 | 1.09 | Price-Related Differential (PRD) | 1.07 | 0.78 |
| Lower PRD Confidence Interval | 1.02 | 0.87 | Lower PRD Confidence Interval | 1.02 | 0.64 |
| Upper PRD Confidence interval | 1.12 | 1.35 | Upper PRD Confidence interval | 1.15 | 1.96 |
| Coef. of Price-Related Bias (PRB) | -0.14 | 0.09 | Coef. of Price-Related Bias (PRB) | -0.06 | 0.02 |
| Lower PRB Confidence Interval | -0.22 | -0.31 | Lower PRB Confidence Interval | -0.17 | -0.28 |
| Upper PRB Confidence Interval | -0.06 | 0.49 | Upper PRB Confidence Interval | 0.04 | 0.32 |
| Average Sale Price | 111,073 | 257,300 | Average Sale Price | 88,077 | 16,260 |
| Average Appraised Value | 95,331 | 335,826 | Average Appraised Value | 73,805 | 16,464 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 037 : GREENWOOD | | | 038 : HAMILTON | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-2 | | | S-6 | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 63 | 4 | Original Number of Sales | 25 | 8 |
| Trimmed Outliers | 9 | 0 | Trimmed Outliers | 1 | 1 |
| Number of Ratios: Outliers Removed | 54 | 4 | Number of Ratios: Outliers Removed | 24 | 7 |
| Minimum Ratio | 40.3 | 68.7 | Minimum Ratio | 61.1 | 58.8 |
| Maximum Ratio | 1410.0 | 118.2 | Maximum Ratio | 202.2 | 443.6 |
| Minimum Sale Price | 200 | 5,500 | Minimum Sale Price | 17,000 | 4,500 |
| Maximum Sale Price | 188,000 | 140,400 | Maximum Sale Price | 180,000 | 275,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 98.7 | 81.7 | Median Ratio | 100.7 | 96.9 |
| Lower Median Confidence Interval | 93.3 | 68.9 | Lower Median Confidence Interval | 96.6 | 75.9 |
| Upper Median Confidence Interval | 107.6 | 116.8 | Upper Median Confidence Interval | 108.7 | 203.0 |
| Broadened Median Ratio | 98.6 | 85.6 | Broadened Median Ratio | 100.4 | 98.0 |
| Coefficient of Dispersion (COD) | 26.0 | 20.7 | Coefficient of Dispersion (COD) | 12.3 | 30.0 |
| Lower COD Confidence Interval | 19.4 | 5.0 | Lower COD Confidence Interval | 8.3 | 11.8 |
| Upper COD Confidence Interval | 34.3 | 23.9 | Upper COD Confidence Interval | 17.9 | 69.4 |
| Value Weighted COD | 18.0 | 16.3 | Value Weighted COD | 12.6 | 20.3 |
| Coefficient of Concentration @10% | 36.5 | 0.0 | Coefficient of Concentration @10% | 48.0 | 25.0 |
| Coefficient of Concentration @15% | 42.9 | 50.0 | Coefficient of Concentration @15% | 56.0 | 37.5 |
| Coefficient of Concentration @20% | 50.8 | 75.0 | Coefficient of Concentration @20% | 72.0 | 37.5 |
| Coefficient of Concentration @50% | 71.4 | 100.0 | Coefficient of Concentration @50% | 96.0 | 75.0 |
| Coefficient of Concentration @100% | 84.1 | 100.0 | Coefficient of Concentration @100% | 96.0 | 75.0 |
| Coefficient of Interquartile Deviation | 38.2 | 25.5 | Coefficient of Interquartile Deviation | 12.0 | 53.5 |
| Median Percent Deviation | 18.4 | 13.5 | Median Percent Deviation | 13.8 | 21.2 |
| Lower Quartile (25 th Percentile) | 83.8 | 69.7 | Lower Quartile (25 th Percentile) | 91.1 | 77.9 |
| Upper Quartile (75 th Percentile) | 159.2 | 111.3 | Upper Quartile (75 th Percentile) | 115.2 | 181.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectW |
| Relative Skewness | 1.08 | 0.63 | Relative Skewness | -0.23 | 1.42 |
| Relative Kurtosis | 3.98 | 1.81 | Relative Kurtosis | 3.05 | 3.91 |
| Arithmetic Mean Ratio | 102.1 | 87.6 | Arithmetic Mean Ratio | 100.1 | 104.6 |
| Weighted Mean Ratio | 93.4 | 72.7 | Weighted Mean Ratio | 97.5 | 97.8 |
| Geometric Mean Ratio | 96.2 | 85.5 | Geometric Mean Ratio | 98.5 | 97.4 |
| Harmonic Mean Ratio | 90.7 | 83.7 | Harmonic Mean Ratio | 96.9 | 91.8 |
| Standard Deviation | 36.9 | 22.6 | Standard Deviation | 17.4 | 47.1 |
| Coefficient of Variation (COV) | 36.1 | 25.8 | Coefficient of Variation (COV) | 17.4 | 45.0 |
| Price-Related Differential (PRD) | 1.09 | 1.21 | Price-Related Differential (PRD) | 1.03 | 1.07 |
| Lower PRD Confidence Interval | 1.03 | 1.01 | Lower PRD Confidence Interval | 1.00 | 0.94 |
| Upper PRD Confidence interval | 1.18 | 1.30 | Upper PRD Confidence interval | 1.06 | 1.23 |
| Coef. of Price-Related Bias (PRB) | -0.67 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.18 | -0.53 |
| Lower PRB Confidence Interval | -0.94 | 0.00 | Lower PRB Confidence Interval | -0.32 | -1.39 |
| Upper PRB Confidence Interval | -0.41 | 0.00 | Upper PRB Confidence Interval | -0.04 | 0.32 |
| Average Sale Price | 47,317 | 81,083 | Average Sale Price | 99,208 | 104,944 |
| Average Appraised Value | 44,194 | 83,345 | Average Appraised Value | 96,748 | 112,832 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 039 : HARPER | | | 040 : HARVEY | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 50 | 8 | Original Number of Sales | 154 | 11 |
| Trimmed Outliers | 8 | 0 | Trimmed Outliers | 20 | 1 |
| Number of Ratios: Outliers Removed | 42 | 8 | Number of Ratios: Outliers Removed | 134 | 10 |
| Minimum Ratio | 20.1 | 11.6 | Minimum Ratio | 40.0 | 46.8 |
| Maximum Ratio | 399.9 | 333.0 | Maximum Ratio | 699.7 | 164.4 |
| Minimum Sale Price | 4,000 | 12,500 | Minimum Sale Price | 10,000 | 33,000 |
| Maximum Sale Price | 195,000 | 400,000 | Maximum Sale Price | 384,000 | 340,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.2 | 107.0 | Median Ratio | 92.6 | 80.6 |
| Lower Median Confidence Interval | 94.7 | 35.6 | Lower Median Confidence Interval | 89.6 | 57.7 |
| Upper Median Confidence Interval | 111.0 | 325.5 | Upper Median Confidence Interval | 94.3 | 100.0 |
| Broadened Median Ratio | 101.6 | 106.3 | Broadened Median Ratio | 92.6 | 81.2 |
| Coefficient of Dispersion (COD) | 18.8 | 87.4 | Coefficient of Dispersion (COD) | 10.7 | 22.1 |
| Lower COD Confidence Interval | 14.1 | 40.3 | Lower COD Confidence Interval | 9.3 | 15.6 |
| Upper COD Confidence Interval | 25.6 | 234.2 | Upper COD Confidence Interval | 12.4 | 35.4 |
| Value Weighted COD | 17.3 | 62.1 | Value Weighted COD | 9.9 | 23.8 |
| Coefficient of Concentration @10% | 36.0 | 0.0 | Coefficient of Concentration @10% | 51.9 | 9.1 |
| Coefficient of Concentration @15% | 44.0 | 25.0 | Coefficient of Concentration @15% | 63.6 | 36.4 |
| Coefficient of Concentration @20% | 56.0 | 25.0 | Coefficient of Concentration @20% | 73.4 | 36.4 |
| Coefficient of Concentration @50% | 78.0 | 37.5 | Coefficient of Concentration @50% | 91.6 | 90.9 |
| Coefficient of Concentration @100% | 88.0 | 75.0 | Coefficient of Concentration @100% | 96.1 | 90.9 |
| Coefficient of Interquartile Deviation | 19.7 | 114.3 | Coefficient of Interquartile Deviation | 9.7 | 26.3 |
| Median Percent Deviation | 18.4 | 59.8 | Median Percent Deviation | 9.5 | 24.0 |
| Lower Quartile (25 th Percentile) | 81.9 | 39.3 | Lower Quartile (25 th Percentile) | 83.8 | 57.7 |
| Upper Quartile (75 th Percentile) | 121.8 | 283.9 | Upper Quartile (75 th Percentile) | 101.8 | 100.0 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | Reject4 |
| Relative Skewness | 0.18 | 0.71 | Relative Skewness | 0.24 | -0.17 |
| Relative Kurtosis | 4.35 | 1.98 | Relative Kurtosis | 3.28 | 1.59 |
| Arithmetic Mean Ratio | 97.8 | 141.2 | Arithmetic Mean Ratio | 91.2 | 77.1 |
| Weighted Mean Ratio | 94.1 | 81.4 | Weighted Mean Ratio | 90.6 | 81.1 |
| Geometric Mean Ratio | 94.0 | 89.3 | Geometric Mean Ratio | 90.3 | 74.6 |
| Harmonic Mean Ratio | 89.5 | 48.4 | Harmonic Mean Ratio | 89.4 | 72.1 |
| Standard Deviation | 25.9 | 125.4 | Standard Deviation | 12.7 | 19.9 |
| Coefficient of Variation (COV) | 26.5 | 88.8 | Coefficient of Variation (COV) | 14.0 | 25.8 |
| Price-Related Differential (PRD) | 1.04 | 1.74 | Price-Related Differential (PRD) | 1.01 | 0.95 |
| Lower PRD Confidence Interval | 1.00 | 1.15 | Lower PRD Confidence Interval | 0.99 | 0.88 |
| Upper PRD Confidence interval | 1.09 | 3.99 | Upper PRD Confidence interval | 1.02 | 1.06 |
| Coef. of Price-Related Bias (PRB) | -0.22 | -0.12 | Coef. of Price-Related Bias (PRB) | -0.21 | 0.14 |
| Lower PRB Confidence Interval | -0.38 | -0.93 | Lower PRB Confidence Interval | -0.32 | -0.12 |
| Upper PRB Confidence Interval | -0.06 | 0.70 | Upper PRB Confidence Interval | -0.09 | 0.39 |
| Average Sale Price | 64,425 | 257,936 | Average Sale Price | 135,538 | 69,375 |
| Average Appraised Value | 60,623 | 250,071 | Average Appraised Value | 122,778 | 64,473 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 041 : HASKELL | | | 042 : HODGEMAN | | |
|--|-------------|-----------|--|-------------|-----------|
| | <i>S-4</i> | | | <i>S-6</i> | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 33 | 5 | Original Number of Sales | 17 | 6 |
| Trimmed Outliers | 4 | 0 | Trimmed Outliers | 1 | 0 |
| Number of Ratios: Outliers Removed | 29 | 5 | Number of Ratios: Outliers Removed | 16 | 6 |
| Minimum Ratio | 1.5 | 51.8 | Minimum Ratio | 49.0 | 49.9 |
| Maximum Ratio | 190.0 | 146.3 | Maximum Ratio | 117.2 | 87.4 |
| Minimum Sale Price | 14,000 | 18,500 | Minimum Sale Price | 10,000 | 8,000 |
| Maximum Sale Price | 200,000 | 100,000 | Maximum Sale Price | 229,000 | 88,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 87.0 | 84.2 | Median Ratio | 96.0 | 72.3 |
| Lower Median Confidence Interval | 81.7 | 55.2 | Lower Median Confidence Interval | 91.7 | 52.1 |
| Upper Median Confidence Interval | 96.0 | 145.5 | Upper Median Confidence Interval | 103.5 | 83.2 |
| Broadened Median Ratio | 87.9 | 101.1 | Broadened Median Ratio | 95.9 | 70.4 |
| Coefficient of Dispersion (COD) | 19.2 | 36.7 | Coefficient of Dispersion (COD) | 10.7 | 15.5 |
| Lower COD Confidence Interval | 13.9 | 9.2 | Lower COD Confidence Interval | 7.4 | 7.5 |
| Upper COD Confidence Interval | 27.5 | 45.7 | Upper COD Confidence Interval | 16.6 | 26.5 |
| Value Weighted COD | 17.6 | 34.2 | Value Weighted COD | 12.8 | 23.0 |
| Coefficient of Concentration @10% | 33.3 | 40.0 | Coefficient of Concentration @10% | 58.8 | 50.0 |
| Coefficient of Concentration @15% | 45.5 | 40.0 | Coefficient of Concentration @15% | 58.8 | 50.0 |
| Coefficient of Concentration @20% | 48.5 | 40.0 | Coefficient of Concentration @20% | 76.5 | 50.0 |
| Coefficient of Concentration @50% | 81.8 | 60.0 | Coefficient of Concentration @50% | 100.0 | 100.0 |
| Coefficient of Concentration @100% | 93.9 | 100.0 | Coefficient of Concentration @100% | 100.0 | 100.0 |
| Coefficient of Interquartile Deviation | 21.3 | 45.8 | Coefficient of Interquartile Deviation | 9.4 | 19.3 |
| Median Percent Deviation | 21.1 | 38.4 | Median Percent Deviation | 7.9 | 15.1 |
| Lower Quartile (25 th Percentile) | 69.1 | 65.8 | Lower Quartile (25 th Percentile) | 86.0 | 53.2 |
| Upper Quartile (75 th Percentile) | 106.1 | 142.9 | Upper Quartile (75 th Percentile) | 104.0 | 81.1 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.47 | 0.13 | Relative Skewness | -0.39 | -0.24 |
| Relative Kurtosis | 2.74 | 1.41 | Relative Kurtosis | 2.53 | 1.67 |
| Arithmetic Mean Ratio | 84.0 | 100.3 | Arithmetic Mean Ratio | 96.4 | 69.2 |
| Weighted Mean Ratio | 86.4 | 86.2 | Weighted Mean Ratio | 94.2 | 61.0 |
| Geometric Mean Ratio | 80.6 | 93.4 | Geometric Mean Ratio | 95.5 | 67.9 |
| Harmonic Mean Ratio | 76.5 | 86.6 | Harmonic Mean Ratio | 94.4 | 66.5 |
| Standard Deviation | 22.3 | 40.9 | Standard Deviation | 13.7 | 14.5 |
| Coefficient of Variation (COV) | 26.5 | 40.8 | Coefficient of Variation (COV) | 14.2 | 21.0 |
| Price-Related Differential (PRD) | 0.97 | 1.16 | Price-Related Differential (PRD) | 1.02 | 1.13 |
| Lower PRD Confidence Interval | 0.92 | 0.99 | Lower PRD Confidence Interval | 0.98 | 0.99 |
| Upper PRD Confidence interval | 1.01 | 1.35 | Upper PRD Confidence interval | 1.09 | 1.20 |
| Coef. of Price-Related Bias (PRB) | 0.19 | -0.32 | Coef. of Price-Related Bias (PRB) | -0.02 | -0.10 |
| Lower PRB Confidence Interval | 0.05 | -1.48 | Lower PRB Confidence Interval | -0.11 | -0.32 |
| Upper PRB Confidence Interval | 0.34 | 0.83 | Upper PRB Confidence Interval | 0.07 | 0.13 |
| Average Sale Price | 114,786 | 28,000 | Average Sale Price | 80,181 | 89,773 |
| Average Appraised Value | 99,198 | 16,601 | Average Appraised Value | 75,529 | 68,668 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 043 : JACKSON | | | 044 : JEFFERSON | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 100 | 4 | Original Number of Sales | 199 | 9 |
| Trimmed Outliers | 13 | 0 | Trimmed Outliers | 13 | 0 |
| Number of Ratios: Outliers Removed | 87 | 4 | Number of Ratios: Outliers Removed | 186 | 9 |
| Minimum Ratio | 40.7 | 16.9 | Minimum Ratio | 9.6 | 75.3 |
| Maximum Ratio | 227.0 | 112.7 | Maximum Ratio | 15028.0 | 240.8 |
| Minimum Sale Price | 5,000 | 27,500 | Minimum Sale Price | 1,000 | 15,000 |
| Maximum Sale Price | 320,000 | 325,000 | Maximum Sale Price | 400,000 | 190,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 93.5 | 60.3 | Median Ratio | 89.1 | 108.8 |
| Lower Median Confidence Interval | 89.9 | 18.8 | Lower Median Confidence Interval | 85.8 | 75.7 |
| Upper Median Confidence Interval | 95.8 | 110.4 | Upper Median Confidence Interval | 92.2 | 157.2 |
| Broadened Median Ratio | 93.2 | 61.8 | Broadened Median Ratio | 89.0 | 106.7 |
| Coefficient of Dispersion (COD) | 11.7 | 44.1 | Coefficient of Dispersion (COD) | 14.4 | 35.8 |
| Lower COD Confidence Interval | 9.9 | 10.5 | Lower COD Confidence Interval | 12.9 | 21.1 |
| Upper COD Confidence Interval | 14.2 | 87.7 | Upper COD Confidence Interval | 16.2 | 73.5 |
| Value Weighted COD | 10.5 | 24.1 | Value Weighted COD | 13.4 | 20.3 |
| Coefficient of Concentration @10% | 46.0 | 50.0 | Coefficient of Concentration @10% | 41.7 | 11.1 |
| Coefficient of Concentration @15% | 61.0 | 50.0 | Coefficient of Concentration @15% | 59.3 | 22.2 |
| Coefficient of Concentration @20% | 72.0 | 50.0 | Coefficient of Concentration @20% | 71.4 | 22.2 |
| Coefficient of Concentration @50% | 88.0 | 50.0 | Coefficient of Concentration @50% | 93.5 | 88.9 |
| Coefficient of Concentration @100% | 96.0 | 100.0 | Coefficient of Concentration @100% | 97.5 | 88.9 |
| Coefficient of Interquartile Deviation | 11.4 | 61.8 | Coefficient of Interquartile Deviation | 12.4 | 33.8 |
| Median Percent Deviation | 11.4 | 40.3 | Median Percent Deviation | 12.5 | 30.4 |
| Lower Quartile (25 th Percentile) | 81.4 | 26.4 | Lower Quartile (25 th Percentile) | 78.3 | 77.3 |
| Upper Quartile (75 th Percentile) | 102.7 | 100.9 | Upper Quartile (75 th Percentile) | 100.5 | 150.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.14 | 0.19 | Relative Skewness | 0.15 | 1.21 |
| Relative Kurtosis | 3.45 | 1.96 | Relative Kurtosis | 3.02 | 3.58 |
| Arithmetic Mean Ratio | 90.1 | 62.5 | Arithmetic Mean Ratio | 88.3 | 121.4 |
| Weighted Mean Ratio | 88.7 | 53.0 | Weighted Mean Ratio | 86.6 | 106.7 |
| Geometric Mean Ratio | 89.0 | 51.2 | Geometric Mean Ratio | 86.8 | 112.5 |
| Harmonic Mean Ratio | 87.9 | 39.4 | Harmonic Mean Ratio | 85.3 | 105.5 |
| Standard Deviation | 13.9 | 39.4 | Standard Deviation | 15.9 | 54.1 |
| Coefficient of Variation (COV) | 15.4 | 63.1 | Coefficient of Variation (COV) | 18.0 | 44.6 |
| Price-Related Differential (PRD) | 1.02 | 1.18 | Price-Related Differential (PRD) | 1.02 | 1.14 |
| Lower PRD Confidence Interval | 1.00 | 0.86 | Lower PRD Confidence Interval | 1.01 | 0.99 |
| Upper PRD Confidence interval | 1.03 | 1.45 | Upper PRD Confidence interval | 1.03 | 1.37 |
| Coef. of Price-Related Bias (PRB) | -0.10 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.83 | -0.25 |
| Lower PRB Confidence Interval | -0.16 | 0.00 | Lower PRB Confidence Interval | -2.88 | -0.70 |
| Upper PRB Confidence Interval | -0.04 | 0.00 | Upper PRB Confidence Interval | 1.22 | 0.21 |
| Average Sale Price | 120,224 | 87,674 | Average Sale Price | 145,227 | 8,167 |
| Average Appraised Value | 106,597 | 74,264 | Average Appraised Value | 125,743 | 9,917 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 045 : JEWELL | | | 046 : JOHNSON | | |
|--|-------------|-----------|--|-------------|------------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 22 | 4 | Original Number of Sales | 306 | 126 |
| Trimmed Outliers | 0 | 0 | Trimmed Outliers | 17 | 3 |
| Number of Ratios: Outliers Removed | 22 | 4 | Number of Ratios: Outliers Removed | 289 | 123 |
| Minimum Ratio | 50.2 | 66.1 | Minimum Ratio | 39.6 | 13.0 |
| Maximum Ratio | 162.7 | 107.4 | Maximum Ratio | 265.1 | 180.6 |
| Minimum Sale Price | 5,000 | 3,500 | Minimum Sale Price | 86,000 | 62,500 |
| Maximum Sale Price | 159,000 | 35,000 | Maximum Sale Price | 24,125,000 | 44,600,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 90.5 | 84.6 | Median Ratio | 93.5 | 86.8 |
| Lower Median Confidence Interval | 77.7 | 66.3 | Lower Median Confidence Interval | 92.0 | 80.1 |
| Upper Median Confidence Interval | 107.0 | 107.1 | Upper Median Confidence Interval | 94.8 | 91.7 |
| Broadened Median Ratio | 90.0 | 85.3 | Broadened Median Ratio | 93.5 | 86.6 |
| Coefficient of Dispersion (COD) | 25.3 | 21.3 | Coefficient of Dispersion (COD) | 8.9 | 22.1 |
| Lower COD Confidence Interval | 18.4 | 1.9 | Lower COD Confidence Interval | 8.1 | 18.8 |
| Upper COD Confidence Interval | 35.3 | 22.5 | Upper COD Confidence Interval | 9.8 | 26.0 |
| Value Weighted COD | 23.9 | 23.6 | Value Weighted COD | 10.8 | 25.8 |
| Coefficient of Concentration @10% | 27.3 | 0.0 | Coefficient of Concentration @10% | 61.1 | 27.0 |
| Coefficient of Concentration @15% | 40.9 | 0.0 | Coefficient of Concentration @15% | 76.5 | 42.9 |
| Coefficient of Concentration @20% | 59.1 | 50.0 | Coefficient of Concentration @20% | 85.0 | 54.0 |
| Coefficient of Concentration @50% | 86.4 | 100.0 | Coefficient of Concentration @50% | 97.7 | 89.7 |
| Coefficient of Concentration @100% | 100.0 | 100.0 | Coefficient of Concentration @100% | 99.7 | 99.2 |
| Coefficient of Interquartile Deviation | 24.2 | 22.8 | Coefficient of Interquartile Deviation | 7.9 | 19.9 |
| Median Percent Deviation | 18.5 | 20.0 | Median Percent Deviation | 7.3 | 16.7 |
| Lower Quartile (25 th Percentile) | 74.4 | 66.9 | Lower Quartile (25 th Percentile) | 85.2 | 65.4 |
| Upper Quartile (75 th Percentile) | 118.2 | 105.6 | Upper Quartile (75 th Percentile) | 100.0 | 100.0 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptK |
| Relative Skewness | 0.75 | 0.05 | Relative Skewness | -0.05 | -0.01 |
| Relative Kurtosis | 2.72 | 1.10 | Relative Kurtosis | 2.91 | 3.04 |
| Arithmetic Mean Ratio | 97.3 | 85.7 | Arithmetic Mean Ratio | 92.6 | 84.2 |
| Weighted Mean Ratio | 90.4 | 91.5 | Weighted Mean Ratio | 89.1 | 80.5 |
| Geometric Mean Ratio | 93.3 | 83.7 | Geometric Mean Ratio | 92.0 | 80.3 |
| Harmonic Mean Ratio | 89.6 | 81.8 | Harmonic Mean Ratio | 91.4 | 75.5 |
| Standard Deviation | 29.6 | 21.1 | Standard Deviation | 10.5 | 24.2 |
| Coefficient of Variation (COV) | 30.4 | 24.6 | Coefficient of Variation (COV) | 11.4 | 28.7 |
| Price-Related Differential (PRD) | 1.08 | 0.94 | Price-Related Differential (PRD) | 1.04 | 1.05 |
| Lower PRD Confidence Interval | 1.01 | 0.88 | Lower PRD Confidence Interval | 1.00 | 0.95 |
| Upper PRD Confidence interval | 1.17 | 1.12 | Upper PRD Confidence interval | 1.09 | 1.21 |
| Coef. of Price-Related Bias (PRB) | 0.00 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.03 | 0.01 |
| Lower PRB Confidence Interval | -0.14 | 0.00 | Lower PRB Confidence Interval | -0.06 | -0.02 |
| Upper PRB Confidence Interval | 0.14 | 0.00 | Upper PRB Confidence Interval | 0.00 | 0.04 |
| Average Sale Price | 45,001 | 1,751,623 | Average Sale Price | 376,299 | 77,282 |
| Average Appraised Value | 40,675 | 1,396,006 | Average Appraised Value | 335,464 | 87,253 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 047 : KEARNY | | | 048 : KINGMAN | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-3 | | | S-4 | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 20 | 5 | Original Number of Sales | 59 | 6 |
| Trimmed Outliers | 2 | 0 | Trimmed Outliers | 10 | 0 |
| Number of Ratios: Outliers Removed | 18 | 5 | Number of Ratios: Outliers Removed | 49 | 6 |
| Minimum Ratio | 13.6 | 56.2 | Minimum Ratio | 42.7 | 68.3 |
| Maximum Ratio | 387.5 | 89.4 | Maximum Ratio | 862.4 | 141.3 |
| Minimum Sale Price | 6,000 | 55,000 | Minimum Sale Price | 1,700 | 30,000 |
| Maximum Sale Price | 280,000 | 185,000 | Maximum Sale Price | 392,000 | 220,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 81.6 | 71.5 | Median Ratio | 97.5 | 100.4 |
| Lower Median Confidence Interval | 77.7 | 56.3 | Lower Median Confidence Interval | 93.4 | 83.1 |
| Upper Median Confidence Interval | 91.9 | 89.0 | Upper Median Confidence Interval | 101.1 | 130.0 |
| Broadened Median Ratio | 82.3 | 71.5 | Broadened Median Ratio | 97.4 | 103.0 |
| Coefficient of Dispersion (COD) | 16.0 | 17.5 | Coefficient of Dispersion (COD) | 11.1 | 15.7 |
| Lower COD Confidence Interval | 11.3 | 4.9 | Lower COD Confidence Interval | 8.7 | 6.4 |
| Upper COD Confidence Interval | 25.8 | 22.3 | Upper COD Confidence Interval | 14.7 | 35.2 |
| Value Weighted COD | 14.4 | 19.4 | Value Weighted COD | 11.1 | 13.8 |
| Coefficient of Concentration @10% | 35.0 | 20.0 | Coefficient of Concentration @10% | 49.2 | 50.0 |
| Coefficient of Concentration @15% | 55.0 | 20.0 | Coefficient of Concentration @15% | 59.3 | 50.0 |
| Coefficient of Concentration @20% | 65.0 | 20.0 | Coefficient of Concentration @20% | 71.2 | 66.7 |
| Coefficient of Concentration @50% | 85.0 | 100.0 | Coefficient of Concentration @50% | 86.4 | 100.0 |
| Coefficient of Concentration @100% | 95.0 | 100.0 | Coefficient of Concentration @100% | 94.9 | 100.0 |
| Coefficient of Interquartile Deviation | 15.3 | 21.9 | Coefficient of Interquartile Deviation | 11.2 | 16.8 |
| Median Percent Deviation | 13.9 | 20.8 | Median Percent Deviation | 10.5 | 10.3 |
| Lower Quartile (25 th Percentile) | 71.4 | 56.4 | Lower Quartile (25 th Percentile) | 87.3 | 90.5 |
| Upper Quartile (75 th Percentile) | 96.4 | 87.8 | Upper Quartile (75 th Percentile) | 109.2 | 124.3 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.41 | 0.04 | Relative Skewness | -0.38 | 0.08 |
| Relative Kurtosis | 3.44 | 1.27 | Relative Kurtosis | 3.48 | 2.49 |
| Arithmetic Mean Ratio | 83.5 | 72.0 | Arithmetic Mean Ratio | 94.7 | 104.5 |
| Weighted Mean Ratio | 83.4 | 69.7 | Weighted Mean Ratio | 91.4 | 105.2 |
| Geometric Mean Ratio | 81.4 | 70.6 | Geometric Mean Ratio | 93.6 | 102.0 |
| Harmonic Mean Ratio | 79.0 | 69.2 | Harmonic Mean Ratio | 92.4 | 99.5 |
| Standard Deviation | 17.8 | 15.7 | Standard Deviation | 14.3 | 24.2 |
| Coefficient of Variation (COV) | 21.3 | 21.8 | Coefficient of Variation (COV) | 15.1 | 23.2 |
| Price-Related Differential (PRD) | 1.00 | 1.03 | Price-Related Differential (PRD) | 1.04 | 0.99 |
| Lower PRD Confidence Interval | 0.97 | 0.98 | Lower PRD Confidence Interval | 1.01 | 0.92 |
| Upper PRD Confidence interval | 1.04 | 1.10 | Upper PRD Confidence interval | 1.07 | 1.07 |
| Coef. of Price-Related Bias (PRB) | -0.28 | -0.08 | Coef. of Price-Related Bias (PRB) | -0.55 | 0.02 |
| Lower PRB Confidence Interval | -0.63 | -0.65 | Lower PRB Confidence Interval | -0.79 | -0.28 |
| Upper PRB Confidence Interval | 0.08 | 0.49 | Upper PRB Confidence Interval | -0.31 | 0.33 |
| Average Sale Price | 131,333 | 121,020 | Average Sale Price | 99,089 | 399,833 |
| Average Appraised Value | 109,539 | 181,752 | Average Appraised Value | 90,607 | 287,510 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 049 : KIOWA | | | 050 : LABETTE | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-3 | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 9 | 3 | Original Number of Sales | 132 | 10 |
| Trimmed Outliers | 0 | 0 | Trimmed Outliers | 15 | 1 |
| Number of Ratios: Outliers Removed | 9 | 3 | Number of Ratios: Outliers Removed | 117 | 9 |
| Minimum Ratio | 76.2 | 68.3 | Minimum Ratio | 35.0 | 50.4 |
| Maximum Ratio | 134.7 | 90.8 | Maximum Ratio | 1641.7 | 469.2 |
| Minimum Sale Price | 5,500 | 50,000 | Minimum Sale Price | 1,000 | 12,000 |
| Maximum Sale Price | 255,000 | 2,100,000 | Maximum Sale Price | 265,000 | 1,950,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.0 | 88.7 | Median Ratio | 106.3 | 88.9 |
| Lower Median Confidence Interval | 84.3 | 69.7 | Lower Median Confidence Interval | 103.1 | 71.6 |
| Upper Median Confidence Interval | 111.9 | 90.7 | Upper Median Confidence Interval | 110.8 | 131.9 |
| Broadened Median Ratio | 97.5 | 82.6 | Broadened Median Ratio | 106.6 | 89.5 |
| Coefficient of Dispersion (COD) | 12.8 | 8.5 | Coefficient of Dispersion (COD) | 18.2 | 24.8 |
| Lower COD Confidence Interval | 7.2 | 0.8 | Lower COD Confidence Interval | 15.3 | 13.7 |
| Upper COD Confidence Interval | 21.5 | 9.9 | Upper COD Confidence Interval | 21.5 | 59.0 |
| Value Weighted COD | 11.4 | 21.4 | Value Weighted COD | 16.8 | 18.4 |
| Coefficient of Concentration @10% | 33.3 | 66.7 | Coefficient of Concentration @10% | 37.9 | 30.0 |
| Coefficient of Concentration @15% | 55.6 | 66.7 | Coefficient of Concentration @15% | 48.5 | 50.0 |
| Coefficient of Concentration @20% | 77.8 | 66.7 | Coefficient of Concentration @20% | 59.1 | 60.0 |
| Coefficient of Concentration @50% | 100.0 | 100.0 | Coefficient of Concentration @50% | 83.3 | 80.0 |
| Coefficient of Concentration @100% | 100.0 | 100.0 | Coefficient of Concentration @100% | 90.9 | 90.0 |
| Coefficient of Interquartile Deviation | 11.6 | 12.7 | Coefficient of Interquartile Deviation | 17.7 | 25.9 |
| Median Percent Deviation | 10.9 | 2.4 | Median Percent Deviation | 15.5 | 17.2 |
| Lower Quartile (25 th Percentile) | 84.7 | 68.3 | Lower Quartile (25 th Percentile) | 92.1 | 71.4 |
| Upper Quartile (75 th Percentile) | 108.1 | 90.8 | Upper Quartile (75 th Percentile) | 129.7 | 117.4 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.76 | -0.68 | Relative Skewness | 0.59 | 1.25 |
| Relative Kurtosis | 2.99 | 1.50 | Relative Kurtosis | 3.53 | 4.26 |
| Arithmetic Mean Ratio | 98.8 | 82.6 | Arithmetic Mean Ratio | 107.0 | 90.8 |
| Weighted Mean Ratio | 91.7 | 69.9 | Weighted Mean Ratio | 97.9 | 83.3 |
| Geometric Mean Ratio | 97.5 | 81.9 | Geometric Mean Ratio | 103.9 | 86.6 |
| Harmonic Mean Ratio | 96.2 | 81.2 | Harmonic Mean Ratio | 100.7 | 82.8 |
| Standard Deviation | 17.6 | 12.4 | Standard Deviation | 26.1 | 31.7 |
| Coefficient of Variation (COV) | 17.8 | 15.0 | Coefficient of Variation (COV) | 24.4 | 34.9 |
| Price-Related Differential (PRD) | 1.08 | 1.18 | Price-Related Differential (PRD) | 1.09 | 1.09 |
| Lower PRD Confidence Interval | 1.02 | 1.00 | Lower PRD Confidence Interval | 1.06 | 0.90 |
| Upper PRD Confidence interval | 1.23 | 1.18 | Upper PRD Confidence interval | 1.13 | 1.43 |
| Coef. of Price-Related Bias (PRB) | -0.09 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.53 | -0.13 |
| Lower PRB Confidence Interval | -0.15 | 0.00 | Lower PRB Confidence Interval | -0.72 | -0.56 |
| Upper PRB Confidence Interval | -0.04 | 0.00 | Upper PRB Confidence Interval | -0.35 | 0.30 |
| Average Sale Price | 137,856 | 179,708 | Average Sale Price | 74,598 | 61,417 |
| Average Appraised Value | 126,416 | 144,693 | Average Appraised Value | 73,068 | 40,878 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 051 : LANE | | | 052 : LEAVENWORTH | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 14 | 2 | Original Number of Sales | 204 | 17 |
| Trimmed Outliers | 1 | 0 | Trimmed Outliers | 25 | 2 |
| Number of Ratios: Outliers Removed | 13 | 2 | Number of Ratios: Outliers Removed | 179 | 15 |
| Minimum Ratio | 18.8 | 88.5 | Minimum Ratio | 39.9 | 64.0 |
| Maximum Ratio | 984.3 | 105.2 | Maximum Ratio | 226.3 | 188.3 |
| Minimum Sale Price | 700 | 30,000 | Minimum Sale Price | 20,000 | 18,500 |
| Maximum Sale Price | 175,000 | 100,000 | Maximum Sale Price | 630,000 | 1,178,893 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 95.1 | 96.8 | Median Ratio | 94.1 | 92.4 |
| Lower Median Confidence Interval | 87.9 | | Lower Median Confidence Interval | 92.0 | 85.4 |
| Upper Median Confidence Interval | 127.3 | | Upper Median Confidence Interval | 95.6 | 99.6 |
| Broadened Median Ratio | 95.1 | | Broadened Median Ratio | 94.0 | 90.8 |
| Coefficient of Dispersion (COD) | 28.7 | 8.6 | Coefficient of Dispersion (COD) | 7.9 | 11.9 |
| Lower COD Confidence Interval | 14.3 | | Lower COD Confidence Interval | 7.0 | 7.7 |
| Upper COD Confidence Interval | 51.6 | | Upper COD Confidence Interval | 9.0 | 20.1 |
| Value Weighted COD | 12.7 | | Value Weighted COD | 7.7 | 9.7 |
| Coefficient of Concentration @10% | 50.0 | | Coefficient of Concentration @10% | 64.7 | 52.9 |
| Coefficient of Concentration @15% | 57.1 | | Coefficient of Concentration @15% | 73.0 | 58.8 |
| Coefficient of Concentration @20% | 57.1 | | Coefficient of Concentration @20% | 80.4 | 70.6 |
| Coefficient of Concentration @50% | 71.4 | | Coefficient of Concentration @50% | 95.6 | 88.2 |
| Coefficient of Concentration @100% | 92.9 | | Coefficient of Concentration @100% | 99.0 | 94.1 |
| Coefficient of Interquartile Deviation | 26.7 | | Coefficient of Interquartile Deviation | 6.8 | 11.4 |
| Median Percent Deviation | 8.9 | | Median Percent Deviation | 6.9 | 7.7 |
| Lower Quartile (25 th Percentile) | 87.2 | | Lower Quartile (25 th Percentile) | 86.9 | 83.2 |
| Upper Quartile (75 th Percentile) | 138.0 | | Upper Quartile (75 th Percentile) | 99.7 | 104.3 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.33 | | Relative Skewness | -0.16 | 0.50 |
| Relative Kurtosis | 3.28 | | Relative Kurtosis | 3.25 | 3.49 |
| Arithmetic Mean Ratio | 99.8 | | Arithmetic Mean Ratio | 93.0 | 89.6 |
| Weighted Mean Ratio | 92.3 | | Weighted Mean Ratio | 93.6 | 86.7 |
| Geometric Mean Ratio | 89.1 | | Geometric Mean Ratio | 92.5 | 88.4 |
| Harmonic Mean Ratio | 73.4 | | Harmonic Mean Ratio | 92.0 | 87.3 |
| Standard Deviation | 42.4 | | Standard Deviation | 9.8 | 14.9 |
| Coefficient of Variation (COV) | 42.6 | | Coefficient of Variation (COV) | 10.5 | 16.6 |
| Price-Related Differential (PRD) | 1.08 | 0.96 | Price-Related Differential (PRD) | 0.99 | 1.03 |
| Lower PRD Confidence Interval | 0.94 | | Lower PRD Confidence Interval | 0.98 | 0.98 |
| Upper PRD Confidence interval | 1.28 | | Upper PRD Confidence interval | 1.00 | 1.12 |
| Coef. of Price-Related Bias (PRB) | -0.77 | | Coef. of Price-Related Bias (PRB) | -0.01 | -0.01 |
| Lower PRB Confidence Interval | -1.59 | | Lower PRB Confidence Interval | -0.05 | -0.13 |
| Upper PRB Confidence Interval | 0.05 | | Upper PRB Confidence Interval | 0.02 | 0.12 |
| Average Sale Price | 51,692 | 255,200 | Average Sale Price | 198,223 | 103,750 |
| Average Appraised Value | 47,686 | 204,983 | Average Appraised Value | 185,472 | 101,401 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 053 : LINCOLN | | | 054 : LINN | | |
|--|-------------|-----------|--|-------------|-----------|
| S-2 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 12 | 2 | Original Number of Sales | 143 | 6 |
| Trimmed Outliers | 0 | 0 | Trimmed Outliers | 21 | 0 |
| Number of Ratios: Outliers Removed | 12 | 2 | Number of Ratios: Outliers Removed | 122 | 6 |
| Minimum Ratio | 46.6 | 51.0 | Minimum Ratio | 13.7 | 51.3 |
| Maximum Ratio | 134.1 | 96.7 | Maximum Ratio | 9492.0 | 113.0 |
| Minimum Sale Price | 9,500 | 89,000 | Minimum Sale Price | 100 | 6,500 |
| Maximum Sale Price | 310,000 | 100,000 | Maximum Sale Price | 418,000 | 150,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 95.0 | 73.9 | Median Ratio | 89.6 | 77.1 |
| Lower Median Confidence Interval | 80.1 | | Lower Median Confidence Interval | 83.3 | 60.3 |
| Upper Median Confidence Interval | 115.1 | | Upper Median Confidence Interval | 97.7 | 103.8 |
| Broadened Median Ratio | 94.2 | | Broadened Median Ratio | 89.7 | 78.7 |
| Coefficient of Dispersion (COD) | 20.4 | 30.9 | Coefficient of Dispersion (COD) | 22.3 | 19.1 |
| Lower COD Confidence Interval | 14.0 | | Lower COD Confidence Interval | 19.3 | 9.7 |
| Upper COD Confidence Interval | 34.1 | | Upper COD Confidence Interval | 26.3 | 38.7 |
| Value Weighted COD | 13.3 | | Value Weighted COD | 14.5 | 21.2 |
| Coefficient of Concentration @10% | 25.0 | | Coefficient of Concentration @10% | 25.2 | 33.3 |
| Coefficient of Concentration @15% | 33.3 | | Coefficient of Concentration @15% | 37.8 | 50.0 |
| Coefficient of Concentration @20% | 58.3 | | Coefficient of Concentration @20% | 48.3 | 50.0 |
| Coefficient of Concentration @50% | 91.7 | | Coefficient of Concentration @50% | 78.3 | 100.0 |
| Coefficient of Concentration @100% | 100.0 | | Coefficient of Concentration @100% | 86.7 | 100.0 |
| Coefficient of Interquartile Deviation | 19.6 | | Coefficient of Interquartile Deviation | 20.9 | 22.3 |
| Median Percent Deviation | 16.5 | | Median Percent Deviation | 20.4 | 16.4 |
| Lower Quartile (25 th Percentile) | 79.9 | | Lower Quartile (25 th Percentile) | 74.1 | 64.8 |
| Upper Quartile (75 th Percentile) | 117.1 | | Upper Quartile (75 th Percentile) | 111.6 | 99.2 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.22 | | Relative Skewness | 0.26 | 0.26 |
| Relative Kurtosis | 2.49 | | Relative Kurtosis | 3.83 | 2.24 |
| Arithmetic Mean Ratio | 95.0 | | Arithmetic Mean Ratio | 86.1 | 80.4 |
| Weighted Mean Ratio | 98.7 | | Weighted Mean Ratio | 84.2 | 67.7 |
| Geometric Mean Ratio | 91.7 | | Geometric Mean Ratio | 82.2 | 78.0 |
| Harmonic Mean Ratio | 88.0 | | Harmonic Mean Ratio | 77.5 | 75.7 |
| Standard Deviation | 24.7 | | Standard Deviation | 24.7 | 21.2 |
| Coefficient of Variation (COV) | 26.0 | | Coefficient of Variation (COV) | 28.7 | 26.4 |
| Price-Related Differential (PRD) | 0.96 | 1.12 | Price-Related Differential (PRD) | 1.02 | 1.19 |
| Lower PRD Confidence Interval | 0.87 | | Lower PRD Confidence Interval | 0.99 | 1.06 |
| Upper PRD Confidence interval | 1.05 | | Upper PRD Confidence interval | 1.06 | 1.34 |
| Coef. of Price-Related Bias (PRB) | 0.07 | | Coef. of Price-Related Bias (PRB) | -0.60 | -0.08 |
| Lower PRB Confidence Interval | -0.05 | | Lower PRB Confidence Interval | -1.34 | -0.28 |
| Upper PRB Confidence Interval | 0.19 | | Upper PRB Confidence Interval | 0.15 | 0.13 |
| Average Sale Price | 57,417 | 52,309 | Average Sale Price | 101,167 | 549,000 |
| Average Appraised Value | 56,688 | 45,285 | Average Appraised Value | 85,190 | 318,327 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 055 : LOGAN | | | 056 : LYON | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>S-4</i> | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 32 | 6 | Original Number of Sales | 344 | 16 |
| Trimmed Outliers | 3 | 0 | Trimmed Outliers | 37 | 0 |
| Number of Ratios: Outliers Removed | 29 | 6 | Number of Ratios: Outliers Removed | 307 | 16 |
| Minimum Ratio | 45.7 | 56.4 | Minimum Ratio | 27.0 | 52.2 |
| Maximum Ratio | 283.1 | 144.8 | Maximum Ratio | 277.1 | 159.9 |
| Minimum Sale Price | 7,500 | 6,000 | Minimum Sale Price | 3,000 | 24,000 |
| Maximum Sale Price | 280,000 | 3,650,000 | Maximum Sale Price | 3,000,015 | 1,180,556 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 90.9 | 89.8 | Median Ratio | 95.0 | 87.1 |
| Lower Median Confidence Interval | 85.8 | 59.2 | Lower Median Confidence Interval | 93.6 | 70.3 |
| Upper Median Confidence Interval | 100.6 | 133.7 | Upper Median Confidence Interval | 96.8 | 106.8 |
| Broadened Median Ratio | 91.9 | 90.6 | Broadened Median Ratio | 95.0 | 86.1 |
| Coefficient of Dispersion (COD) | 15.6 | 31.0 | Coefficient of Dispersion (COD) | 11.1 | 23.4 |
| Lower COD Confidence Interval | 11.4 | 18.2 | Lower COD Confidence Interval | 10.1 | 15.7 |
| Upper COD Confidence Interval | 22.4 | 48.9 | Upper COD Confidence Interval | 12.2 | 37.6 |
| Value Weighted COD | 12.5 | 36.5 | Value Weighted COD | 10.5 | 23.2 |
| Coefficient of Concentration @10% | 37.5 | 33.3 | Coefficient of Concentration @10% | 48.8 | 31.3 |
| Coefficient of Concentration @15% | 56.3 | 33.3 | Coefficient of Concentration @15% | 67.4 | 37.5 |
| Coefficient of Concentration @20% | 65.6 | 33.3 | Coefficient of Concentration @20% | 74.7 | 43.8 |
| Coefficient of Concentration @50% | 90.6 | 83.3 | Coefficient of Concentration @50% | 91.0 | 93.8 |
| Coefficient of Concentration @100% | 96.9 | 100.0 | Coefficient of Concentration @100% | 98.5 | 100.0 |
| Coefficient of Interquartile Deviation | 13.3 | 37.6 | Coefficient of Interquartile Deviation | 10.2 | 23.2 |
| Median Percent Deviation | 12.5 | 33.8 | Median Percent Deviation | 10.3 | 22.8 |
| Lower Quartile (25 th Percentile) | 78.0 | 60.6 | Lower Quartile (25 th Percentile) | 86.1 | 66.5 |
| Upper Quartile (75 th Percentile) | 102.2 | 128.1 | Upper Quartile (75 th Percentile) | 105.6 | 106.9 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectK |
| Relative Skewness | -0.20 | 0.33 | Relative Skewness | 0.38 | 0.93 |
| Relative Kurtosis | 3.30 | 1.71 | Relative Kurtosis | 3.40 | 3.97 |
| Arithmetic Mean Ratio | 88.8 | 94.2 | Arithmetic Mean Ratio | 94.9 | 88.4 |
| Weighted Mean Ratio | 90.3 | 57.6 | Weighted Mean Ratio | 94.5 | 75.6 |
| Geometric Mean Ratio | 86.6 | 88.9 | Geometric Mean Ratio | 94.0 | 84.8 |
| Harmonic Mean Ratio | 84.3 | 84.0 | Harmonic Mean Ratio | 93.0 | 81.4 |
| Standard Deviation | 18.8 | 34.7 | Standard Deviation | 13.6 | 27.3 |
| Coefficient of Variation (COV) | 21.2 | 36.9 | Coefficient of Variation (COV) | 14.4 | 30.8 |
| Price-Related Differential (PRD) | 0.98 | 1.64 | Price-Related Differential (PRD) | 1.01 | 1.17 |
| Lower PRD Confidence Interval | 0.94 | 1.30 | Lower PRD Confidence Interval | 0.98 | 1.03 |
| Upper PRD Confidence interval | 1.03 | 2.28 | Upper PRD Confidence interval | 1.02 | 1.42 |
| Coef. of Price-Related Bias (PRB) | -0.06 | -0.11 | Coef. of Price-Related Bias (PRB) | -0.07 | -0.07 |
| Lower PRB Confidence Interval | -0.19 | -0.21 | Lower PRB Confidence Interval | -0.10 | -0.18 |
| Upper PRB Confidence Interval | 0.08 | -0.01 | Upper PRB Confidence Interval | -0.04 | 0.04 |
| Average Sale Price | 92,290 | 268,088 | Average Sale Price | 126,772 | 287,929 |
| Average Appraised Value | 83,370 | 312,153 | Average Appraised Value | 119,747 | 185,163 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 057 : MARION | | | 058 : MARSHALL | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 115 | 12 | Original Number of Sales | 89 | 5 |
| Trimmed Outliers | 11 | 0 | Trimmed Outliers | 13 | 0 |
| Number of Ratios: Outliers Removed | 104 | 12 | Number of Ratios: Outliers Removed | 76 | 5 |
| Minimum Ratio | 28.5 | 61.5 | Minimum Ratio | 46.4 | 66.7 |
| Maximum Ratio | 900.0 | 137.7 | Maximum Ratio | 556.4 | 214.0 |
| Minimum Sale Price | 2,000 | 24,000 | Minimum Sale Price | 5,000 | 10,000 |
| Maximum Sale Price | 375,000 | 115,000 | Maximum Sale Price | 292,000 | 103,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 96.0 | 99.8 | Median Ratio | 99.8 | 102.6 |
| Lower Median Confidence Interval | 92.5 | 78.4 | Lower Median Confidence Interval | 96.4 | 70.3 |
| Upper Median Confidence Interval | 99.1 | 113.7 | Upper Median Confidence Interval | 104.1 | 206.2 |
| Broadened Median Ratio | 95.8 | 99.2 | Broadened Median Ratio | 100.1 | 116.1 |
| Coefficient of Dispersion (COD) | 18.9 | 17.2 | Coefficient of Dispersion (COD) | 12.8 | 38.9 |
| Lower COD Confidence Interval | 15.8 | 10.7 | Lower COD Confidence Interval | 10.5 | 10.2 |
| Upper COD Confidence Interval | 22.9 | 27.6 | Upper COD Confidence Interval | 15.8 | 53.1 |
| Value Weighted COD | 17.4 | 16.9 | Value Weighted COD | 12.1 | 33.9 |
| Coefficient of Concentration @10% | 37.4 | 33.3 | Coefficient of Concentration @10% | 47.2 | 40.0 |
| Coefficient of Concentration @15% | 46.1 | 41.7 | Coefficient of Concentration @15% | 60.7 | 40.0 |
| Coefficient of Concentration @20% | 55.7 | 58.3 | Coefficient of Concentration @20% | 64.0 | 40.0 |
| Coefficient of Concentration @50% | 84.3 | 100.0 | Coefficient of Concentration @50% | 88.8 | 80.0 |
| Coefficient of Concentration @100% | 90.4 | 100.0 | Coefficient of Concentration @100% | 93.3 | 80.0 |
| Coefficient of Interquartile Deviation | 18.4 | 19.4 | Coefficient of Interquartile Deviation | 11.3 | 48.7 |
| Median Percent Deviation | 16.4 | 16.0 | Median Percent Deviation | 10.9 | 35.0 |
| Lower Quartile (25 th Percentile) | 81.1 | 75.9 | Lower Quartile (25 th Percentile) | 89.4 | 81.7 |
| Upper Quartile (75 th Percentile) | 116.4 | 114.5 | Upper Quartile (75 th Percentile) | 111.9 | 181.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptK | Normality Test | RejectA | AcceptW |
| Relative Skewness | 0.53 | 0.04 | Relative Skewness | 0.03 | 0.67 |
| Relative Kurtosis | 4.30 | 2.21 | Relative Kurtosis | 3.42 | 2.12 |
| Arithmetic Mean Ratio | 95.3 | 97.8 | Arithmetic Mean Ratio | 97.7 | 125.8 |
| Weighted Mean Ratio | 92.3 | 97.6 | Weighted Mean Ratio | 94.8 | 109.9 |
| Geometric Mean Ratio | 92.0 | 95.4 | Geometric Mean Ratio | 96.2 | 116.1 |
| Harmonic Mean Ratio | 88.2 | 92.9 | Harmonic Mean Ratio | 94.6 | 107.6 |
| Standard Deviation | 24.8 | 22.4 | Standard Deviation | 16.9 | 57.4 |
| Coefficient of Variation (COV) | 26.0 | 22.9 | Coefficient of Variation (COV) | 17.3 | 45.7 |
| Price-Related Differential (PRD) | 1.03 | 1.00 | Price-Related Differential (PRD) | 1.03 | 1.14 |
| Lower PRD Confidence Interval | 1.00 | 0.96 | Lower PRD Confidence Interval | 1.01 | 0.97 |
| Upper PRD Confidence interval | 1.07 | 1.05 | Upper PRD Confidence interval | 1.06 | 1.27 |
| Coef. of Price-Related Bias (PRB) | -0.27 | 0.05 | Coef. of Price-Related Bias (PRB) | -0.25 | -0.08 |
| Lower PRB Confidence Interval | -0.41 | -0.17 | Lower PRB Confidence Interval | -0.36 | -0.89 |
| Upper PRB Confidence Interval | -0.13 | 0.28 | Upper PRB Confidence Interval | -0.13 | 0.74 |
| Average Sale Price | 91,281 | 50,916 | Average Sale Price | 81,571 | 117,017 |
| Average Appraised Value | 84,269 | 35,953 | Average Appraised Value | 77,327 | 92,517 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 059 : MCPHERSON | | | 060 : MEADE | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-4 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 269 | 12 | Original Number of Sales | 31 | 6 |
| Trimmed Outliers | 25 | 0 | Trimmed Outliers | 1 | 0 |
| Number of Ratios: Outliers Removed | 244 | 12 | Number of Ratios: Outliers Removed | 30 | 6 |
| Minimum Ratio | 24.6 | 52.1 | Minimum Ratio | 43.1 | 39.5 |
| Maximum Ratio | 286.0 | 140.6 | Maximum Ratio | 208.5 | 95.3 |
| Minimum Sale Price | 6,500 | 50,000 | Minimum Sale Price | 20,000 | 18,000 |
| Maximum Sale Price | 550,000 | 400,000 | Maximum Sale Price | 160,000 | 675,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 98.9 | 84.5 | Median Ratio | 89.4 | 68.8 |
| Lower Median Confidence Interval | 97.7 | 61.6 | Lower Median Confidence Interval | 80.0 | 52.4 |
| Upper Median Confidence Interval | 100.4 | 100.9 | Upper Median Confidence Interval | 93.6 | 86.8 |
| Broadened Median Ratio | 98.9 | 84.7 | Broadened Median Ratio | 89.2 | 69.8 |
| Coefficient of Dispersion (COD) | 7.3 | 26.8 | Coefficient of Dispersion (COD) | 17.2 | 18.4 |
| Lower COD Confidence Interval | 6.6 | 17.9 | Lower COD Confidence Interval | 12.4 | 9.5 |
| Upper COD Confidence Interval | 8.1 | 44.2 | Upper COD Confidence Interval | 24.1 | 43.7 |
| Value Weighted COD | 6.7 | 29.8 | Value Weighted COD | 14.0 | 34.9 |
| Coefficient of Concentration @10% | 65.8 | 16.7 | Coefficient of Concentration @10% | 35.5 | 50.0 |
| Coefficient of Concentration @15% | 78.8 | 16.7 | Coefficient of Concentration @15% | 48.4 | 66.7 |
| Coefficient of Concentration @20% | 86.2 | 41.7 | Coefficient of Concentration @20% | 67.7 | 66.7 |
| Coefficient of Concentration @50% | 95.9 | 83.3 | Coefficient of Concentration @50% | 90.3 | 100.0 |
| Coefficient of Concentration @100% | 99.3 | 100.0 | Coefficient of Concentration @100% | 96.8 | 100.0 |
| Coefficient of Interquartile Deviation | 6.4 | 23.5 | Coefficient of Interquartile Deviation | 15.5 | 17.2 |
| Median Percent Deviation | 6.3 | 23.5 | Median Percent Deviation | 15.1 | 9.5 |
| Lower Quartile (25 th Percentile) | 92.9 | 61.5 | Lower Quartile (25 th Percentile) | 75.3 | 58.8 |
| Upper Quartile (75 th Percentile) | 105.6 | 101.2 | Upper Quartile (75 th Percentile) | 102.9 | 82.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.06 | 0.60 | Relative Skewness | 0.42 | -0.29 |
| Relative Kurtosis | 3.10 | 2.27 | Relative Kurtosis | 3.47 | 2.64 |
| Arithmetic Mean Ratio | 98.8 | 87.7 | Arithmetic Mean Ratio | 89.0 | 69.3 |
| Weighted Mean Ratio | 98.4 | 83.1 | Weighted Mean Ratio | 83.0 | 85.2 |
| Geometric Mean Ratio | 98.3 | 83.6 | Geometric Mean Ratio | 86.6 | 67.0 |
| Harmonic Mean Ratio | 97.9 | 79.8 | Harmonic Mean Ratio | 84.0 | 64.5 |
| Standard Deviation | 9.3 | 28.8 | Standard Deviation | 20.9 | 18.4 |
| Coefficient of Variation (COV) | 9.4 | 32.9 | Coefficient of Variation (COV) | 23.5 | 26.5 |
| Price-Related Differential (PRD) | 1.00 | 1.06 | Price-Related Differential (PRD) | 1.07 | 0.81 |
| Lower PRD Confidence Interval | 1.00 | 0.95 | Lower PRD Confidence Interval | 1.03 | 0.77 |
| Upper PRD Confidence interval | 1.01 | 1.22 | Upper PRD Confidence interval | 1.12 | 1.23 |
| Coef. of Price-Related Bias (PRB) | -0.06 | 0.02 | Coef. of Price-Related Bias (PRB) | -0.16 | 0.06 |
| Lower PRB Confidence Interval | -0.09 | -0.25 | Lower PRB Confidence Interval | -0.29 | -0.10 |
| Upper PRB Confidence Interval | -0.04 | 0.30 | Upper PRB Confidence Interval | -0.03 | 0.22 |
| Average Sale Price | 158,818 | 158,800 | Average Sale Price | 79,070 | 287,939 |
| Average Appraised Value | 156,344 | 142,676 | Average Appraised Value | 65,642 | 248,864 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 061 : MIAMI | | | 062 : MITCHELL | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 170 | 9 | Original Number of Sales | 63 | 4 |
| Trimmed Outliers | 19 | 1 | Trimmed Outliers | 5 | 0 |
| Number of Ratios: Outliers Removed | 151 | 8 | Number of Ratios: Outliers Removed | 58 | 4 |
| Minimum Ratio | 10.5 | 50.0 | Minimum Ratio | 44.8 | 81.2 |
| Maximum Ratio | 1285.0 | 136.3 | Maximum Ratio | 2065.0 | 137.1 |
| Minimum Sale Price | 6,000 | 22,000 | Minimum Sale Price | 600 | 23,500 |
| Maximum Sale Price | 725,000 | 582,084 | Maximum Sale Price | 295,000 | 210,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 90.7 | 91.7 | Median Ratio | 106.3 | 121.3 |
| Lower Median Confidence Interval | 88.6 | 75.6 | Lower Median Confidence Interval | 100.0 | 83.1 |
| Upper Median Confidence Interval | 91.8 | 105.0 | Upper Median Confidence Interval | 113.5 | 136.5 |
| Broadened Median Ratio | 90.7 | 90.9 | Broadened Median Ratio | 105.8 | 117.2 |
| Coefficient of Dispersion (COD) | 10.2 | 12.3 | Coefficient of Dispersion (COD) | 18.7 | 12.6 |
| Lower COD Confidence Interval | 8.8 | 5.5 | Lower COD Confidence Interval | 15.4 | 2.4 |
| Upper COD Confidence Interval | 11.8 | 32.6 | Upper COD Confidence Interval | 23.9 | 23.4 |
| Value Weighted COD | 10.0 | 18.3 | Value Weighted COD | 15.1 | 6.4 |
| Coefficient of Concentration @10% | 55.3 | 44.4 | Coefficient of Concentration @10% | 39.7 | 50.0 |
| Coefficient of Concentration @15% | 67.1 | 66.7 | Coefficient of Concentration @15% | 49.2 | 75.0 |
| Coefficient of Concentration @20% | 74.7 | 77.8 | Coefficient of Concentration @20% | 55.6 | 75.0 |
| Coefficient of Concentration @50% | 91.2 | 100.0 | Coefficient of Concentration @50% | 87.3 | 100.0 |
| Coefficient of Concentration @100% | 96.5 | 100.0 | Coefficient of Concentration @100% | 93.7 | 100.0 |
| Coefficient of Interquartile Deviation | 9.3 | 12.1 | Coefficient of Interquartile Deviation | 15.1 | 17.8 |
| Median Percent Deviation | 8.9 | 11.5 | Median Percent Deviation | 16.2 | 7.6 |
| Lower Quartile (25 th Percentile) | 80.6 | 78.4 | Lower Quartile (25 th Percentile) | 86.4 | 90.6 |
| Upper Quartile (75 th Percentile) | 97.5 | 100.6 | Upper Quartile (75 th Percentile) | 118.5 | 133.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.01 | -1.11 | Relative Skewness | 0.36 | -0.79 |
| Relative Kurtosis | 3.53 | 3.54 | Relative Kurtosis | 3.12 | 2.12 |
| Arithmetic Mean Ratio | 88.8 | 85.1 | Arithmetic Mean Ratio | 103.4 | 115.2 |
| Weighted Mean Ratio | 88.0 | 76.1 | Weighted Mean Ratio | 98.4 | 120.3 |
| Geometric Mean Ratio | 88.0 | 83.3 | Geometric Mean Ratio | 100.4 | 113.1 |
| Harmonic Mean Ratio | 87.0 | 81.2 | Harmonic Mean Ratio | 97.3 | 110.8 |
| Standard Deviation | 12.3 | 16.8 | Standard Deviation | 25.0 | 24.0 |
| Coefficient of Variation (COV) | 13.9 | 19.7 | Coefficient of Variation (COV) | 24.1 | 20.8 |
| Price-Related Differential (PRD) | 1.01 | 1.12 | Price-Related Differential (PRD) | 1.05 | 0.96 |
| Lower PRD Confidence Interval | 1.00 | 1.01 | Lower PRD Confidence Interval | 1.01 | 0.88 |
| Upper PRD Confidence interval | 1.02 | 1.36 | Upper PRD Confidence interval | 1.10 | 1.03 |
| Coef. of Price-Related Bias (PRB) | -0.35 | -0.12 | Coef. of Price-Related Bias (PRB) | -0.88 | 0.00 |
| Lower PRB Confidence Interval | -0.53 | -0.22 | Lower PRB Confidence Interval | -1.33 | 0.00 |
| Upper PRB Confidence Interval | -0.17 | -0.03 | Upper PRB Confidence Interval | -0.42 | 0.00 |
| Average Sale Price | 212,857 | 73,175 | Average Sale Price | 80,576 | 156,385 |
| Average Appraised Value | 187,331 | 59,770 | Average Appraised Value | 79,322 | 167,902 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 063 : MONTGOMERY | | | 064 : MORRIS | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 374 | 12 | Original Number of Sales | 46 | 4 |
| Trimmed Outliers | 47 | 1 | Trimmed Outliers | 4 | 0 |
| Number of Ratios: Outliers Removed | 327 | 11 | Number of Ratios: Outliers Removed | 42 | 4 |
| Minimum Ratio | 19.8 | 72.1 | Minimum Ratio | 54.6 | 98.6 |
| Maximum Ratio | 26080.0 | 456.9 | Maximum Ratio | 602.0 | 168.3 |
| Minimum Sale Price | 100 | 9,500 | Minimum Sale Price | 5,000 | 12,000 |
| Maximum Sale Price | 405,000 | 279,000 | Maximum Sale Price | 597,000 | 212,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 102.7 | 123.7 | Median Ratio | 103.3 | 127.4 |
| Lower Median Confidence Interval | 100.0 | 103.9 | Lower Median Confidence Interval | 86.0 | 98.7 |
| Upper Median Confidence Interval | 105.0 | 147.5 | Upper Median Confidence Interval | 113.1 | 167.6 |
| Broadened Median Ratio | 102.6 | 123.7 | Broadened Median Ratio | 103.9 | 129.4 |
| Coefficient of Dispersion (COD) | 22.2 | 20.0 | Coefficient of Dispersion (COD) | 24.0 | 24.5 |
| Lower COD Confidence Interval | 20.0 | 14.3 | Lower COD Confidence Interval | 18.5 | 2.0 |
| Upper COD Confidence Interval | 24.6 | 36.0 | Upper COD Confidence Interval | 32.2 | 25.5 |
| Value Weighted COD | 16.5 | 17.6 | Value Weighted COD | 19.8 | 22.8 |
| Coefficient of Concentration @10% | 32.4 | 33.3 | Coefficient of Concentration @10% | 26.1 | 0.0 |
| Coefficient of Concentration @15% | 42.5 | 50.0 | Coefficient of Concentration @15% | 34.8 | 0.0 |
| Coefficient of Concentration @20% | 51.3 | 58.3 | Coefficient of Concentration @20% | 41.3 | 0.0 |
| Coefficient of Concentration @50% | 78.1 | 91.7 | Coefficient of Concentration @50% | 87.0 | 100.0 |
| Coefficient of Concentration @100% | 87.4 | 91.7 | Coefficient of Concentration @100% | 91.3 | 100.0 |
| Coefficient of Interquartile Deviation | 22.9 | 20.1 | Coefficient of Interquartile Deviation | 23.8 | 25.9 |
| Median Percent Deviation | 18.6 | 16.0 | Median Percent Deviation | 25.3 | 22.1 |
| Lower Quartile (25 th Percentile) | 86.8 | 102.5 | Lower Quartile (25 th Percentile) | 74.6 | 98.9 |
| Upper Quartile (75 th Percentile) | 133.8 | 152.3 | Upper Quartile (75 th Percentile) | 123.8 | 164.9 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.72 | 0.02 | Relative Skewness | 0.59 | 0.06 |
| Relative Kurtosis | 3.96 | 2.20 | Relative Kurtosis | 3.24 | 1.09 |
| Arithmetic Mean Ratio | 102.5 | 120.2 | Arithmetic Mean Ratio | 98.6 | 130.4 |
| Weighted Mean Ratio | 97.2 | 108.7 | Weighted Mean Ratio | 93.8 | 110.4 |
| Geometric Mean Ratio | 98.0 | 116.8 | Geometric Mean Ratio | 94.2 | 126.6 |
| Harmonic Mean Ratio | 92.9 | 113.2 | Harmonic Mean Ratio | 89.9 | 122.9 |
| Standard Deviation | 30.6 | 29.3 | Standard Deviation | 30.2 | 36.5 |
| Coefficient of Variation (COV) | 29.8 | 24.4 | Coefficient of Variation (COV) | 30.7 | 28.0 |
| Price-Related Differential (PRD) | 1.06 | 1.11 | Price-Related Differential (PRD) | 1.05 | 1.18 |
| Lower PRD Confidence Interval | 1.03 | 1.03 | Lower PRD Confidence Interval | 0.99 | 0.98 |
| Upper PRD Confidence interval | 1.08 | 1.25 | Upper PRD Confidence interval | 1.14 | 1.30 |
| Coef. of Price-Related Bias (PRB) | -1.33 | -0.23 | Coef. of Price-Related Bias (PRB) | -0.18 | 0.00 |
| Lower PRB Confidence Interval | -2.35 | -0.70 | Lower PRB Confidence Interval | -0.39 | 0.00 |
| Upper PRB Confidence Interval | -0.30 | 0.25 | Upper PRB Confidence Interval | 0.02 | 0.00 |
| Average Sale Price | 77,232 | 88,188 | Average Sale Price | 111,830 | 100,417 |
| Average Appraised Value | 75,036 | 65,220 | Average Appraised Value | 104,865 | 78,645 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 065 : MORTON | | | 066 : NEMAHA | | |
|--|-------------|-----------|--|-------------|-----------|
| | <i>S-4</i> | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 17 | 4 | Original Number of Sales | 112 | 11 |
| Trimmed Outliers | 1 | 0 | Trimmed Outliers | 13 | 1 |
| Number of Ratios: Outliers Removed | 16 | 4 | Number of Ratios: Outliers Removed | 99 | 10 |
| Minimum Ratio | 37.3 | 65.8 | Minimum Ratio | 48.8 | 52.7 |
| Maximum Ratio | 241.6 | 130.5 | Maximum Ratio | 2416.7 | 194.1 |
| Minimum Sale Price | 5,000 | 20,000 | Minimum Sale Price | 300 | 12,500 |
| Maximum Sale Price | 180,000 | 340,500 | Maximum Sale Price | 457,650 | 371,100 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.0 | 91.4 | Median Ratio | 97.9 | 81.1 |
| Lower Median Confidence Interval | 93.2 | 66.7 | Lower Median Confidence Interval | 93.3 | 58.2 |
| Upper Median Confidence Interval | 125.9 | 128.9 | Upper Median Confidence Interval | 101.4 | 99.6 |
| Broadened Median Ratio | 103.4 | 93.6 | Broadened Median Ratio | 97.8 | 79.7 |
| Coefficient of Dispersion (COD) | 18.9 | 21.8 | Coefficient of Dispersion (COD) | 16.8 | 18.3 |
| Lower COD Confidence Interval | 12.5 | 6.1 | Lower COD Confidence Interval | 14.2 | 12.2 |
| Upper COD Confidence Interval | 32.6 | 27.7 | Upper COD Confidence Interval | 20.3 | 29.3 |
| Value Weighted COD | 14.9 | 23.9 | Value Weighted COD | 15.4 | 16.5 |
| Coefficient of Concentration @10% | 41.2 | 50.0 | Coefficient of Concentration @10% | 42.0 | 36.4 |
| Coefficient of Concentration @15% | 52.9 | 50.0 | Coefficient of Concentration @15% | 50.9 | 45.5 |
| Coefficient of Concentration @20% | 64.7 | 50.0 | Coefficient of Concentration @20% | 59.8 | 45.5 |
| Coefficient of Concentration @50% | 82.4 | 100.0 | Coefficient of Concentration @50% | 86.6 | 90.9 |
| Coefficient of Concentration @100% | 94.1 | 100.0 | Coefficient of Concentration @100% | 91.1 | 90.9 |
| Coefficient of Interquartile Deviation | 19.1 | 28.6 | Coefficient of Interquartile Deviation | 15.3 | 25.5 |
| Median Percent Deviation | 14.8 | 18.1 | Median Percent Deviation | 14.3 | 22.9 |
| Lower Quartile (25 th Percentile) | 90.6 | 70.3 | Lower Quartile (25 th Percentile) | 86.7 | 58.2 |
| Upper Quartile (75 th Percentile) | 129.2 | 122.6 | Upper Quartile (75 th Percentile) | 116.6 | 99.6 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | Reject4 |
| Relative Skewness | -0.31 | 0.38 | Relative Skewness | 0.04 | -0.01 |
| Relative Kurtosis | 4.05 | 1.86 | Relative Kurtosis | 3.06 | 1.75 |
| Arithmetic Mean Ratio | 104.5 | 94.8 | Arithmetic Mean Ratio | 94.7 | 76.5 |
| Weighted Mean Ratio | 98.6 | 74.9 | Weighted Mean Ratio | 92.0 | 70.3 |
| Geometric Mean Ratio | 100.3 | 91.9 | Geometric Mean Ratio | 92.2 | 74.6 |
| Harmonic Mean Ratio | 94.7 | 89.1 | Harmonic Mean Ratio | 89.5 | 72.8 |
| Standard Deviation | 27.3 | 27.4 | Standard Deviation | 21.2 | 17.4 |
| Coefficient of Variation (COV) | 26.2 | 28.9 | Coefficient of Variation (COV) | 22.4 | 22.7 |
| Price-Related Differential (PRD) | 1.06 | 1.27 | Price-Related Differential (PRD) | 1.03 | 1.09 |
| Lower PRD Confidence Interval | 1.00 | 1.05 | Lower PRD Confidence Interval | 1.00 | 1.03 |
| Upper PRD Confidence interval | 1.18 | 1.39 | Upper PRD Confidence interval | 1.07 | 1.21 |
| Coef. of Price-Related Bias (PRB) | -0.07 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.96 | -0.23 |
| Lower PRB Confidence Interval | -0.24 | 0.00 | Lower PRB Confidence Interval | -1.33 | -0.44 |
| Upper PRB Confidence Interval | 0.10 | 0.00 | Upper PRB Confidence Interval | -0.59 | -0.01 |
| Average Sale Price | 82,272 | 93,050 | Average Sale Price | 111,898 | 275,164 |
| Average Appraised Value | 81,092 | 115,834 | Average Appraised Value | 102,968 | 224,755 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 067 : NEOSHO | | | 068 : NESS | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 149 | 8 | Original Number of Sales | 29 | 4 |
| Trimmed Outliers | 21 | 1 | Trimmed Outliers | 3 | 0 |
| Number of Ratios: Outliers Removed | 128 | 7 | Number of Ratios: Outliers Removed | 26 | 4 |
| Minimum Ratio | 20.9 | 70.4 | Minimum Ratio | 61.3 | 59.0 |
| Maximum Ratio | 1472.7 | 401.9 | Maximum Ratio | 335.4 | 100.6 |
| Minimum Sale Price | 1,136 | 10,250 | Minimum Sale Price | 14,000 | 16,000 |
| Maximum Sale Price | 260,000 | 4,025,000 | Maximum Sale Price | 165,000 | 350,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.7 | 100.9 | Median Ratio | 99.6 | 73.9 |
| Lower Median Confidence Interval | 99.1 | 87.5 | Lower Median Confidence Interval | 95.1 | 59.4 |
| Upper Median Confidence Interval | 108.5 | 139.0 | Upper Median Confidence Interval | 107.4 | 99.6 |
| Broadened Median Ratio | 102.1 | 105.8 | Broadened Median Ratio | 99.5 | 75.8 |
| Coefficient of Dispersion (COD) | 16.5 | 18.5 | Coefficient of Dispersion (COD) | 15.9 | 19.0 |
| Lower COD Confidence Interval | 14.0 | 10.6 | Lower COD Confidence Interval | 10.7 | 4.8 |
| Upper COD Confidence Interval | 19.6 | 33.0 | Upper COD Confidence Interval | 23.1 | 22.6 |
| Value Weighted COD | 13.6 | 1.1 | Value Weighted COD | 14.0 | 13.3 |
| Coefficient of Concentration @10% | 40.3 | 37.5 | Coefficient of Concentration @10% | 44.8 | 50.0 |
| Coefficient of Concentration @15% | 49.7 | 50.0 | Coefficient of Concentration @15% | 51.7 | 50.0 |
| Coefficient of Concentration @20% | 57.7 | 50.0 | Coefficient of Concentration @20% | 58.6 | 50.0 |
| Coefficient of Concentration @50% | 82.6 | 87.5 | Coefficient of Concentration @50% | 86.2 | 100.0 |
| Coefficient of Concentration @100% | 89.9 | 87.5 | Coefficient of Concentration @100% | 93.1 | 100.0 |
| Coefficient of Interquartile Deviation | 17.4 | 24.5 | Coefficient of Interquartile Deviation | 16.4 | 23.6 |
| Median Percent Deviation | 15.6 | 21.7 | Median Percent Deviation | 11.8 | 15.0 |
| Lower Quartile (25 th Percentile) | 94.0 | 89.2 | Lower Quartile (25 th Percentile) | 88.2 | 60.9 |
| Upper Quartile (75 th Percentile) | 129.3 | 138.6 | Upper Quartile (75 th Percentile) | 120.8 | 95.7 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.49 | 0.36 | Relative Skewness | 0.68 | 0.42 |
| Relative Kurtosis | 4.23 | 1.90 | Relative Kurtosis | 3.44 | 1.70 |
| Arithmetic Mean Ratio | 104.0 | 104.3 | Arithmetic Mean Ratio | 99.5 | 76.8 |
| Weighted Mean Ratio | 98.0 | 98.8 | Weighted Mean Ratio | 94.2 | 80.3 |
| Geometric Mean Ratio | 101.4 | 101.7 | Geometric Mean Ratio | 97.2 | 75.2 |
| Harmonic Mean Ratio | 98.7 | 99.2 | Harmonic Mean Ratio | 94.9 | 73.7 |
| Standard Deviation | 22.9 | 25.4 | Standard Deviation | 22.5 | 18.3 |
| Coefficient of Variation (COV) | 22.1 | 24.3 | Coefficient of Variation (COV) | 22.6 | 23.8 |
| Price-Related Differential (PRD) | 1.06 | 1.06 | Price-Related Differential (PRD) | 1.06 | 0.96 |
| Lower PRD Confidence Interval | 1.04 | 0.96 | Lower PRD Confidence Interval | 1.02 | 0.86 |
| Upper PRD Confidence interval | 1.09 | 1.28 | Upper PRD Confidence interval | 1.13 | 1.05 |
| Coef. of Price-Related Bias (PRB) | -0.57 | -0.09 | Coef. of Price-Related Bias (PRB) | -0.24 | 0.00 |
| Lower PRB Confidence Interval | -0.75 | -0.50 | Lower PRB Confidence Interval | -0.46 | 0.00 |
| Upper PRB Confidence Interval | -0.40 | 0.31 | Upper PRB Confidence Interval | -0.02 | 0.00 |
| Average Sale Price | 85,013 | 107,286 | Average Sale Price | 70,135 | 63,583 |
| Average Appraised Value | 83,291 | 102,641 | Average Appraised Value | 66,040 | 50,081 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 069 : NORTON | | | 070 : OSAGE | | |
|--|-------------|-----------|--|-------------|-----------|
| S-3 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 65 | 5 | Original Number of Sales | 200 | 12 |
| Trimmed Outliers | 3 | 0 | Trimmed Outliers | 24 | 1 |
| Number of Ratios: Outliers Removed | 62 | 5 | Number of Ratios: Outliers Removed | 176 | 11 |
| Minimum Ratio | 43.8 | 51.9 | Minimum Ratio | 31.9 | 25.9 |
| Maximum Ratio | 471.8 | 157.1 | Maximum Ratio | 1697.5 | 363.4 |
| Minimum Sale Price | 4,000 | 3,000 | Minimum Sale Price | 3,000 | 7,000 |
| Maximum Sale Price | 285,000 | 170,000 | Maximum Sale Price | 312,900 | 1,087,547 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 88.4 | 132.7 | Median Ratio | 95.5 | 97.1 |
| Lower Median Confidence Interval | 84.5 | 58.0 | Lower Median Confidence Interval | 92.9 | 60.1 |
| Upper Median Confidence Interval | 96.0 | 155.7 | Upper Median Confidence Interval | 100.2 | 126.9 |
| Broadened Median Ratio | 88.3 | 126.8 | Broadened Median Ratio | 95.5 | 96.6 |
| Coefficient of Dispersion (COD) | 18.3 | 22.3 | Coefficient of Dispersion (COD) | 16.8 | 36.7 |
| Lower COD Confidence Interval | 14.9 | 5.1 | Lower COD Confidence Interval | 14.7 | 20.3 |
| Upper COD Confidence Interval | 22.5 | 50.6 | Upper COD Confidence Interval | 19.2 | 70.9 |
| Value Weighted COD | 15.2 | 47.9 | Value Weighted COD | 13.4 | 40.9 |
| Coefficient of Concentration @10% | 30.8 | 40.0 | Coefficient of Concentration @10% | 37.5 | 16.7 |
| Coefficient of Concentration @15% | 49.2 | 40.0 | Coefficient of Concentration @15% | 53.5 | 16.7 |
| Coefficient of Concentration @20% | 61.5 | 60.0 | Coefficient of Concentration @20% | 63.0 | 25.0 |
| Coefficient of Concentration @50% | 89.2 | 80.0 | Coefficient of Concentration @50% | 84.0 | 75.0 |
| Coefficient of Concentration @100% | 95.4 | 100.0 | Coefficient of Concentration @100% | 92.0 | 83.3 |
| Coefficient of Interquartile Deviation | 15.7 | 27.9 | Coefficient of Interquartile Deviation | 16.6 | 36.5 |
| Median Percent Deviation | 15.2 | 18.4 | Median Percent Deviation | 13.3 | 35.7 |
| Lower Quartile (25 th Percentile) | 73.4 | 77.2 | Lower Quartile (25 th Percentile) | 85.8 | 58.7 |
| Upper Quartile (75 th Percentile) | 101.2 | 151.1 | Upper Quartile (75 th Percentile) | 117.5 | 129.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.45 | -0.77 | Relative Skewness | 0.44 | 0.73 |
| Relative Kurtosis | 2.83 | 2.18 | Relative Kurtosis | 3.53 | 3.26 |
| Arithmetic Mean Ratio | 88.9 | 117.9 | Arithmetic Mean Ratio | 96.7 | 94.5 |
| Weighted Mean Ratio | 85.7 | 70.8 | Weighted Mean Ratio | 93.9 | 69.3 |
| Geometric Mean Ratio | 86.4 | 110.0 | Geometric Mean Ratio | 94.3 | 83.5 |
| Harmonic Mean Ratio | 84.0 | 100.4 | Harmonic Mean Ratio | 91.9 | 71.9 |
| Standard Deviation | 21.0 | 42.1 | Standard Deviation | 21.2 | 47.1 |
| Coefficient of Variation (COV) | 23.7 | 35.7 | Coefficient of Variation (COV) | 21.9 | 49.9 |
| Price-Related Differential (PRD) | 1.04 | 1.66 | Price-Related Differential (PRD) | 1.03 | 1.36 |
| Lower PRD Confidence Interval | 0.99 | 1.00 | Lower PRD Confidence Interval | 1.01 | 1.09 |
| Upper PRD Confidence interval | 1.09 | 2.06 | Upper PRD Confidence interval | 1.05 | 1.68 |
| Coef. of Price-Related Bias (PRB) | -0.06 | -0.12 | Coef. of Price-Related Bias (PRB) | -0.38 | -0.16 |
| Lower PRB Confidence Interval | -0.18 | -0.24 | Lower PRB Confidence Interval | -0.58 | -0.49 |
| Upper PRB Confidence Interval | 0.05 | -0.01 | Upper PRB Confidence Interval | -0.18 | 0.17 |
| Average Sale Price | 88,535 | 72,625 | Average Sale Price | 105,550 | 39,024 |
| Average Appraised Value | 75,840 | 59,636 | Average Appraised Value | 99,068 | 42,853 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 071 : OSBORNE | | | 072 : OTTAWA | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-3 | | | S-3 | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 25 | 6 | Original Number of Sales | 63 | 5 |
| Trimmed Outliers | 0 | 0 | Trimmed Outliers | 8 | 0 |
| Number of Ratios: Outliers Removed | 25 | 6 | Number of Ratios: Outliers Removed | 55 | 5 |
| Minimum Ratio | 37.8 | 43.9 | Minimum Ratio | 55.2 | 108.2 |
| Maximum Ratio | 122.2 | 190.5 | Maximum Ratio | 2404.0 | 153.7 |
| Minimum Sale Price | 3,000 | 10,000 | Minimum Sale Price | 1,000 | 12,000 |
| Maximum Sale Price | 119,000 | 72,000 | Maximum Sale Price | 337,000 | 65,500 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 92.9 | 119.3 | Median Ratio | 100.7 | 120.6 |
| Lower Median Confidence Interval | 79.0 | 71.9 | Lower Median Confidence Interval | 93.0 | 109.1 |
| Upper Median Confidence Interval | 103.8 | 163.7 | Upper Median Confidence Interval | 102.7 | 150.9 |
| Broadened Median Ratio | 91.9 | 119.1 | Broadened Median Ratio | 100.4 | 122.2 |
| Coefficient of Dispersion (COD) | 18.7 | 30.3 | Coefficient of Dispersion (COD) | 14.9 | 10.1 |
| Lower COD Confidence Interval | 13.4 | 15.3 | Lower COD Confidence Interval | 11.7 | 3.0 |
| Upper COD Confidence Interval | 27.4 | 80.9 | Upper COD Confidence Interval | 19.1 | 13.9 |
| Value Weighted COD | 20.0 | 22.3 | Value Weighted COD | 13.0 | 6.6 |
| Coefficient of Concentration @10% | 32.0 | 0.0 | Coefficient of Concentration @10% | 38.1 | 60.0 |
| Coefficient of Concentration @15% | 48.0 | 50.0 | Coefficient of Concentration @15% | 50.8 | 80.0 |
| Coefficient of Concentration @20% | 64.0 | 66.7 | Coefficient of Concentration @20% | 58.7 | 80.0 |
| Coefficient of Concentration @50% | 96.0 | 66.7 | Coefficient of Concentration @50% | 87.3 | 100.0 |
| Coefficient of Concentration @100% | 100.0 | 100.0 | Coefficient of Concentration @100% | 96.8 | 100.0 |
| Coefficient of Interquartile Deviation | 16.2 | 27.0 | Coefficient of Interquartile Deviation | 12.8 | 12.6 |
| Median Percent Deviation | 15.8 | 15.5 | Median Percent Deviation | 13.2 | 8.4 |
| Lower Quartile (25 th Percentile) | 77.0 | 85.9 | Lower Quartile (25 th Percentile) | 85.3 | 111.8 |
| Upper Quartile (75 th Percentile) | 107.1 | 150.4 | Upper Quartile (75 th Percentile) | 111.1 | 142.2 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.59 | -0.07 | Relative Skewness | 0.24 | 0.78 |
| Relative Kurtosis | 2.69 | 2.42 | Relative Kurtosis | 3.06 | 2.31 |
| Arithmetic Mean Ratio | 89.0 | 118.3 | Arithmetic Mean Ratio | 95.5 | 125.7 |
| Weighted Mean Ratio | 86.0 | 124.2 | Weighted Mean Ratio | 92.6 | 120.1 |
| Geometric Mean Ratio | 85.8 | 108.1 | Geometric Mean Ratio | 93.5 | 124.8 |
| Harmonic Mean Ratio | 82.0 | 96.1 | Harmonic Mean Ratio | 91.5 | 123.9 |
| Standard Deviation | 22.3 | 49.0 | Standard Deviation | 19.2 | 17.7 |
| Coefficient of Variation (COV) | 25.0 | 41.4 | Coefficient of Variation (COV) | 20.1 | 14.0 |
| Price-Related Differential (PRD) | 1.04 | 0.95 | Price-Related Differential (PRD) | 1.03 | 1.05 |
| Lower PRD Confidence Interval | 0.99 | 0.79 | Lower PRD Confidence Interval | 1.00 | 0.99 |
| Upper PRD Confidence interval | 1.10 | 1.08 | Upper PRD Confidence interval | 1.07 | 1.08 |
| Coef. of Price-Related Bias (PRB) | 0.00 | 0.17 | Coef. of Price-Related Bias (PRB) | -0.76 | -0.09 |
| Lower PRB Confidence Interval | -0.08 | -0.24 | Lower PRB Confidence Interval | -1.33 | -0.31 |
| Upper PRB Confidence Interval | 0.08 | 0.58 | Upper PRB Confidence Interval | -0.18 | 0.13 |
| Average Sale Price | 52,836 | 38,300 | Average Sale Price | 118,223 | 33,714 |
| Average Appraised Value | 45,434 | 42,198 | Average Appraised Value | 109,504 | 38,699 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 073 : PAWNEE | | | 074 : PHILLIPS | | |
|--|-------------|-----------|--|-------------|-----------|
| S-8 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 79 | 9 | Original Number of Sales | 54 | 5 |
| Trimmed Outliers | 5 | 0 | Trimmed Outliers | 4 | 0 |
| Number of Ratios: Outliers Removed | 74 | 9 | Number of Ratios: Outliers Removed | 50 | 5 |
| Minimum Ratio | 43.6 | 62.6 | Minimum Ratio | 57.0 | 29.8 |
| Maximum Ratio | 289.3 | 197.9 | Maximum Ratio | 253.3 | 95.1 |
| Minimum Sale Price | 3,500 | 3,500 | Minimum Sale Price | 2,250 | 3,500 |
| Maximum Sale Price | 240,000 | 395,000 | Maximum Sale Price | 176,500 | 325,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 100.2 | 101.0 | Median Ratio | 87.4 | 52.5 |
| Lower Median Confidence Interval | 96.4 | 63.4 | Lower Median Confidence Interval | 79.3 | 32.4 |
| Upper Median Confidence Interval | 105.9 | 176.0 | Upper Median Confidence Interval | 90.5 | 93.1 |
| Broadened Median Ratio | 100.0 | 97.6 | Broadened Median Ratio | 87.1 | 60.7 |
| Coefficient of Dispersion (COD) | 19.8 | 38.5 | Coefficient of Dispersion (COD) | 14.6 | 35.3 |
| Lower COD Confidence Interval | 16.2 | 21.5 | Lower COD Confidence Interval | 11.7 | 9.4 |
| Upper COD Confidence Interval | 24.3 | 63.9 | Upper COD Confidence Interval | 18.7 | 48.0 |
| Value Weighted COD | 15.7 | 36.6 | Value Weighted COD | 13.6 | 19.3 |
| Coefficient of Concentration @10% | 36.7 | 22.2 | Coefficient of Concentration @10% | 38.9 | 40.0 |
| Coefficient of Concentration @15% | 49.4 | 44.4 | Coefficient of Concentration @15% | 57.4 | 40.0 |
| Coefficient of Concentration @20% | 60.8 | 44.4 | Coefficient of Concentration @20% | 72.2 | 40.0 |
| Coefficient of Concentration @50% | 86.1 | 66.7 | Coefficient of Concentration @50% | 92.6 | 80.0 |
| Coefficient of Concentration @100% | 96.2 | 100.0 | Coefficient of Concentration @100% | 98.1 | 100.0 |
| Coefficient of Interquartile Deviation | 16.4 | 48.5 | Coefficient of Interquartile Deviation | 12.6 | 44.2 |
| Median Percent Deviation | 15.2 | 37.2 | Median Percent Deviation | 13.3 | 43.2 |
| Lower Quartile (25 th Percentile) | 89.2 | 74.9 | Lower Quartile (25 th Percentile) | 74.8 | 40.5 |
| Upper Quartile (75 th Percentile) | 122.2 | 172.8 | Upper Quartile (75 th Percentile) | 96.9 | 86.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.37 | 0.53 | Relative Skewness | 0.62 | 0.16 |
| Relative Kurtosis | 2.99 | 1.70 | Relative Kurtosis | 3.52 | 1.75 |
| Arithmetic Mean Ratio | 103.3 | 116.5 | Arithmetic Mean Ratio | 84.9 | 61.4 |
| Weighted Mean Ratio | 98.7 | 88.0 | Weighted Mean Ratio | 83.2 | 53.2 |
| Geometric Mean Ratio | 99.9 | 107.2 | Geometric Mean Ratio | 83.5 | 56.9 |
| Harmonic Mean Ratio | 96.4 | 99.0 | Harmonic Mean Ratio | 82.1 | 52.4 |
| Standard Deviation | 26.3 | 51.1 | Standard Deviation | 16.0 | 25.6 |
| Coefficient of Variation (COV) | 25.5 | 43.8 | Coefficient of Variation (COV) | 18.8 | 41.6 |
| Price-Related Differential (PRD) | 1.05 | 1.32 | Price-Related Differential (PRD) | 1.02 | 1.15 |
| Lower PRD Confidence Interval | 1.00 | 0.96 | Lower PRD Confidence Interval | 1.00 | 0.97 |
| Upper PRD Confidence interval | 1.10 | 1.70 | Upper PRD Confidence interval | 1.05 | 1.30 |
| Coef. of Price-Related Bias (PRB) | -0.08 | 0.03 | Coef. of Price-Related Bias (PRB) | -0.10 | -0.07 |
| Lower PRB Confidence Interval | -0.16 | -0.23 | Lower PRB Confidence Interval | -0.17 | -0.44 |
| Upper PRB Confidence Interval | 0.00 | 0.28 | Upper PRB Confidence Interval | -0.03 | 0.30 |
| Average Sale Price | 72,853 | 48,847 | Average Sale Price | 71,143 | 1,548,927 |
| Average Appraised Value | 71,877 | 30,787 | Average Appraised Value | 59,201 | 1,217,167 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 075 : POTTAWATOMIE | | | 076 : PRATT | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 301 | 15 | Original Number of Sales | 104 | 7 |
| Trimmed Outliers | 33 | 0 | Trimmed Outliers | 19 | 0 |
| Number of Ratios: Outliers Removed | 268 | 15 | Number of Ratios: Outliers Removed | 85 | 7 |
| Minimum Ratio | 4.8 | 40.8 | Minimum Ratio | 51.8 | 59.9 |
| Maximum Ratio | 275.9 | 104.1 | Maximum Ratio | 797.3 | 181.9 |
| Minimum Sale Price | 8,000 | 4,500 | Minimum Sale Price | 1,950 | 23,000 |
| Maximum Sale Price | 650,000 | 5,000,000 | Maximum Sale Price | 415,000 | 350,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 99.5 | 83.3 | Median Ratio | 100.6 | 107.9 |
| Lower Median Confidence Interval | 97.4 | 62.7 | Lower Median Confidence Interval | 96.1 | 101.1 |
| Upper Median Confidence Interval | 100.6 | 99.4 | Upper Median Confidence Interval | 103.2 | 173.9 |
| Broadened Median Ratio | 99.5 | 82.2 | Broadened Median Ratio | 100.5 | 107.1 |
| Coefficient of Dispersion (COD) | 7.7 | 20.7 | Coefficient of Dispersion (COD) | 9.9 | 27.1 |
| Lower COD Confidence Interval | 7.0 | 14.1 | Lower COD Confidence Interval | 8.3 | 12.3 |
| Upper COD Confidence Interval | 8.6 | 32.9 | Upper COD Confidence Interval | 12.1 | 51.7 |
| Value Weighted COD | 7.4 | 19.3 | Value Weighted COD | 7.8 | 26.8 |
| Coefficient of Concentration @10% | 63.8 | 20.0 | Coefficient of Concentration @10% | 56.7 | 57.1 |
| Coefficient of Concentration @15% | 75.4 | 26.7 | Coefficient of Concentration @15% | 64.4 | 57.1 |
| Coefficient of Concentration @20% | 83.4 | 40.0 | Coefficient of Concentration @20% | 67.3 | 57.1 |
| Coefficient of Concentration @50% | 96.7 | 93.3 | Coefficient of Concentration @50% | 92.3 | 71.4 |
| Coefficient of Concentration @100% | 99.3 | 100.0 | Coefficient of Concentration @100% | 95.2 | 100.0 |
| Coefficient of Interquartile Deviation | 7.3 | 22.8 | Coefficient of Interquartile Deviation | 8.5 | 33.8 |
| Median Percent Deviation | 6.8 | 21.7 | Median Percent Deviation | 8.4 | 6.3 |
| Lower Quartile (25 th Percentile) | 90.7 | 62.7 | Lower Quartile (25 th Percentile) | 92.3 | 101.1 |
| Upper Quartile (75 th Percentile) | 105.3 | 100.7 | Upper Quartile (75 th Percentile) | 109.3 | 173.9 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | -0.25 | -0.36 | Relative Skewness | 0.30 | 0.38 |
| Relative Kurtosis | 3.27 | 1.88 | Relative Kurtosis | 3.52 | 2.02 |
| Arithmetic Mean Ratio | 98.1 | 80.1 | Arithmetic Mean Ratio | 98.7 | 119.7 |
| Weighted Mean Ratio | 98.0 | 94.2 | Weighted Mean Ratio | 97.4 | 132.9 |
| Geometric Mean Ratio | 97.6 | 77.4 | Geometric Mean Ratio | 97.9 | 113.0 |
| Harmonic Mean Ratio | 97.1 | 74.4 | Harmonic Mean Ratio | 97.0 | 106.2 |
| Standard Deviation | 9.9 | 20.4 | Standard Deviation | 13.0 | 43.3 |
| Coefficient of Variation (COV) | 10.1 | 25.5 | Coefficient of Variation (COV) | 13.1 | 36.2 |
| Price-Related Differential (PRD) | 1.00 | 0.85 | Price-Related Differential (PRD) | 1.01 | 0.90 |
| Lower PRD Confidence Interval | 1.00 | 0.76 | Lower PRD Confidence Interval | 1.00 | 0.72 |
| Upper PRD Confidence interval | 1.01 | 1.07 | Upper PRD Confidence interval | 1.03 | 1.12 |
| Coef. of Price-Related Bias (PRB) | 0.02 | 0.01 | Coef. of Price-Related Bias (PRB) | -0.15 | 0.09 |
| Lower PRB Confidence Interval | -0.02 | -0.04 | Lower PRB Confidence Interval | -0.27 | -0.15 |
| Upper PRB Confidence Interval | 0.04 | 0.07 | Upper PRB Confidence Interval | -0.03 | 0.34 |
| Average Sale Price | 212,078 | 152,500 | Average Sale Price | 110,081 | 28,714 |
| Average Appraised Value | 207,751 | 112,558 | Average Appraised Value | 107,174 | 26,083 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 077 : RAWLINS | | | 078 : RENO | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>S-4</i> | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 17 | 4 | Original Number of Sales | 132 | 18 |
| Trimmed Outliers | 2 | 0 | Trimmed Outliers | 24 | 0 |
| Number of Ratios: Outliers Removed | 15 | 4 | Number of Ratios: Outliers Removed | 108 | 18 |
| Minimum Ratio | 68.0 | 59.4 | Minimum Ratio | 29.6 | 58.1 |
| Maximum Ratio | 274.9 | 103.6 | Maximum Ratio | 261.2 | 156.3 |
| Minimum Sale Price | 5,000 | 11,000 | Minimum Sale Price | 2,000 | 10,000 |
| Maximum Sale Price | 205,000 | 205,000 | Maximum Sale Price | 451,000 | 350,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.3 | 64.4 | Median Ratio | 96.2 | 109.6 |
| Lower Median Confidence Interval | 90.4 | 59.5 | Lower Median Confidence Interval | 95.0 | 85.4 |
| Upper Median Confidence Interval | 118.2 | 101.8 | Upper Median Confidence Interval | 98.3 | 131.6 |
| Broadened Median Ratio | 101.6 | 70.1 | Broadened Median Ratio | 96.3 | 110.2 |
| Coefficient of Dispersion (COD) | 14.8 | 18.7 | Coefficient of Dispersion (COD) | 8.2 | 23.0 |
| Lower COD Confidence Interval | 10.1 | 1.5 | Lower COD Confidence Interval | 6.9 | 16.7 |
| Upper COD Confidence Interval | 25.6 | 24.8 | Upper COD Confidence Interval | 9.7 | 33.9 |
| Value Weighted COD | 12.3 | 8.2 | Value Weighted COD | 7.7 | 24.0 |
| Coefficient of Concentration @10% | 35.3 | 75.0 | Coefficient of Concentration @10% | 57.6 | 22.2 |
| Coefficient of Concentration @15% | 58.8 | 75.0 | Coefficient of Concentration @15% | 66.7 | 38.9 |
| Coefficient of Concentration @20% | 70.6 | 75.0 | Coefficient of Concentration @20% | 73.5 | 38.9 |
| Coefficient of Concentration @50% | 82.4 | 75.0 | Coefficient of Concentration @50% | 90.9 | 100.0 |
| Coefficient of Concentration @100% | 94.1 | 100.0 | Coefficient of Concentration @100% | 96.2 | 100.0 |
| Coefficient of Interquartile Deviation | 15.7 | 26.5 | Coefficient of Interquartile Deviation | 8.6 | 25.9 |
| Median Percent Deviation | 13.0 | 5.4 | Median Percent Deviation | 8.3 | 23.7 |
| Lower Quartile (25 th Percentile) | 90.0 | 60.1 | Lower Quartile (25 th Percentile) | 89.0 | 83.9 |
| Upper Quartile (75 th Percentile) | 121.8 | 94.3 | Upper Quartile (75 th Percentile) | 105.4 | 140.6 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectW | Normality Test | RejectK | AcceptK |
| Relative Skewness | 0.84 | 1.09 | Relative Skewness | -0.06 | -0.08 |
| Relative Kurtosis | 3.87 | 2.28 | Relative Kurtosis | 3.44 | 1.94 |
| Arithmetic Mean Ratio | 102.7 | 73.0 | Arithmetic Mean Ratio | 95.7 | 110.0 |
| Weighted Mean Ratio | 98.3 | 62.5 | Weighted Mean Ratio | 95.0 | 105.7 |
| Geometric Mean Ratio | 101.0 | 71.1 | Geometric Mean Ratio | 95.1 | 105.6 |
| Harmonic Mean Ratio | 99.3 | 69.5 | Harmonic Mean Ratio | 94.5 | 100.9 |
| Standard Deviation | 20.2 | 20.7 | Standard Deviation | 10.6 | 30.9 |
| Coefficient of Variation (COV) | 19.6 | 28.3 | Coefficient of Variation (COV) | 11.1 | 28.1 |
| Price-Related Differential (PRD) | 1.05 | 1.17 | Price-Related Differential (PRD) | 1.01 | 1.04 |
| Lower PRD Confidence Interval | 1.01 | 1.01 | Lower PRD Confidence Interval | 0.99 | 0.95 |
| Upper PRD Confidence interval | 1.11 | 1.30 | Upper PRD Confidence interval | 1.03 | 1.22 |
| Coef. of Price-Related Bias (PRB) | -0.09 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.05 | -0.02 |
| Lower PRB Confidence Interval | -0.30 | 0.00 | Lower PRB Confidence Interval | -0.10 | -0.11 |
| Upper PRB Confidence Interval | 0.12 | 0.00 | Upper PRB Confidence Interval | 0.01 | 0.07 |
| Average Sale Price | 68,300 | 327,309 | Average Sale Price | 107,261 | 50,100 |
| Average Appraised Value | 67,133 | 268,769 | Average Appraised Value | 101,865 | 46,389 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 079 : REPUBLIC | | | 080 : RICE | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 36 | 4 | Original Number of Sales | 87 | 6 |
| Trimmed Outliers | 3 | 0 | Trimmed Outliers | 16 | 0 |
| Number of Ratios: Outliers Removed | 33 | 4 | Number of Ratios: Outliers Removed | 71 | 6 |
| Minimum Ratio | 30.9 | 45.1 | Minimum Ratio | 24.6 | 74.1 |
| Maximum Ratio | 265.7 | 380.0 | Maximum Ratio | 254.4 | 300.8 |
| Minimum Sale Price | 4,000 | 1,000 | Minimum Sale Price | 1,250 | 11,500 |
| Maximum Sale Price | 290,000 | 68,000 | Maximum Sale Price | 205,000 | 42,500 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 86.6 | 117.9 | Median Ratio | 96.6 | 108.2 |
| Lower Median Confidence Interval | 78.6 | 46.3 | Lower Median Confidence Interval | 93.3 | 84.5 |
| Upper Median Confidence Interval | 95.5 | 369.3 | Upper Median Confidence Interval | 99.7 | 218.1 |
| Broadened Median Ratio | 86.2 | 149.5 | Broadened Median Ratio | 96.9 | 110.5 |
| Coefficient of Dispersion (COD) | 20.8 | 91.1 | Coefficient of Dispersion (COD) | 11.9 | 43.2 |
| Lower COD Confidence Interval | 15.5 | 14.3 | Lower COD Confidence Interval | 9.7 | 12.7 |
| Upper COD Confidence Interval | 28.5 | 118.8 | Upper COD Confidence Interval | 14.9 | 93.6 |
| Value Weighted COD | 20.5 | 53.8 | Value Weighted COD | 11.5 | 44.7 |
| Coefficient of Concentration @10% | 36.1 | 0.0 | Coefficient of Concentration @10% | 43.7 | 33.3 |
| Coefficient of Concentration @15% | 50.0 | 0.0 | Coefficient of Concentration @15% | 55.2 | 50.0 |
| Coefficient of Concentration @20% | 55.6 | 0.0 | Coefficient of Concentration @20% | 63.2 | 50.0 |
| Coefficient of Concentration @50% | 86.1 | 50.0 | Coefficient of Concentration @50% | 86.2 | 83.3 |
| Coefficient of Concentration @100% | 91.7 | 75.0 | Coefficient of Concentration @100% | 98.9 | 83.3 |
| Coefficient of Interquartile Deviation | 19.1 | 116.6 | Coefficient of Interquartile Deviation | 11.2 | 40.3 |
| Median Percent Deviation | 15.5 | 51.0 | Median Percent Deviation | 10.8 | 18.8 |
| Lower Quartile (25 th Percentile) | 73.9 | 51.4 | Lower Quartile (25 th Percentile) | 84.8 | 89.7 |
| Upper Quartile (75 th Percentile) | 107.1 | 326.3 | Upper Quartile (75 th Percentile) | 106.5 | 176.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | AcceptK | AcceptW | Normality Test | RejectK | RejectW |
| Relative Skewness | 0.08 | 0.80 | Relative Skewness | -0.43 | 1.55 |
| Relative Kurtosis | 3.09 | 2.00 | Relative Kurtosis | 3.62 | 3.78 |
| Arithmetic Mean Ratio | 84.6 | 165.2 | Arithmetic Mean Ratio | 95.3 | 136.9 |
| Weighted Mean Ratio | 79.3 | 70.5 | Weighted Mean Ratio | 94.2 | 134.1 |
| Geometric Mean Ratio | 81.1 | 118.9 | Geometric Mean Ratio | 93.9 | 122.3 |
| Harmonic Mean Ratio | 77.1 | 88.8 | Harmonic Mean Ratio | 92.4 | 112.6 |
| Standard Deviation | 23.6 | 152.3 | Standard Deviation | 15.5 | 82.8 |
| Coefficient of Variation (COV) | 27.8 | 92.2 | Coefficient of Variation (COV) | 16.3 | 60.5 |
| Price-Related Differential (PRD) | 1.07 | 2.34 | Price-Related Differential (PRD) | 1.01 | 1.02 |
| Lower PRD Confidence Interval | 1.01 | 1.15 | Lower PRD Confidence Interval | 0.99 | 0.90 |
| Upper PRD Confidence interval | 1.18 | 3.64 | Upper PRD Confidence interval | 1.03 | 1.09 |
| Coef. of Price-Related Bias (PRB) | -0.14 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.03 | 0.49 |
| Lower PRB Confidence Interval | -0.26 | 0.00 | Lower PRB Confidence Interval | -0.10 | -0.64 |
| Upper PRB Confidence Interval | -0.02 | 0.00 | Upper PRB Confidence Interval | 0.03 | 1.61 |
| Average Sale Price | 75,795 | 36,250 | Average Sale Price | 67,680 | 549,306 |
| Average Appraised Value | 60,113 | 32,613 | Average Appraised Value | 63,743 | 516,107 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 081 : RILEY | | | 082 : ROOKS | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-5 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 192 | 7 | Original Number of Sales | 51 | 7 |
| Trimmed Outliers | 22 | 0 | Trimmed Outliers | 5 | 0 |
| Number of Ratios: Outliers Removed | 170 | 7 | Number of Ratios: Outliers Removed | 46 | 7 |
| Minimum Ratio | 63.3 | 52.0 | Minimum Ratio | 51.7 | 47.0 |
| Maximum Ratio | 755.0 | 99.5 | Maximum Ratio | 589.0 | 122.8 |
| Minimum Sale Price | 7,500 | 184,900 | Minimum Sale Price | 500 | 10,000 |
| Maximum Sale Price | 1,400,000 | 4,500,000 | Maximum Sale Price | 260,000 | 208,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 98.8 | 75.0 | Median Ratio | 95.3 | 56.9 |
| Lower Median Confidence Interval | 97.8 | 66.5 | Lower Median Confidence Interval | 86.5 | 50.9 |
| Upper Median Confidence Interval | 100.2 | 94.2 | Upper Median Confidence Interval | 108.6 | 109.7 |
| Broadened Median Ratio | 98.8 | 78.0 | Broadened Median Ratio | 95.2 | 59.1 |
| Coefficient of Dispersion (COD) | 5.8 | 16.6 | Coefficient of Dispersion (COD) | 24.3 | 37.8 |
| Lower COD Confidence Interval | 5.1 | 10.8 | Lower COD Confidence Interval | 18.9 | 21.9 |
| Upper COD Confidence Interval | 6.6 | 33.9 | Upper COD Confidence Interval | 32.1 | 63.9 |
| Value Weighted COD | 5.7 | 25.5 | Value Weighted COD | 19.5 | 19.4 |
| Coefficient of Concentration @10% | 70.8 | 28.6 | Coefficient of Concentration @10% | 25.5 | 28.6 |
| Coefficient of Concentration @15% | 82.8 | 57.1 | Coefficient of Concentration @15% | 39.2 | 42.9 |
| Coefficient of Concentration @20% | 88.5 | 57.1 | Coefficient of Concentration @20% | 47.1 | 71.4 |
| Coefficient of Concentration @50% | 95.8 | 100.0 | Coefficient of Concentration @50% | 78.4 | 71.4 |
| Coefficient of Concentration @100% | 97.4 | 100.0 | Coefficient of Concentration @100% | 88.2 | 85.7 |
| Coefficient of Interquartile Deviation | 5.5 | 18.5 | Coefficient of Interquartile Deviation | 27.3 | 51.7 |
| Median Percent Deviation | 5.5 | 14.1 | Median Percent Deviation | 20.3 | 17.5 |
| Lower Quartile (25 th Percentile) | 93.9 | 66.5 | Lower Quartile (25 th Percentile) | 79.8 | 50.9 |
| Upper Quartile (75 th Percentile) | 104.7 | 94.2 | Upper Quartile (75 th Percentile) | 131.7 | 109.7 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectW |
| Relative Skewness | -0.27 | -0.19 | Relative Skewness | 1.10 | 0.85 |
| Relative Kurtosis | 3.02 | 2.03 | Relative Kurtosis | 3.81 | 1.97 |
| Arithmetic Mean Ratio | 98.2 | 78.0 | Arithmetic Mean Ratio | 100.2 | 72.5 |
| Weighted Mean Ratio | 97.9 | 92.0 | Weighted Mean Ratio | 92.2 | 62.7 |
| Geometric Mean Ratio | 97.9 | 76.4 | Geometric Mean Ratio | 96.1 | 67.7 |
| Harmonic Mean Ratio | 97.6 | 74.8 | Harmonic Mean Ratio | 92.4 | 63.9 |
| Standard Deviation | 7.4 | 16.4 | Standard Deviation | 30.9 | 30.8 |
| Coefficient of Variation (COV) | 7.6 | 21.1 | Coefficient of Variation (COV) | 30.8 | 42.5 |
| Price-Related Differential (PRD) | 1.00 | 0.85 | Price-Related Differential (PRD) | 1.09 | 1.16 |
| Lower PRD Confidence Interval | 1.00 | 0.77 | Lower PRD Confidence Interval | 1.03 | 0.93 |
| Upper PRD Confidence interval | 1.01 | 0.99 | Upper PRD Confidence interval | 1.16 | 1.37 |
| Coef. of Price-Related Bias (PRB) | -0.29 | 0.12 | Coef. of Price-Related Bias (PRB) | -0.28 | -0.22 |
| Lower PRB Confidence Interval | -0.40 | 0.04 | Lower PRB Confidence Interval | -0.42 | -0.64 |
| Upper PRB Confidence Interval | -0.18 | 0.19 | Upper PRB Confidence Interval | -0.14 | 0.20 |
| Average Sale Price | 213,807 | 87,200 | Average Sale Price | 71,391 | 52,903 |
| Average Appraised Value | 209,263 | 53,674 | Average Appraised Value | 65,828 | 37,849 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 083 : RUSH | | | 084 : RUSSELL | | |
|--|-------------|-----------|--|-------------|-----------|
| S-3 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 35 | 4 | Original Number of Sales | 74 | 5 |
| Trimmed Outliers | 5 | 0 | Trimmed Outliers | 7 | 0 |
| Number of Ratios: Outliers Removed | 30 | 4 | Number of Ratios: Outliers Removed | 67 | 5 |
| Minimum Ratio | 38.3 | 45.1 | Minimum Ratio | 28.4 | 40.8 |
| Maximum Ratio | 584.8 | 107.1 | Maximum Ratio | 283.6 | 93.2 |
| Minimum Sale Price | 2,300 | 7,000 | Minimum Sale Price | 7,320 | 40,000 |
| Maximum Sale Price | 130,000 | 75,000 | Maximum Sale Price | 583,000 | 1,000,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 107.4 | 77.0 | Median Ratio | 89.1 | 78.5 |
| Lower Median Confidence Interval | 93.9 | 46.0 | Lower Median Confidence Interval | 85.7 | 41.9 |
| Upper Median Confidence Interval | 116.7 | 106.3 | Upper Median Confidence Interval | 93.1 | 92.3 |
| Broadened Median Ratio | 105.1 | 76.7 | Broadened Median Ratio | 89.1 | 71.6 |
| Coefficient of Dispersion (COD) | 21.8 | 29.2 | Coefficient of Dispersion (COD) | 14.6 | 22.4 |
| Lower COD Confidence Interval | 15.8 | 7.6 | Lower COD Confidence Interval | 11.9 | 5.1 |
| Upper COD Confidence Interval | 32.3 | 37.0 | Upper COD Confidence Interval | 18.3 | 38.8 |
| Value Weighted COD | 15.3 | 29.2 | Value Weighted COD | 11.7 | 37.3 |
| Coefficient of Concentration @10% | 31.4 | 0.0 | Coefficient of Concentration @10% | 45.9 | 40.0 |
| Coefficient of Concentration @15% | 42.9 | 0.0 | Coefficient of Concentration @15% | 55.4 | 40.0 |
| Coefficient of Concentration @20% | 48.6 | 50.0 | Coefficient of Concentration @20% | 64.9 | 60.0 |
| Coefficient of Concentration @50% | 77.1 | 100.0 | Coefficient of Concentration @50% | 89.2 | 100.0 |
| Coefficient of Concentration @100% | 88.6 | 100.0 | Coefficient of Concentration @100% | 97.3 | 100.0 |
| Coefficient of Interquartile Deviation | 22.2 | 34.7 | Coefficient of Interquartile Deviation | 12.6 | 28.0 |
| Median Percent Deviation | 21.5 | 28.6 | Median Percent Deviation | 13.6 | 18.6 |
| Lower Quartile (25 th Percentile) | 84.3 | 49.6 | Lower Quartile (25 th Percentile) | 76.5 | 45.6 |
| Upper Quartile (75 th Percentile) | 131.9 | 103.1 | Upper Quartile (75 th Percentile) | 99.1 | 89.6 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.76 | -0.04 | Relative Skewness | -0.13 | -0.32 |
| Relative Kurtosis | 4.31 | 1.44 | Relative Kurtosis | 3.27 | 1.38 |
| Arithmetic Mean Ratio | 101.1 | 76.6 | Arithmetic Mean Ratio | 87.2 | 69.8 |
| Weighted Mean Ratio | 95.9 | 62.7 | Weighted Mean Ratio | 85.4 | 53.0 |
| Geometric Mean Ratio | 96.7 | 72.6 | Geometric Mean Ratio | 85.4 | 66.4 |
| Harmonic Mean Ratio | 91.9 | 68.5 | Harmonic Mean Ratio | 83.5 | 62.9 |
| Standard Deviation | 30.6 | 27.8 | Standard Deviation | 17.1 | 22.9 |
| Coefficient of Variation (COV) | 30.2 | 36.3 | Coefficient of Variation (COV) | 19.7 | 32.9 |
| Price-Related Differential (PRD) | 1.05 | 1.22 | Price-Related Differential (PRD) | 1.02 | 1.32 |
| Lower PRD Confidence Interval | 1.00 | 1.03 | Lower PRD Confidence Interval | 0.99 | 0.94 |
| Upper PRD Confidence interval | 1.15 | 1.39 | Upper PRD Confidence interval | 1.06 | 1.54 |
| Coef. of Price-Related Bias (PRB) | -0.42 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.05 | -0.09 |
| Lower PRB Confidence Interval | -0.65 | 0.00 | Lower PRB Confidence Interval | -0.12 | -0.33 |
| Upper PRB Confidence Interval | -0.19 | 0.00 | Upper PRB Confidence Interval | 0.01 | 0.16 |
| Average Sale Price | 48,432 | 57,786 | Average Sale Price | 112,440 | 503,494 |
| Average Appraised Value | 46,443 | 45,480 | Average Appraised Value | 96,024 | 415,387 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 085 : SALINE | | | 086 : SCOTT | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 154 | 28 | Original Number of Sales | 46 | 5 |
| Trimmed Outliers | 12 | 1 | Trimmed Outliers | 3 | 0 |
| Number of Ratios: Outliers Removed | 142 | 27 | Number of Ratios: Outliers Removed | 43 | 5 |
| Minimum Ratio | 54.8 | 53.8 | Minimum Ratio | 44.0 | 58.9 |
| Maximum Ratio | 760.0 | 313.4 | Maximum Ratio | 334.2 | 110.9 |
| Minimum Sale Price | 2,500 | 35,000 | Minimum Sale Price | 10,000 | 15,000 |
| Maximum Sale Price | 440,000 | 1,565,000 | Maximum Sale Price | 425,000 | 125,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 97.1 | 90.2 | Median Ratio | 89.6 | 65.6 |
| Lower Median Confidence Interval | 95.4 | 79.5 | Lower Median Confidence Interval | 85.5 | 59.0 |
| Upper Median Confidence Interval | 100.5 | 105.9 | Upper Median Confidence Interval | 93.5 | 108.3 |
| Broadened Median Ratio | 97.0 | 90.0 | Broadened Median Ratio | 89.8 | 71.6 |
| Coefficient of Dispersion (COD) | 10.8 | 26.0 | Coefficient of Dispersion (COD) | 10.9 | 24.9 |
| Lower COD Confidence Interval | 9.5 | 20.1 | Lower COD Confidence Interval | 8.4 | 3.9 |
| Upper COD Confidence Interval | 12.4 | 35.1 | Upper COD Confidence Interval | 14.4 | 31.5 |
| Value Weighted COD | 9.7 | 22.1 | Value Weighted COD | 9.6 | 28.6 |
| Coefficient of Concentration @10% | 50.6 | 25.0 | Coefficient of Concentration @10% | 50.0 | 40.0 |
| Coefficient of Concentration @15% | 65.6 | 39.3 | Coefficient of Concentration @15% | 67.4 | 60.0 |
| Coefficient of Concentration @20% | 76.0 | 42.9 | Coefficient of Concentration @20% | 80.4 | 60.0 |
| Coefficient of Concentration @50% | 94.2 | 82.1 | Coefficient of Concentration @50% | 93.5 | 80.0 |
| Coefficient of Concentration @100% | 96.1 | 96.4 | Coefficient of Concentration @100% | 95.7 | 100.0 |
| Coefficient of Interquartile Deviation | 10.2 | 30.4 | Coefficient of Interquartile Deviation | 9.2 | 31.2 |
| Median Percent Deviation | 9.8 | 22.7 | Median Percent Deviation | 9.9 | 10.2 |
| Lower Quartile (25 th Percentile) | 89.9 | 70.9 | Lower Quartile (25 th Percentile) | 80.5 | 59.3 |
| Upper Quartile (75 th Percentile) | 109.6 | 125.6 | Upper Quartile (75 th Percentile) | 96.9 | 100.2 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.36 | 0.64 | Relative Skewness | -0.17 | 0.69 |
| Relative Kurtosis | 3.03 | 2.35 | Relative Kurtosis | 3.35 | 1.84 |
| Arithmetic Mean Ratio | 97.8 | 95.4 | Arithmetic Mean Ratio | 88.5 | 76.9 |
| Weighted Mean Ratio | 96.7 | 89.0 | Weighted Mean Ratio | 87.9 | 78.5 |
| Geometric Mean Ratio | 96.9 | 91.4 | Geometric Mean Ratio | 87.5 | 74.4 |
| Harmonic Mean Ratio | 96.0 | 87.7 | Harmonic Mean Ratio | 86.5 | 72.3 |
| Standard Deviation | 13.5 | 29.0 | Standard Deviation | 13.1 | 22.7 |
| Coefficient of Variation (COV) | 13.8 | 30.4 | Coefficient of Variation (COV) | 14.8 | 29.5 |
| Price-Related Differential (PRD) | 1.01 | 1.07 | Price-Related Differential (PRD) | 1.01 | 0.98 |
| Lower PRD Confidence Interval | 1.00 | 0.97 | Lower PRD Confidence Interval | 0.99 | 0.89 |
| Upper PRD Confidence interval | 1.03 | 1.21 | Upper PRD Confidence interval | 1.03 | 1.07 |
| Coef. of Price-Related Bias (PRB) | -0.41 | -0.02 | Coef. of Price-Related Bias (PRB) | -0.08 | 0.10 |
| Lower PRB Confidence Interval | -0.54 | -0.16 | Lower PRB Confidence Interval | -0.20 | -0.33 |
| Upper PRB Confidence Interval | -0.27 | 0.13 | Upper PRB Confidence Interval | 0.04 | 0.54 |
| Average Sale Price | 137,957 | 102,714 | Average Sale Price | 135,799 | 590,549 |
| Average Appraised Value | 133,359 | 99,597 | Average Appraised Value | 119,317 | 490,895 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 087 : SEDGWICK | | | 088 : SEWARD | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 234 | 136 | Original Number of Sales | 119 | 21 |
| Trimmed Outliers | 25 | 3 | Trimmed Outliers | 16 | 0 |
| Number of Ratios: Outliers Removed | 209 | 133 | Number of Ratios: Outliers Removed | 103 | 21 |
| Minimum Ratio | 31.0 | 37.6 | Minimum Ratio | 29.7 | 11.9 |
| Maximum Ratio | 401.5 | 253.3 | Maximum Ratio | 327.2 | 132.2 |
| Minimum Sale Price | 3,985 | 30,000 | Minimum Sale Price | 15,000 | 35,000 |
| Maximum Sale Price | 688,140 | 5,405,000 | Maximum Sale Price | 3,100,000 | 2,100,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 90.6 | 85.3 | Median Ratio | 98.8 | 81.5 |
| Lower Median Confidence Interval | 88.2 | 77.0 | Lower Median Confidence Interval | 95.8 | 65.3 |
| Upper Median Confidence Interval | 92.3 | 90.6 | Upper Median Confidence Interval | 100.8 | 94.8 |
| Broadened Median Ratio | 90.6 | 85.5 | Broadened Median Ratio | 98.8 | 81.6 |
| Coefficient of Dispersion (COD) | 10.2 | 23.0 | Coefficient of Dispersion (COD) | 9.3 | 28.2 |
| Lower COD Confidence Interval | 9.1 | 20.1 | Lower COD Confidence Interval | 8.0 | 19.8 |
| Upper COD Confidence Interval | 11.4 | 26.2 | Upper COD Confidence Interval | 11.1 | 46.8 |
| Value Weighted COD | 9.6 | 25.8 | Value Weighted COD | 9.4 | 23.6 |
| Coefficient of Concentration @10% | 53.8 | 21.3 | Coefficient of Concentration @10% | 53.8 | 28.6 |
| Coefficient of Concentration @15% | 64.5 | 31.6 | Coefficient of Concentration @15% | 70.6 | 33.3 |
| Coefficient of Concentration @20% | 78.6 | 48.5 | Coefficient of Concentration @20% | 77.3 | 47.6 |
| Coefficient of Concentration @50% | 95.3 | 91.9 | Coefficient of Concentration @50% | 89.9 | 81.0 |
| Coefficient of Concentration @100% | 98.7 | 99.3 | Coefficient of Concentration @100% | 96.6 | 100.0 |
| Coefficient of Interquartile Deviation | 8.9 | 21.1 | Coefficient of Interquartile Deviation | 9.1 | 25.9 |
| Median Percent Deviation | 8.7 | 21.2 | Median Percent Deviation | 8.8 | 24.4 |
| Lower Quartile (25 th Percentile) | 81.9 | 67.2 | Lower Quartile (25 th Percentile) | 89.4 | 57.3 |
| Upper Quartile (75 th Percentile) | 98.1 | 103.3 | Upper Quartile (75 th Percentile) | 107.3 | 99.5 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | RejectK |
| Relative Skewness | 0.08 | 0.34 | Relative Skewness | -0.16 | -0.31 |
| Relative Kurtosis | 3.02 | 2.44 | Relative Kurtosis | 3.26 | 2.80 |
| Arithmetic Mean Ratio | 89.0 | 85.2 | Arithmetic Mean Ratio | 97.5 | 79.1 |
| Weighted Mean Ratio | 90.0 | 75.4 | Weighted Mean Ratio | 95.6 | 81.6 |
| Geometric Mean Ratio | 88.3 | 82.0 | Geometric Mean Ratio | 96.7 | 71.3 |
| Harmonic Mean Ratio | 87.5 | 78.7 | Harmonic Mean Ratio | 96.0 | 58.5 |
| Standard Deviation | 11.6 | 23.6 | Standard Deviation | 11.9 | 30.0 |
| Coefficient of Variation (COV) | 13.0 | 27.6 | Coefficient of Variation (COV) | 12.2 | 38.0 |
| Price-Related Differential (PRD) | 0.99 | 1.13 | Price-Related Differential (PRD) | 1.02 | 0.97 |
| Lower PRD Confidence Interval | 0.98 | 1.06 | Lower PRD Confidence Interval | 1.00 | 0.88 |
| Upper PRD Confidence interval | 1.00 | 1.22 | Upper PRD Confidence interval | 1.04 | 1.07 |
| Coef. of Price-Related Bias (PRB) | -0.07 | -0.04 | Coef. of Price-Related Bias (PRB) | -0.13 | 0.06 |
| Lower PRB Confidence Interval | -0.11 | -0.07 | Lower PRB Confidence Interval | -0.19 | -0.06 |
| Upper PRB Confidence Interval | -0.03 | 0.00 | Upper PRB Confidence Interval | -0.06 | 0.18 |
| Average Sale Price | 163,426 | 235,361 | Average Sale Price | 135,615 | 448,770 |
| Average Appraised Value | 147,148 | 221,987 | Average Appraised Value | 129,704 | 417,135 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 089 : SHAWNEE | | | 090 : SHERIDAN | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-2 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 236 | 46 | Original Number of Sales | 24 | 3 |
| Trimmed Outliers | 29 | 3 | Trimmed Outliers | 2 | 0 |
| Number of Ratios: Outliers Removed | 207 | 43 | Number of Ratios: Outliers Removed | 22 | 3 |
| Minimum Ratio | 45.9 | 28.4 | Minimum Ratio | 51.0 | 76.2 |
| Maximum Ratio | 784.0 | 184.0 | Maximum Ratio | 480.7 | 139.1 |
| Minimum Sale Price | 3,000 | 30,000 | Minimum Sale Price | 10,000 | 20,000 |
| Maximum Sale Price | 670,000 | 6,200,000 | Maximum Sale Price | 198,500 | 871,815 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 96.4 | 95.5 | Median Ratio | 89.4 | 96.7 |
| Lower Median Confidence Interval | 94.7 | 87.3 | Lower Median Confidence Interval | 73.3 | 77.5 |
| Upper Median Confidence Interval | 98.1 | 100.6 | Upper Median Confidence Interval | 102.6 | 136.2 |
| Broadened Median Ratio | 96.4 | 95.1 | Broadened Median Ratio | 88.2 | 104.0 |
| Coefficient of Dispersion (COD) | 9.0 | 17.2 | Coefficient of Dispersion (COD) | 20.2 | 21.7 |
| Lower COD Confidence Interval | 8.1 | 13.1 | Lower COD Confidence Interval | 15.0 | 7.1 |
| Upper COD Confidence Interval | 10.1 | 22.5 | Upper COD Confidence Interval | 27.8 | 21.7 |
| Value Weighted COD | 8.7 | 12.0 | Value Weighted COD | 17.7 | 1.5 |
| Coefficient of Concentration @10% | 56.4 | 32.6 | Coefficient of Concentration @10% | 20.8 | 33.3 |
| Coefficient of Concentration @15% | 70.8 | 52.2 | Coefficient of Concentration @15% | 33.3 | 33.3 |
| Coefficient of Concentration @20% | 80.1 | 71.7 | Coefficient of Concentration @20% | 54.2 | 33.3 |
| Coefficient of Concentration @50% | 92.4 | 87.0 | Coefficient of Concentration @50% | 91.7 | 100.0 |
| Coefficient of Concentration @100% | 95.3 | 100.0 | Coefficient of Concentration @100% | 91.7 | 100.0 |
| Coefficient of Interquartile Deviation | 8.2 | 14.8 | Coefficient of Interquartile Deviation | 19.3 | 32.5 |
| Median Percent Deviation | 8.3 | 13.5 | Median Percent Deviation | 18.9 | 21.2 |
| Lower Quartile (25 th Percentile) | 88.0 | 82.7 | Lower Quartile (25 th Percentile) | 72.1 | 76.2 |
| Upper Quartile (75 th Percentile) | 103.8 | 110.9 | Upper Quartile (75 th Percentile) | 106.7 | 139.1 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.29 | 0.72 | Relative Skewness | 0.20 | 0.40 |
| Relative Kurtosis | 3.34 | 3.47 | Relative Kurtosis | 2.18 | 1.50 |
| Arithmetic Mean Ratio | 95.3 | 97.5 | Arithmetic Mean Ratio | 86.2 | 104.0 |
| Weighted Mean Ratio | 93.9 | 89.7 | Weighted Mean Ratio | 84.5 | 97.1 |
| Geometric Mean Ratio | 94.6 | 95.1 | Geometric Mean Ratio | 83.7 | 100.8 |
| Harmonic Mean Ratio | 94.0 | 92.8 | Harmonic Mean Ratio | 81.2 | 97.8 |
| Standard Deviation | 11.0 | 22.1 | Standard Deviation | 21.1 | 32.1 |
| Coefficient of Variation (COV) | 11.6 | 22.7 | Coefficient of Variation (COV) | 24.5 | 30.8 |
| Price-Related Differential (PRD) | 1.01 | 1.09 | Price-Related Differential (PRD) | 1.02 | 1.07 |
| Lower PRD Confidence Interval | 1.01 | 1.03 | Lower PRD Confidence Interval | 0.97 | 0.93 |
| Upper PRD Confidence interval | 1.03 | 1.16 | Upper PRD Confidence interval | 1.09 | 1.14 |
| Coef. of Price-Related Bias (PRB) | -0.28 | -0.04 | Coef. of Price-Related Bias (PRB) | -0.17 | 0.00 |
| Lower PRB Confidence Interval | -0.37 | -0.09 | Lower PRB Confidence Interval | -0.53 | 0.00 |
| Upper PRB Confidence Interval | -0.20 | 0.01 | Upper PRB Confidence Interval | 0.18 | 0.00 |
| Average Sale Price | 146,901 | 202,553 | Average Sale Price | 102,146 | 331,300 |
| Average Appraised Value | 137,903 | 177,765 | Average Appraised Value | 86,343 | 261,371 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 091 : SHERMAN | | | 092 : SMITH | | |
|--|-------------|-----------|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 82 | 3 | Original Number of Sales | 49 | 4 |
| Trimmed Outliers | 9 | 0 | Trimmed Outliers | 3 | 0 |
| Number of Ratios: Outliers Removed | 73 | 3 | Number of Ratios: Outliers Removed | 46 | 4 |
| Minimum Ratio | 34.9 | 67.0 | Minimum Ratio | 34.8 | 39.0 |
| Maximum Ratio | 272.5 | 207.0 | Maximum Ratio | 298.0 | 211.6 |
| Minimum Sale Price | 6,000 | 30,000 | Minimum Sale Price | 2,000 | 1,765 |
| Maximum Sale Price | 425,000 | 1,750,000 | Maximum Sale Price | 250,000 | 45,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 94.9 | 88.8 | Median Ratio | 93.6 | 58.2 |
| Lower Median Confidence Interval | 90.4 | 68.5 | Lower Median Confidence Interval | 83.5 | 39.0 |
| Upper Median Confidence Interval | 99.8 | 199.1 | Upper Median Confidence Interval | 104.1 | 204.8 |
| Broadened Median Ratio | 94.8 | 120.9 | Broadened Median Ratio | 93.3 | 80.5 |
| Coefficient of Dispersion (COD) | 14.5 | 52.5 | Coefficient of Dispersion (COD) | 21.6 | 89.9 |
| Lower COD Confidence Interval | 11.8 | 8.2 | Lower COD Confidence Interval | 17.7 | 12.0 |
| Upper COD Confidence Interval | 18.1 | 52.5 | Upper COD Confidence Interval | 28.1 | 108.4 |
| Value Weighted COD | 11.5 | 25.0 | Value Weighted COD | 18.6 | 123.0 |
| Coefficient of Concentration @10% | 45.1 | 33.3 | Coefficient of Concentration @10% | 26.5 | 0.0 |
| Coefficient of Concentration @15% | 54.9 | 33.3 | Coefficient of Concentration @15% | 44.9 | 0.0 |
| Coefficient of Concentration @20% | 68.3 | 33.3 | Coefficient of Concentration @20% | 51.0 | 0.0 |
| Coefficient of Concentration @50% | 87.8 | 66.7 | Coefficient of Concentration @50% | 81.6 | 75.0 |
| Coefficient of Concentration @100% | 93.9 | 66.7 | Coefficient of Concentration @100% | 93.9 | 75.0 |
| Coefficient of Interquartile Deviation | 13.0 | 78.8 | Coefficient of Interquartile Deviation | 19.0 | 119.2 |
| Median Percent Deviation | 12.1 | 24.5 | Median Percent Deviation | 19.8 | 32.2 |
| Lower Quartile (25 th Percentile) | 84.5 | 67.0 | Lower Quartile (25 th Percentile) | 78.4 | 39.2 |
| Upper Quartile (75 th Percentile) | 109.1 | 207.0 | Upper Quartile (75 th Percentile) | 113.9 | 177.8 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectW |
| Relative Skewness | -0.13 | 0.64 | Relative Skewness | 0.18 | 1.01 |
| Relative Kurtosis | 3.72 | 1.50 | Relative Kurtosis | 2.86 | 2.20 |
| Arithmetic Mean Ratio | 93.7 | 120.9 | Arithmetic Mean Ratio | 94.5 | 91.7 |
| Weighted Mean Ratio | 92.9 | 70.4 | Weighted Mean Ratio | 89.0 | 107.8 |
| Geometric Mean Ratio | 91.7 | 107.2 | Geometric Mean Ratio | 91.0 | 70.8 |
| Harmonic Mean Ratio | 89.5 | 96.7 | Harmonic Mean Ratio | 87.0 | 58.3 |
| Standard Deviation | 18.5 | 75.3 | Standard Deviation | 25.1 | 81.8 |
| Coefficient of Variation (COV) | 19.7 | 62.3 | Coefficient of Variation (COV) | 26.6 | 89.2 |
| Price-Related Differential (PRD) | 1.01 | 1.72 | Price-Related Differential (PRD) | 1.06 | 0.85 |
| Lower PRD Confidence Interval | 0.98 | 1.10 | Lower PRD Confidence Interval | 1.01 | 0.67 |
| Upper PRD Confidence interval | 1.04 | 1.72 | Upper PRD Confidence interval | 1.13 | 1.39 |
| Coef. of Price-Related Bias (PRB) | -0.11 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.14 | 0.00 |
| Lower PRB Confidence Interval | -0.19 | 0.00 | Lower PRB Confidence Interval | -0.23 | 0.00 |
| Upper PRB Confidence Interval | -0.04 | 0.00 | Upper PRB Confidence Interval | -0.05 | 0.00 |
| Average Sale Price | 102,277 | 51,500 | Average Sale Price | 56,187 | 28,333 |
| Average Appraised Value | 95,058 | 39,916 | Average Appraised Value | 50,030 | 25,037 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 093 : STAFFORD | | | 094 : STANTON | | |
|--|-------------|-----------|--|-------------|-----------|
| | S-3 | | | S-4 | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 38 | 5 | Original Number of Sales | 20 | 4 |
| Trimmed Outliers | 2 | 0 | Trimmed Outliers | 3 | 0 |
| Number of Ratios: Outliers Removed | 36 | 5 | Number of Ratios: Outliers Removed | 17 | 4 |
| Minimum Ratio | 56.8 | 100.3 | Minimum Ratio | 52.1 | 67.9 |
| Maximum Ratio | 184.7 | 166.9 | Maximum Ratio | 553.0 | 110.6 |
| Minimum Sale Price | 3,500 | 4,000 | Minimum Sale Price | 1,000 | 70,000 |
| Maximum Sale Price | 185,000 | 60,000 | Maximum Sale Price | 257,500 | 1,900,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 101.9 | 101.4 | Median Ratio | 102.2 | 96.4 |
| Lower Median Confidence Interval | 96.8 | 100.3 | Lower Median Confidence Interval | 93.2 | 68.7 |
| Upper Median Confidence Interval | 111.9 | 159.4 | Upper Median Confidence Interval | 113.2 | 110.5 |
| Broadened Median Ratio | 101.8 | 102.1 | Broadened Median Ratio | 101.6 | 94.0 |
| Coefficient of Dispersion (COD) | 18.1 | 13.7 | Coefficient of Dispersion (COD) | 13.8 | 17.1 |
| Lower COD Confidence Interval | 13.2 | 0.4 | Lower COD Confidence Interval | 8.6 | 5.0 |
| Upper COD Confidence Interval | 25.0 | 26.2 | Upper COD Confidence Interval | 22.8 | 22.8 |
| Value Weighted COD | 14.4 | 5.1 | Value Weighted COD | 14.1 | 12.8 |
| Coefficient of Concentration @10% | 36.8 | 80.0 | Coefficient of Concentration @10% | 45.0 | 0.0 |
| Coefficient of Concentration @15% | 50.0 | 80.0 | Coefficient of Concentration @15% | 55.0 | 75.0 |
| Coefficient of Concentration @20% | 57.9 | 80.0 | Coefficient of Concentration @20% | 60.0 | 75.0 |
| Coefficient of Concentration @50% | 89.5 | 80.0 | Coefficient of Concentration @50% | 85.0 | 100.0 |
| Coefficient of Concentration @100% | 100.0 | 100.0 | Coefficient of Concentration @100% | 90.0 | 100.0 |
| Coefficient of Interquartile Deviation | 17.4 | 17.2 | Coefficient of Interquartile Deviation | 13.2 | 19.6 |
| Median Percent Deviation | 15.9 | 1.1 | Median Percent Deviation | 12.9 | 13.4 |
| Lower Quartile (25 th Percentile) | 88.3 | 100.6 | Lower Quartile (25 th Percentile) | 90.1 | 72.1 |
| Upper Quartile (75 th Percentile) | 123.7 | 135.4 | Upper Quartile (75 th Percentile) | 117.1 | 110.0 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectW | Normality Test | RejectK | AcceptW |
| Relative Skewness | 0.98 | 1.49 | Relative Skewness | -0.77 | -0.32 |
| Relative Kurtosis | 4.12 | 3.24 | Relative Kurtosis | 2.99 | 1.43 |
| Arithmetic Mean Ratio | 105.9 | 114.7 | Arithmetic Mean Ratio | 95.3 | 92.8 |
| Weighted Mean Ratio | 101.6 | 106.1 | Weighted Mean Ratio | 93.4 | 86.6 |
| Geometric Mean Ratio | 103.0 | 112.2 | Geometric Mean Ratio | 93.2 | 91.1 |
| Harmonic Mean Ratio | 100.2 | 110.2 | Harmonic Mean Ratio | 90.8 | 89.3 |
| Standard Deviation | 26.1 | 29.2 | Standard Deviation | 19.1 | 20.3 |
| Coefficient of Variation (COV) | 24.7 | 25.5 | Coefficient of Variation (COV) | 20.0 | 21.8 |
| Price-Related Differential (PRD) | 1.04 | 1.08 | Price-Related Differential (PRD) | 1.02 | 1.07 |
| Lower PRD Confidence Interval | 0.99 | 0.98 | Lower PRD Confidence Interval | 0.98 | 0.95 |
| Upper PRD Confidence interval | 1.12 | 1.18 | Upper PRD Confidence interval | 1.10 | 1.16 |
| Coef. of Price-Related Bias (PRB) | -0.06 | -0.03 | Coef. of Price-Related Bias (PRB) | -0.21 | 0.00 |
| Lower PRB Confidence Interval | -0.12 | -0.34 | Lower PRB Confidence Interval | -0.44 | 0.00 |
| Upper PRB Confidence Interval | 0.01 | 0.28 | Upper PRB Confidence Interval | 0.02 | 0.00 |
| Average Sale Price | 52,579 | 76,300 | Average Sale Price | 98,588 | 175,221 |
| Average Appraised Value | 53,404 | 39,154 | Average Appraised Value | 92,114 | 138,031 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 095 : STEVENS | | | 096 : SUMNER | | |
|--|-------------|-----------|--|-------------|-----------|
| | | S-2 | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 41 | 4 | Original Number of Sales | 207 | 15 |
| Trimmed Outliers | 3 | 0 | Trimmed Outliers | 18 | 1 |
| Number of Ratios: Outliers Removed | 38 | 4 | Number of Ratios: Outliers Removed | 189 | 14 |
| Minimum Ratio | 22.2 | 65.7 | Minimum Ratio | 38.1 | 52.7 |
| Maximum Ratio | 181.1 | 100.4 | Maximum Ratio | 884.0 | 224.1 |
| Minimum Sale Price | 20,000 | 55,000 | Minimum Sale Price | 1,000 | 8,000 |
| Maximum Sale Price | 480,000 | 155,000 | Maximum Sale Price | 445,000 | 165,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 95.0 | 94.6 | Median Ratio | 96.3 | 111.5 |
| Lower Median Confidence Interval | 92.0 | 67.0 | Lower Median Confidence Interval | 92.0 | 87.4 |
| Upper Median Confidence Interval | 101.3 | 100.2 | Upper Median Confidence Interval | 98.9 | 128.2 |
| Broadened Median Ratio | 95.1 | 90.7 | Broadened Median Ratio | 96.5 | 111.6 |
| Coefficient of Dispersion (COD) | 15.0 | 10.5 | Coefficient of Dispersion (COD) | 17.8 | 19.7 |
| Lower COD Confidence Interval | 11.3 | 1.4 | Lower COD Confidence Interval | 15.6 | 13.4 |
| Upper COD Confidence Interval | 21.0 | 19.4 | Upper COD Confidence Interval | 20.2 | 32.1 |
| Value Weighted COD | 13.7 | 9.9 | Value Weighted COD | 14.9 | 19.0 |
| Coefficient of Concentration @10% | 39.0 | 75.0 | Coefficient of Concentration @10% | 36.2 | 20.0 |
| Coefficient of Concentration @15% | 56.1 | 75.0 | Coefficient of Concentration @15% | 47.8 | 40.0 |
| Coefficient of Concentration @20% | 65.9 | 75.0 | Coefficient of Concentration @20% | 59.9 | 60.0 |
| Coefficient of Concentration @50% | 90.2 | 100.0 | Coefficient of Concentration @50% | 85.5 | 86.7 |
| Coefficient of Concentration @100% | 100.0 | 100.0 | Coefficient of Concentration @100% | 94.2 | 93.3 |
| Coefficient of Interquartile Deviation | 15.8 | 14.4 | Coefficient of Interquartile Deviation | 15.7 | 18.3 |
| Median Percent Deviation | 13.8 | 4.4 | Median Percent Deviation | 15.7 | 17.3 |
| Lower Quartile (25 th Percentile) | 77.3 | 72.3 | Lower Quartile (25 th Percentile) | 80.5 | 87.4 |
| Upper Quartile (75 th Percentile) | 107.2 | 99.6 | Upper Quartile (75 th Percentile) | 110.8 | 128.2 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectK |
| Relative Skewness | -0.81 | -1.00 | Relative Skewness | 0.33 | -0.43 |
| Relative Kurtosis | 3.27 | 2.20 | Relative Kurtosis | 3.52 | 2.34 |
| Arithmetic Mean Ratio | 91.2 | 88.8 | Arithmetic Mean Ratio | 93.7 | 105.7 |
| Weighted Mean Ratio | 89.5 | 90.7 | Weighted Mean Ratio | 90.3 | 96.4 |
| Geometric Mean Ratio | 88.8 | 87.6 | Geometric Mean Ratio | 91.0 | 102.3 |
| Harmonic Mean Ratio | 86.0 | 86.3 | Harmonic Mean Ratio | 88.2 | 98.4 |
| Standard Deviation | 19.1 | 15.8 | Standard Deviation | 22.0 | 26.2 |
| Coefficient of Variation (COV) | 20.9 | 17.8 | Coefficient of Variation (COV) | 23.5 | 24.8 |
| Price-Related Differential (PRD) | 1.02 | 0.98 | Price-Related Differential (PRD) | 1.04 | 1.10 |
| Lower PRD Confidence Interval | 0.98 | 0.96 | Lower PRD Confidence Interval | 1.02 | 1.02 |
| Upper PRD Confidence interval | 1.08 | 1.00 | Upper PRD Confidence interval | 1.06 | 1.27 |
| Coef. of Price-Related Bias (PRB) | 0.02 | 0.00 | Coef. of Price-Related Bias (PRB) | -0.28 | -0.06 |
| Lower PRB Confidence Interval | -0.08 | 0.00 | Lower PRB Confidence Interval | -0.36 | -0.21 |
| Upper PRB Confidence Interval | 0.11 | 0.00 | Upper PRB Confidence Interval | -0.20 | 0.10 |
| Average Sale Price | 130,755 | 105,511 | Average Sale Price | 104,021 | 139,688 |
| Average Appraised Value | 117,045 | 98,484 | Average Appraised Value | 93,939 | 126,065 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 097 : THOMAS | | | 098 : TREGO | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-4 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 89 | 6 | Original Number of Sales | 31 | 6 |
| Trimmed Outliers | 11 | 0 | Trimmed Outliers | 6 | 1 |
| Number of Ratios: Outliers Removed | 78 | 6 | Number of Ratios: Outliers Removed | 25 | 5 |
| Minimum Ratio | 54.3 | 30.7 | Minimum Ratio | 27.0 | 51.6 |
| Maximum Ratio | 205.2 | 139.1 | Maximum Ratio | 245.1 | 502.0 |
| Minimum Sale Price | 10,000 | 42,000 | Minimum Sale Price | 5,000 | 500 |
| Maximum Sale Price | 375,000 | 220,000 | Maximum Sale Price | 270,000 | 1,300,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 96.1 | 86.5 | Median Ratio | 97.9 | 95.1 |
| Lower Median Confidence Interval | 91.5 | 54.0 | Lower Median Confidence Interval | 87.3 | 67.6 |
| Upper Median Confidence Interval | 99.9 | 125.6 | Upper Median Confidence Interval | 101.4 | 312.9 |
| Broadened Median Ratio | 96.5 | 89.3 | Broadened Median Ratio | 97.2 | 97.9 |
| Coefficient of Dispersion (COD) | 10.9 | 30.4 | Coefficient of Dispersion (COD) | 11.7 | 18.8 |
| Lower COD Confidence Interval | 9.0 | 16.0 | Lower COD Confidence Interval | 8.4 | 5.0 |
| Upper COD Confidence Interval | 13.2 | 93.2 | Upper COD Confidence Interval | 16.4 | 31.3 |
| Value Weighted COD | 11.8 | 33.8 | Value Weighted COD | 9.9 | 13.4 |
| Coefficient of Concentration @10% | 55.1 | 33.3 | Coefficient of Concentration @10% | 38.7 | 33.3 |
| Coefficient of Concentration @15% | 64.0 | 50.0 | Coefficient of Concentration @15% | 48.4 | 50.0 |
| Coefficient of Concentration @20% | 71.9 | 50.0 | Coefficient of Concentration @20% | 61.3 | 50.0 |
| Coefficient of Concentration @50% | 95.5 | 66.7 | Coefficient of Concentration @50% | 80.6 | 83.3 |
| Coefficient of Concentration @100% | 98.9 | 100.0 | Coefficient of Concentration @100% | 96.8 | 83.3 |
| Coefficient of Interquartile Deviation | 9.6 | 30.7 | Coefficient of Interquartile Deviation | 14.2 | 75.1 |
| Median Percent Deviation | 8.5 | 20.1 | Median Percent Deviation | 15.2 | 21.2 |
| Lower Quartile (25 th Percentile) | 84.5 | 65.7 | Lower Quartile (25 th Percentile) | 82.7 | 75.5 |
| Upper Quartile (75 th Percentile) | 102.9 | 118.9 | Upper Quartile (75 th Percentile) | 110.5 | 218.4 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | AcceptK | AcceptW |
| Relative Skewness | -0.28 | -0.26 | Relative Skewness | 0.10 | -0.25 |
| Relative Kurtosis | 3.11 | 2.42 | Relative Kurtosis | 2.80 | 2.34 |
| Arithmetic Mean Ratio | 93.0 | 88.7 | Arithmetic Mean Ratio | 94.1 | 89.8 |
| Weighted Mean Ratio | 91.1 | 92.0 | Weighted Mean Ratio | 92.2 | 81.5 |
| Geometric Mean Ratio | 92.0 | 80.7 | Geometric Mean Ratio | 93.0 | 86.4 |
| Harmonic Mean Ratio | 91.0 | 70.7 | Harmonic Mean Ratio | 91.9 | 82.7 |
| Standard Deviation | 13.1 | 36.6 | Standard Deviation | 14.7 | 26.1 |
| Coefficient of Variation (COV) | 14.1 | 41.2 | Coefficient of Variation (COV) | 15.6 | 29.1 |
| Price-Related Differential (PRD) | 1.02 | 0.96 | Price-Related Differential (PRD) | 1.02 | 1.10 |
| Lower PRD Confidence Interval | 1.00 | 0.88 | Lower PRD Confidence Interval | 0.99 | 0.93 |
| Upper PRD Confidence interval | 1.04 | 1.18 | Upper PRD Confidence interval | 1.06 | 1.35 |
| Coef. of Price-Related Bias (PRB) | -0.06 | 0.13 | Coef. of Price-Related Bias (PRB) | -0.10 | -0.38 |
| Lower PRB Confidence Interval | -0.12 | -0.36 | Lower PRB Confidence Interval | -0.22 | -0.92 |
| Upper PRB Confidence Interval | 0.00 | 0.62 | Upper PRB Confidence Interval | 0.02 | 0.17 |
| Average Sale Price | 132,528 | 229,913 | Average Sale Price | 84,150 | 46,500 |
| Average Appraised Value | 120,781 | 224,021 | Average Appraised Value | 77,620 | 44,239 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 099 : WABAUNSEE | | | 100 : WALLACE | | |
|--|-------------|-----------|--|-------------|-----------|
| | | | S-3 | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 68 | 5 | Original Number of Sales | 7 | 3 |
| Trimmed Outliers | 10 | 0 | Trimmed Outliers | 0 | 0 |
| Number of Ratios: Outliers Removed | 58 | 5 | Number of Ratios: Outliers Removed | 7 | 3 |
| Minimum Ratio | 28.3 | 39.7 | Minimum Ratio | 71.4 | 52.5 |
| Maximum Ratio | 291.3 | 96.1 | Maximum Ratio | 153.3 | 92.2 |
| Minimum Sale Price | 2,000 | 58,000 | Minimum Sale Price | 18,500 | 2,000 |
| Maximum Sale Price | 353,000 | 1,100,000 | Maximum Sale Price | 135,000 | 70,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 93.4 | 72.7 | Median Ratio | 97.8 | 67.8 |
| Lower Median Confidence Interval | 90.5 | 42.8 | Lower Median Confidence Interval | 75.3 | 53.5 |
| Upper Median Confidence Interval | 96.6 | 94.5 | Upper Median Confidence Interval | 118.1 | 90.5 |
| Broadened Median Ratio | 93.5 | 73.6 | Broadened Median Ratio | 101.2 | 70.8 |
| Coefficient of Dispersion (COD) | 11.0 | 20.1 | Coefficient of Dispersion (COD) | 19.7 | 19.5 |
| Lower COD Confidence Interval | 8.5 | 6.4 | Lower COD Confidence Interval | 11.4 | 7.5 |
| Upper COD Confidence Interval | 14.1 | 33.3 | Upper COD Confidence Interval | 44.5 | 19.5 |
| Value Weighted COD | 10.5 | 6.0 | Value Weighted COD | 16.6 | 29.3 |
| Coefficient of Concentration @10% | 51.5 | 40.0 | Coefficient of Concentration @10% | 28.6 | 33.3 |
| Coefficient of Concentration @15% | 61.8 | 60.0 | Coefficient of Concentration @15% | 42.9 | 33.3 |
| Coefficient of Concentration @20% | 69.1 | 60.0 | Coefficient of Concentration @20% | 42.9 | 33.3 |
| Coefficient of Concentration @50% | 89.7 | 100.0 | Coefficient of Concentration @50% | 85.7 | 100.0 |
| Coefficient of Concentration @100% | 97.1 | 100.0 | Coefficient of Concentration @100% | 100.0 | 100.0 |
| Coefficient of Interquartile Deviation | 9.7 | 25.1 | Coefficient of Interquartile Deviation | 21.9 | 29.3 |
| Median Percent Deviation | 9.2 | 13.3 | Median Percent Deviation | 20.7 | 22.6 |
| Lower Quartile (25 th Percentile) | 82.4 | 52.7 | Lower Quartile (25 th Percentile) | 75.3 | 52.5 |
| Upper Quartile (75 th Percentile) | 100.6 | 89.2 | Upper Quartile (75 th Percentile) | 118.1 | 92.2 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | AcceptW | AcceptW |
| Relative Skewness | -0.18 | -0.46 | Relative Skewness | 0.65 | 0.27 |
| Relative Kurtosis | 3.35 | 2.23 | Relative Kurtosis | 2.65 | 1.50 |
| Arithmetic Mean Ratio | 90.9 | 71.3 | Arithmetic Mean Ratio | 103.1 | 70.8 |
| Weighted Mean Ratio | 88.6 | 71.7 | Weighted Mean Ratio | 101.8 | 86.9 |
| Geometric Mean Ratio | 89.8 | 68.5 | Geometric Mean Ratio | 100.1 | 69.0 |
| Harmonic Mean Ratio | 88.6 | 65.2 | Harmonic Mean Ratio | 97.2 | 67.2 |
| Standard Deviation | 14.0 | 21.0 | Standard Deviation | 27.7 | 20.0 |
| Coefficient of Variation (COV) | 15.4 | 29.5 | Coefficient of Variation (COV) | 26.9 | 28.2 |
| Price-Related Differential (PRD) | 1.03 | 0.99 | Price-Related Differential (PRD) | 1.01 | 0.81 |
| Lower PRD Confidence Interval | 1.00 | 0.87 | Lower PRD Confidence Interval | 0.94 | 0.82 |
| Upper PRD Confidence interval | 1.05 | 1.10 | Upper PRD Confidence interval | 1.09 | 0.94 |
| Coef. of Price-Related Bias (PRB) | -0.09 | 0.01 | Coef. of Price-Related Bias (PRB) | 0.03 | 0.00 |
| Lower PRB Confidence Interval | -0.15 | -0.29 | Lower PRB Confidence Interval | -0.28 | 0.00 |
| Upper PRB Confidence Interval | -0.02 | 0.31 | Upper PRB Confidence Interval | 0.35 | 0.00 |
| Average Sale Price | 137,050 | 36,000 | Average Sale Price | 55,429 | 71,250 |
| Average Appraised Value | 121,483 | 32,785 | Average Appraised Value | 56,414 | 51,675 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 101 : WASHINGTON | | | 102 : WICHITA | | |
|--|-------------|-----------|--|-------------|-----------|
| | <i>S-4</i> | | | <i>S-2</i> | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 43 | 5 | Original Number of Sales | 22 | 4 |
| Trimmed Outliers | 4 | 0 | Trimmed Outliers | 1 | 0 |
| Number of Ratios: Outliers Removed | 39 | 5 | Number of Ratios: Outliers Removed | 21 | 4 |
| Minimum Ratio | 39.5 | 51.8 | Minimum Ratio | 66.0 | 30.0 |
| Maximum Ratio | 2605.0 | 139.7 | Maximum Ratio | 154.0 | 109.0 |
| Minimum Sale Price | 400 | 20,000 | Minimum Sale Price | 17,000 | 30,000 |
| Maximum Sale Price | 150,000 | 240,000 | Maximum Sale Price | 275,000 | 87,000 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 99.4 | 83.2 | Median Ratio | 91.5 | 92.1 |
| Lower Median Confidence Interval | 91.1 | 53.5 | Lower Median Confidence Interval | 87.8 | 33.0 |
| Upper Median Confidence Interval | 112.7 | 133.2 | Upper Median Confidence Interval | 104.0 | 108.3 |
| Broadened Median Ratio | 99.8 | 78.1 | Broadened Median Ratio | 92.1 | 84.6 |
| Coefficient of Dispersion (COD) | 25.9 | 25.8 | Coefficient of Dispersion (COD) | 13.1 | 22.3 |
| Lower COD Confidence Interval | 19.4 | 8.0 | Lower COD Confidence Interval | 9.5 | 3.5 |
| Upper COD Confidence Interval | 34.7 | 41.2 | Upper COD Confidence Interval | 18.4 | 57.8 |
| Value Weighted COD | 19.2 | 26.5 | Value Weighted COD | 10.1 | 27.1 |
| Coefficient of Concentration @10% | 32.6 | 40.0 | Coefficient of Concentration @10% | 40.9 | 50.0 |
| Coefficient of Concentration @15% | 39.5 | 40.0 | Coefficient of Concentration @15% | 59.1 | 50.0 |
| Coefficient of Concentration @20% | 51.2 | 40.0 | Coefficient of Concentration @20% | 68.2 | 75.0 |
| Coefficient of Concentration @50% | 72.1 | 80.0 | Coefficient of Concentration @50% | 95.5 | 75.0 |
| Coefficient of Concentration @100% | 93.0 | 100.0 | Coefficient of Concentration @100% | 100.0 | 100.0 |
| Coefficient of Interquartile Deviation | 22.2 | 32.2 | Coefficient of Interquartile Deviation | 11.8 | 32.6 |
| Median Percent Deviation | 19.4 | 20.8 | Median Percent Deviation | 13.1 | 10.1 |
| Lower Quartile (25 th Percentile) | 82.8 | 58.8 | Lower Quartile (25 th Percentile) | 85.5 | 45.1 |
| Upper Quartile (75 th Percentile) | 126.9 | 112.5 | Upper Quartile (75 th Percentile) | 107.1 | 105.2 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | AcceptK | AcceptW |
| Relative Skewness | 0.66 | 0.88 | Relative Skewness | 0.11 | -0.96 |
| Relative Kurtosis | 3.28 | 2.57 | Relative Kurtosis | 2.53 | 2.22 |
| Arithmetic Mean Ratio | 102.0 | 85.2 | Arithmetic Mean Ratio | 93.4 | 80.8 |
| Weighted Mean Ratio | 92.0 | 69.5 | Weighted Mean Ratio | 92.8 | 72.0 |
| Geometric Mean Ratio | 96.2 | 80.5 | Geometric Mean Ratio | 92.1 | 72.5 |
| Harmonic Mean Ratio | 90.2 | 76.5 | Harmonic Mean Ratio | 90.8 | 62.2 |
| Standard Deviation | 35.1 | 33.4 | Standard Deviation | 15.6 | 34.9 |
| Coefficient of Variation (COV) | 34.4 | 39.2 | Coefficient of Variation (COV) | 16.7 | 43.1 |
| Price-Related Differential (PRD) | 1.11 | 1.23 | Price-Related Differential (PRD) | 1.01 | 1.12 |
| Lower PRD Confidence Interval | 1.04 | 0.95 | Lower PRD Confidence Interval | 0.97 | 1.00 |
| Upper PRD Confidence interval | 1.22 | 1.42 | Upper PRD Confidence interval | 1.05 | 1.31 |
| Coef. of Price-Related Bias (PRB) | -1.30 | -0.09 | Coef. of Price-Related Bias (PRB) | -0.04 | 0.00 |
| Lower PRB Confidence Interval | -2.14 | -0.62 | Lower PRB Confidence Interval | -0.13 | 0.00 |
| Upper PRB Confidence Interval | -0.46 | 0.44 | Upper PRB Confidence Interval | 0.05 | 0.00 |
| Average Sale Price | 61,768 | 37,821 | Average Sale Price | 120,238 | 26,088 |
| Average Appraised Value | 56,816 | 41,271 | Average Appraised Value | 111,581 | 27,916 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 103 : WILSON | | | 104 : WOODSON | | |
|--|-------------|-----------|--|-------------|-----------|
| S-3 | | | | | |
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind | <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 63 | 6 | Original Number of Sales | 33 | 4 |
| Trimmed Outliers | 6 | 0 | Trimmed Outliers | 2 | 0 |
| Number of Ratios: Outliers Removed | 57 | 6 | Number of Ratios: Outliers Removed | 31 | 4 |
| Minimum Ratio | 46.4 | 53.5 | Minimum Ratio | 13.9 | 67.2 |
| Maximum Ratio | 3055.0 | 98.9 | Maximum Ratio | 285.4 | 286.5 |
| Minimum Sale Price | 1,000 | 16,500 | Minimum Sale Price | 5,000 | 810 |
| Maximum Sale Price | 320,000 | 425,000 | Maximum Sale Price | 120,000 | 678,857 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | | <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 129.8 | 81.3 | Median Ratio | 104.0 | 95.8 |
| Lower Median Confidence Interval | 109.7 | 59.7 | Lower Median Confidence Interval | 87.7 | 68.4 |
| Upper Median Confidence Interval | 144.0 | 91.9 | Upper Median Confidence Interval | 118.9 | 277.2 |
| Broadened Median Ratio | 130.7 | 79.3 | Broadened Median Ratio | 102.8 | 122.8 |
| Coefficient of Dispersion (COD) | 36.1 | 14.1 | Coefficient of Dispersion (COD) | 27.3 | 59.4 |
| Lower COD Confidence Interval | 27.6 | 6.1 | Lower COD Confidence Interval | 20.7 | 6.7 |
| Upper COD Confidence Interval | 45.6 | 28.8 | Upper COD Confidence Interval | 39.3 | 75.4 |
| Value Weighted COD | 31.9 | 8.8 | Value Weighted COD | 25.7 | 31.7 |
| Coefficient of Concentration @10% | 19.0 | 50.0 | Coefficient of Concentration @10% | 18.2 | 50.0 |
| Coefficient of Concentration @15% | 27.0 | 50.0 | Coefficient of Concentration @15% | 30.3 | 50.0 |
| Coefficient of Concentration @20% | 36.5 | 66.7 | Coefficient of Concentration @20% | 45.5 | 50.0 |
| Coefficient of Concentration @50% | 73.0 | 100.0 | Coefficient of Concentration @50% | 84.8 | 75.0 |
| Coefficient of Concentration @100% | 84.1 | 100.0 | Coefficient of Concentration @100% | 93.9 | 75.0 |
| Coefficient of Interquartile Deviation | 38.0 | 15.7 | Coefficient of Interquartile Deviation | 23.4 | 86.9 |
| Median Percent Deviation | 29.9 | 11.7 | Median Percent Deviation | 20.7 | 17.1 |
| Lower Quartile (25 th Percentile) | 94.2 | 62.8 | Lower Quartile (25 th Percentile) | 83.0 | 73.3 |
| Upper Quartile (75 th Percentile) | 192.9 | 88.4 | Upper Quartile (75 th Percentile) | 131.6 | 239.9 |
| <i>PARAMETRIC STATISTICS</i> | | | <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | AcceptW | Normality Test | RejectK | RejectW |
| Relative Skewness | 1.07 | -0.30 | Relative Skewness | 0.20 | 1.09 |
| Relative Kurtosis | 3.31 | 2.14 | Relative Kurtosis | 3.62 | 2.29 |
| Arithmetic Mean Ratio | 136.4 | 77.6 | Arithmetic Mean Ratio | 102.9 | 136.3 |
| Weighted Mean Ratio | 101.0 | 75.6 | Weighted Mean Ratio | 93.9 | 73.2 |
| Geometric Mean Ratio | 124.6 | 76.2 | Geometric Mean Ratio | 95.1 | 115.2 |
| Harmonic Mean Ratio | 114.6 | 74.6 | Harmonic Mean Ratio | 81.4 | 101.8 |
| Standard Deviation | 61.3 | 15.9 | Standard Deviation | 35.8 | 101.1 |
| Coefficient of Variation (COV) | 45.0 | 20.5 | Coefficient of Variation (COV) | 34.8 | 74.2 |
| Price-Related Differential (PRD) | 1.35 | 1.03 | Price-Related Differential (PRD) | 1.10 | 1.86 |
| Lower PRD Confidence Interval | 1.25 | 0.92 | Lower PRD Confidence Interval | 1.02 | 1.02 |
| Upper PRD Confidence interval | 1.49 | 1.15 | Upper PRD Confidence interval | 1.18 | 2.42 |
| Coef. of Price-Related Bias (PRB) | -0.87 | -0.04 | Coef. of Price-Related Bias (PRB) | -0.12 | 0.00 |
| Lower PRB Confidence Interval | -1.41 | -0.19 | Lower PRB Confidence Interval | -0.27 | 0.00 |
| Upper PRB Confidence Interval | -0.32 | 0.12 | Upper PRB Confidence Interval | 0.03 | 0.00 |
| Average Sale Price | 65,799 | 55,222 | Average Sale Price | 45,040 | 518,285 |
| Average Appraised Value | 66,462 | 41,283 | Average Appraised Value | 42,279 | 411,182 |

Detailed Sample Statistics for the Residential and Commercial Subclasses

| 105 : WYANDOTTE | | |
|--|-------------|-----------|
| <i>GENERAL STATISTICS</i> | Residential | Comm./Ind |
| Original Number of Sales | 282 | 56 |
| Trimmed Outliers | 32 | 2 |
| Number of Ratios: Outliers Removed | 250 | 54 |
| Minimum Ratio | 11.7 | 31.9 |
| Maximum Ratio | 621.5 | 294.9 |
| Minimum Sale Price | 4,000 | 25,000 |
| Maximum Sale Price | 9,150,000 | 9,664,430 |
| <i>DISTRIBUTION FREE STATISTICS</i> | | |
| Median Ratio | 91.4 | 80.0 |
| Lower Median Confidence Interval | 89.5 | 74.1 |
| Upper Median Confidence Interval | 94.2 | 90.2 |
| Broadened Median Ratio | 91.4 | 80.4 |
| Coefficient of Dispersion (COD) | 18.8 | 24.1 |
| Lower COD Confidence Interval | 16.8 | 19.8 |
| Upper COD Confidence Interval | 21.1 | 30.2 |
| Value Weighted COD | 12.3 | 26.1 |
| Coefficient of Concentration @10% | 36.5 | 26.8 |
| Coefficient of Concentration @15% | 46.8 | 35.7 |
| Coefficient of Concentration @20% | 56.4 | 44.6 |
| Coefficient of Concentration @50% | 81.9 | 87.5 |
| Coefficient of Concentration @100% | 93.6 | 96.4 |
| Coefficient of Interquartile Deviation | 17.6 | 23.5 |
| Median Percent Deviation | 17.4 | 22.3 |
| Lower Quartile (25 th Percentile) | 75.7 | 63.6 |
| Upper Quartile (75 th Percentile) | 107.8 | 101.2 |
| <i>PARAMETRIC STATISTICS</i> | | |
| Normality Test | RejectK | RejectK |
| Relative Skewness | 0.29 | 0.21 |
| Relative Kurtosis | 3.42 | 2.59 |
| Arithmetic Mean Ratio | 89.4 | 81.3 |
| Weighted Mean Ratio | 87.7 | 69.5 |
| Geometric Mean Ratio | 86.5 | 77.6 |
| Harmonic Mean Ratio | 83.3 | 73.6 |
| Standard Deviation | 22.5 | 24.1 |
| Coefficient of Variation (COV) | 25.1 | 29.7 |
| Price-Related Differential (PRD) | 1.02 | 1.17 |
| Lower PRD Confidence Interval | 1.00 | 1.01 |
| Upper PRD Confidence interval | 1.04 | 1.48 |
| Coef. of Price-Related Bias (PRB) | -0.17 | -0.05 |
| Lower PRB Confidence Interval | -0.23 | -0.13 |
| Upper PRB Confidence Interval | -0.11 | 0.02 |
| Average Sale Price | 164,710 | 932,672 |
| Average Appraised Value | 144,501 | 648,000 |

Section II

Kansas Real Estate

Sales Validation Questionnaire

INSTRUCTIONS FOR COMPLETING THE SALES VALIDATION QUESTIONNAIRE

ITEM 1 Please check all boxes which pertain.

ITEM 2 Check the box which describes the current or most recent use of the property at the time of sale. Check all boxes which are applicable if the property has multiple uses.

ITEM 3 Check yes; if the buyer assumed any long term lease(s) (more than 3 years remaining) at the time of sale.

ITEM 4 Check yes; if the purchase price included an operating business, franchise, trade license, patent, trademark, stock, bonds, technology, and/or goodwill.

ITEM 5 Check yes; if any tangible and portable items of property were included in the sale price. If possible, provide a brief description and your estimate of the total value of all personal property included in the sale price.

ITEM 6 Check yes; if the property characteristics have been changed since January 1. Indicate what type of change(s) took place by marking the appropriate box. Indicate the date the change(s) took place.

ITEM 7 Check yes; if any delinquent taxes were assumed by the purchaser and included as part of the sale price. Do not consider any prorated taxes for the year in which the property was sold that are part of normal escrow closings.

ITEM 8 Check the predominate method of financing used to acquire the property. Check "Not Applicable" if the property was not financed.

ITEM 9 Check yes; if the property was either advertised or listed with a real estate agent or offered by a realtor. If the buyer owns or controls the property being purchased, check "Not Applicable".

ITEM 10 Provide an explanation if you believe the buyer or seller was not fully informed about the property or knowledge of the property was not used in the negotiations, or if necessary, attach an additional sheet of paper.

ITEM 11 Provide the total sale price and date of sale. The deed or the contract for deed was signed, not the contract for deed.

ITEM 12 Provide the total sale price and date of sale. The deed or the contract for deed was signed, not the contract for deed.

ITEM 13 Provide the total sale price and date of sale. The deed or the contract for deed was signed, not the contract for deed.

| | | |
|--|--|--|
| <p>SECTION 1: PROPERTY INFORMATION</p> <p>1.1. PROPERTY ADDRESS: _____</p> <p>1.2. COUNTY: _____</p> <p>1.3. CITY/TOWNSHIP: _____</p> <p>1.4. ZIP CODE: _____</p> <p>1.5. PARCEL NUMBER: _____</p> | | <p>SECTION 2: SALE INFORMATION</p> <p>2.1. DATE OF SALE: _____</p> <p>2.2. SALE PRICE: _____</p> <p>2.3. TYPE OF SALE: _____</p> <p>2.4. FINANCING: _____</p> |
| <p>SECTION 3: PROPERTY CHARACTERISTICS</p> <p>3.1. CURRENT USE: _____</p> <p>3.2. LEASES: _____</p> <p>3.3. BUSINESS/GOODWILL: _____</p> <p>3.4. TANGIBLE/PORTABLE ITEMS: _____</p> <p>3.5. PROPERTY CHANGES: _____</p> | | <p>SECTION 4: FINANCING</p> <p>4.1. METHOD OF FINANCING: _____</p> <p>4.2. DELINQUENT TAXES: _____</p> |
| <p>SECTION 5: REALTOR/AGENT INFORMATION</p> <p>5.1. REALTOR/AGENT NAME: _____</p> <p>5.2. REALTOR/AGENT ADDRESS: _____</p> <p>5.3. REALTOR/AGENT PHONE: _____</p> | | <p>SECTION 6: DISCLOSURES</p> <p>6.1. FULLY INFORMED: _____</p> <p>6.2. KNOWLEDGE OF PROPERTY: _____</p> <p>6.3. USED IN NEGOTIATIONS: _____</p> |
| <p>SECTION 7: TOTAL SALE PRICE</p> <p>7.1. TOTAL SALE PRICE: _____</p> | | <p>SECTION 8: SIGNATURES</p> <p>8.1. BUYER SIGNATURE: _____</p> <p>8.2. SELLER SIGNATURE: _____</p> |

ONLY FOR USE IN COUNTIES APPROVED TO ACCEPT ONE-PART FORMS (See website information below)

KANSAS REAL ESTATE SALES VALIDATION QUESTIONNAIRE

| | | | | | | | | | | |
|--------------------------------------|--------------------------|--------------------------------|---------------|-----------|-----------|-------------|-----------------|-------------|--------------|-----------|
| FOR COUNTY USE ONLY: | | COV # _____ | CO. NO. _____ | MAP _____ | SEC _____ | SHEET _____ | QTR. _____ | BLOCK _____ | PARCEL _____ | OWN _____ |
| DEED BOOK _____ | PAGE _____ | | | | | | | | | |
| RECORDING DATE _____ / _____ / _____ | TYPE OF INSTRUMENT _____ | SPLIT <input type="checkbox"/> | | MO _____ | YR _____ | TY _____ | AMOUNT \$ _____ | S _____ | V _____ | |
| CR _____ RA _____ DE _____ | | MULTI <input type="checkbox"/> | | | | | | | | |

SELLER (Grantor) NAME _____ BUYER (Grantee) NAME _____

MAILING _____ MAILING _____

CITY/ST/ZIP _____ CITY/ST/ZIP _____

PHONE NO. (____) _____ PHONE NO. (____) _____

email (optional) _____ email (optional) _____

IF AN AGENT SIGNS THIS FORM, BOTH BUYER AND SELLER TELEPHONE NUMBERS MUST BE ENTERED.

| | |
|--|--|
| BRIEF LEGAL DESCRIPTION _____ _____ _____ | Property / Situs Address: _____ Name and Mailing Address for Tax Statements _____ _____ |
|--|--|

| | |
|---|--|
| <p>1. Check any special factors that apply:</p> <p><input type="checkbox"/> Sale between immediate family members: Specify the relationship _____</p> <p><input type="checkbox"/> Sale involved corporate affiliates or related entities</p> <p><input type="checkbox"/> Auction sale (absolute auction <input type="checkbox"/> Yes <input type="checkbox"/> No)</p> <p><input type="checkbox"/> Short sale (amount of lien(s) exceeds sale proceeds)</p> <p><input type="checkbox"/> Transfer in lieu of foreclosure or repossession</p> <p><input type="checkbox"/> Sale involved a build-to-suit or leaseback arrangement</p> <p><input type="checkbox"/> Sale by judicial order (by a guardian, executor, conservator, administrator, or trustee of an estate)</p> <p><input type="checkbox"/> Sale involved a government agency or public utility</p> <p><input type="checkbox"/> Buyer (new owner) is a religious, charitable, or benevolent organization, school or educational association</p> <p><input type="checkbox"/> Buyer (new owner) is a financial institution, insurance company, pension fund, or mortgage corporation</p> <p><input type="checkbox"/> Sale of only a partial interest in the real estate</p> <p><input type="checkbox"/> Sale involved a trade or exchange of properties</p> <p><input type="checkbox"/> None of the above</p> <p>2. Check use of property at the time of sale:</p> <p><input type="checkbox"/> Single family residence <input type="checkbox"/> Agricultural land</p> <p><input type="checkbox"/> Farm/Ranch with residence Mineral rights included?</p> <p><input type="checkbox"/> Condominium unit <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Vacant land <input type="checkbox"/> Apartment building</p> <p><input type="checkbox"/> Other: (Specify) _____ <input type="checkbox"/> Commercial/Industrial bldg. _____</p> <p>3. Was the property rented or leased at the time of sale? <input type="checkbox"/> Yes (number of years remaining on lease _____) <input type="checkbox"/> Tenant is buyer <input type="checkbox"/> No</p> <p>4. Did the sale price include an operating business? <input type="checkbox"/> Yes (estimated value \$ _____) <input type="checkbox"/> No</p> <p>5. Was any personal property included in the sale price (such as furniture, equipment, inventory, machinery, crops, etc.)? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe _____</p> <p>_____ _____ Estimated value of all personal property items included in the sale price \$ _____</p> <p>If Mobile Home: Year _____ Model _____</p> | <p>6. Were any changes made to the property since January 1st? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Demolition <input type="checkbox"/> New construction <input type="checkbox"/> Remodeling <input type="checkbox"/> Additions Date completed _____ Amount \$ _____</p> <p>7. Were any delinquent property taxes paid by the buyer? Amt. \$ _____ <input type="checkbox"/> Yes AND the amount was included in the total sale price <input type="checkbox"/> Yes but the amount was not included in the total sale price <input type="checkbox"/> No delinquent property taxes were included in the sale</p> <p>8. Method of financing (check all that apply): <input type="checkbox"/> New loan(s) from a financial institution <input type="checkbox"/> IRS 1031 Exchange <input type="checkbox"/> Seller financing <input type="checkbox"/> Assumption of an existing loan(s) <input type="checkbox"/> All cash <input type="checkbox"/> Trade of property <input type="checkbox"/> Not applicable</p> <p>9. Was the property offered to other potential buyers? <input type="checkbox"/> Yes: Advertised (listed, Internet, yard sign, word-of-mouth, etc.) <input type="checkbox"/> No: Private purchase (not offered on the open market)</p> <p>10. Does the buyer hold title to any adjoining property? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>11. Are there any additional facts that would cause this sale to be a distressed, forced, or non-arm's length exchange? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe _____</p> <p>_____ _____</p> <p>K.S.A. 79-1437g. Same; penalty for violations. Any person who shall falsify the value of real estate transferred shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$500.</p> <p>12. TOTAL SALE PRICE \$ _____</p> <p>DEED DATE _____ / _____ / _____</p> <p>13. I have read the instructions for completing this form and certify that the above information is true and accurate.</p> <p>Print name _____</p> <p>Signature _____</p> <p><input type="checkbox"/> Grantor (Seller) <input type="checkbox"/> Grantee (Buyer) <input type="checkbox"/> Agent Daytime phone number (____) _____</p> |
|---|--|

PV-RE-22-OP
(Rev. 08/12)

KANSAS REAL ESTATE SALES VALIDATION ONE-PART QUESTIONNAIRE WEBSITE ADDRESS:
<http://www.ksrevenue.org/pvdratiostats.html>

INSTRUCTIONS FOR COMPLETING THE SALES VALIDATION QUESTIONNAIRE
One Part Form

- ITEM 1** Please check all boxes which pertain to the sale.
- ITEM 2** Check the box which describes the current or most recent use of the property at the time of sale. Check all boxes which are applicable if the property has multiple uses.
- ITEM 3** Check yes if the buyer assumed any long term lease(s) (more than 3 years remaining) at the time of sale. Enter the years remaining if known. Check the box if a tenant (renter or lessee) purchased the property.
- ITEM 4** Check yes if the purchase price included an operating business that may include intangible personal property such as a franchise, trade license, patent, trademark, stocks, bonds, and/or goodwill. Estimate the value of the intangibles if this was part of the purchase agreement and included in the total sale price.
- ITEM 5** Check yes if any tangible items of property were included in the sale price. If possible, provide a brief description and your estimate of all personal property included in the total sale price.
- ITEM 6** Check yes if the property characteristics changed after January 1st of the sale year. Indicate what type of major change(s) (such as demolition, new construction, remodeling, rehabilitation) took place by marking the appropriate box. Indicate the approximate date the changes took place and the approximate cost.
- ITEM 7** Check yes if any delinquent property taxes were paid by the buyer and included as part of the sale price. Do not include the estimated real estate taxes prorated for the year the property sold included as part of the typical escrow closing cost.
- ITEM 8** Check the predominate method of financing used to acquire the property. Check "Not Applicable" if money did not exchange hands.
- ITEM 9** Check yes if the property was advertised on the open market, listed with a real estate agent or broker, displayed a for sale sign, advertised in a newspaper or other publication, listed on the internet, and/or offered by word of mouth. A private sale is an exchange that was not made available to the general public or the property was not exposed on the open market.
- ITEM 10** Check yes if the buyer owns or controls the property adjoining or adjacent to the property being purchased.
- ITEM 11** Provide a brief explanation if either the buyer or seller did not act prudently, was not fully informed about the property, did not have knowledge of the local market, was poorly advised, did not use good judgment in the negotiations, was acting under duress, or was compelled to sell or buy the property out of necessity.
- ITEM 12** Provide the total sale price and date of sale. The date should be the date that either the deed or the contract for deed was signed, not the date the deed was recorded.
- ITEM 13** Please sign the questionnaire and list a daytime phone number. The county appraiser may need to make a follow up phone call to clarify unusual terms or conditions.

When a real estate sales validation questionnaire is not required due to one or more of the exemptions provided in 1-16 below, the exemption must be clearly stated on the document being filed. The Register of Deeds cannot add this information to the deed at filing.

TRANSFERS OF TITLE THAT DO NOT REQUIRE A SALES VALIDATION QUESTIONNAIRE:

- (1) Recorded prior to the effective date of this act, i.e., July 1, 1991;
 - (2) made solely for the purpose of securing or releasing security for a debt or other obligation;
 - (3) made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration;
 - (4) by way of gift, donation or contribution stated in the deed or other instruments;
 - (5) to cemetery lots;
 - (6) by leases and transfers of severed mineral interests;
 - (7) to or from a trust, and without consideration;
 - (8) resulting from a divorce settlement where one party transfers interest in property to the other;
 - (9) made solely for the purpose of creating a joint tenancy or tenancy in common;
 - (10) by way of a sheriff's deed;
 - (11) by way of a deed which has been in escrow for longer than five years;
 - (12) by way of a quit claim deed filed for the purpose of clearing title encumbrances;
 - (13) when title is transferred to convey right-of-way or pursuant to eminent domain;
 - (14) made by a guardian, executor, administrator, conservator or trustee of an estate pursuant to judicial order;
 - (15) when title is transferred due to repossession; or
 - (16) made for the purpose of releasing an equitable lien on a previously recorded affidavit of equitable interest, and without additional consideration.
- (b) When a real estate sales validation questionnaire is not required due to one or more of the exemptions provided in 1-16 above, the exemption shall be clearly stated on the document being filed.

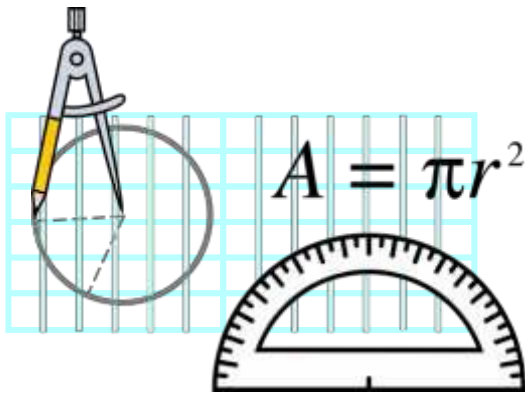
If you have any questions or need assistance completing this form, please call the county appraiser's office.

Section III

Ratio Study Validation

&

Statistical Procedures



Introduction

The sales ratio study is an important performance evaluation tool in the mass appraisal process. It can be used to measure the county's overall appraisal accuracy by indicating the general level of appraisal and the degree of uniformity. The study can also be used to monitor the need for a general reappraisal or identify neighborhoods that may require a review. Information from the study can also be used to develop market trends affecting various types of properties. By identifying problem areas or selected groups of properties in need of attention, resources can be efficiently allocated.

The ratio study makes a comparison of recently sold properties to the county appraiser's estimate of market value. Recent sales of property can often serve as representatives of true market value if the buyer and seller are well informed, the market is open and competitive and neither party is acting with undue compulsion. The appraiser will also consider other factors that may influence the price paid for a property. In some cases, an adjustment to the sale price must be made before it can be used as a good indicator of market value.

The principal information source used to confirm the sale price and determine validity of a real estate transfer is the Kansas Real Estate Sales Validation Questionnaire. Kansas statutes requires that a questionnaire be completed and filed with the register of deeds before a deed, affidavit of equitable interest or other recording instrument is accepted for recording (with some exceptions per K.S.A. 79-1437e).

Information provided by the Kansas Real Estate Sales Validation Questionnaire is not always sufficient to make a validation decision and a follow-up verification may be required. The buyer, seller or agent may have to be interviewed in order to make a final decision on the validity or obtain additional information for needed adjustments. The determination to classify a sale as valid or invalid is based upon industry standards promulgated by the International Association of Assessing Officers (IAAO). Various factors will be considered during the screening process before invalidating a sale. Any sale that is affected by the following conditions will be considered invalid for ratio study purposes:

- Property not exposed for sale on the open market

- Physical characteristics of the property changed after January 1, of the study year and before the sale occurred
- Highest and best use of the property changed after January 1, of the study year the sale occurred
- Sale involved a governmental agency liquidating repossessed property
- Transfer was a satisfaction of a contract for deed signed prior to the study year
- Transaction was a forced sale
- Sale included an excessive amount of tangible or intangible personal property
- Sale/transfer date not within the current study timeframe
- The parcel sold was a split from parent parcel appraised on January 1
- Uninformed buyer and/or seller discovered through validation research.

The study concept is a simple one. The degree to which an appraisal made for tax purposes reflects market value can be indicated by the sale price of that property. If a sufficient number of recent sales are available, statistical measures can often provide reliable estimates of performance. Because property in Kansas is grouped into several subclasses, such as residential and commercial/industrial, a ratio study is conducted on each group to provide more detailed information.

The ratio for each property is calculated by dividing the appraised value by the sale price. The resulting ratios indicate how closely the appraiser achieved the goal of fair market value with a ratio of 100 percent being the most desirable. For the Kansas Real Estate Ratio Study, ratios are expressed as a percentage.

For example, consider the following five residential properties that have recently sold.

| <i>Sale</i> | <i>Appraised Value</i> | <i>Sale Price</i> | <i>Ratio</i> | <i>Ratio as a Percentage</i> |
|-------------|---------------------------------|---------------------------------|--------------|------------------------------|
| 4 1 | \$30,000 \$29,000 | \$30,000 \$30,250 | 1.00 1.25 | 100.0 125.0 |
| 2 | \$45,000 | \$50,000 | 0.90 | 90.0 |
| 3 | \$12,000 | \$15,000 | 0.80 | 80.0 |

Distribution-Free Statistics

Distribution-free statistics do not require assumptions about the shape of the population distribution from which the ratio study sample was drawn. Distribution-free statistics are nonparametric estimates that include the median and median absolute deviation.

Median Ratio

The median ratio is one of the most common statistical measures used in mass appraisal performance. It is considered a robust measure of the overall level of assessment (central tendency) because of its insensitivity to low or high ratios in the sample.

The ratios must first be sorted in ascending or descending order (*arrayed*). If the number of sample ratios is odd, the median is the value halfway through the arrayed data set with an equal number of ratios above and below the median.

| <i>Sale</i> | <i>Ratio</i> |
|-------------|--------------|
| 1 | 80.0 |
| 2 | 90.0 |
| 3 | 100.0 |
| 4 | 120.0 |
| 5 | 125.0 |

Median Ratio

If the number of sample ratios is even, the median value is determined by adding the two middle values that fall in the center of the array and dividing by 2.

| <i>Sale</i> | <i>Ratio</i> |
|-------------|--------------|
| 1 | 80.0 |
| 2 | 90.0 |
| 3 | 100.0 |
| 4 | 120.0 |
| 5 | 125.0 |
| 6 | 130.0 |

Median Ratio ←

The ratios 100.0 and 120.0 (*sample no. 3 & 4*) are in the middle of the array and should be added together and divided by 2.

$$\frac{100.0 + 120.0}{2} = \mathbf{110.0 \text{ Median Ratio}}$$

Broadened Median Ratio (BMED)

The broadened median is a useful measure because it preserves the resistance of the median to outliers while achieving insensitivity to rounding and grouping of the middle observations. It is computed by averaging the median and up to six of the ratios around the median. The exact number depends on the sample size. Data sets with an odd number of ratios for sample sizes between five and eleven use the average of the three central ratios. For sample sizes greater than eleven the five central ratios are averaged. For data sets with an even number of ratios in sample sizes less than fourteen, the broadened median uses the four central ratios with weights 1/6, 1/3, 1/3 and 1/6. For data sets larger than fourteen, the broadened median uses the six central ratios with an assigned weight of 1/5 to each of the middle four ratios and 1/10 to the ratios at each end.

Broadened Median Ratio Computation

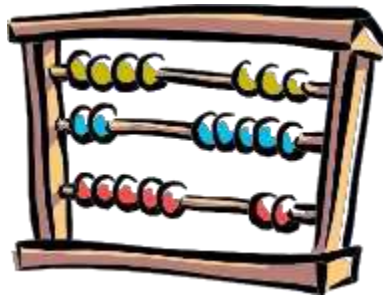
Example of odd numbered data set: 80.0 90.0 100.0 120.0 135.0

1. Sum of the three central values ($90.0 + 100.0 + 120.0 = 310.0$)
2. Divide by 3 ($310.0 / 3 = 103.3$) **Broadened Median Ratio**

Example of even number data set: 75.0 80.0 90.0 100.0 120.0 135.0

$$(80.0 * 1/6) + (90.0 * 1/3) + (100.0 * 1/3) + (120.0 * 1/3)$$

$$13.3 + 30.0 + 33.3 + 20.0 = 96.7 \text{ **Broadened Median Ratio**}$$



Coefficient of Dispersion (COD)

The coefficient of dispersion (*COD*) is the most common measure of uniformity in the mass appraisal industry. It measures the average amount of dispersion from the median and expresses it as a percentage of the median ratio. The statistic indicates how close the ratios are clustered around the median ratio.

COD Computation

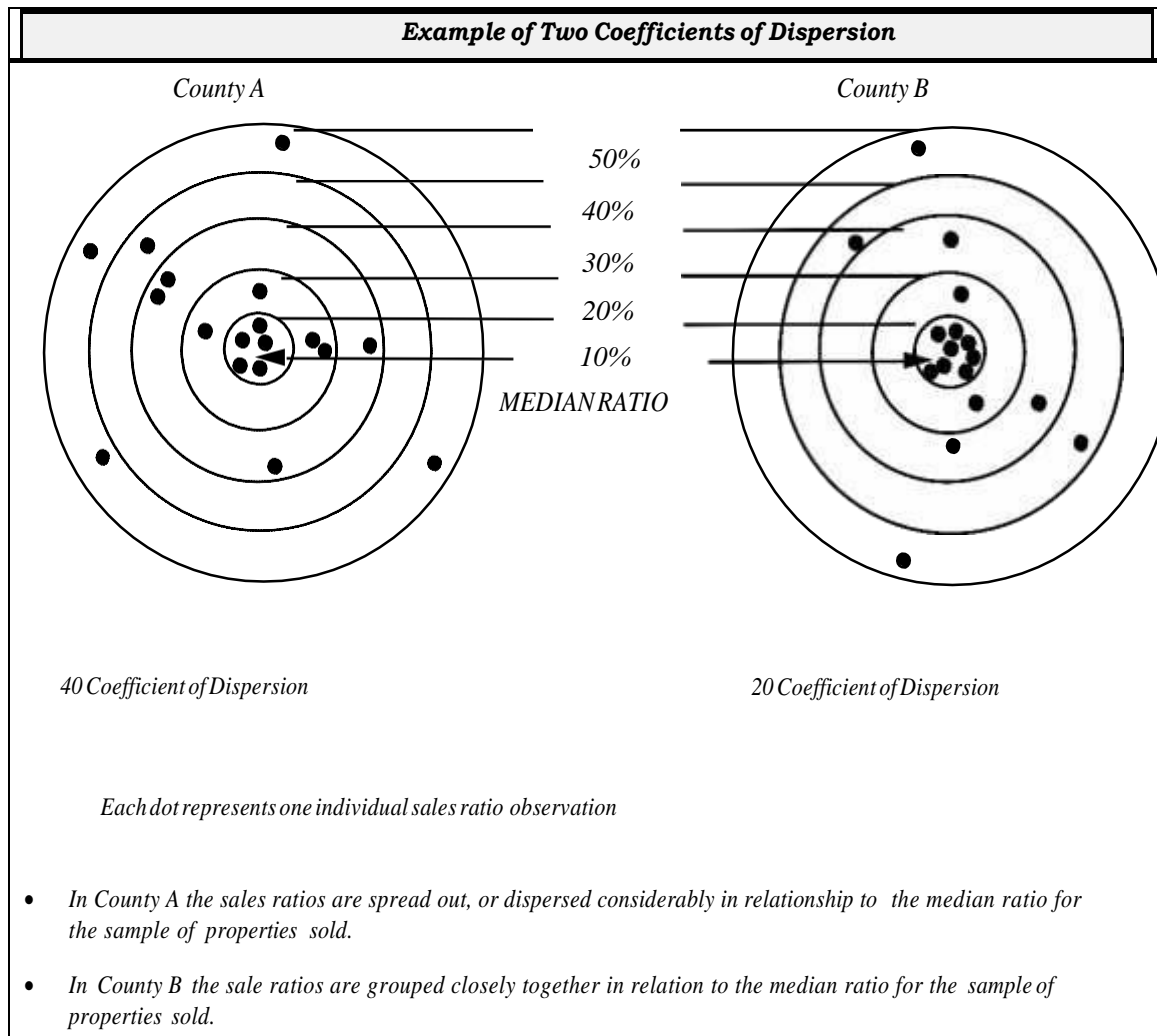
1. Subtract the median ratio from each ratio to find the absolute deviation (ignore plus or minus signs)
2. Sum the absolute deviations and divide by the sample size to find the average absolute deviation
3. Divide the average absolute deviation by the median ratio and multiply by 100 to obtain the percentage measure known as the *COD*

| <i>Sale</i> | <i>Ratio</i> | <i>Median Ratio</i> | <i>Absolute Deviation From Median</i> |
|--------------------------|--------------|---------------------|---------------------------------------|
| 1 | 80.0 | 100.0 | 20.0 |
| 2 | 90.0 | 100.0 | 10.0 |
| 3 | 100.0 | 100.0 | 00.0 |
| 4 | 120.0 | 100.0 | 20.0 |
| 5 | 125.0 | 100.0 | 25.0 |
| <i>Sum of Deviations</i> | | | 75.0 |

$$\frac{20.0+10.0+00.0+20.0+25.0}{5} = \frac{75.0}{5} = 15.0 \text{ Average Absolute Deviation from Median}$$

$$\frac{15.0}{100.0} = 0.15 * 100 = \mathbf{15.0} \text{ Coefficient of Dispersion (COD)}$$

The lower the coefficient of deviation, the more uniform the assessments. A high COD suggest a lack of uniformity. The ideal value is *0*; however, this cannot be considered a realistic goal in an imperfect real estate market. Confidence intervals are used to evaluate this performance measure.



The two counties in the illustration above both have a median ratio of 100 percent. However, one of the counties has a COD of 20 while the other county has a COD of 40. This difference suggests that appraisals in the county with a COD of 20 came twice as close to the median level of appraisal as the county with a COD of 40.

Weighted Coefficient of Dispersion

To calculate a value weighted COD, the contribution of each sale is factored into the deviation of each ratio about the median. If the weighted COD is greater than the COD, relatively high-value properties have been appraised with greater variability than low-value properties. If the weighted COD is less than the COD, high-value properties have been appraised with less variability than low-value properties.

- Weighted COD Computation**
1. Calculate the mean sale price
 2. Divide each sale price by the mean sale price to find the weight
 3. Subtract each ratio from the median and take the absolute value (ignore plus or minus signs)
 4. Multiply each weight times the absolute deviation from the median
 5. Sum the weighted absolute deviations from the median
 6. Divide by the number of ratios ($61.9 / 5 = 12.4$)
 7. Divide by the median and multiply by 100 $12.4 / 100.0 * 100.0 = 12.4$

| Sale | Appraised Value | Sale Price | Mean Sale Price | Weight | Ratio | Median Ratio | Absolute Deviation From Median | Weight x Absolute Deviation From Median |
|--------------|------------------|------------------|-----------------|--------|-------|--------------|--------------------------------|---|
| 1 | \$25,000 | \$20,000 | \$26,200 | 0.7634 | 125.0 | 100.0 | 25.0 | 19.1 |
| 2 | \$45,000 | \$50,000 | \$26,200 | 1.9084 | 90.0 | 100.0 | 10.0 | 19.1 |
| 3 | \$12,000 | \$15,000 | \$26,200 | 0.5725 | 80.0 | 100.0 | 20.0 | 11.5 |
| 4 | \$30,000 | \$30,000 | \$26,200 | 1.1450 | 100.0 | 100.0 | 00.0 | 00.0 |
| 5 | \$19,200 | \$16,000 | \$26,200 | 0.6107 | 120.0 | 100.0 | 20.0 | 12.2 |
| Total | \$131,200 | \$131,000 | | | | | | 61.9 |

$$\text{Mean sale price} = \frac{\$131,000}{5} = \$26,200$$

$$\left(\frac{61.9}{5} \right) / 100.0 * 100 = \mathbf{12.4} \text{ Weighted Coefficient of Dispersion}$$



Coefficient of Concentration (COC)

The coefficient of concentration (COC) is another measure of appraisal uniformity. It is found by determining the portion of ratios falling within a specified percentage of the median. The higher the coefficient of concentration is the better the measure of uniformity. Coefficients are calculated for 10 percent, 15 percent, 20 percent, 50 percent and 100 percent.

COC @ 15%

| Sale | Ratio |
|------|-------------|
| 1 | 70.0 |
| 2 | 75.0 |
| 3 | 81.0 |
| 4 | 82.0 |
| 5 | 85.0 |
| 6 | 90.0 |
| 7 | 90.0 |
| 8 | 95.0 |
| 9 | 100.0 |
| 10 | 105.0 |
| 11 | 107.0 |
| 12 | 108.0 |
| 13 | 120.0 |
| 14 | 130.0 |
| 15 | 135.0 |

Median Ratio

← $95.0 - 14.3 = 80.7$

← $95.0 + 14.3 = 109.3$

If the range selected is 15%, to select the proportion that falls within the range:

$95.0 * 15.0\% = 14.3$

$95.0 - 14.3\% = 80.7$

$95.0 + 14.3\% = 109.3$

10 ratios in the sample fall within the range of 80.7 to 109.3

$10 / 15 = 0.667 * 100 = 66.7$ **Coefficient of Concentration**



Coefficient of Interquartile Deviation

This measure was the original coefficient of dispersion recommended for use in ratio studies by the National Association of Tax Administrators. It is the interquartile range of ratios divided by 2, divided by the median ratio and multiplied by 100. The statistic is less sensitive to outliers than the COD currently defined by the IAAO.



| <i>Sale</i> | <i>Ratio</i> |
|-------------|--------------|
| 1 | 60.0 |
| 2 | 80.8 |
| 3 | 88.1 |
| 4 | 96.0 |
| 5 | 115.2 |
| 6 | 120.4 |
| 7 | 145.7 |

Median Ratio 96.0

1st Quartile = (Sale 2) 80.8

3rd Quartile = (Sale 6) 120.4

Interquartile range 120.4 - 80.8 = 39.6

*39.6 / 2 / 96.0 * 100 = 20.625 round to **20.6** Coefficient Interquartile Deviation*

Median Percent Deviation

The median percent deviation is the *median* of the absolute deviations about the median, divided by the median ratio. It is an alternative to the COD and is highly resistant to the influence of outlier ratios.

Median Percent Deviation Computation

1. Subtract the median ratio from each ratio and find the absolute value of the deviation
2. Array the absolute deviations and find the median value deviation in the array
3. Divide the median absolute deviation by the median ratio and multiply by 100

| <i>Sale</i> | <i>Ratio</i> | <i>Median Ratio</i> | <i>Absolute Deviation From Median</i> |
|-------------|--------------|---------------------|---------------------------------------|
| 1 | 80.0 | 100.0 | 20.0 |
| 2 | 90.0 | 100.0 | 10.0 |
| 3 | 100.0 | 100.0 | 00.0 |
| 4 | 120.0 | 100.0 | 20.0 |
| 5 | 125.0 | 100.0 | 25.0 |

Arrayed Deviations: 0 10.0 20.0 20.0 25.0 - Median Absolute Deviation (MAD) = 20.0

$$MAD = 20.0, \text{ Median} = 100.0$$

$$\frac{20.0}{100.0} = 0.200 * 100 = \mathbf{.200 \text{ Median Percent Deviation}}$$

Percentiles and Quartiles

Percentiles are dividing points for specific percentages of the data. The dividing points are the 25th percentile (*1st quartile*), the 50th percentile (*median or 2nd quartile*) and the 75th (*3rd quartile*) percentile. The interquartile range is the difference between the 25th and the 75th percentiles.

25th Percentile (1st Quartile)

The 25th percentile is the first percentile and exceeds one-quarter of the ratios. The formula for finding the lower 25th percentile is $k = 0.25 * n + 0.25$. The rank of the 25th percentile in an array of 99 ratios is $0.25 * 99 + 0.25 = 25$.

75th Percentile (3rd Quartile)

The 75th percentile is the third quartile and exceeds three quarters of the ratios. The formula for finding the rank of the 75th percentile is $k = 0.75 * n + 0.75$. Usually, the rank of the percentile will not be a whole number, which means one must interpolate between ratios in the sorted array. In a sample that has 100 ratios, the 75th percentile is $0.75 * 100 + 0.75 = 75.75$. If the 75th and 76th highest ratios are 0.98 and 1.00 respectively, the 75th percentile is $0.98 + ((0.75) * (1.00 - 0.98)) = 0.995$.

Normality Test

A normality test of the sample data can be used to determine if the spread of ratios in the population conforms to a standard normal distribution or bell-shaped curve (*Gaussian shape*). Although ratio data seldom conforms to a normal distribution, an effort has been made to examine and test the sample data. Parametric statistics generally depend upon an underlying assumption of normality. Numerous statistical tests can be employed to detect departures from a normal distribution. The ratio study program employs newer and more powerful procedures based on the empirical distribution function or standardized moments of skewness and kurtosis. These also include the D'Agostino-Pearson K^2 , Shapiro-Wilk W (or Shapiro-Francia W') and Anderson-Darling A^2 tests. Several tests are used to evaluate each ratio study sample. The primary normality test selected for an individual ratio sample can be identified by a letter code below.

M: 3rd and 4th standardized moment's critical values
 3: 3rd standardized moment critical value
 4: 4th standardized moment critical value
 A: Anderson-Darling A^2
 K: D'Agostino-Pearson K^2
 W: Shapiro-Wilk W (*Shapiro-Francia W' for $n > 50$ to 99*)

Null hypothesis (H_0) used for these tests: The study sample was drawn from a population with a normal distribution of ratios.

No statistical procedure is expected to perform perfectly under all circumstances. There is a small probability that an individual sample drawn from a population with a standard normal distribution of ratios may not pass a mathematical test. Thus, the null hypothesis will sometimes be rejected, when in fact it should not be (this is a type *I* error). The testing methods used by PVD are designed to limit the probability of rejection to less than 10%.

Skewness

Skewness is a descriptive measure of symmetry about the ratio distribution. Most ratio study frequency distributions tend to have longer tails that stretch to the right of the mean. This indication of positive skewness can often be attributed to high ratio outliers. Several approaches are available to calculate measures of skewness. The degree of skewness in this analysis is measured by the moment coefficient of skewness (based on the third moment about the mean). It is also called a measure of relative skewness. The normal distribution has no skewness and the value of this measure should be close to zero. Highly skewed sample distributions will have a measure greater than +3 or lower than -3.

Kurtosis

Kurtosis is a measure that is used to describe the concentration of ratio data in a frequency distribution. A normal distribution is bell shaped and referred to as mesokurtic, or neutral. It will have a value close to 3 (closer to 2 in small samples). Ratio study samples tend to have heavy tails to the right of the median (mean) ratio.

Parametric Statistics

Parametric statistics make certain assumptions about the distribution of the population ratios or samples drawn from these populations. When these assumptions are met, parametric statistics make more efficient use of the data than distribution-free statistics.

Arithmetic Mean Ratio

The arithmetic mean ratio is the average of the sample ratios.

Arithmetic Mean Ratio Computation

1. Sum the sample ratios
2. Divide by the sample number

In a normal distribution, the mean will equal the median. If the distribution is skewed to the right, the mean will be greater than the median, which is typical of ratio study data. If the distribution is skewed to the left, the mean will be less than the median.

| <i>Sale</i> | <i>Ratio</i> |
|-------------|--------------|
| 1 | 80.0 |
| 2 | 90.0 |
| 3 | 100.0 |
| 4 | 120.0 |
| 5 | 125.0 |

Note: The median sales ratio for this example is 100.0.

$$\frac{80.0 + 90.0 + 100.0 + 120.0 + 125.0}{5} = 103.0 \quad \text{Arithmetic Mean Ratio}$$



Weighted Mean Ratio

The value weighted mean ratio is the average of a sample of ratios where proportional weights have been assigned to the sales prices. The weighted mean ratio gives weight to each dollar of value in the sample whereas the median and mean give equal weight to each ratio. The weighted mean ratio is often referred to as the aggregate ratio and is used in computing the price-related differential (*PRD*).

Weighted Mean Ratio Computation

1. Sum the appraised values
2. Sum the sales prices
3. Divide the sum of the total appraised value by the sum of the total sale price
4. Multiply by 100

| <i>Sale</i> | <i>Appraised Value</i> | <i>Sale Price</i> |
|--------------|------------------------|-------------------|
| 1 | \$55,000 | \$50,000 |
| 2 | \$125,000 | \$128,800 |
| 3 | \$75,000 | \$75,000 |
| 4 | \$40,000 | \$32,000 |
| 5 | \$15,000 | \$59,900 |
| <i>Total</i> | <i>\$310,000</i> | <i>\$345,700</i> |

$$\frac{310,000}{345,700} = 0.8967 * 100 = \mathbf{89.7} \quad \text{\underline{Weighted Mean Ratio}}$$



Geometric Mean Ratio

The geometric mean offers a measure of appraisal level that, like the median, is not as susceptible to the influence of outliers as the mean and weighted mean. Large differences between the geometric mean and the arithmetic mean indicate the presence of significant outlier ratios.

Geometric Mean Ratio Computation

1. Multiply the ratios in the sample together and finding the n^{th} root of the result, where n equals the number of ratios in the sample
2. Find the n^{th} root of the product, where n equals the number of ratios in the sample

| <i>Sale</i> | <i>Ratio</i> |
|-------------|--------------|
| 1 | 80.0 |
| 2 | 90.0 |
| 3 | 100.0 |
| 4 | 120.0 |
| 5 | 125.0 |

$$(80.0 * 90.0 * 100.0 * 120.0 * 125.0)^{1/5} = \mathbf{101.6} \text{ Geometric Mean Ratio}$$

Harmonic Mean Ratio

The harmonic mean is used to calculate average rates. The rate usually indicates the relationship between two different types of measuring units that can be expressed reciprocally. The harmonic mean is less affected by extreme ratios than the geometric mean and the arithmetic mean.

Harmonic Mean Ratio Computation

1. Find the reciprocal of each ratio value (1 divided by the ratio)
2. Sum the reciprocals
3. Divide the number of ratios in the sample by the sum of the reciprocals

| <i>Sale</i> | <i>Appraised Value</i> | <i>Sale Price</i> | <i>Ratio</i> | <i>Reciprocal Values</i> |
|--------------|------------------------|-------------------|--------------|--------------------------|
| 1 | \$25,000 | \$20,000 | 125.0 | 0.0080 |
| 2 | \$45,000 | \$50,000 | 90.0 | 0.0111 |
| 3 | \$12,000 | \$15,000 | 80.0 | 0.0125 |
| 4 | \$30,000 | \$30,000 | 100.0 | 0.0100 |
| 5 | \$19,200 | \$16,000 | 120.0 | 0.0083 |
| <i>Total</i> | | | | 0.0499 |

$$\frac{5}{0.0499} = \mathbf{100.2} \text{ Harmonic Mean Ratio}$$

Standard Deviation

The standard deviation is the most common measure of dispersion and may be a useful measure of appraisal uniformity if the underlying distribution of ratios in the population conforms to a normal distribution.

The formula for the standard deviation is
$$s = \sqrt{\frac{\sum (A_i/S_i - \bar{A}/\bar{S})^2}{n-1}}$$

s = standard deviation

\sum = algebraic symbol for sum

A_i = each Appraised Value

S_i = each Sale Price

\bar{A}/\bar{S} = Sample Mean Ratio

² = square or take to the 2nd Power

$\sqrt{\quad}$ = the square root symbol

Standard Deviation Computation

1. Subtract the mean from each ratio
2. Square the difference
3. Sum the squared differences
4. Divide by the number of ratios less one to obtain the **variance**
5. Take the square root of the variance to arrive at the standard deviation

| <i>Sale</i> | <i>Appraised Value</i> | <i>Sale Price</i> | <i>Ratio</i> | <i>Ratio Minus Mean</i> | <i>Square the Difference</i> |
|-------------|------------------------|-------------------|--------------|-------------------------|------------------------------|
| 1 | \$25,000 | \$20,000 | 125.0 | 22.0 | 484.0 |
| 2 | \$45,000 | \$50,000 | 90.0 | -13.0 | 169.0 |
| 3 | \$12,000 | \$15,000 | 80.0 | -23.0 | 529.0 |
| 4 | \$30,000 | \$30,000 | 100.0 | -3.0 | 9.0 |
| 5 | \$19,200 | \$16,000 | 120.0 | 17.0 | 289.0 |
| | | | | <i>Total</i> | <i>1480.0</i> |
| <i>Mean</i> | <i>103.0</i> | | | | |

$$\sqrt{\frac{1480.0}{5-1}} = 370.0 \text{ Variance}$$

$$\sqrt{370.0} = 19.2 \text{ Standard Deviation}$$

Coefficient of Variation (COV)

The coefficient of variation (COV) is a relative measure of appraisal uniformity that is based on the standard deviation.

Coefficient of Variation (COV) Computation

1. *Compute the standard deviation*
2. *Divide the standard deviation by the arithmetic mean ratio*

Using the standard deviation of 19.2 from the previous example —and the arithmetic mean ratio of 103.0, the calculation would be as follows.

$$\frac{19.2}{103.0} * 100.0 = \mathbf{18.6 \text{ Coefficient of Variation (COV)}}$$



Price-Related Differential (PRD)

The price-related differential (*PRD*) is a statistic for measuring assessment regressivity or progressivity. Appraisals are considered regressive if high-value properties are under appraised relative to low-value properties and progressive if high-value properties are relatively over appraised.

A PRD of 1.00 is the most desirable state and indicates that no assessment bias exists between the low and high value properties. A PRD greater than 1.00 suggests that high-value property may be under appraised relative to lower valued property. If the PRD is less than 1.00, high-value property may be over appraised relative to low-valued property.

Price-Related Differential (PRD) Computation

1. Divide the arithmetic mean ratio by the weighted mean ratio

| <i>Sale</i> | <i>Appraised Value</i> | <i>Sale Price</i> | <i>Ratio</i> |
|--------------|------------------------|-------------------|--------------|
| 1 | \$25,000 | \$20,000 | 125.0 |
| 2 | \$45,000 | \$50,000 | 90.0 |
| 3 | \$12,000 | \$15,000 | 80.0 |
| 4 | \$30,000 | \$30,000 | 100.0 |
| 5 | \$19,200 | \$16,000 | 120.0 |
| <i>Total</i> | <i>\$131,200</i> | <i>\$131,000</i> | <i>515.0</i> |

Type equation here.

$$\frac{515.0}{5.0} = 103.00 \text{ Arithmetic Mean}$$

$$\frac{131,200}{131,000} * 100 = 100.15 \text{ Value Weighted Mean Ratio}$$

$$\frac{103.00}{100.15} = 1.03 \text{ Price-Related Differential (PRD)}$$

The arithmetic mean ratio is 103.0 and the weighted mean ratio is 100.2 ($1.002 * 100$). The PRD is found by dividing the mean ratio by the weighted mean ratio.

The example above may indicate some assessment regressivity. The International Association of Assessing Officers *Standard on Ratio Studies* recommends the price-related differential (*PRD*) should range between 0.98 and 1.03. Confidence intervals are used to evaluate this performance measure.

Price-Related Bias (PRB)

Price-related bias (*PRB*) is a coefficient that provides an index of appraisal/sale ratio change to market value change (vertical equity) obtained by regressing the ratio deviations from the median ratio (percentage changes) on a proxy of market value. The market value proxy is obtained by giving equal weight to appraised values and sales prices. The regression summary output coefficient, β_1 (X Variable 1 if developed in Microsoft Excel), or slope of the regression line represents the corresponding percentage change in ratios.

Price-Related Bias (PRB) Computation

1. Calculate the ratio for each sale and find the median ratio of the sample.
2. Compute the proxy of market value. This term is composed of 50 percent of sale price + 50 percent of appraised value. To ensure that appraised values and sales prices receive equal weight, appraised values are divided by the median ratio (trended) before summing:

$$\text{Proxy_MV} = 0.5$$

Where:

AV = Appraised Value

SP = Sale Price

3. Take the natural logarithm of the value proxy and divide by the natural log of 2 (.693):

$$\text{Ln_Proxy MV} = \text{LN}(\text{Proxy MV})/\text{LN}(2)$$

Taking logarithms converts the market value proxy to a percentage basis, which substantially minimizes the impact of atypically high values (outliers) in the analysis. Dividing by the natural log of 2 allows each increment of 1 to be interpreted as a change of 100%. (For example: $\text{LN}(100,000)/\text{LN}(2) = 16.613$ and $\text{LN}(200,000)/\text{LN}(2) = 17.613$).
4. Compute percentage differences of each sale ratio in the sample when compared to the sample median ratio:

$$\text{Pct_Diff} = (\text{Sale ratio} - \text{Median ratio})/\text{Median ratio}$$

Where:

$$\text{PCT_Diff} = \text{Percentage Difference}$$

$$\text{Sale ratio} = \text{Appraised value} / \text{sale price}$$
5. Set up a simple linear regression where the independent variable is the log of the market value proxy (3) and the dependent variable is the associated sale ratio percentage difference (4): $\text{Pct_Diff} = \beta_0 + \beta_1 \times \text{Ln_ProxyMV}$
6. Evaluate the p-Value for significance. It must be $\leq .05$ to be significant
7. Examine the upper and lower 95% confidence intervals:

The *PRB* coefficient (slope) should fall between -0.05 and 0.05 . If the 95 percent confidence interval does not overlap this range, one can reasonably conclude that appraisal levels change by more than 5 percent when market values are halved or doubled. *PRBs* for which 95 percent confidence intervals fall outside the range of -0.10 to 0.10 indicate unacceptable vertical inequities.

In the following example ratios decline by 34.0 percent when market values double (and increase by 34.0 percent when market values are halved). The 95 percent confidence interval is -0.381 to -0.300 .

| <i>AV</i> | <i>SP</i> | <i>Ratio</i> | <i>AV/Med</i> | <i>MV proxy</i> | <i>X Ind Var LN(MV Proxy)</i> | <i>Y Dep Var Pct Diff</i> |
|-----------|---------------|--------------|---------------|-----------------|-----------------------------------|-------------------------------|
| 67,500 | 125,000 | 0.54 | 78,488 | 101,744 | 16.635 | -0.372 |
| 51,000 | 85,000 | 0.60 | 59,302 | 72,151 | 16.139 | -0.302 |
| 55,800 | 90,000 | 0.62 | 64,884 | 77,442 | 16.241 | -0.279 |
| 50,400 | 70,000 | 0.72 | 58,605 | 64,302 | 15.973 | -0.163 |
| 40,500 | 54,000 | 0.75 | 47,093 | 50,547 | 15.625 | -0.128 |
| 48,360 | 62,000 | 0.78 | 56,233 | 59,116 | 15.851 | -0.093 |
| 53,300 | 65,000 | 0.82 | 61,977 | 63,488 | 15.954 | -0.047 |
| 44,720 | 52,000 | 0.86 | 52,000 | 52,000 | 15.666 | 0.000 |
| 36,400 | 40,000 | 0.91 | 42,326 | 41,163 | 15.329 | 0.058 |
| 37,830 | 39,000 | 0.97 | 43,988 | 41,494 | 15.341 | 0.128 |
| 30,000 | 30,000 | 1.00 | 34,884 | 32,442 | 14.986 | 0.163 |
| 33,600 | 32,000 | 1.05 | 39,070 | 35,535 | 15.117 | 0.221 |
| 33,000 | 30,000 | 1.10 | 38,372 | 34,186 | 15.061 | 0.279 |
| 9,000 | 6,000 | 1.50 | 10,465 | 8,233 | 13.007 | 0.744 |
| 8,500 | 5,000 | 1.70 | 9,884 | 7,442 | 12.861 | 0.977 |
| | Median | 0.86 | | | | |

| SUMMARY OUTPUT | | | | | | |
|--------------------|---------------------|-----------------------|---------------|----------------|----------------------|----------------------|
| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> | <i>Lower 95%</i> | <i>Upper 95%</i> |
| Intercept | 5.292 | 0.2881 | 18.370 | 1.108E-10 | 4.670 | 5.915 |
| X Variable 1 (PRB) | -0.340 | 0.0188 | -18.137 | 1.300E-10 | -0.381 | -0.300 |

Note: The summary output in the example above was computed in Microsoft Excel (Data\ Data Analysis\ Regression). **No** outlier trimming was employed for this performance measure. In order to fully assess the usefulness of the statistic, extreme, influential, and leverage ratios must be identified through routine regression diagnostic test and reasonable cutoff (trimming) procedures applied. Confidence intervals are used to evaluate this performance measure. No formal IAAO performance standard has been established at this time. However, the general area of compliance for the PRB is expected to fall between -.050 and +0.050.

Average Sale Price**Average Sale Price Computation**

1. Sum the sale prices
2. Divide by the number of sale prices in the sample

| <i>Sale</i> | <i>Sale Price</i> |
|--------------|-------------------|
| 1 | \$20,000 |
| 2 | \$50,000 |
| 3 | \$15,000 |
| 4 | \$30,000 |
| 5 | \$16,000 |
| <i>Total</i> | <i>\$131,000</i> |

$$\frac{\$131,000}{5} = \$26,200 \quad \text{Average Sale Price}$$

Average Market (Appraised) Value Estimate**Average Market Value Computation**

5. Sum the appraised values
6. Divide by the number of observations in the sample

| <i>Sale</i> | <i>Appraised Value</i> |
|--------------|------------------------|
| 1 | \$25,000 |
| 2 | \$45,000 |
| 3 | \$12,000 |
| 4 | \$30,000 |
| 5 | \$19,200 |
| <i>Total</i> | <i>\$131,200</i> |

$$\frac{\$131,200}{5} = \$26,240 \quad \text{Average Market Value}$$

Trimming Outlier Ratios

Outliers are extreme ratios that are considered highly unusual when compared to the typical observations found in the sample. These aberrant ratios can distort some statistical measures. The potential for damage is greater when the sample sizes are small. One anomalous ratio can exert a controlling influence over a ratio study outcome and produce misleading information. Although extra steps have been taken in the sale verification and screening process to identify suspect sales; some suspect ratios may slip through. Uniform trimming procedures have been used to remove the influence of outlier ratios prior to calculating the following statistics and performance measures.

| Trimmed Statistical Measures | | |
|---------------------------------|----------------------------------|--------------------------|
| Coefficient of Dispersion (COD) | Weighted Mean | PRD Confidence Intervals |
| COD Confidence Intervals | Geometric Mean | Average Sale Price |
| Weighted COD | Standard Deviation | Average Market Value |
| Harmonic Mean | Coefficient of Variation | Normality testing |
| Arithmetic Mean | Price-Related Differential (PRD) | |

| Trimming Procedures for Removing Outlier Ratios |
|--|
| <ol style="list-style-type: none"> 1. The interquartile range of the sample is calculated by locating the first and third quartile points. The first quartile point is identified by the formula $(n * .25) + .25$ (n is the sample size). The third quartile is identified by the formula $(n * .75) + .75$. 2. The interquartile range (third quartile – first quartile) is multiplied by a factor of 1.5 to establish a base width for general outlier trimming. A factor of 3 is used to remove extreme outliers only. 3. The base width is added to the third quartile and subtracted from the first quartile to set the outlier trim points. |

An additional screen has been built into the trimming algorithm to restrict the maximum percentage of trimmed ratios to 20 percent.

*Note: Most personal computer spreadsheets contain functions to locate the first (Q1) and third (Q3) quartile, but they do not all use the same formula to calculate quartiles. PVD uses the same formula as Minitab, SPSS and NCSS. Excel uses $(n * .25) + .75$ for Q1 and $(n * .75) + .25$ for Q3. The difference in formulas CAN cause trim points to be different.*

Determining Minimum Sample Size from Tolerance Limits

In order for ratio study inferences to be reliable, it is necessary to know if the sample size is sufficient. For this Kansas ratio study, nonparametric tolerance limits have been employed to develop minimum sample size guidelines. A tolerance limit provides an interval wherein prescribed proportions of ratio populations are expected to lie, with a given level of statistical probability. For ratio study samples in the Residential or Commercial/Industrial subclass, a threshold has been selected to coincide with an 85 percent probability that at least 50 percent of the population ratios will be represented by the distribution of ratios found in the sample.

The table below provides information that can be used to evaluate sample size adequacy. For the Residential and Commercial/Industrial subclasses, a minimum of five ratios are required to achieve the minimum sample size threshold and provide a sufficient number of observations to develop confidence interval estimates. In most counties the Residential subclass sample will exceed ten sales and achieve an 85 percent probability that 70 percent of the population ratio range will be represented by the sample. Small counties will often require supplemental sales (over the past 4 years) if less than five recent sales are available to develop a ratio sample for the Commercial/Industrial subclass. Large counties that qualify for representative residential sampling are held to higher standards. The sample size goal is expected to meet a 90 percent probability that 98 percent of the population ratios will be represented by the sample distribution. To meet this threshold, a county must have more than 194 valid residential sales during the study year.

Sample Sizes for Nonparametric Tolerance Limits

| <i>Proportion of Ratios</i> | <i>50%</i> | <i>70%</i> | <i>75%</i> | <i>80%</i> | <i>85%</i> | <i>90%</i> | <i>95%</i> | <i>98%</i> |
|-----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <i>85% Probability</i> | 6 | 10 | 13 | 16 | 22 | 33 | 67 | 168 |
| <i>90% Probability</i> | 7 | 12 | 15 | 18 | 25 | 38 | 77 | 194 |
| <i>95% Probability</i> | 8 | 14 | 18 | 22 | 30 | 46 | 93 | 236 |

References:

Conover, W.J., 1980. *Practical nonparametric statistics*. New York: John Wiley & Sons
 Wilks, S.S., 1962. *Mathematical statistics*. New York: John Wiley & Sons

Bootstrap Confidence Intervals for the Compliance Ratio Study

Traditional statistical methods have not been very successful in assessing the accuracy of inferences when the underlying data deviates from a Gaussian (*normal or bell-shaped*) distribution. Ratio study data typically falls into this category. Statistical procedures developed over the last twenty years have improved the accuracy of reliability measures, such as confidence intervals, in many scientific and industrial applications. The *bootstrap* is one such method that employs computer simulation and re-sampling techniques to provide a more powerful way to comprehend the uncertainty associated with ratio study performance measures. This process can provide estimates for statistical measures that do not easily lend themselves to formulas by reducing the dependency on mathematical and model assumptions.

The name bootstrap is derived from the old saying, “*pulling yourself up by your bootstraps* (Efron, 1999),” that reflects the fact that one available sample gives rise to many others.

Bootstrapping produces a confidence interval in a different but natural way. Bootstrap samples are generated using a Monte Carlo simulation routine to prepare numerous re-samples of the same size as the original sample. After these samples are generated, the statistics of interest are computed (*Coefficient of Dispersion, Median Ratio and Price-Related Differential*). A bootstrap confidence interval for each statistic can be obtained from the distribution of the sample.

References:

- Efron, Bradley and Robert J. Tibshirani. 1993. *An introduction to the bootstrap*. New York: Chapman & Hall.
- Diaconis, Persi and Bradley Efron. 1983. Computer-intensive methods in statistics. *Scientific American*. 148:116-130.
- Gunter, Bert. 1991. Bootstrapping: How to make something from almost nothing and get statistically valid answers. *Quality Progress*. 24(12)97-103.
- Hall, Peter. 1992. *Bootstrap and the Edgeworth expansion*. New York: Springer-Verlag.

Residential Sampling Counties

A sample of sales ratios from a county may not accurately represent the population from which they have been drawn. Ratio study performance measures can be distorted or skewed by a disproportionate influence of new construction, highly active neighborhoods or unique properties. Depressed areas, older neighborhoods and properties with low turnover rates are often underrepresented in a sample of sales. A large sample does not mitigate these problems. Research conducted by PVD has shown that in the largest counties, a smaller representative sample can improve statistical accuracy and permit considerable savings of staff time and resources in conducting the validation process.

Legislative changes in 1994 granted the Director of Property Valuation discretion to select a *random sample* from the pool of valid sales in the residential subclass of property. This option can be used in counties with more than 15,000 parcels.

The Ratio Study Technical Advisory Committee has determined that an eligible county should have a sufficient number of transfers to construct a representative sample with at least 200 valid residential sales for the study year. The 13 counties listed below meet the aforementioned criteria for the 2013 study.

| <i>Residential Sampling Counties 2018</i> | | | | | |
|---|--------------------|------------------|--------------------|------------------|--------------------|
| <i>County</i> | <i>Sample Size</i> | <i>County</i> | <i>Sample Size</i> | <i>County</i> | <i>Sample Size</i> |
| <i>Butler</i> | <i>250</i> | <i>McPherson</i> | <i>200</i> | <i>Wyandotte</i> | <i>300</i> |
| <i>Douglas</i> | <i>200</i> | <i>Reno</i> | <i>200</i> | | |
| <i>Ford</i> | <i>200</i> | <i>Riley</i> | <i>250</i> | | |
| <i>Harvey</i> | <i>200</i> | <i>Saline</i> | <i>250</i> | | |
| <i>Johnson</i> | <i>350</i> | <i>Sedgwick</i> | <i>350</i> | | |
| <i>Leavenworth</i> | <i>200</i> | <i>Shawnee</i> | <i>300</i> | | |

To perform residential sampling the following procedures have been implemented:

- Changes in population property characteristics are analyzed each year before sampling goals are established for a county.
- A computer assisted sampling program is employed to track the sampling process and ensure that sales will be selected on a random basis.
- A process has been employed to develop a more representative sample based on salient property characteristics of the population, such as, year built, size and construction quality.
- Sales validation and appeal procedures are uniform between residential sampling counties and non-sampling counties.
- Residential sampling plans and results are submitted each year to the Ratio Study Technical Advisory Committee for review and evaluation.

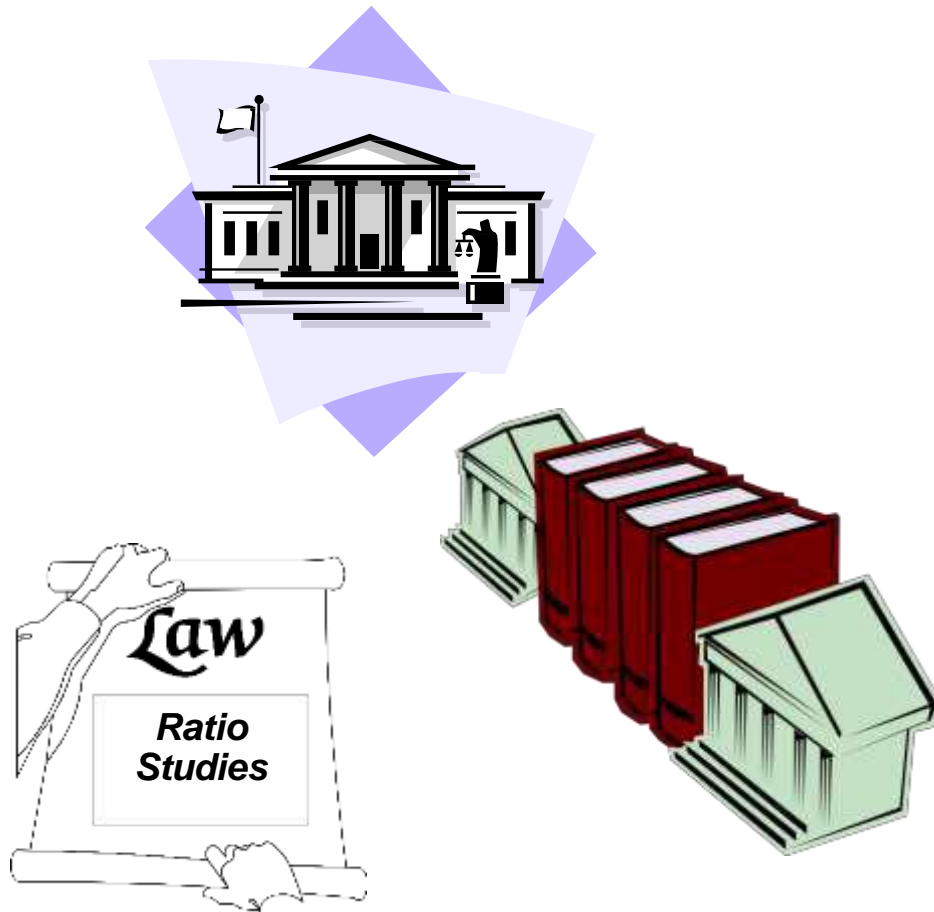
Supplemental Commercial/Industrial Sales

If less than six valid sales occurred in a county with the commercial/industrial subclass of property during the study cycle, a review of sales from the previous four-year timeframe was made (*January 1, 2014 through December 31, 2017*) pursuant to K.S.A. 79-1488. Forty-one Kansas counties required supplemental sales for the commercial/industrial subclass for the year 2018. Approximately 160 supplemental commercial sales have been included in the statistical analysis for the year 2018 ratio studies.

The appraised value for supplemental sales reflects the appraised value for the year in which the property sold.

Section IV

Statutes, Directives and Administrative Regulations Pertaining to the Ratio Study



Kansas Statutes

79-503a. **Fair market value defined; allowable variance; factors to be considered in determining fair market value; generally accepted appraisal procedures to be utilized.**

79-503a. Fair market value defined; allowable variance; factors to be considered in determining fair market value; generally accepted appraisal procedures and standards to be utilized. "Fair market value" means the amount in terms of money that a well informed buyer is justified in paying and a well informed seller is justified in accepting for property in an open and competitive market, assuming that the parties are acting without undue compulsion. In the determination of fair market value of any real property which is subject to any special assessment, such value shall not be determined by adding the present value of the special assessment to the sales price. For the purposes of this definition it will be assumed that consummation of a sale occurs as of January 1. Sales in and of themselves shall not be the sole criteria of fair market value but shall be used in connection with cost, income and other factors including but not by way of exclusion:

- (a) The proper classification of lands and improvements;
- (b) the size thereof;
- (c) the effect of location on value;
- (d) depreciation, including physical deterioration or functional, economic or social obsolescence;
- (e) cost of reproduction of improvements;
- (f) productivity taking into account all restrictions imposed by the state or federal government and local governing bodies, including, but not limited to, restrictions on property rented or leased to low income individuals and families as authorized by section 42 of the federal internal revenue code of 1986, as amended;
- (g) earning capacity as indicated by lease price, by capitalization of net income or by absorption or sell-out period;
- (h) rental or reasonable rental values or rental values restricted by the state or federal government or local governing bodies, including, but not limited to, restrictions on property rented or leased to low income individuals and families, as authorized by section 42 of the federal internal revenue code of 1986, as amended;
- (i) sale value on open market with due allowance to abnormal inflationary factors influencing such values;
- (j) restrictions or requirements imposed upon the use of real estate by the state or federal government or local governing bodies, including zoning and planning boards or commissions, and including, but not limited to, restrictions or requirements imposed upon the use of real estate rented or leased to low income individuals and families, as authorized by section 42 of the federal internal revenue code of 1986, as amended; and
- (k) comparison with values of other property of known or recognized value. The assessment-sales ratio study shall not be used as an appraisal for appraisal purposes.

The appraisal process utilized in the valuation of all real and tangible personal property for ad valorem tax purposes shall conform to generally accepted appraisal procedures and standards which are consistent with the definition of fair market value unless otherwise specified by law.

History: L. 1982, ch. 391, § 2; L. 1990, ch. 346, § 3; L. 1995, ch. 254, § 5; L. 1997, ch. 126, § 42; L. 2003, ch. 156, § 4; L. 2009, ch. 97, § 3; L. 2016, ch. 112, § 9; July 1.

79-1437c. **Real estate sales validation questionnaires; required to accompany transfers of title; retention time; use of information.**

No deed or instrument providing for the transfer of title to real estate or affidavit of equitable interest in real estate shall be recorded in the office of the register of deeds unless such deed, instrument or affidavit shall be accompanied by a completed real estate sales validation questionnaire completed by the grantor or grantee or the agent of such grantor or grantee concerning the property transferred. Such questionnaire shall not be filed of record by the register of deeds but shall be retained for a period of five years at which time they shall be destroyed. The register of deeds shall in conjunction with the county clerk use the

information derived from such questionnaires in cooperating with and assisting the director of property valuation in developing the information as provided for in K.S.A. 79-1487, and amendments thereto.

History: L. 1991, ch. 162, § 3; L. 1992, ch. 159, § 1; L. 1992, ch. 282, § 18; L. 1995, ch. 252, § 25; Jan. 1, 1996.

79-1437d. Same; devised by director of property valuation; approval by legislature; information to be contained therein.

The real estate sales questionnaire shall be devised by the director of property valuation, and the director shall furnish copies thereof to the register of deeds. Upon proposing modifications or changes to the real estate sales validation questionnaire devised and used prior to 1992 or any validation questionnaire approved by the legislature in 1992 or thereafter, the director of property valuation shall submit such proposal to the legislature. Upon the failure of the legislature to enact legislation modifying the director's proposal within 60 days of submission thereof, such proposal shall be deemed to be approved, and the director's modified questionnaire may be utilized at anytime thereafter. The questionnaire shall be devised to obtain information regarding the identification and location of the property, name and address of the purchaser, sales price, date of sale, the classification and subclassification to which such property belongs, nature and circumstances peculiar to the sale, whether any personal property was included in the sales price, whether the purchaser assumed any mortgage or liens, loans, leases or taxes, the method of financing, whether any special assessments are levied against the property and such other information as the director of property valuation shall require. No information shall be requested in such questionnaire which would require the disclosure of the interest rate paid by the purchaser or the specific term of any mortgage.

History: L. 1991, ch. 162, § 4; July 1.

79-1437e. Same; inapplicability to certain transfers of title.

- (a) The real estate sales validation questionnaire required by this act shall not apply to transfers of title:
- (1) Recorded prior to the effective date of this act;
 - (2) made solely for the purpose of securing or releasing security for a debt or other obligation;
 - (3) made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration;
 - (4) by way of gift, donation or contribution stated in the deed or other instrument;
 - (5) to cemetery lots;
 - (6) by leases and transfers of severed mineral interests;
 - (7) to or from a trust, and without consideration;
 - (8) resulting from a divorce settlement where one party transfers interest in property to the other;
 - (9) made solely for the purpose of creating a joint tenancy or tenancy in common;
 - (10) by way of a sheriff's deed;
 - (11) by way of a deed which has been in escrow for longer than five years;
 - (12) by way of a quit claim deed filed for the purpose of clearing title encumbrances;
 - (13) when title is transferred to convey right-of-way or pursuant to eminent domain;

- (14) made by a guardian, executor, administrator, conservator or trustee of an estate pursuant to judicial order;
 - (15) when title is transferred due to repossession; or
 - (16) made for the purpose of releasing an equitable lien on a previously recorded affidavit of equitable interest, and without additional consideration.
- (b) When a real estate sales validation questionnaire is not required due to one or more of the exemptions provided in subsection (a), the exemption shall be clearly stated on the document being filed.

History: L. 1991, ch. 162, § 5; L. 1992, ch. 159, § 2; L. 1994, ch. 275, § 12; L. 2002, ch.22, §1; July 1.

79-1437f. Same; disposition and use of contents thereof, to and by whom.

Except as otherwise provided by K.S.A. 79-1460, and amendments thereto, contents of the real estate sales validation questionnaire shall be made available only to the following people for the purposes listed hereafter:

- (a) County officials for cooperating with and assisting the director of property valuation in developing the information as provided for in K.S.A. 79-1487, and amendments thereto;
- (b) any property owner, or the owner's representative, for prosecuting an appeal of the valuation of such owner's property or for determining whether to make such an appeal, but access shall be limited to the contents of those questionnaires concerning the same constitutionally prescribed subclass of property as that of such owner's property;
- (c) the county appraiser and appraisers employed by the county for the appraisal of property located within the county;
- (d) appraisers licensed or certified pursuant to K.S.A. 58-4101 et seq., and amendments thereto, for appraisal of property and preparation of appraisal reports;
- (e) financial institutions for conducting appraisals and evaluations as required by federal and state regulators;
- (f) the county appraiser or the appraiser's designee, hearing officers or panels appointed pursuant to K.S.A. 79-1602 or 79-1611, and amendments thereto, and the state board of tax appeals for conducting valuation appeal proceedings;
- (g) the board of county commissioners for conducting any of the board's statutorily prescribed duties;
- (h) the director of property valuation for conducting any of the director's statutorily prescribed duties; and
- (i) a person licensed pursuant to the real estate brokers' and salespersons' act for purposes of fulfilling such person's statutory duties and providing information on market value of property to clients and customers.

History: L. 1991, ch. 162, § 6; L. 1992, ch. 282, § 19; L. 1999, ch. 123, § 2; L. 2002, ch. 23, § 1; L. 2006, ch. 151, § 3; L. 2007, ch. 63, § 1; L. 2008, ch. 109, § 87; L. 2014, ch. 141, § 96; July 1.

79-1437g. Same; penalty for violations.

Any person who shall falsify the value of real estate transferred shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$500.

History: L. 1991, ch. 162, § 7; L. 1992, ch. 159, § 3; April 30.

79-1444 Same; technical advisory committee; membership; qualifications, compensation and allowance; duties; additional advisory committee, appointment.

There is hereby established a technical advisory committee on the assessment-sales ratio study. The committee shall consist of three (3) members, appointed by and serving at the pleasure of the secretary of revenue. Members of the committee shall have such education and training as may be necessary to advise the director in the methodology of conducting studies of the type required under the provisions of this act. Members of the advisory committee on assessment-sales ratio study attending meetings of such committee, or attending a subcommittee meeting thereof authorized by such committee, shall be paid amounts provided in subsection (e) of K.S.A. 75-3223 and amendments thereto. The same shall be paid from appropriations to the secretary of revenue upon warrants of the director of accounts and reports issued pursuant to vouchers approved by the secretary of revenue or a person or persons designated by him or her.

It shall be the duty of the committee to advise and consult with and assist the director in the review and evaluation of the procedures used by the director of property valuation in making the assessment-sales ratio study and to make recommendations for any changes deemed necessary. It shall be the duty of the board of regents and the administration of each of the state institutions thereunder to authorize any staff members so selected to participate as members in the activities of such committee. The secretary of revenue may appoint an additional advisory committee of not to exceed seven (7) members to serve at his or her pleasure.

History: L. 1965, ch. 516, § 6; L. 1968, ch. 208, § 14; L. 1972, ch. 362, § 7; L. 1974, ch. 348, § 99; L. 1974, ch. 428, § 7; L. 1975, ch. 416, § 27; July 1.

79-1485 Kansas real estate ratio study act: purposes.

- (a) This act shall be known and may be cited as the Kansas real estate ratio study act.
- (b) The purpose of this act is to provide statistical information regarding the relationship of the appraised value to the selling price of real estate which has sold during the study year and the relative level of uniformity of appraisal within and among counties and to report such information in convenient form to the legislature and other interested parties. The statistical information determined pursuant to this act may be used by the director in carrying out such director's duties, including, but not limited to, assisting such director in the determination of substantial compliance under K.S.A. 79-1445, and amendments thereto.

History: L. 1992, ch. 131, § 1; L. 1994, ch. 275, § 8; July 1.

79-1486 Same; definitions. As used in this act:

- (a) "Sale" or "sales" shall include all transfers of real estate for which a real estate sales validation questionnaire is required by K.S.A. 79-1437c, and amendments thereto; however, all sales for which a real estate sales validation questionnaire is required by K.S.A. 79-1437c, and amendments thereto, need not be included in the final ratios determined;
- (b) "valid sale" is a sale that is an indicator of fair market value as defined in K.S.A. 79-503a, and amendments thereto;
- (c) "invalid sale" is a sale that is not an indicator of fair market value as defined in K.S.A. 79-503a, and amendments thereto;

- (d) “unvalidated sale” is a residential subclass sale that was not selected through a random sampling process and has not been determined to be either a valid sale or an invalid sale;
 - (e) “real estate” shall include land, improvements and structures which are appraised as real property;
 - (f) “director” shall mean the director of property valuation;
 - (g) “classification” shall mean those classifications which apply to real property contained in K.S.A. 79-1439, and amendments thereto, or any stratification which may be prescribed by the director;
 - (h) “average” shall mean that measure or measures of central tendency which the director shall determine best describes a group of individual ratios;
 - (i) “ratio” shall mean the numerical relationship between the appraised or assessed value and the selling price; and
 - (j) “study year” shall mean that twelve-month period beginning annually on January 1.
- History:** L. 1992, ch. 131, § 2; L. 1994, ch. 275, § 9; July 1.

79-1487 Same: duties of local officials; access of records by director.

It shall be the duty of all county officials to cooperate with and assist the director in the development of the information required by this act. Such county officials shall exchange such information as may be necessary to carry out the intent and purposes of this act. The director or the director’s agents shall have access to all county records for the purpose of carrying out the intent and purposes of this act.

History: L. 1992, ch. 131, § 3; July 1.

79-1488 Same; authorities and duties of director.

It shall be the duty of the director to obtain all information relating to each sale of real estate as the director shall deem necessary to carry out the intent and purposes of this act. The director shall prescribe the form in which the data is obtained. The director shall assign agents who shall verify and categorize each sale as valid, invalid or unvalidated. The director shall determine the median ratio in relation to the county’s certified value, the price-related differential, and the coefficient of dispersion for each classification of property in each county. If, in the director’s opinion, sales from the study year are insufficient to determine reliable ratios for any classification of property in any county, sales from the four-year period preceding the study year may be used to supplement study year sales or the director may obtain or conduct appraisals for the purpose of supplementing, verifying or correcting ratios for the study year. The director may select random samples of residential subclass sales from counties having a total parcel count in excess of 15,000 to determine reliable residential subclass ratios for any such county. The random sample shall be selected prior to any validation process. Data from deeds, other instruments of conveyance and real estate sales validation questionnaires recorded or filed with the register of deeds on or after the first day of February following the study year shall not be used in determining the ratios for any county.

History: L. 1992, ch. 131, § 4; L. 1994, ch. 275, § 10; July 1.

79-1489 Same; notification of ratios to county by the director; appeals, procedure.

The director shall determine the mid-year ratios for each county and notify the board of county commissioners thereof. When the final ratios are determined, the director shall notify the board of county commissioners of each county of the ratios determined for such county. If the board of county commissioners disagrees with the ratios determined for the county, such board, within 15 days after receipt of such notice, may appeal such determination to the state

board of tax appeals. Written notice of appeal shall be served on the state board of tax appeals and the director by certified mail. The notice of appeal shall clearly and specifically state the facts upon which the appeal is based. The state board of tax appeals shall conduct a summary proceeding in accordance with the provisions of the Kansas administrative procedure act within 30 days of receipt of the written notice of appeal and shall issue findings and a final order within 30 days after the conclusion of such summary proceeding. If the state board of tax appeals finds that corrections in the ratios are necessary, it shall order the director to make necessary corrections consistent with such findings prior to the publication of the study.

History: L. 1992, ch. 131, § 5; L. 1994, ch. 275, § 11; L. 2008, ch. 109, § 94; L. 2014, ch. 141, § 102; July 1

79-1490 Same; publishing of study, when.

The director shall publish the ratio study after the procedures prescribed in K.S.A. 79-1489 have been concluded. If it is determined that the ratio study cannot be published by April 1, the director shall provide a preliminary ratio study to the governor, the speaker of the house and the president of the senate and their respective tax committees on or before March 15.

History: L. 1992, ch. 131, § 6; July 1.

79-1491 Same; rules and regulations.

The secretary of revenue shall adopt rules and regulations providing for the administration of this act.

History: L. 1992, ch. 131, § 7; July 1.

79-1492 Same; application of act.

The provisions of K.S.A. 79-1437e, 79-1485, 79-1486, 79-1488 and 79-1489 shall apply to all taxable years commencing after December 31, 1993.

History: L. 1992, ch. 131, § 8; L. 1994, ch. 275, § 13; July 1.

79-1493 Same; authority to compile and publish other statistics not affected.

Nothing in this act shall preclude the director from gathering, compiling or publishing any information or statistics in addition to those required by this act.

History: L. 1992, ch. 131, § 9; July 1.

79-1495 Computer-assisted mass-appraisal system; verification of accuracy requirements

In any county which fails to meet the minimum appraisal standards for commercial real property established by the official Kansas appraisal/sales ratio study conducted for the preceding year by the division of property valuation of the department of revenue, the director of property valuation shall be required to perform, or to contract with an independent third party to perform, a market-based appraisal of no less than 1% of the commercial properties appraised by the computer-assisted mass-appraisal system within the county as a verification of the accuracy of such system. The properties shall be selected so to represent a sample of the commercial property types which failed to meet statistical compliance in the county. The property owner shall be allowed the opportunity to meet with the appraiser in order to offer pertinent data and insight on the issues that would affect the value of the property. This appraisal will not be an official appraisal of the property and will be used for the purposes of quality assurance of the mass-appraisal system. If the independent appraisal reveals a statistical deviation greater than 5% on more than 25% of the audited properties, then the director will perform additional audits in those counties and require corrective action necessary to ensure a fair and accurate appraisal.

History: L. 2016, ch. 112, § 22; July 1.



Division Of Property Valuation
 Docking State Office Building
 915 SW Harrison St., Room 400N
 Topeka, KS 66612-1588



phone: 785-296-2365
 fax: 785-296-2320
 www.kcrevenue.org

Nick Jordan, Secretary
 David N. Harper, Director

Sam Brownback, Governor

DIRECTIVE #14-046

TO: County Appraisers
SUBJECT: Scope of Work and Substantial Compliance

This Directive Supersedes Directive #92-002 and #92-003

This directive is adopted pursuant to the provisions of K.S.A. 79-505 and shall take effect and be in full force from and after its publication in the Kansas Register.

The following criteria and standards shall be used for appraisals developed in the 2014 valuation cycle (in preparation for January 1, 2015 valuation date) and subsequent years to determine whether a county is in substantial compliance with the statutory requirement to uniformly appraise real and personal property at its fair market value, as defined by K.S.A. 79-503a, and amendments thereto. In order to establish compliance or lack of compliance in each county, the Division of Property Valuation (PVD) shall conduct a ratio study to develop statistical performance measures as required by K.S.A. 79-1485 *et. seq.* PVD shall conduct a procedural audit in each county covering items deemed essential to establishing fair market value. PVD shall determine whether specific Kansas statutes pertaining to property taxation have been followed. In accordance with K.S.A. 79-1445, PVD will publish annually a list of the substantial compliance results for each county.

Criteria and Standards

The annual substantial compliance process uses an objective scoring system that PVD has developed to evaluate completion of key mass appraisal steps, accomplishment of assessment administration functions, and achievement of accuracy standards in each county. Points are awarded when a county meets minimum statistical performance measures, documentation is verified to confirm that mass appraisal procedures have been followed, and statutory requirements have been met. A maximum score of 100 is possible. A county must achieve a minimum score of 75 to attain substantial compliance. Any county achieving a score less than 75 shall be found in noncompliance and may be required to submit a detailed plan to correct areas of noncompliance.

Substantial compliance is based upon ratio study performance measures, an audit of procedural steps required to develop a credible mass appraisal, and verification that important statutory mandates have been met. The ratio study conducted by PVD is used to

verify that overall value conclusions meet minimum standards of reasonableness, consistency and accuracy. Refusal by county officials to cooperate in the ratio study may result in a noncompliance order. The procedural steps are tied to Kansas statutes and regulations, the International Association of Assessing Officers (IAAO) Standard on Mass Appraisal and the Uniform Standards of Professional Appraisal Practice (USPAP). Refusal by a county or district appraiser to perform any procedural step may result in a noncompliance order. Kansas statutes require critical functions to be performed and annual processing deadlines to be met by the county or district appraiser. Refusal to comply with any statutory requirement may result in a noncompliance order.

If a county is determined to be in noncompliance, the director may pursue all legal options, including, but not limited to, proceedings before the Kansas Court of Tax Appeals and/or the removal of the county or district appraiser from office. PVD may require the county to submit a detailed plan to correct areas of noncompliance. A PVD audit of all property tax functions and responsibilities may be initiated if the county does not implement its approved plan or the plan is ineffective in bringing the county back into compliance.

The director may include an administrative note on the final report if a county fails to achieve industry standard ratio study performance measures. Counties receiving an administrative note may be required to submit a plan to correct the area or areas not meeting the basic statistical standards.

The Compliance Scorecard along with the points possible follows:

Compliance Scorecard - Example of total points possible

| Subclass | Appraised Value | Percent of Total Appraised Value |
|-----------------------|-----------------|----------------------------------|
| Residential | | |
| Commercial/Industrial | | |
| Total Appraised Value | | |

| Subclass | Percent of Appraised Value (weighted) | Compliance Points Possible | Weighted Points | Points Received |
|--------------------------------------|---------------------------------------|----------------------------|-----------------|-----------------|
| 1. Statistical Measures | | | | |
| Residential | | | | |
| Appraisal Level | | 25 | | |
| Appraisal Uniformity | | 25 | | |
| Commercial/Industrial | | | | |
| Appraisal Level | | 25 | | |
| Appraisal Uniformity | | 25 | | |
| Statistical Compliance Points | | 50 | | |

| | Compliance Points Possible | Points Received |
|--|----------------------------|-----------------|
| 2. Procedures | | |
| a. Scope of Work Appraisal Plan | 4 | |
| b. Sales File | 4 | |
| c. Parcel Maintenance Inspection | 4 | |
| d. Land Valuation Model Calibration | 4 | |
| e. Construction Cost Multiplier Analysis | 4 | |
| f. Depreciation Analysis | 4 | |
| g. Income Approach | 4 | |
| h. Comparable Sales Approach | 4 | |
| i. Final Review Process | 4 | |
| Total | 36 | |
| 3. Agricultural Use Valuation | 2 | |
| 4. Cadastral Mapping | 2 | |
| 5. Statutory Compliance | | |
| a. Trend Study and CVN Mailing | 2 | |
| b. Informal Hearings | 2 | |
| c. Appraised Value Certification | 2 | |
| d. Personal Property | 2 | |
| e. Preservation and Protection of Property Tax Records | 2 | |
| Total | 10 | |
| I. Total Points Possible | 100 | |
| II. Total Points Received | | |
| III. Overall Score (II/I) * 100 | | |

1. STATISTICAL MEASURES COMPLIANCE REVIEW (50 points)

Statistical compliance for the *residential* and *commercial/industrial* subclasses shall be determined separately. A maximum of 50 ratio study compliance points are possible for a county that achieves the median ratio (25 points) and COD (25 points) performance goals through statistical point estimates in both subclasses. Subclass points shall be weighted by the percentage of appraised value within the combined subclasses, as derived from the most recent statistical abstract. The percentage of appraised value, divided between the residential and commercial/industrial subclass will be shown at the top of the form. These percentages will be used to develop the point weighting for each statistical measure in the two subclasses. Subclass weights are expected to vary from county to county and from year to year.

The following is an example of the weighting procedure:

| Subclass | Appraised Value | Percent of Total Appraised Value |
|-----------------------|-----------------|----------------------------------|
| Residential | \$250,000,000 | 84.7 |
| Commercial/Industrial | \$45,000,000 | 15.3 |
| Total Appraised Value | \$295,000,000 | 100.0 |

| Subclass | Percent of Appraised Value (weighted) | Compliance Points Possible | Weighted Points | Points Received |
|--------------------------------------|---------------------------------------|----------------------------|-----------------|-----------------|
| 1. Statistical Measures | | | | |
| Residential | | | | |
| Appraisal Level | 84.7 | 25 | 21.2 | |
| Appraisal Uniformity | 84.7 | 25 | 21.2 | |
| Commercial/Industrial | | | | |
| Appraisal Level | 15.3 | 25 | 3.8 | |
| Appraisal Uniformity | 15.3 | 25 | 3.8 | |
| Statistical Compliance Points | | | 50.0 | |

1. Sum the residential and commercial/industrial appraised value
 $(\$250,000,000 + \$45,000,000 = \$295,000,000)$

2. Divide each subclass appraised value by the total appraised value.
 $\$250,000,000/\$295,000,000 = 84.7$ percent (Residential)
 $\$45,000,000/\$295,000,000 = 15.3$ percent (Commercial-Industrial)

3. Multiply the percent of appraised value (weighted) by the compliance points possible in each subclass for both the median ratio and COD.

$$.847 \text{ times } 25 = 21.2$$

$$.847 \text{ times } 25 = 21.2$$

$$.153 \text{ times } 25 = 3.8$$

$$.153 \text{ times } 25 = 3.8$$

Median ratio: 115.2 95% Confidence interval: 110.1 to 120.0 would not be considered in statistical compliance because the lower end (110.1) does not reach the acceptable range of 90.0 to 110.0 percent.

b. Appraisal Uniformity

The average deviation of ratios about the median appraisal level shall be measured by the coefficient of dispersion (COD). The COD measure must suggest a deviation of 20.0 or less for the *residential* subclass and the *commercial/industrial* subclass to achieve statistical compliance. If a subclass fails to meet this goal, confidence interval estimates shall be developed about the COD. If the range estimate for the subclass includes a COD of 20.0 or less at the 95% level of confidence, appraisal uniformity shall not be found out of statistical compliance.

For example:

COD: 18.0 95% Confidence interval: 13.0 to 22.0

This example is not considered out of compliance because the COD point estimate is less than 20.0. The confidence interval does suggest, however, there is a small probability the true COD could actually be greater than 20.0, due to sampling error.

COD: 30.0 95% Confidence interval: 22.0 to 38.0

This example is considered out of compliance because the COD point estimate is 30.0 and the lower range of the 95% confidence interval does not fall below 20.0 (the maximum limit for compliance).

COD: 22.0 95% Confidence interval: 17.0 to 26.0

This example is not considered out of compliance although the COD point estimate is 22.0. Due to sampling error, it is probable that the true COD is somewhere within the range of 17.0 to 26.0 at the 95% level of confidence. The county would not fail the compliance test because of insufficient statistical confirmation. The lower end of the confidence interval does fall below 20.0 (the maximum limit for compliance).

c. Sample Size

If less than six valid sales are collected for a subclass during the study period, valid sales within the same subclass from the four previous study periods may be included to develop a larger and more reliable sample for analysis.

If less than five valid sales are available in a subclass sample, ratio study performance measures will not be used to determine statistical compliance. The points allocated to the statistical measures for that subclass shall be subtracted from the total compliance points, thereby establishing a new base of total possible points.

All reinspection activity must have an inspection history record entered into the CAMA system showing the reviewer name, inspection date, and process code to adequately indicate the purpose of the review.

d. Land Valuation Model Calibration (4 points)

PVD shall verify that the county has developed and calibrated land valuation models in accordance with the Revaluation Maintenance Specifications. Neighborhood analysis forms, analysis documentation, and data summary must be complete to be considered in compliance. PVD shall also confirm land pricing tables have been updated. A market analysis for agricultural land must also be documented. Deviations from model assignments must be documented.

e. Construction Cost Multiplier Analysis (4 points)

If the county deviates from the current cost valuation system, PVD shall verify the county has a current residential and/or commercial/agricultural construction cost multiplier analysis in accordance with the Revaluation Maintenance Specifications. If the county recognizes a deviation from the current cost valuation system, cost tables must be updated to reflect the study. Deviation from the current cost valuation system without documentation will result in the loss of two points for the applicable property type. Two points for residential and two for commercial/agricultural are possible and are evaluated independently.

Sales of newly constructed properties may be used in the analysis for actual construction cost when appropriate.

f. Depreciation Analysis (4 points)

PVD shall verify the county has developed a depreciation analysis in accordance with the Revaluation Maintenance Specifications and PVD sales validation guidelines that utilizes all available valid sales. The county must include appropriate statistics, graphics reports and statistical analyses to test percent good calibration assignments. All forms of depreciation must be documented. The county must update percent good tables, if appropriate, with the results of the yearly analysis. Deviations from model assignments must be documented. Two points for residential and two for commercial/agricultural are possible and are evaluated independently.

g. Income Approach (4 points)

PVD shall verify that the county has developed or attempted to develop an income approach to value appropriate properties. The appraiser must document all income approach analysis and conclusions in accordance with the Revaluation Maintenance Specifications. Updated income and expense model calibration must be completed. Deviations from model assignments must be documented.

h. Comparable Sales Approach (4 points)

PVD shall verify the county has developed a sales comparison approach to value by analyzing the relationship between the sales prices and the real property characteristics. The county must document all sales approach analysis, model specification, model calibration and conclusions in accordance with the Revaluation Maintenance Specifications. Deviations from model assignments must be documented.

i. Final Review Process (4 points)

PVD shall verify that the county has performed the final review of values in accordance with the Revaluation Maintenance Specifications. The county must document the date and person performing the final review.

3. AGRICULTURAL USE VALUATION (2 points)

PVD shall verify that the county has met the review/inspection requirements for current agricultural use and influence factors in accordance with the Revaluation Maintenance Specifications. The county must identify current use of agricultural land, which includes cropland, grassland, irrigated land, waterways, non-productive land, and farm home sites. Agricultural use values issued annually by PVD must be updated into the CAMA system (see Appendix A. Scoring Example).

4. CADASTRAL MAPPING (2 points)

PVD shall verify that accurate property ownership maps are being maintained in accordance with the Revaluation Maintenance Specifications. Updated field maps (showing new plats, splits, and combinations), an updated assessment administration file and adherence to the parcel definition must be maintained (see Appendix A. Scoring Example).

5. STATUTORY COMPLIANCE (10 points)

The following review areas are to establish whether the county is following Kansas statutes not previously covered (see Appendix A. Scoring Example).

- a. A real estate value trend study is published at least five business days prior to the mailing of the CVN's (K.S.A. 79-1460A). Change of value notices are mailed on or before the statutory deadline, provided an extension has not been granted pursuant to K.S.A. 79-1404, *Seventeenth*, or an alternate form of notification approved pursuant to K.S.A. 79-1460 (K.S.A. 79-1460).
- b. Informal hearings are held within statutory timeframe, provided an extension has not been granted pursuant to K.S.A. 79-1404, *Seventeenth* (K.S.A. 79-1448).
- c. Values are certified to county clerk by statutory deadline, provided an extension has not been granted pursuant to K.S.A. 79-1404, *Seventeenth* (K.S.A. 79-1466 and 79-1467).

- d. Personal property is listed as required and penalties applied where applicable (K.S.A. 79-306 and 79-1422, K.S.A. 79-332a).
- e. The preservation and protection of all property tax records (K.S.A. 45-403).

Approved: June 3, 2014



David N. Harper
Director of Property Valuation

APPENDIX A. Scoring Example

The scorecard on the following page demonstrates the scoring process based on the following information.

- The residential subclass failed to meet the required level of appraisal statistical standards and did not receive the 21.2 points possible.
- The commercial subclass had less than six sales; therefore, there were zero points possible for the commercial/industrial subclass. The total weighted points possible for statistical analysis changed to 42.4.
- A total of 50 points were possible for procedures, agricultural use valuation, cadastral mapping and statutory compliance.
- Compliance points possible total 92.4.
- The county deviated from the default residential construction cost multiplier and did not do a residential construction cost analysis. The county used the default commercial cost multiplier. Therefore 2 of the 4 possible points for the construction cost multiplier were deducted for failure to provide documentation to support deviation from the use of the residential default construction cost multiplier.
- The total points received for procedures totals 34 out of a possible 36.
- The county failed to mail their change of value notices before the statutory deadline and lost two points. Eight of a possible 10 points were earned for procedural compliance.
 - Total compliance points possible 92.4
 - Total points received 67.2

Total points received (67.2) divided by the total points possible (92.4) = final substantial compliance score (72.7 percent).

The county failed substantial compliance because the county did not reach the passing score of 75.0 percent.

Compliance Scorecard

Example

| Subclass | Appraised Value | Percent of Total Appraised Value |
|-----------------------|-----------------|----------------------------------|
| Residential | \$250,000,000 | 84.7 |
| Commercial/Industrial | 45,000,000 | 15.3 |
| Total Appraised Value | \$295,000,000 | 100.0 |

| Subclass | Percent of Appraised Value (weighted) | Compliance Points Possible | Weighted Points | Points Received |
|--------------------------------------|---------------------------------------|----------------------------|-----------------|-----------------|
| 1. Statistical Measures | | | | |
| Residential | | | | |
| Appraisal Level | 84.7 | 25 | 21.2 | 0 |
| Appraisal Uniformity | 84.7 | 25 | 21.2 | 21.2 |
| Commercial/Industrial | | | | |
| Appraisal Level | 15.3 | 25 | | |
| Appraisal Uniformity | 15.3 | 25 | | |
| Statistical Compliance Points | | 50 | 42.4 | 21.2 |

| 2. Procedures | Compliance Points Possible | Points Received |
|--|----------------------------|-----------------|
| a. Scope of Work Appraisal Plan | 4 | 4 |
| b. Sales File | 4 | 4 |
| c. Parcel Maintenance Inspection | 4 | 4 |
| d. Land Valuation Model Calibration | 4 | 4 |
| e. Construction Cost Multiplier Analysis | 4 | 2 |
| f. Depreciation Analysis | 4 | 4 |
| g. Income Approach | 4 | 4 |
| h. Comparable Sales Approach | 4 | 4 |
| i. Final Review Process | 4 | 4 |
| Total | 36 | 34 |
| 3. Agricultural Use Valuation | 2 | 2 |
| 4. Cadastral Mapping | 2 | 2 |
| 5. Statutory Compliance | | |
| a. Trend Study and CVN Mailing | 2 | 0 |
| b. Informal Hearings | 2 | 2 |
| c. Appraised Value Certification | 2 | 2 |
| d. Personal Property | 2 | 2 |
| e. Preservation and Protection of Property Tax Records | 2 | 2 |
| Total | 10 | 8 |
| I. Total Points Possible | 92.4 | |
| II. Total Points Received | | 67.2 |
| III. Overall Score (II/I)*100 | | 72.7 |



K A N S A S

DEPARTMENT OF REVENUE
DIVISION OF PROPERTY VALUATION

DIRECTIVE 03-041

TO: REGISTER OF DEEDS
FROM: Mark S. Beck, Director
SUBJECT: Real Estate Sales Validation Questionnaires; Filing Requirements
(To replace Directive #92-016 and 94-028)

This directive is adopted pursuant to the provisions of K.S.A. 79-505, and shall be in force and effect from and after the Director's approval date.

Register of Deeds shall comply with the following procedures in handling and processing real estate sales validation questionnaires.

1. The only exceptions to the requirement to file a real estate sales validation questionnaire are statutory.

K.S.A. 79-1437e(a), as amended by L. 2002, ch. 22, provides:

The real estate sales validation questionnaire required shall not apply to transfers of title:

- (1) recorded prior to the effective date of this act;
- (2) made solely for the purpose of securing or releasing security for a debt or other obligation;
- (3) made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration;
- (4) by way of gift, donation or contribution stated in the deed or other instrument;
- (5) to cemetery lots;
- (6) by leases and transfers of severed mineral interests;
- (7) to or from a trust, and without consideration;

- (8) resulting from a divorce settlement where one party transfers interest in property to the other;
- (9) made solely for the purpose of creating a joint tenancy or tenancy in common;
- (10) by way of a sheriff's deed;
- (11) by way of a deed which has been in escrow for longer than five years;
- (12) by way of a quit claim deed filed for the purpose of clearing title encumbrances;
- (13) when title is transferred to convey right-of-way or pursuant to eminent domain;
- (14) made by a guardian, executor, administrator, conservator or trustee of an estate pursuant to judicial order;
- (15) when title is transferred due to repossession; or
- (16) made for the purpose of releasing an equitable lien on a previously recorded affidavit of equitable interest, and without additional consideration.

When a real estate questionnaire is not required due to one of the exemptions listed above, the exemption number or reason for an exemption must be clearly stated on the deed. The register of deeds should not make changes to the face of the deed by adding the exemption number or exemption description. (*Also see Att'y Gen. Op. No. 92-122*)

2. The Division of Property Valuation supplies a three-part real estate sales validation questionnaire (form number PV-RE-21) which is required when an affidavit of equitable interest, deed in real estate, or any other instrument used to transfer real property is recorded in the office of the register of deeds. Only counties having prior written approval from the director may use a special one-part version of the form (PV-RE-21-OP). The one-part form can be used in conjunction with image document management systems. Photocopies are not acceptable; however, filers may submit a computer-printed form. The digital version of the form (PV-RE-21-OP-CG) can be obtained from the Department of Revenue website. Instructions for completing the questionnaire must be printed on the reverse side or attached on a separate page. Counties accepting one-part forms are required to provide the original document(s) to the Division of Property Valuation.
3. The "total sale price" must be entered on the real estate sales validation questionnaire. If one dollar (\$1.00), ten dollars (\$10.00) or any nominal sale price is entered on the real estate sales validation questionnaire, the register of deeds shall question the accuracy of the sale price as entered. If the grantor, grantee, or agent affirms that the sale price as entered is correct, the deed should be recorded.
4. A real estate sales validation questionnaire is not required on a deed that states "without consideration" or that has one dollar (\$1.00), ten dollars (\$10.00) or some other nominal value entered thereon. "Without consideration" as used in K.S.A. 79-1437(e)(7), as amended by L. 1992, ch. a59, § 2, means "gift." Therefore, an entered consideration of one dollar (\$1), ten dollars (\$10) or "love and affection" on a deed shall be construed as a "gift," and the deed accepted without a real estate sales validation questionnaire. However, if the phrase "one dollar (\$1.00) and other valuable consideration" has been entered on the deed, a real estate sales validation questionnaire is required to record the deed.
5. The buyer, seller or agent thereof may complete and sign the real estate validation questionnaire.

6. If a government entity, such as a county, conveys real property, the real estate sales validation questionnaire must be signed by the government official(s) who signed the deed or an agent.
7. Multiple deeds conveying partial interests and filed simultaneously, do not require multiple real estate sales validation questionnaires, provided the real estate sales validation questionnaire filed is annotated to state that the consideration entered thereon is the total consideration for the transfer of the entire interest. The register of deeds shall indicate in the upper left-hand corner of the real estate sales validation questionnaire the deed book and page number range assigned to the corresponding deeds.
8. A real estate sales validation questionnaire with the phrase "other valuable consideration" entered as the sales price shall not be accepted. It shall be returned for the sale price to be entered before the deed, instrument or affidavit may be recorded.
9. The Register of Deeds has a legal obligation to see that the real estate sales validation questionnaire is completed. At a minimum, this requires that each real estate sales validation questionnaire be scrutinized for completion of the identification and location information and all questions thereon.
10. A real estate sales validation questionnaire without every question answered, including the sale price, the signature and phone numbers entered is not "completed". Incomplete real estate sales validation questionnaires accompanied by the deed, other instrument transferring title to real estate or affidavit of equitable interest must be returned to the filer with notice that such deed, instrument or affidavit has not been recorded.
11. Phone numbers for both the buyer and the seller are required when the agent completes a real estate sales validation questionnaire.
12. The phrase "made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration," (K.S.A. 79-1437e) is explained as follows:

Confirm means "to support or establish the certainty or validity of; verify." The American Heritage Dictionary of the English Language, 386 (4th Edition, 2000).

Correct means "to remove errors from." Webster's II New Riverside University Dictionary, 314 (1984).

Modify means "To change in form or character; alter." The American Heritage Dictionary of the English Language, 1130 (4th Edition, 2000).

Supplement means "something added to offset a deficiency, or strengthen the whole; a section added to a document to provide additional data, or to correct errors." Webster's II New Riverside Dictionary, 1163 (1984).

The recurrent theme of these definitions is an incidental change, not a change in substance. In the case of a deed previously recorded, this would mean that the change does not change the grantor or the grantee (although, e.g., a change may be made in the spelling of the grantor or grantee's name). Whatever the change, the intent to convey the real property to a named person or entity is not changed. Also, there can be no additional consideration.

13. It is a misdemeanor to falsify the sale price of real estate transferred on a real estate sales validation questionnaire (K.S.A. 79-1437g). Any Register of Deeds or other county official who has information

or suspects that a real estate sales validation questionnaire has been falsified shall notify the County Attorney or County Counselor for possible legal action.

14. Individuals may obtain photocopies of real estate sales validation questionnaires if they have statutory access to them (K.S.A. 79-1437f). K.S.A. 45-219(a) provides that any person may make abstracts or copies of any public record to which such person has access under the Open Records Act. Public officials may require advance payment of the actual cost of furnishing copies, including the cost of staff time, to make the information available. K.S.A. 45-218(f); K.S.A. 45-219(c)(1). (*Also see Att’y Gen. Op. No. 92-38*)


Financial institutions can also obtain copies of real estate sales validation questionnaires for conducting appraisals or evaluations that are being conducted pursuant to state and federal regulations.

The Internal Revenue Service (IRS) also has access to real estate sales validation questionnaires (*United States v. Martin*, 542 F. Supp. 22 (1982)).

15. Transfer on Death Deeds do not require the completion of the *Kansas Real Estate Sales Validation Questionnaire* because it does not actually transfer property at the time of filing.
16. Only those deeds to and from a trust and *without consideration* do not require a questionnaire be completed.
17. The Register of Deeds shall also comply with the Permanent Administrative Regulations promulgated by the Department of Revenue, Division of Property Valuation. Article 4 (Real Estate Ratio Study), 93-4-2 and 93-4-3 reference the duties of the Register of Deeds.

Approved: February 5, 2003

Date



Mark S. Beck
Director of Property Valuation.

**REAL PROPERTY SUBCLASSES & ASSESSMENT
RATES**

**CONSTITUTION OF THE STATE OF KANSAS
Article II.-§ 1. Nov. 3, 1992**

System of taxation; classification: exemption.

- (a) The provisions of this subsection shall govern the assessment and taxation of property on and after January 1, 1993, and each year thereafter...

Class 1 shall consist of real property. Real property shall be further classified into seven subclasses. Such property shall be defined by law for the purpose of subclassification and assessed uniformly as to subclass at the following percentages of value:

- | | |
|---|--------------|
| (1) Real Property used for residential purposes including multi-family residential real property and real property necessary to accommodate a residential community of mobile or manufactured homes including the real property upon which same homes are located | 11.5% |
| <i>(KSCAMA Suffix Codes R, F)</i> | |
| (2) Land devoted to agricultural use that shall be valued upon the basis of its agricultural income or agricultural productivity pursuant to section 12 of article 11 of the constitution | 30.0% |
| <i>(KSCAMA Suffix Codes A)</i> | |
| (3) Vacant Lots | 12.0% |
| <i>(KSCAMA Suffix Codes V)</i> | |
| (4) Real property which is owned and operated by a not-for-profit organization not subject to federal income taxation pursuant to section 501 of the federal internal revenue code, and which is included in this subclass by law | 12.0% |
| <i>(KSCAMA Suffix Codes N)</i> | |
| (5) Public utility real property, except railroad real property that shall be assessed at the average rate that all other commercial and industrial property | 33.0% |
| <i>(KSCAMA Suffix Codes U)</i> | |
| (6) Real property used for commercial and industrial purposes and buildings and other improvements located upon land devoted to agricultural use | 25.0% |
| <i>(KSCAMA Suffix Codes C & A with agricultural improvements)</i> | |
| (7) All other urban and rural real property not otherwise specifically sub-classed | 30.0% |
| <i>(KSCAMA Suffix Codes O)</i> | |

State of Kansas**Department of Revenue
Division of Property Valuation****Article 4. REAL ESTATE RATIO STUDY****93-4-2. Annotation and disposition of real estate sales validation questionnaires; duties of county officials.**

- (a) Not later than three business days after the receipt of a three-part real estate sales validation questionnaire, the register of deeds shall annotate each copy with the following information:
- (1) The volume and page entry from the general index, indicating where the deed, instrument, or affidavit of equitable interest that accompanies it is recorded;
 - (2) the county official validation number;
 - (3) the type of instrument; and
 - (4) the recording date.

The register of deeds shall retain the original copy and forward the county appraiser's copy and the director of property valuation's copy to the county appraiser. Not later than three business days after the receipt of the county appraiser's and the director's copies, the county appraiser shall enter the parcel identification number on both paper copies of each real estate sales validation questionnaire received from the register of deeds.

- (b) The register of deeds may accept a one-part real estate sales validation questionnaire when authorized by the director of property valuation to process real estate sales validation questionnaires by electronic imaging. An electronic copy may be accepted by the register of deeds if questionnaires are received by means of digital media transmission and retained in an electronic document management system. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1487 and 79-1488; effective June 26, 1998; amended Oct. 3, 2014.)

93-4-3. Split and combined real estate parcel sales; duties of county officials.

Not later than 10 business days after the receipt of a real estate sales validation questionnaire concerning the sale of a split parcel or a parcel to be combined with one or more parcels, the county appraiser shall perform one of the following:

- (a) On or after January 1 of the current appraisal year and before the creation of working files for the next appraisal year, enter the sales information on the parent parcel record in the county's computer-assisted mass appraisal system; or
- (b) on or after the creation of working files for the next appraisal year and before January 1 of the next appraisal year, enter the sales information on the split or combined parcel record in the county's computer-assisted mass appraisal system. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1487; effective June 26, 1998; amended Oct. 3, 2014.)

93-4-4. Assemblage and entering of sales data; accounting for real estate sales validation questionnaires; duties of county officials.

- (a) Not later than the 10th day of each month, the county appraiser shall assemble and enter into the county's computer-assisted mass appraisal system the sales data pertaining to property transfers that were recorded on or before the last day of the preceding month, as obtained from the real estate sales validation questionnaires received from the register of deeds.
- (b) The county appraiser shall meet the following requirements:
 - (1) Account for all real estate sales validation questionnaires by entering sales information from all questionnaires into the database fields in the county's computer-assisted mass appraisal system;
 - (2) maintain in a void file those questionnaires that cannot be matched with a parcel of real estate, those that contain information that cannot be entered in the county's computer-assisted mass appraisal system, and those that were not required by K.S.A. 79-1437e and amendments thereto;
 - (3) electronically upload the recorded monthly sales data from the county's computer-assisted mass appraisal system to the current year's ratio study database at the division of property valuation, not later than the 15th day of the following month; and
 - (4) perform one of the following, not later than the 15th day of the following month:
 - (A) Submit the complete set of sales validation questionnaire documents recorded in the previous month to the director of property valuation or the director's agents; or
 - (B) electronically upload the complete set of recorded monthly sales as digital image files that meet specified file-naming conventions, resolution, and format standards to the sales validation questionnaire database at the division of property valuation. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1487 and 79-1488; effective June 26, 1998; amended Oct. 3, 2014.)

93-4-5. Access to county records by the director of property valuation; duties of county officials.

- (a) The county shall make its computer-assisted mass appraisal system available to the director of property valuation and the director's agents, to generate and print reports and to prepare data files to enable the electronic extraction of sale information on a monthly basis.

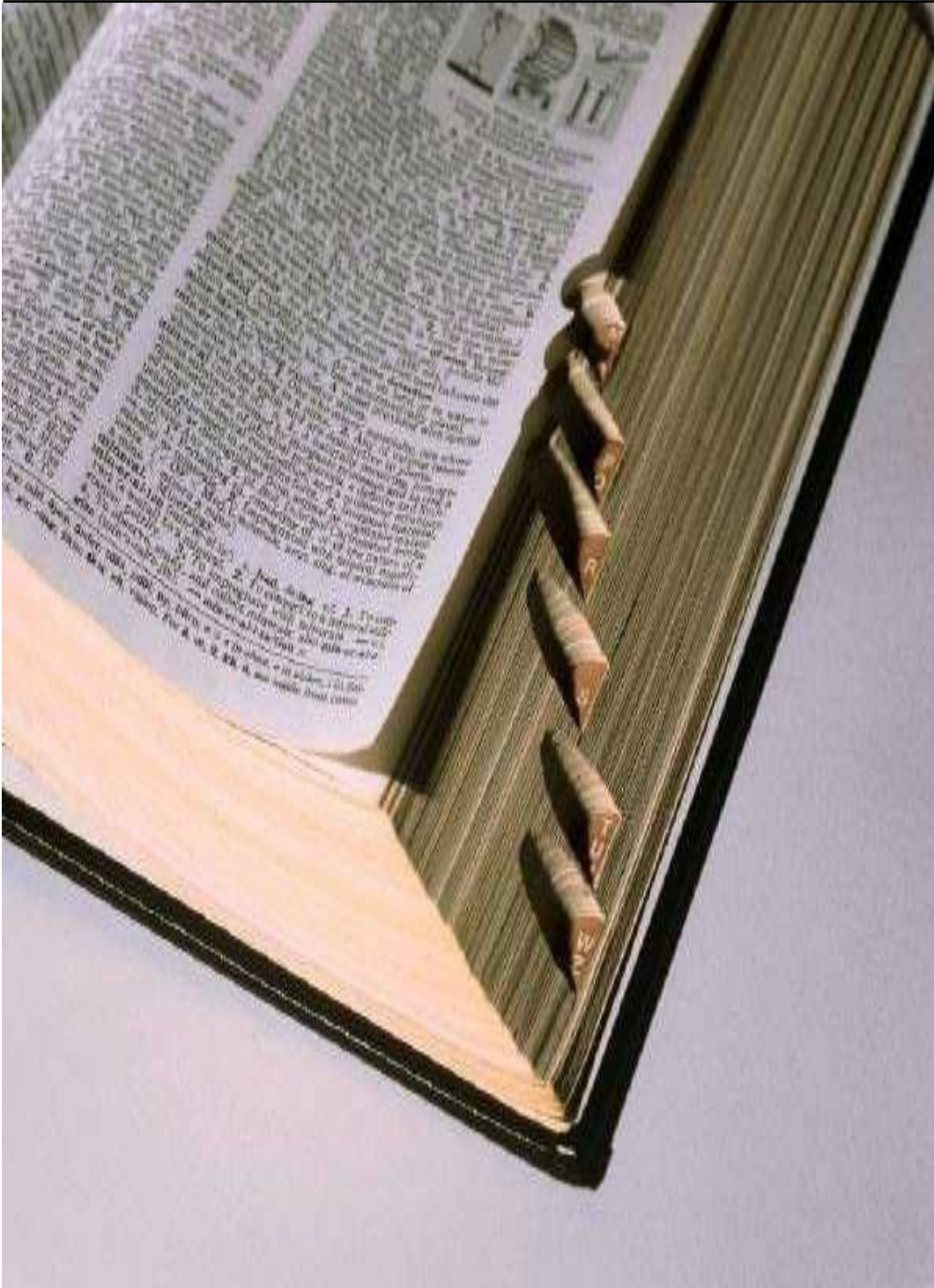
- (b) The county appraiser shall prepare and transmit the electronic assessment administration file of all appraised values to the director not later than three business days after the mailing of the annual valuation notices pursuant to K.S.A. 79-1460, and amendments thereto. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1487; effective June 26, 1998; amended Oct. 3, 2014.)

93-4-6. Performance standards.

Table 2-3 of the "standard on ratio studies," adopted by the executive board of the international association of assessing officers in April 2013, is hereby adopted by reference and shall constitute the performance standards used to evaluate the appraisal of residential and commercial and industrial real estate. However, the coefficient of dispersion shall have a range of 5.0 to 20.0, with a level of confidence of 95 percent. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1485, 79-1486, 79-1487, and 79-1488, K.S.A. 2013 Supp. 79-1489, K.S.A. 79-1490, 79-1492, and 79-1493; effective June 26, 1998; amended April 20, 2001; amended Oct. 3, 2014.)

Section V

Glossary of Terms



| |
|------------------|
| Glossary* |
|------------------|

| | |
|---|--|
| Adjusted Sale Price | The sale price that results from adjustments made to the stated sales price to account for the effects of time, personal property, financing or the like. |
| Aggregate Mean Ratio | See weighted mean ratio. |
| Alternative Hypothesis | The negation of the null hypothesis and usually consists of a statement saying “H ₀ is not true” or “Fail to accept H ₀ .” It is denoted by H ₁ . A statement indicates the opposite of the null hypothesis. |
| Appraisal-Sales Price Ratio | The ratio of the appraised value to the sale price (<i>or adjusted sale price</i>) of a property. The appraised value divided by the sale price. |
| Array | An ordered arrangement of data such as a listing of sales ratios in order to magnitude from high to low or low to high. |
| Assessment Progressivity (<i>Regressivity</i>) | An appraisal bias such that high-value properties are appraised higher (<i>lower</i>) than low-value properties. (<i>See also Price-Related Differential.</i>) |
| Assessment Ratio | The ratio of the assessed value to an indicator of market value. |
| Average Absolute Deviation | The sum of the absolute (<i>sign ignored</i>) differences between the individual observations and the average of all the observations, divided by the number of observations. |
| Average Market Value | Sum of the market values divided by the number of values added together. |
| Average Sale Price | Mean sale price. The sum of all sales divided by the number of samples. |
| Bootstrap | A computer intensive statistical procedure designed to provide numerous random samples from the original data set, which are in turn used to generate the statistics of interest, such as point estimates and confidence intervals. This procedure is particularly helpful when the original data set is small, in order to give more accurate statistics. |
| Broadened Median | A special type of median that reduces insensitivity to rounding and grouping of observations around the middle ratio. |
| Coefficient of Concentration (<i>COC</i>) | The percentage of ratios falling within a specified percentage range (\pm) of the median ratio. |
| Coefficient of Dispersion (<i>COD</i>) | The average of the absolute deviation of a sample of ratios from the median ratio, expressed as a percentage of the median. The most common measure of uniformity in sales ratio studies. Low COD’s tend to be associated with good appraisal uniformity. |
| Coefficient of Quartile Deviation | The interquartile ranges of a sample of ratios divided by 2 and expressed as a percentage of the median ratio. This measure of uniformity was referred to as the coefficient of dispersion when it was first adopted for use in assessment performance in 1954. Like the median, it is very resistant to the influence of outlier ratios. |

| | |
|---------------------------------------|---|
| Coefficient of Variation (COV) | The standard deviation expressed as a percentage of the mean ratio. |
| Confidence Interval | For a given confidence level, the range within which one can conclude that a population parameter (<i>such as the median ratio</i>) lies. The reliability of confidence intervals depends on the extent to which required statistical assumptions are met. A range of numbers within that we expect the true value of the population parameter to be contained. The high and low endpoints of the interval are computed based on sample information. |
| Confidence Level | The degree of precision selected for a confidence interval and other statistical tests. Ratio study confidence intervals are based on 95 percent confidence levels. |
| Consideration | The amount of money and other valuable goods or services upon which a buyer and a seller agree to consummate a sale. |
| Critical Values | Hypothesis testing uses a decision rule that specifies for every possible value of a statistic whether the null hypothesis should be accepted or rejected. The test procedure divides the sample space (<i>a set of possible values of a sample statistic</i>) into mutually exclusive parts called the acceptance region and the rejection (<i>or critical</i>) region. The critical region calls for rejecting the null hypothesis. The values that lie exactly on the boundary of the region of rejection are the critical values. |
| Descriptive Statistics | Statistics used to describe or summarize information about a sample. These measures include point estimates. |
| Dispersion | The degree to which data are distributed either tightly or loosely around a measure of central tendency. Measures of dispersion include the range, average deviation, median absolute deviation, standard deviation, coefficient of dispersion, median percent deviation and coefficient of variation. |
| Geometric Mean Ratio | A measure of central tendency computed by multiplying the values of all of the observations by one another and then taking the result to an exponent equal to one divided by the number of observations. The geometric mean is less sensitive to extreme ratios than the arithmetic mean. |
| Harmonic Mean Ratio | A specially calculated mean that is based upon the reciprocal of the arithmetic mean of the reciprocals of each value in the data set. (<i>Reciprocal: the inverse of a number, i.e., the reciprocal of 0.40 is 2.50.</i>) It is less affected of extreme values in the data set than the arithmetic mean or the geometric mean. |
| Histogram | A bar chart or graph of a frequency distribution in which the frequencies of the various classes are indicated by horizontal or vertical bars whose lengths are proportional to the number or percentage of observations in each class. |
| Hypothesis | An unproved proposition that tentatively explains certain facts; a proposition that is empirically testable; a probable answer to a question. |
| Inferential Statistics | Statistics used to make judgments about a population based on information obtained from a sample. |

| | |
|---|--|
| Interquartile Range (<i>Interquartile Deviation</i>) | The result obtained by subtracting the first quartile from the third quartile. The interquartile range contains the middle 50 percent of the observations. |
| Market | The “place” in which buyers and sellers interact. The collective body of buyers and sellers for a particular product. |
| Market Price | The price a particular buyer and seller agree to in a particular transaction that occurs in an open and competitive market. |
| Market Value | Pursuant to K.S.A. 79-503a, “... <i>The amount in terms of money that a well informed buyer is justified in paying and a well informed seller is justified in accepting for property in an open and competitive market, assuming that the parties are acting without undue compulsion...</i> ” |
| Maximum Ratio | Largest sales ratio in the sample. |
| Mean Ratio | Result of adding all the ratios and dividing by the number of ratios. (<i>Also called the arithmetic mean or average.</i>) |
| Median | The midpoint or middle value when a set of values is ranked in order of magnitude; if the number of values is even, the midpoint or average of the two middle values. It is the second quartile. |
| Median Absolute Deviation (<i>MAD</i>) | The median of the absolute deviation from the median. In a symmetrical distribution, the measure approximates one-half of the interquartile range. |
| Median Percent Deviation | A relative measure of uniformity that is found by the median absolute deviation (<i>MAD</i>) by the median ratio. |
| Median Ratio | Middle ratio in a sorted array of ratios. If the number of ratios is even, it is the average of the middle two ratios. |
| Minimum Ratio | Lowest sales ratio in the sample. |
| Mode | A value most often assumed by a variable. By extension for grouped data, the class in which a plurality of the observations falls. |
| Nonparametric | A statistic whose interpretation or reliability does not depend on the distribution of the underlying data. |
| Normal Distribution | A theoretical frequency distribution often approximated in real world situations. It is a symmetrical and bell-shaped distribution where 68 percent of the observations occur within one standard deviation of the mean and 96 percent within two standard deviations of the mean. |
| Normality Test | A mathematical test to determine if the data is considered to be normally distributed or conforms to a bell-shaped curve (<i>Gaussian shape</i>). |
| Null Hypothesis | A hypothesis that one chooses to accept in the absence of sufficient evidence to the contrary. |
| Observation | An observation is one recording or occurrence of the value of a variable. One ratio from a sample of ratios is an example. |

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| Open Market | A freely competitive market in which any buyer or seller may trade and in which prices are determined by competition. |
| Outliers | Observations that have unusual values differing markedly from a measure of central tendency. Some outliers occur naturally. Others may be due to data errors. |
| Parameter | Numerical descriptive measures of the population, for example, the arithmetic mean or the standard deviation. Parameters are generally unknown and estimated from statistics calculated from a sample of the population. |
| Parametric Statistic | A statistic whose interpretation or reliability depends on the distribution of the underlying data. |
| Percentile | Values that divide a set of data into specified percentages when the data are arrayed in ascending order. The tenth percentile is the value of the observation below which the lowest 10 percent of the values fall, the twentieth percentile is the value below which the lowest 20 percent of the values fall, and so forth. |
| Population | All the items of interest, for example, all the properties in a subclass, jurisdiction or neighborhood. |
| Price-Related Differential (PRD) | A performance statistic used to measure appraisal regressivity or progressivity. It may also be referred to as vertical inequity. It is calculated by taking the mean ratio and dividing it by the weighted mean ratio. |
| Price-Related Bias (PRB) | A coefficient that provides an index of price-related bias (vertical equity) obtained by regressing the ratio deviations from the median ratio (percentage changes) on the proxy of market value. The PRB is the slope of the regression line. This statistical measure can supplement information provided by the price-related differential. |
| Quartiles | The values that divide a set of data into four equal parts when the data are arrayed in ascending order. |
| Random Sample | A sample in which each item in the population has an equal chance of being included and by extension, each possible combination of n items has an equal chance of occurrence. |
| Range | (1) The maximum value of a sample minus the minimum value. (2) The difference between the maximum and minimum values that a variable may assume. |
| Ratio Study | A study of the relationship between appraised (or assessed) values and the market values of property. Indicators of market values may be either sales (<i>sales ratio study</i>) or independent “expert” appraisals (<i>appraisal ratio study</i>). Of common interest in ratio studies is the level and uniformity of the appraisals or assessments. |
| Representative Sample | A sample of observations from a larger population of observations, such that statistics calculated from the sample can be expected to represent the characteristics of the population being studied. |

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| Sales Price | Price a parcel of real property sold for. In some cases, this value must be adjusted to remove non-real estate components or trended back to January 1 (<i>the appraisal date</i>). |
| Sales Ratio | A ratio of the county appraiser's estimate of value to the sale price of a property (<i>appraised value ÷ sale price</i>). |
| Sales Data | Information about the nature of the transaction and the sale price and property characteristics as of the date of sale. |
| Sample | A set of observations selected from a population. If the sample was randomly selected, basic concepts of probability may be applied. (<i>See random sample and representative sample.</i>) |
| Skewed | Quality of a frequency distribution that makes it asymmetrical. Distributions with longer tails on the right than on the left are said to be skewed to the right or to be positively skewed. Distributions with longer tails to the left are said to be skewed to the left or to be negatively skewed. |
| Standard Deviation | The statistic calculated from a set of numbers by subtracting the mean from each value and squaring the remainders, adding together these squares, dividing by the size of the sample less one, and taking the square root of the result. When the data are normally distributed, one can calculate the percentage of observations within any number of standard deviations of the mean from normal probability tables. When the data are not normally distributed, the standard deviation is less meaningful and should be used with caution. |
| Statistics | <p>(1) Numerical point estimates calculated from a sample (<i>for example, the mean, median or coefficient of dispersion</i>). Statistics are used to estimate corresponding measures, termed parameters for the population.</p> <p>(2) The science of studying numerical data systematically and presenting useful results. Two main branches of statistics exist: <i>descriptive and inferential</i>.</p> |
| Stratify | To divide, for purposes of analysis, a sample of observations into two or more subsets according to some criterion or set of characteristics. |
| Stratum, Strata (Pls.) | A class or subset as a result of stratification. |
| Subclass | <p>A group of properties with related use characteristics. In Kansas, the following subclasses of real property, defined in the Constitution, are used in the ratio study:</p> <ol style="list-style-type: none"> (1) residential, including multi-family residential mobile homes and condominiums; (2) land devoted to agricultural use; (3) vacant lots; (4) property owned and operated by not-for-profit organizations; (5) public utility property; (6) commercial and industrial property and buildings and other improvements located upon land devoted to agricultural use; (7) all other urban and rural real property not otherwise specifically subclassed. |

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| Tolerance Limits | Interval measure that provides a specified degree of confidence that a prescribed proportion of the population values is thought to be contained within. |
| Trending | Adjustment to the sale price to account for inflation or deflation that has occurred in the local market between January 1 (<i>the appraisal date</i>) and the date of sale. |
| Weighted Coefficient of Dispersion | The coefficient of dispersion when absolute differences between individual assessment ratios and the median ratio are weighted on the basis of sale price. |
| Weighted Mean | In ratio studies, the value weighted mean is calculated by weighting the ratios based on their sale prices. A shortcut method is to sum the appraisals (<i>or assessments</i>), sum the sale prices and divide the first result by the second. |
| Weighted Mean Ratio | Sum of the appraised values divided by the sum of the sales price, which weights each ratio in proportion to its sale price. Also known as the sum of the aggregates. |

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*References

American Institute of Real Estate Appraisers. 1989. *The dictionary of real estate appraisal*. Illinois: National Assoc. of Realtors.

Hamburg, Morris. 1974. *Basic statistics*. New York: Harcourt Brace Javanovich, Inc.

Hoaglin, David C., Fredrick Mosteller and John W. Tukey. 1983. *Understanding robust and exploratory data analysis*. New York: John Wiley.

Moore, David S. and George P. McCabe. 1989. *Introduction to the practice of statistics*. New York: W.H. Freeman and Company.

Shao, Stephen P. 1972. *Statistics for business and economics*. Ohio: Merrill.

Sincich, Terry. 1986. *Business statistics by example*. California: Dellen.

Zikmund, William G. 1999. *Exploring marketing research*. Fort Worth, TX: The Dryden Press.