



Division of Property Valuation

2022

Kansas Real Estate Ratio Study

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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 2022 Kansas Appraisal/Sales Ratio Study that is based upon real estate transfers occurring from January 1, 2022, through December 31, 2022. This study is conducted annually by the Kansas Department of Revenue, Division of Property Valuation for all 105 Kansas Counties.

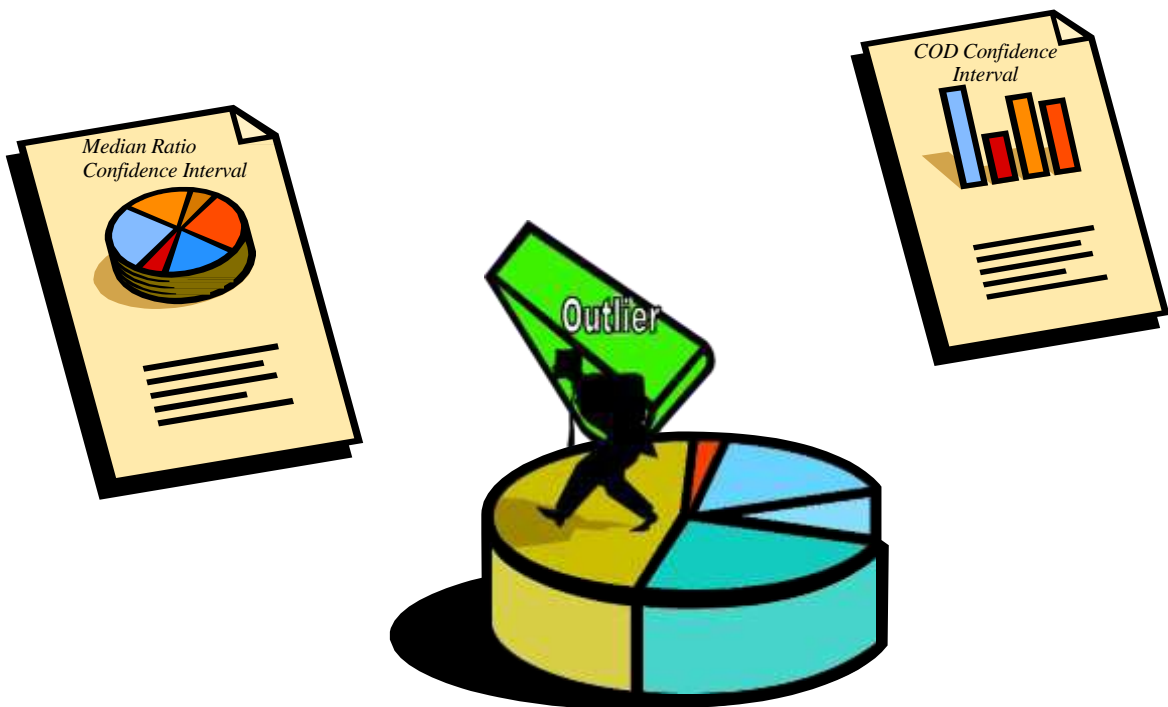


<https://www.ksrevenue.org/pvdratiostats.html>

Section 1

Year 2022

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 2022 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 #20-046 pursuant to the provisions of K.S.A 79-505.

The study includes sales that are considered to be *valid* arm's-length transactions. These real property transfers have been qualified independently by PVD research analyst and appraisal staff and can serve as a 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 2022. In addition, the sample of 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 in excess of 15,000 parcels. These counties must also have experienced at least 250 valid residential sales based on previous studies to be considered for sampling. The 2022 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.

Most sales in the residential and commercial/industrial subclasses have been trended back to January 1, 2022, 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 A) and Farm with Homesite (subclass F) performance measures. Agricultural land is appraised according to its *use* value; therefore, for *Agricultural Land Only* and *Agricultural with/Improvements* no ideal sales 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.

2022 Ratio Study Technical Advisory Committee		
<p>Dr. John Boyer Emeritus Prof. of Statistics Kansas State University Manhattan, KS 66506</p>	<p>Dr. Ronald L. Wasserstein Executive Director American Statistical Assn. 732 N Washington St. Alexandria, Virginia 22314-3402</p>	<p>Dr. Paul Byrne Assoc. Prof. of Economics Washburn University School of Business Henderson 310-P 1700 SW College Ave. Topeka, KS 66621</p>

2022 Kansas County Appraiser's Association (KCAA) Ratio Committee		
<p>Brad Eldridge – Chair Stacy Berry Cara Mays Kim Romero Justin Eimers Matt Willard</p>	<p>beldridge@douglascountyks.org stacy.berry@sncu.us cmays@coffeycountyks.org kar@mcpcoks.us jeimers@miamicountyks.org mwillard@wycokck.org</p>	<p>Douglas Co. Shawnee Co. Coffey Co. McPherson Co. Miami Co. Wyandotte Co.</p>



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	92.8	87.1	to	97.3	18.9	16.0	to	22.3	1.03	1.00	to	1.06	108	10
Commercial/Ind.	87.8	53.4	to	94.9	27.3	13.9	to	52.7	0.99	0.86	to	1.16	13	0
Vacant Lot	62.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	19.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	5.0	-	N/A	-	64.5	-	N/A	-	0.94	-	N/A	-	7	0
Ag. (Impr.+ Land)	10.6	-	N/A	-	106.0	-	N/A	-	0.90	-	N/A	-	13	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	88.0	-	N/A	-	25.7	-	N/A	-	1.18	-	N/A	-	136	13
Total Market	91.6	-	N/A	-	20.0	-	N/A	-	1.02	-	N/A	-	122	10

002 : ANDERSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	83.4	77.7	to	90.7	20.7	17.2	to	26.1	1.05	1.02	to	1.09	71	6
Commercial/Ind.	82.2	53.6	to	108.2	44.0	29.7	to	91.4	1.31	1.09	to	1.71	13	0
Vacant Lot	49.6	-	N/A	-	63.6	-	N/A	-	1.32	-	N/A	-	7	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.9	-	N/A	-	54.5	-	N/A	-	1.21	-	N/A	-	17	0
Ag. (Impr.+ Land)	9.6	-	N/A	-	200.8	-	N/A	-	1.19	-	N/A	-	45	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	68.6	-	N/A	-	50.0	-	N/A	-	1.48	-	N/A	-	136	3
Total Market	80.5	-	N/A	-	27.0	-	N/A	-	1.07	-	N/A	-	91	5

003 : ATCHISON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.5	89.3	to	97.1	21.0	18.4	to	23.8	1.04	1.02	to	1.07	178	10
Commercial/Ind.	95.2	82.6	to	102.6	11.9	6.1	to	23.6	1.03	0.96	to	1.14	12	2
Vacant Lot	44.4	-	N/A	-	45.7	-	N/A	-	1.21	-	N/A	-	4	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	10.1	-	N/A	-	40.2	-	N/A	-	0.79	-	N/A	-	9	0
Ag. (Impr.+ Land)	11.6	-	N/A	-	103.0	-	N/A	-	1.04	-	N/A	-	13	0
Other/Ex/Ut/NP/M	119.9	-	N/A	-	22.8	-	N/A	-	1.20	-	N/A	-	2	0
Total w/Ag.&F&H	92.0	-	N/A	-	23.5	-	N/A	-	1.12	-	N/A	-	209	17
Total Market	93.3	-	N/A	-	21.5	-	N/A	-	1.04	-	N/A	-	196	11

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	93.6	86.9	to	101.1	15.3	12.1	to	20.4	1.04	0.99	to	1.11	36	2
Commercial/Ind. <i>S-4</i>	86.0	19.2	to	195.6	50.4	7.9	to	190.7	1.67	1.07	to	2.47	5	0
Vacant Lot	48.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	29.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	6.6	-	N/A	-	54.0	-	N/A	-	1.01	-	N/A	-	5	0
Ag. (Impr.+ Land)	9.1	-	N/A	-	144.6	-	N/A	-	1.67	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	87.4	-	N/A	-	31.3	-	N/A	-	1.47	-	N/A	-	51	2
Total Market	88.7	-	N/A	-	15.9	-	N/A	-	1.03	-	N/A	-	42	4

005 : BARTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.9	87.5	to	97.9	19.2	17.2	to	22.0	1.03	1.01	to	1.06	163	9
Commercial/Ind.	71.2	49.8	to	90.7	39.2	27.5	to	67.6	1.49	1.05	to	2.14	22	1
Vacant Lot	61.7	-	N/A	-	26.2	-	N/A	-	1.13	-	N/A	-	20	1
Farm & Home	19.5	-	N/A	-	71.2	-	N/A	-	1.41	-	N/A	-	6	0
Ag. Land Only	10.8	-	N/A	-	35.4	-	N/A	-	1.01	-	N/A	-	16	0
Ag. (Impr.+ Land)	10.2	-	N/A	-	35.5	-	N/A	-	0.99	-	N/A	-	22	0
Other/Ex/Ut/NP/M	145.8	-	N/A	-	38.3	-	N/A	-	1.14	-	N/A	-	2	0
Total w/Ag.&F&H	84.6	-	N/A	-	31.7	-	N/A	-	1.44	-	N/A	-	235	9
Total Market	87.6	-	N/A	-	22.0	-	N/A	-	1.09	-	N/A	-	207	13

006 : BOURBON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	80.1	74.3	to	89.3	29.7	26.1	to	34.4	1.13	1.03	to	1.32	150	7
Commercial/Ind.	78.4	54.8	to	98.2	24.8	15.6	to	42.4	0.94	0.82	to	1.10	7	1
Vacant Lot	58.0	-	N/A	-	36.4	-	N/A	-	1.70	-	N/A	-	14	1
Farm & Home	28.0	-	N/A	-	49.7	-	N/A	-	0.95	-	N/A	-	7	0
Ag. Land Only	3.2	-	N/A	-	79.6	-	N/A	-	1.08	-	N/A	-	24	1
Ag. (Impr.+ Land)	5.3	-	N/A	-	149.6	-	N/A	-	1.05	-	N/A	-	50	4
Other/Ex/Ut/NP/M	484.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	68.5	-	N/A	-	49.9	-	N/A	-	1.62	-	N/A	-	229	3
Total Market	77.2	-	N/A	-	31.8	-	N/A	-	1.10	-	N/A	-	172	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

007 : BROWN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.0	88.5	to	101.9	23.6	19.7	to	28.7	1.04	1.00	to	1.09	104	4
Commercial/Ind.	82.9	63.0	to	102.1	29.4	19.9	to	68.5	1.64	0.87	to	2.07	13	2
Vacant Lot	149.2	-	N/A	-	32.7	-	N/A	-	1.16	-	N/A	-	4	0
Farm & Home	51.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	11.8	-	N/A	-	4.9	-	N/A	-	1.04	-	N/A	-	3	0
Ag. (Impr.+ Land)	12.7	-	N/A	-	128.8	-	N/A	-	1.63	-	N/A	-	9	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	92.6	-	N/A	-	29.1	-	N/A	-	1.37	-	N/A	-	131	7
Total Market	96.3	-	N/A	-	24.1	-	N/A	-	1.14	-	N/A	-	121	8

008 : BUTLER COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.0	91.5	to	94.3	10.7	9.7	to	11.9	1.00	0.99	to	1.01	313	25
Commercial/Ind.	83.6	68.4	to	94.6	27.5	19.4	to	36.8	1.14	1.03	to	1.30	36	3
Vacant Lot	84.9	-	N/A	-	34.4	-	N/A	-	1.33	-	N/A	-	77	4
Farm & Home	61.8	-	N/A	-	31.4	-	N/A	-	1.05	-	N/A	-	49	1
Ag. Land Only	3.3	-	N/A	-	55.7	-	N/A	-	0.92	-	N/A	-	32	2
Ag. (Impr.+ Land)	3.5	-	N/A	-	63.5	-	N/A	-	1.04	-	N/A	-	36	1
Other/Ex/Ut/NP/M	110.7	-	N/A	-	21.6	-	N/A	-	0.99	-	N/A	-	4	1
Total w/Ag.&F&H	88.5	-	N/A	-	17.4	-	N/A	-	1.07	-	N/A	-	515	73
Total Market	92.1	-	N/A	-	13.2	-	N/A	-	1.02	-	N/A	-	430	53

009 : CHASE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	79.8	61.2	to	93.0	27.2	19.2	to	40.3	1.02	0.93	to	1.13	23	0
Commercial/Ind. <i>S-6</i>	91.7	65.4	to	118.0	24.0	13.7	to	39.4	1.08	1.00	to	1.25	10	0
Vacant Lot	37.0	-	N/A	-	96.2	-	N/A	-	2.38	-	N/A	-	3	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.8	-	N/A	-	78.6	-	N/A	-	2.32	-	N/A	-	2	0
Ag. (Impr.+ Land)	9.6	-	N/A	-	175.4	-	N/A	-	0.79	-	N/A	-	5	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	67.4	-	N/A	-	42.2	-	N/A	-	1.36	-	N/A	-	41	0
Total Market	83.3	-	N/A	-	29.4	-	N/A	-	1.05	-	N/A	-	36	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

010 : CHAUTAUQUA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.6	68.8	to	106.7	27.4	19.1	to	44.5	1.20	1.06	to	1.38	25	1
Commercial/Ind. <i>S-8</i>	83.1	35.9	to	99.6	39.3	17.6	to	96.4	1.90	1.24	to	3.42	10	0
Vacant Lot	38.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.7	-	N/A	-	28.8	-	N/A	-	1.03	-	N/A	-	11	0
Ag. (Impr.+ Land)	4.1	-	N/A	-	38.8	-	N/A	-	1.02	-	N/A	-	21	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	54.7	-	N/A	-	74.7	-	N/A	-	2.21	-	N/A	-	57	1
Total Market	86.1	-	N/A	-	33.1	-	N/A	-	1.35	-	N/A	-	36	1

011 : CHEROKEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.7	81.1	to	90.5	24.1	21.6	to	27.0	1.03	1.01	to	1.06	216	15
Commercial/Ind.	64.4	39.5	to	199.8	86.3	40.4	to	183.2	0.68	0.49	to	1.50	13	2
Vacant Lot	39.1	-	N/A	-	90.6	-	N/A	-	1.46	-	N/A	-	21	0
Farm & Home	73.5	-	N/A	-	57.3	-	N/A	-	1.16	-	N/A	-	6	0
Ag. Land Only	4.7	-	N/A	-	64.4	-	N/A	-	0.86	-	N/A	-	7	0
Ag. (Impr.+ Land)	23.9	-	N/A	-	98.3	-	N/A	-	1.30	-	N/A	-	21	0
Other/Ex/Ut/NP/M	229.4	-	N/A	-	61.6	-	N/A	-	1.42	-	N/A	-	4	0
Total w/Ag.&F&H	81.5	-	N/A	-	33.3	-	N/A	-	1.18	-	N/A	-	281	20
Total Market	84.0	-	N/A	-	29.0	-	N/A	-	1.02	-	N/A	-	254	20

012 : CHEYENNE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.5	84.1	to	100.0	17.2	13.5	to	21.3	1.04	1.00	to	1.09	56	5
Commercial/Ind.	93.3	40.1	to	98.4	30.7	10.0	to	120.4	1.23	1.06	to	1.66	7	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	6.7	-	N/A	-	18.5	-	N/A	-	1.01	-	N/A	-	26	2
Ag. (Impr.+ Land)	6.7	-	N/A	-	21.2	-	N/A	-	1.03	-	N/A	-	28	3
Other/Ex/Ut/NP/M	88.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	81.3	-	N/A	-	50.4	-	N/A	-	1.89	-	N/A	-	92	0
Total Market	94.9	-	N/A	-	17.0	-	N/A	-	1.04	-	N/A	-	64	7

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	82.7	72.1	to	98.7	24.8	19.5	to	34.5	1.04	0.98	to	1.11	38	2
Commercial/Ind. <i>S-6</i>	58.3	14.4	to	180.0	103.7	50.1	to	512.9	1.65	1.16	to	2.69	9	0
Vacant Lot	5.5	-	N/A	-	446.6	-	N/A	-	5.33	-	N/A	-	3	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	7.3	-	N/A	-	25.0	-	N/A	-	0.97	-	N/A	-	3	0
Ag. (Impr.+ Land)	7.3	-	N/A	-	25.0	-	N/A	-	0.97	-	N/A	-	3	0
Other/Ex/Ut/NP/M	501.2	-	N/A	-	75.9	-	N/A	-	1.76	-	N/A	-	2	0
Total w/Ag.&F&H	78.6	-	N/A	-	37.8	-	N/A	-	1.13	-	N/A	-	55	4
Total Market	79.8	-	N/A	-	34.2	-	N/A	-	1.08	-	N/A	-	52	4

014 : CLAY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.8	88.4	to	96.3	14.1	11.9	to	16.7	1.03	1.01	to	1.06	97	5
Commercial/Ind.	52.1	30.9	to	78.2	37.9	20.6	to	78.0	0.78	0.62	to	1.07	7	0
Vacant Lot	133.3	-	N/A	-	33.1	-	N/A	-	1.52	-	N/A	-	3	0
Farm & Home	41.1	-	N/A	-	50.5	-	N/A	-	1.17	-	N/A	-	8	0
Ag. Land Only	6.0	-	N/A	-	47.0	-	N/A	-	0.82	-	N/A	-	6	0
Ag. (Impr.+ Land)	6.3	-	N/A	-	46.7	-	N/A	-	0.87	-	N/A	-	7	0
Other/Ex/Ut/NP/M	79.3	-	N/A	-	24.5	-	N/A	-	1.04	-	N/A	-	3	0
Total w/Ag.&F&H	87.9	-	N/A	-	19.5	-	N/A	-	1.07	-	N/A	-	125	13
Total Market	91.7	-	N/A	-	16.0	-	N/A	-	1.04	-	N/A	-	110	8

015 : CLOUD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.1	83.3	to	92.5	15.6	13.7	to	18.1	1.04	1.01	to	1.06	140	14
Commercial/Ind.	61.6	46.3	to	108.0	43.6	19.4	to	110.1	0.89	0.78	to	1.07	7	0
Vacant Lot	102.7	-	N/A	-	35.2	-	N/A	-	0.80	-	N/A	-	5	0
Farm & Home	57.0	-	N/A	-	34.5	-	N/A	-	1.15	-	N/A	-	4	0
Ag. Land Only	8.5	-	N/A	-	31.8	-	N/A	-	1.11	-	N/A	-	14	0
Ag. (Impr.+ Land)	8.5	-	N/A	-	31.8	-	N/A	-	1.11	-	N/A	-	14	0
Other/Ex/Ut/NP/M	88.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	84.2	-	N/A	-	21.7	-	N/A	-	1.07	-	N/A	-	171	20
Total Market	88.0	-	N/A	-	16.6	-	N/A	-	1.03	-	N/A	-	153	17

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	83.6	79.7	to	87.4	14.9	12.7	to	17.9	1.04	1.02	to	1.08	107	14
Commercial/Ind.	77.7	63.0	to	136.4	40.7	22.1	to	93.7	1.06	1.02	to	1.17	7	0
Vacant Lot	50.0	-	N/A	-	36.8	-	N/A	-	1.23	-	N/A	-	12	0
Farm & Home	40.1	-	N/A	-	37.6	-	N/A	-	1.23	-	N/A	-	5	0
Ag. Land Only	6.4	-	N/A	-	22.9	-	N/A	-	1.06	-	N/A	-	15	3
Ag. (Impr.+ Land)	6.5	-	N/A	-	43.5	-	N/A	-	1.01	-	N/A	-	18	1
Other/Ex/Ut/NP/M	133.4	-	N/A	-	44.0	-	N/A	-	1.38	-	N/A	-	4	0
Total w/Ag.&F&H	77.7	-	N/A	-	32.1	-	N/A	-	1.31	-	N/A	-	153	11
Total Market	82.1	-	N/A	-	17.6	-	N/A	-	1.02	-	N/A	-	130	18

017 : COMANCHE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	81.9	76.9	to	92.3	13.4	9.2	to	20.0	0.99	0.96	to	1.02	21	3
Commercial/Ind. <i>S-6</i>	96.6	51.9	to	137.8	36.7	18.9	to	80.4	0.99	0.85	to	1.29	8	0
Vacant Lot	160.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	22.8	-	N/A	-	36.2	-	N/A	-	1.20	-	N/A	-	2	0
Ag. Land Only	4.1	-	N/A	-	64.0	-	N/A	-	1.16	-	N/A	-	6	0
Ag. (Impr.+ Land)	5.8	-	N/A	-	47.2	-	N/A	-	1.17	-	N/A	-	9	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	76.9	-	N/A	-	49.1	-	N/A	-	2.32	-	N/A	-	41	1
Total Market	83.8	-	N/A	-	26.7	-	N/A	-	1.04	-	N/A	-	30	2

018 : COWLEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.2	84.8	to	90.3	17.2	15.2	to	19.6	1.03	1.01	to	1.05	189	15
Commercial/Ind.	95.7	66.1	to	112.6	29.1	19.4	to	47.1	1.18	0.98	to	1.53	21	0
Vacant Lot	113.0	-	N/A	-	36.1	-	N/A	-	1.28	-	N/A	-	22	1
Farm & Home	45.6	-	N/A	-	30.0	-	N/A	-	1.04	-	N/A	-	12	0
Ag. Land Only	5.4	-	N/A	-	49.1	-	N/A	-	1.15	-	N/A	-	12	2
Ag. (Impr.+ Land)	4.8	-	N/A	-	55.1	-	N/A	-	1.09	-	N/A	-	17	2
Other/Ex/Ut/NP/M	24.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	85.8	-	N/A	-	25.9	-	N/A	-	1.13	-	N/A	-	262	19
Total Market	88.1	-	N/A	-	20.7	-	N/A	-	1.06	-	N/A	-	233	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

019 : CRAWFORD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	81.4	78.2	to	85.9	20.5	18.3	to	23.1	1.03	1.00	to	1.05	209	9
Commercial/Ind.	58.4	41.4	to	79.0	45.8	34.5	to	71.9	1.20	1.04	to	1.47	32	3
Vacant Lot	77.9	-	N/A	-	61.8	-	N/A	-	1.63	-	N/A	-	41	2
Farm & Home	12.6	-	N/A	-	86.4	-	N/A	-	1.03	-	N/A	-	11	0
Ag. Land Only	2.4	-	N/A	-	79.8	-	N/A	-	0.71	-	N/A	-	25	0
Ag. (Impr.+ Land)	2.6	-	N/A	-	80.2	-	N/A	-	0.73	-	N/A	-	27	0
Other/Ex/Ut/NP/M	112.9	-	N/A	-	18.2	-	N/A	-	1.22	-	N/A	-	2	0
Total w/Ag.&F&H	76.9	-	N/A	-	36.7	-	N/A	-	1.19	-	N/A	-	322	11
Total Market	80.3	-	N/A	-	27.3	-	N/A	-	1.13	-	N/A	-	284	15

020 : DECATUR COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	65.2	59.9	to	80.3	31.6	25.2	to	40.6	1.11	1.04	to	1.19	46	1
Commercial/Ind.	90.8	43.9	to	97.6	16.6	1.4	to	39.7	1.16	1.00	to	1.25	4	0
Vacant Lot	73.8	-	N/A	-	41.8	-	N/A	-	1.52	-	N/A	-	2	0
Farm & Home	24.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.8	-	N/A	-	33.2	-	N/A	-	1.14	-	N/A	-	16	1
Ag. (Impr.+ Land)	9.5	-	N/A	-	34.4	-	N/A	-	1.14	-	N/A	-	17	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	59.8	-	N/A	-	48.7	-	N/A	-	1.65	-	N/A	-	70	1
Total Market	65.9	-	N/A	-	32.8	-	N/A	-	1.11	-	N/A	-	52	1

021 : DICKINSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.9	88.0	to	93.1	16.3	14.6	to	18.3	1.02	1.00	to	1.03	236	19
Commercial/Ind.	78.7	59.9	to	95.0	18.2	9.7	to	46.7	0.96	0.89	to	1.08	9	1
Vacant Lot	169.6	-	N/A	-	26.0	-	N/A	-	1.12	-	N/A	-	4	0
Farm & Home	47.6	-	N/A	-	28.5	-	N/A	-	1.09	-	N/A	-	11	0
Ag. Land Only	5.5	-	N/A	-	80.0	-	N/A	-	0.97	-	N/A	-	12	1
Ag. (Impr.+ Land)	28.3	-	N/A	-	79.6	-	N/A	-	1.10	-	N/A	-	32	1
Other/Ex/Ut/NP/M	1122.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	87.7	-	N/A	-	22.5	-	N/A	-	1.06	-	N/A	-	293	28
Total Market	90.6	-	N/A	-	16.5	-	N/A	-	1.02	-	N/A	-	250	25

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	81.4	74.7	to	90.1	24.5	19.6	to	31.4	1.09	1.03	to	1.17	55	3
Commercial/Ind. <i>S-2</i>	71.1	50.3	to	115.0	28.3	7.8	to	35.2	1.56	1.01	to	1.74	5	0
Vacant Lot	26.8	-	N/A	-	31.6	-	N/A	-	1.68	-	N/A	-	7	1
Farm & Home	40.0	-	N/A	-	4.2	-	N/A	-	0.98	-	N/A	-	2	0
Ag. Land Only	9.2	-	N/A	-	50.3	-	N/A	-	0.71	-	N/A	-	6	0
Ag. (Impr.+ Land)	13.7	-	N/A	-	51.5	-	N/A	-	0.92	-	N/A	-	12	2
Other/Ex/Ut/NP/M	147.2	-	N/A	-	52.1	-	N/A	-	1.47	-	N/A	-	2	0
Total w/Ag.&F&H	73.5	-	N/A	-	40.9	-	N/A	-	1.33	-	N/A	-	83	3
Total Market	77.7	-	N/A	-	29.9	-	N/A	-	1.11	-	N/A	-	69	4

023 : DOUGLAS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.1	91.4	to	94.2	9.2	8.3	to	10.2	1.00	1.00	to	1.01	256	19
Commercial/Ind.	75.1	65.9	to	81.4	19.3	14.5	to	26.2	0.98	0.90	to	1.07	37	2
Vacant Lot	82.8	-	N/A	-	24.1	-	N/A	-	0.99	-	N/A	-	69	1
Farm & Home	66.5	-	N/A	-	22.9	-	N/A	-	1.03	-	N/A	-	11	0
Ag. Land Only	2.4	-	N/A	-	50.8	-	N/A	-	0.98	-	N/A	-	23	1
Ag. (Impr.+ Land)	2.4	-	N/A	-	52.7	-	N/A	-	0.98	-	N/A	-	25	1
Other/Ex/Ut/NP/M	79.9	-	N/A	-	21.4	-	N/A	-	1.05	-	N/A	-	4	0
Total w/Ag.&F&H	89.1	-	N/A	-	14.5	-	N/A	-	1.05	-	N/A	-	402	38
Total Market	91.3	-	N/A	-	12.2	-	N/A	-	1.05	-	N/A	-	366	30

024 : EDWARDS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	86.2	81.0	to	91.2	21.0	14.7	to	29.9	1.08	1.02	to	1.18	29	1
Commercial/Ind. <i>S-6</i>	89.8	47.9	to	123.7	30.0	14.1	to	115.5	1.13	0.95	to	1.59	6	0
Vacant Lot	30.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	4.3	-	N/A	-	49.0	-	N/A	-	0.96	-	N/A	-	8	0
Ag. (Impr.+ Land)	7.0	-	N/A	-	117.1	-	N/A	-	1.40	-	N/A	-	12	2
Other/Ex/Ut/NP/M	218.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	84.9	-	N/A	-	38.6	-	N/A	-	1.91	-	N/A	-	49	1
Total Market	86.2	-	N/A	-	26.0	-	N/A	-	1.07	-	N/A	-	37	1

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	77.1	69.5	to	93.0	24.2	17.7	to	33.6	1.09	1.01	to	1.21	28	1
Commercial/Ind. <i>S-8</i>	78.2	49.5	to	119.5	36.5	17.8	to	74.8	1.51	1.06	to	2.42	9	0
Vacant Lot	47.9	-	N/A	-	14.1	-	N/A	-	0.99	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	2.9	-	N/A	-	6.3	-	N/A	-	0.96	-	N/A	-	4	0
Ag. (Impr.+ Land)	21.0	-	N/A	-	80.5	-	N/A	-	1.60	-	N/A	-	13	1
Other/Ex/Ut/NP/M	103.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	67.8	-	N/A	-	40.2	-	N/A	-	1.95	-	N/A	-	53	2
Total Market	77.1	-	N/A	-	25.8	-	N/A	-	1.20	-	N/A	-	40	2

026 : ELLIS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.3	93.3	to	97.3	9.7	8.7	to	10.9	1.02	1.01	to	1.04	200	8
Commercial/Ind.	92.0	81.1	to	105.0	25.3	18.6	to	38.2	1.15	0.97	to	1.46	31	2
Vacant Lot	87.5	-	N/A	-	51.8	-	N/A	-	1.87	-	N/A	-	16	0
Farm & Home	29.9	-	N/A	-	65.1	-	N/A	-	1.02	-	N/A	-	7	0
Ag. Land Only	8.3	-	N/A	-	41.5	-	N/A	-	1.02	-	N/A	-	21	1
Ag. (Impr.+ Land)	7.4	-	N/A	-	41.1	-	N/A	-	1.04	-	N/A	-	27	1
Other/Ex/Ut/NP/M	115.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	92.7	-	N/A	-	11.3	-	N/A	-	1.03	-	N/A	-	282	51
Total Market	95.1	-	N/A	-	10.8	-	N/A	-	1.02	-	N/A	-	248	21

027 : ELLSWORTH COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	97.3	92.5	to	99.5	13.1	11.1	to	15.8	1.05	1.03	to	1.08	92	5
Commercial/Ind.	119.5	57.0	to	142.6	23.5	5.9	to	42.5	1.20	1.01	to	1.38	5	0
Vacant Lot	101.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	58.6	-	N/A	-	30.5	-	N/A	-	1.84	-	N/A	-	6	0
Ag. Land Only	9.1	-	N/A	-	51.9	-	N/A	-	1.55	-	N/A	-	4	0
Ag. (Impr.+ Land)	14.1	-	N/A	-	102.8	-	N/A	-	0.97	-	N/A	-	11	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	93.9	-	N/A	-	16.8	-	N/A	-	1.09	-	N/A	-	115	12
Total Market	97.7	-	N/A	-	13.7	-	N/A	-	1.06	-	N/A	-	98	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

028 : FINNEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.5	89.9	to	94.9	10.5	9.5	to	11.8	1.01	1.01	to	1.02	186	5
Commercial/Ind.	82.5	70.5	to	90.0	27.4	19.1	to	39.9	1.47	1.17	to	2.06	31	0
Vacant Lot	82.6	-	N/A	-	24.5	-	N/A	-	0.95	-	N/A	-	33	2
Farm & Home	58.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	5.6	-	N/A	-	68.2	-	N/A	-	0.97	-	N/A	-	10	0
Ag. (Impr.+ Land)	5.6	-	N/A	-	68.5	-	N/A	-	0.90	-	N/A	-	12	0
Other/Ex/Ut/NP/M	122.0	-	N/A	-	27.4	-	N/A	-	1.09	-	N/A	-	4	0
Total w/Ag.&F&H	89.7	-	N/A	-	13.0	-	N/A	-	1.06	-	N/A	-	267	26
Total Market	90.9	-	N/A	-	12.2	-	N/A	-	1.02	-	N/A	-	254	19

029 : FORD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	76.0	73.5	to	79.5	18.9	16.9	to	21.4	1.05	1.00	to	1.14	185	11
Commercial/Ind.	61.6	43.9	to	96.8	50.9	33.0	to	93.6	1.44	1.14	to	2.10	16	1
Vacant Lot	43.4	-	N/A	-	65.1	-	N/A	-	1.72	-	N/A	-	26	2
Farm & Home	49.5	-	N/A	-	62.3	-	N/A	-	1.15	-	N/A	-	10	0
Ag. Land Only	7.8	-	N/A	-	54.3	-	N/A	-	1.02	-	N/A	-	15	1
Ag. (Impr.+ Land)	8.2	-	N/A	-	46.0	-	N/A	-	1.01	-	N/A	-	17	2
Other/Ex/Ut/NP/M	68.0	-	N/A	-	15.7	-	N/A	-	1.01	-	N/A	-	2	0
Total w/Ag.&F&H	72.8	-	N/A	-	26.6	-	N/A	-	1.14	-	N/A	-	256	24
Total Market	74.4	-	N/A	-	22.8	-	N/A	-	1.11	-	N/A	-	229	18

030 : FRANKLIN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.8	93.5	to	99.5	16.9	15.3	to	18.8	1.04	1.03	to	1.06	356	38
Commercial/Ind.	79.9	57.5	to	98.0	34.1	24.6	to	53.8	1.00	0.92	to	1.13	18	2
Vacant Lot	90.4	-	N/A	-	34.1	-	N/A	-	1.67	-	N/A	-	30	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	5.3	-	N/A	-	54.2	-	N/A	-	0.91	-	N/A	-	32	0
Ag. (Impr.+ Land)	11.5	-	N/A	-	225.5	-	N/A	-	1.18	-	N/A	-	80	0
Other/Ex/Ut/NP/M	139.4	-	N/A	-	34.8	-	N/A	-	1.14	-	N/A	-	2	0
Total w/Ag.&F&H	91.0	-	N/A	-	25.9	-	N/A	-	1.18	-	N/A	-	486	52
Total Market	95.8	-	N/A	-	18.4	-	N/A	-	1.05	-	N/A	-	406	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

031 : GEARY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	97.5	95.6	to	98.7	9.9	9.3	to	10.7	1.02	1.01	to	1.04	600	65
Commercial/Ind.	86.6	68.5	to	108.3	25.8	18.2	to	41.8	1.12	1.00	to	1.31	18	1
Vacant Lot	75.6	-	N/A	-	139.6	-	N/A	-	12.52	-	N/A	-	8	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	12.0	-	N/A	-	49.3	-	N/A	-	1.01	-	N/A	-	4	0
Ag. (Impr.+ Land)	34.0	-	N/A	-	70.9	-	N/A	-	0.87	-	N/A	-	9	0
Other/Ex/Ut/NP/M	59.1	-	N/A	-	0.2	-	N/A	-	1.00	-	N/A	-	2	0
Total w/Ag.&F&H	97.2	-	N/A	-	10.6	-	N/A	-	1.02	-	N/A	-	637	76
Total Market	97.3	-	N/A	-	10.3	-	N/A	-	1.03	-	N/A	-	628	74

032 : GOVE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.0	73.1	to	104.0	24.7	16.8	to	37.7	1.04	0.97	to	1.12	24	1
Commercial/Ind.	86.4	23.1	to	269.1	66.5	4.2	to	157.8	1.95	0.91	to	2.73	5	0
Vacant Lot	21.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	9.8	-	N/A	-	14.8	-	N/A	-	0.99	-	N/A	-	11	1
Ag. (Impr.+ Land)	9.6	-	N/A	-	18.7	-	N/A	-	1.02	-	N/A	-	16	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	60.4	-	N/A	-	72.1	-	N/A	-	1.94	-	N/A	-	46	1
Total Market	87.0	-	N/A	-	27.8	-	N/A	-	1.04	-	N/A	-	30	2

033 : GRAHAM COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.6	83.4	to	98.3	14.3	10.6	to	20.0	1.04	1.01	to	1.08	31	1
Commercial/Ind. <i>S-6</i>	80.1	59.3	to	101.1	21.3	13.4	to	44.1	1.04	0.96	to	1.14	7	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	7.9	-	N/A	-	40.3	-	N/A	-	1.00	-	N/A	-	25	0
Ag. (Impr.+ Land)	9.7	-	N/A	-	38.9	-	N/A	-	1.00	-	N/A	-	29	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	65.5	-	N/A	-	58.6	-	N/A	-	2.36	-	N/A	-	67	0
Total Market	91.4	-	N/A	-	15.6	-	N/A	-	1.03	-	N/A	-	38	1

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	93.3	88.7	to	97.0	9.1	7.5	to	11.3	0.99	0.98	to	1.00	69	3
Commercial/Ind.	77.1	22.5	to	136.9	50.5	16.9	to	164.5	2.40	1.24	to	3.75	6	0
Vacant Lot	6.3	-	N/A	-	287.4	-	N/A	-	1.16	-	N/A	-	8	1
Farm & Home	25.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	1.4	-	N/A	-	26.3	-	N/A	-	0.91	-	N/A	-	12	1
Ag. (Impr.+ Land)	1.4	-	N/A	-	44.2	-	N/A	-	0.95	-	N/A	-	14	2
Other/Ex/Ut/NP/M	101.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	87.5	-	N/A	-	20.6	-	N/A	-	1.17	-	N/A	-	99	14
Total Market	91.3	-	N/A	-	10.2	-	N/A	-	1.00	-	N/A	-	84	11

035 : GRAY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	89.2	84.8	to	92.2	9.5	7.4	to	12.5	1.00	0.99	to	1.02	42	3
Commercial/Ind. <i>S-6</i>	69.8	41.0	to	200.6	73.6	19.2	to	150.6	1.12	0.90	to	1.69	9	0
Vacant Lot	90.4	-	N/A	-	29.7	-	N/A	-	1.05	-	N/A	-	4	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	6.4	-	N/A	-	59.0	-	N/A	-	1.24	-	N/A	-	8	0
Ag. (Impr.+ Land)	12.5	-	N/A	-	153.1	-	N/A	-	1.15	-	N/A	-	15	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	83.9	-	N/A	-	29.3	-	N/A	-	1.23	-	N/A	-	70	4
Total Market	88.6	-	N/A	-	11.1	-	N/A	-	1.00	-	N/A	-	55	8

036 : GREELEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.1	72.4	to	109.9	25.2	16.5	to	39.2	1.07	0.97	to	1.23	17	1
Commercial/Ind. <i>S-6</i>	89.6	76.4	to	139.0	26.9	18.9	to	40.3	1.14	1.04	to	1.35	8	0
Vacant Lot	48.3	-	N/A	-	23.5	-	N/A	-	1.20	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	4.8	-	N/A	-	14.9	-	N/A	-	1.03	-	N/A	-	6	0
Ag. (Impr.+ Land)	5.2	-	N/A	-	435.0	-	N/A	-	1.50	-	N/A	-	9	0
Other/Ex/Ut/NP/M	116.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	81.3	-	N/A	-	45.6	-	N/A	-	1.66	-	N/A	-	37	0
Total Market	93.4	-	N/A	-	27.5	-	N/A	-	1.07	-	N/A	-	28	1

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	88.1	77.1	to	96.8	27.5	21.3	to	35.7	1.08	1.02	to	1.16	64	4
Commercial/Ind.	79.6	66.8	to	103.2	24.7	13.2	to	64.8	1.13	0.85	to	1.72	7	1
Vacant Lot	160.7	-	N/A	-	21.0	-	N/A	-	1.05	-	N/A	-	2	0
Farm & Home	26.3	-	N/A	-	48.3	-	N/A	-	1.32	-	N/A	-	13	2
Ag. Land Only	2.8	-	N/A	-	23.8	-	N/A	-	1.12	-	N/A	-	16	0
Ag. (Impr.+ Land)	3.1	-	N/A	-	24.5	-	N/A	-	1.11	-	N/A	-	23	3
Other/Ex/Ut/NP/M	52.1	-	N/A	-	133.1	-	N/A	-	1.26	-	N/A	-	3	0
Total w/Ag.&F&H	65.1	-	N/A	-	62.5	-	N/A	-	2.54	-	N/A	-	112	2
Total Market	88.1	-	N/A	-	30.3	-	N/A	-	1.08	-	N/A	-	76	7

038 : HAMILTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	67.0	56.9	to	76.1	20.4	13.2	to	34.0	1.00	0.94	to	1.05	16	2
Commercial/Ind. <i>S-1</i>	84.3	37.1	to	99.3	26.6	5.5	to	52.5	1.02	0.84	to	1.32	5	0
Vacant Lot	7.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	1.4	-	N/A	-	31.3	-	N/A	-	0.77	-	N/A	-	4	0
Ag. (Impr.+ Land)	1.7	-	N/A	-	873.9	-	N/A	-	1.56	-	N/A	-	5	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	60.8	-	N/A	-	48.0	-	N/A	-	1.24	-	N/A	-	27	0
Total Market	67.0	-	N/A	-	31.3	-	N/A	-	1.02	-	N/A	-	22	1

039 : HARPER COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.3	82.5	to	99.2	20.2	16.3	to	25.5	1.02	0.99	to	1.07	66	9
Commercial/Ind.	89.1	51.3	to	129.2	31.0	9.8	to	52.4	1.42	0.99	to	1.59	5	0
Vacant Lot	80.8	-	N/A	-	72.9	-	N/A	-	2.48	-	N/A	-	2	0
Farm & Home	66.9	-	N/A	-	35.1	-	N/A	-	1.06	-	N/A	-	2	0
Ag. Land Only	4.0	-	N/A	-	58.4	-	N/A	-	1.01	-	N/A	-	18	1
Ag. (Impr.+ Land)	4.5	-	N/A	-	51.5	-	N/A	-	0.96	-	N/A	-	29	4
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	77.1	-	N/A	-	50.1	-	N/A	-	1.75	-	N/A	-	104	3
Total Market	87.5	-	N/A	-	23.4	-	N/A	-	1.08	-	N/A	-	73	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	82.4	80.9	to	85.6	13.4	11.9	to	15.2	1.01	0.99	to	1.02	207	21
Commercial/Ind.	65.3	49.0	to	79.2	46.5	33.7	to	71.3	1.26	1.10	to	1.59	30	1
Vacant Lot	74.8	-	N/A	-	46.5	-	N/A	-	1.33	-	N/A	-	12	0
Farm & Home	46.9	-	N/A	-	26.5	-	N/A	-	1.05	-	N/A	-	12	0
Ag. Land Only	4.3	-	N/A	-	81.1	-	N/A	-	0.74	-	N/A	-	25	0
Ag. (Impr.+ Land)	4.2	-	N/A	-	83.4	-	N/A	-	0.70	-	N/A	-	27	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	78.9	-	N/A	-	20.9	-	N/A	-	1.05	-	N/A	-	288	38
Total Market	82.0	-	N/A	-	17.3	-	N/A	-	1.03	-	N/A	-	249	20

041 : HASKELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.3	82.7	to	97.0	16.4	12.2	to	22.7	0.96	0.92	to	1.00	37	4
Commercial/Ind. <i>S-3</i>	53.5	35.7	to	97.3	42.9	28.0	to	84.8	1.10	1.04	to	1.23	6	0
Vacant Lot	64.0	-	N/A	-	23.7	-	N/A	-	1.02	-	N/A	-	3	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.2	-	N/A	-	33.1	-	N/A	-	1.17	-	N/A	-	8	1
Ag. (Impr.+ Land)	3.3	-	N/A	-	146.2	-	N/A	-	0.92	-	N/A	-	11	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	77.3	-	N/A	-	40.3	-	N/A	-	1.18	-	N/A	-	57	3
Total Market	86.6	-	N/A	-	22.9	-	N/A	-	0.94	-	N/A	-	46	3

042 : HODGEMAN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	83.3	73.9	to	97.2	13.2	7.0	to	31.7	1.04	0.98	to	1.19	7	0
Commercial/Ind. <i>S-3</i>	56.9	31.5	to	108.7	41.9	14.1	to	72.0	1.48	0.95	to	1.86	5	0
Vacant Lot	12.9	-	N/A	-	85.8	-	N/A	-	5.48	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	6.9	-	N/A	-	40.2	-	N/A	-	1.01	-	N/A	-	8	0
Ag. (Impr.+ Land)	8.7	-	N/A	-	51.1	-	N/A	-	0.88	-	N/A	-	12	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	27.6	-	N/A	-	116.0	-	N/A	-	1.69	-	N/A	-	26	0
Total Market	72.0	-	N/A	-	36.6	-	N/A	-	1.73	-	N/A	-	14	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

043 : JACKSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	89.4	85.8	to	94.5	17.2	14.7	to	20.4	1.05	1.03	to	1.08	110	9
Commercial/Ind.	63.7	37.1	to	78.6	32.3	19.6	to	59.2	1.23	0.97	to	1.76	14	0
Vacant Lot	90.0	-	N/A	-	21.5	-	N/A	-	1.45	-	N/A	-	4	0
Farm & Home	65.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	6.0	-	N/A	-	78.6	-	N/A	-	0.96	-	N/A	-	29	1
Ag. (Impr.+ Land)	21.1	-	N/A	-	123.8	-	N/A	-	1.11	-	N/A	-	70	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	75.6	-	N/A	-	40.1	-	N/A	-	1.32	-	N/A	-	199	4
Total Market	87.4	-	N/A	-	19.0	-	N/A	-	1.08	-	N/A	-	128	10

044 : JEFFERSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.4	87.0	to	93.5	15.0	13.2	to	17.0	1.02	1.01	to	1.05	179	19
Commercial/Ind.	75.7	64.9	to	99.9	28.0	18.3	to	43.7	1.12	1.02	to	1.32	17	1
Vacant Lot	123.8	-	N/A	-	74.1	-	N/A	-	2.28	-	N/A	-	27	2
Farm & Home	56.0	-	N/A	-	25.1	-	N/A	-	1.00	-	N/A	-	26	1
Ag. Land Only	1.7	-	N/A	-	145.0	-	N/A	-	0.85	-	N/A	-	25	2
Ag. (Impr.+ Land)	3.1	-	N/A	-	297.8	-	N/A	-	0.84	-	N/A	-	42	4
Other/Ex/Ut/NP/M	80.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	81.2	-	N/A	-	33.2	-	N/A	-	1.10	-	N/A	-	292	24
Total Market	90.3	-	N/A	-	19.8	-	N/A	-	1.04	-	N/A	-	224	23

045 : JEWELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.5	76.7	to	101.1	18.7	13.2	to	27.6	1.03	0.98	to	1.10	27	1
Commercial/Ind. <i>S-7</i>	95.8	68.1	to	103.7	19.1	9.2	to	36.7	1.54	0.96	to	1.85	10	1
Vacant Lot	28.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	31.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	10.1	-	N/A	-	36.7	-	N/A	-	0.87	-	N/A	-	6	0
Ag. (Impr.+ Land)	13.5	-	N/A	-	147.4	-	N/A	-	1.59	-	N/A	-	14	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	76.7	-	N/A	-	40.3	-	N/A	-	1.76	-	N/A	-	53	2
Total Market	91.9	-	N/A	-	20.5	-	N/A	-	1.10	-	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

046 : JOHNSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.7	92.5	to	94.8	9.1	8.4	to	9.9	0.99	0.95	to	1.02	418	24
Commercial/Ind.	87.4	81.3	to	92.4	22.6	19.9	to	25.8	1.05	0.94	to	1.21	175	7
Vacant Lot	65.8	-	N/A	-	26.9	-	N/A	-	1.09	-	N/A	-	633	31
Farm & Home	53.0	-	N/A	-	37.6	-	N/A	-	1.16	-	N/A	-	39	0
Ag. Land Only	0.4	-	N/A	-	127.6	-	N/A	-	1.39	-	N/A	-	63	12
Ag. (Impr.+ Land)	0.5	-	N/A	-	198.1	-	N/A	-	1.40	-	N/A	-	72	14
Other/Ex/Ut/NP/M	98.6	-	N/A	-	11.5	-	N/A	-	1.01	-	N/A	-	10	2
Total w/Ag.&F&H	79.0	-	N/A	-	24.8	-	N/A	-	0.96	-	N/A	-	1347	97
Total Market	81.6	-	N/A	-	22.7	-	N/A	-	0.96	-	N/A	-	1236	60

047 : KEARNY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.7	81.2	to	90.2	16.2	11.4	to	23.2	1.01	0.97	to	1.07	32	2
Commercial/Ind. <i>S-3</i>	71.5	57.0	to	91.7	18.4	5.0	to	22.7	1.00	0.95	to	1.09	5	0
Vacant Lot	57.6	-	N/A	-	49.8	-	N/A	-	1.06	-	N/A	-	4	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.3	-	N/A	-	67.2	-	N/A	-	1.10	-	N/A	-	12	1
Ag. (Impr.+ Land)	4.0	-	N/A	-	61.0	-	N/A	-	1.01	-	N/A	-	14	2
Other/Ex/Ut/NP/M	343.2	-	N/A	-	52.4	-	N/A	-	0.68	-	N/A	-	2	0
Total w/Ag.&F&H	75.2	-	N/A	-	44.6	-	N/A	-	1.47	-	N/A	-	57	2
Total Market	87.6	-	N/A	-	19.4	-	N/A	-	0.99	-	N/A	-	43	4

048 : KINGMAN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	85.4	78.3	to	89.1	26.7	22.4	to	32.5	1.05	1.01	to	1.10	96	5
Commercial/Ind. <i>S-6</i>	72.3	50.9	to	111.0	32.3	20.1	to	79.1	1.37	1.12	to	2.08	10	1
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	51.1	-	N/A	-	19.6	-	N/A	-	1.11	-	N/A	-	3	0
Ag. Land Only	4.1	-	N/A	-	60.4	-	N/A	-	1.06	-	N/A	-	27	0
Ag. (Impr.+ Land)	4.3	-	N/A	-	63.5	-	N/A	-	1.14	-	N/A	-	34	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	73.9	-	N/A	-	49.0	-	N/A	-	1.72	-	N/A	-	143	4
Total Market	84.3	-	N/A	-	27.3	-	N/A	-	1.05	-	N/A	-	106	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

049 : KIOWA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.8	87.5	to	97.0	13.7	7.5	to	25.3	0.96	0.88	to	1.02	13	1
Commercial/Ind. <i>S-2</i>	50.5	43.1	to	91.6	34.3	5.2	to	34.3	1.16	0.99	to	1.18	3	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	22.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	4.6	-	N/A	-	63.6	-	N/A	-	1.00	-	N/A	-	12	0
Ag. (Impr.+ Land)	4.9	-	N/A	-	63.6	-	N/A	-	1.00	-	N/A	-	13	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	46.5	-	N/A	-	84.6	-	N/A	-	1.36	-	N/A	-	30	0
Total Market	89.7	-	N/A	-	20.5	-	N/A	-	1.05	-	N/A	-	16	0

050 : LABETTE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.4	87.5	to	96.0	22.2	19.8	to	25.0	1.03	1.01	to	1.06	203	13
Commercial/Ind.	77.1	48.9	to	101.1	30.1	16.9	to	54.7	1.92	1.07	to	2.61	15	2
Vacant Lot	86.5	-	N/A	-	151.4	-	N/A	-	3.76	-	N/A	-	6	0
Farm & Home	22.6	-	N/A	-	16.0	-	N/A	-	1.03	-	N/A	-	3	0
Ag. Land Only	7.0	-	N/A	-	18.2	-	N/A	-	0.95	-	N/A	-	4	0
Ag. (Impr.+ Land)	8.9	-	N/A	-	118.0	-	N/A	-	0.99	-	N/A	-	12	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	88.6	-	N/A	-	29.2	-	N/A	-	1.37	-	N/A	-	239	15
Total Market	90.5	-	N/A	-	24.2	-	N/A	-	1.34	-	N/A	-	224	16

051 : LANE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	82.3	69.3	to	98.9	24.8	17.1	to	37.9	1.02	0.94	to	1.09	21	1
Commercial/Ind. <i>S-8</i>	97.7	63.7	to	115.3	30.6	17.6	to	70.8	1.57	1.02	to	3.66	11	1
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	6.4	-	N/A	-	37.7	-	N/A	-	1.10	-	N/A	-	9	0
Ag. (Impr.+ Land)	6.9	-	N/A	-	64.7	-	N/A	-	1.12	-	N/A	-	14	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	66.5	-	N/A	-	61.4	-	N/A	-	2.48	-	N/A	-	46	1
Total Market	82.4	-	N/A	-	27.7	-	N/A	-	1.19	-	N/A	-	32	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	92.5	90.2	to	95.0	9.9	8.9	to	11.2	1.00	0.99	to	1.01	239	34
Commercial/Ind.	80.3	68.0	to	94.2	24.1	18.0	to	35.2	1.14	1.06	to	1.27	25	1
Vacant Lot	81.0	-	N/A	-	35.8	-	N/A	-	1.13	-	N/A	-	82	8
Farm & Home	66.0	-	N/A	-	28.4	-	N/A	-	1.11	-	N/A	-	55	1
Ag. Land Only	1.5	-	N/A	-	130.0	-	N/A	-	0.82	-	N/A	-	47	4
Ag. (Impr.+ Land)	1.5	-	N/A	-	128.4	-	N/A	-	0.84	-	N/A	-	50	4
Other/Ex/Ut/NP/M	100.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	86.7	-	N/A	-	23.3	-	N/A	-	1.08	-	N/A	-	452	59
Total Market	90.2	-	N/A	-	14.5	-	N/A	-	1.03	-	N/A	-	347	44

053 : LINCOLN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.2	80.9	to	99.7	17.4	12.6	to	24.9	0.98	0.94	to	1.03	38	0
Commercial/Ind.	78.3	64.0	to	99.4	14.9	3.9	to	18.3	0.94	0.91	to	1.00	4	0
Vacant Lot	77.2	-	N/A	-	43.0	-	N/A	-	1.27	-	N/A	-	3	0
Farm & Home	3.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	9.9	-	N/A	-	48.3	-	N/A	-	1.36	-	N/A	-	12	0
Ag. (Impr.+ Land)	10.3	-	N/A	-	39.8	-	N/A	-	1.18	-	N/A	-	18	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	74.3	-	N/A	-	43.7	-	N/A	-	1.86	-	N/A	-	64	0
Total Market	91.1	-	N/A	-	18.6	-	N/A	-	0.98	-	N/A	-	45	1

054 : LINN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.3	83.6	to	94.1	23.2	19.8	to	27.5	0.99	0.95	to	1.03	123	6
Commercial/Ind. <i>S-7</i>	95.6	71.2	to	127.9	22.7	14.0	to	40.0	1.07	0.97	to	1.28	11	1
Vacant Lot	50.8	-	N/A	-	67.7	-	N/A	-	1.38	-	N/A	-	190	14
Farm & Home	72.1	-	N/A	-	15.3	-	N/A	-	0.98	-	N/A	-	4	0
Ag. Land Only	3.5	-	N/A	-	48.0	-	N/A	-	1.00	-	N/A	-	21	0
Ag. (Impr.+ Land)	6.6	-	N/A	-	104.6	-	N/A	-	0.84	-	N/A	-	50	8
Other/Ex/Ut/NP/M	41.9	-	N/A	-	30.8	-	N/A	-	1.05	-	N/A	-	4	0
Total w/Ag.&F&H	64.5	-	N/A	-	54.0	-	N/A	-	1.11	-	N/A	-	382	15
Total Market	70.3	-	N/A	-	45.8	-	N/A	-	0.82	-	N/A	-	328	17

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	94.6	89.6	to	97.1	14.2	10.6	to	18.5	1.03	1.00	to	1.06	46	4
Commercial/Ind. <i>S-7</i>	40.8	25.5	to	94.4	60.4	38.9	to	118.5	1.44	1.06	to	2.29	8	0
Vacant Lot	193.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	24.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.9	-	N/A	-	22.6	-	N/A	-	1.01	-	N/A	-	11	0
Ag. (Impr.+ Land)	8.5	-	N/A	-	25.0	-	N/A	-	0.96	-	N/A	-	13	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	83.6	-	N/A	-	41.2	-	N/A	-	1.76	-	N/A	-	69	1
Total Market	93.1	-	N/A	-	17.2	-	N/A	-	1.15	-	N/A	-	55	7

056 : LYON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.8	85.8	to	90.6	13.7	12.0	to	15.6	1.02	1.00	to	1.05	189	15
Commercial/Ind.	83.2	71.7	to	92.6	22.7	16.1	to	31.1	1.03	0.90	to	1.23	28	1
Vacant Lot	74.3	-	N/A	-	56.4	-	N/A	-	3.60	-	N/A	-	11	2
Farm & Home	69.3	-	N/A	-	21.2	-	N/A	-	1.03	-	N/A	-	23	1
Ag. Land Only	4.4	-	N/A	-	50.5	-	N/A	-	1.24	-	N/A	-	21	0
Ag. (Impr.+ Land)	4.4	-	N/A	-	48.5	-	N/A	-	1.16	-	N/A	-	26	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	84.1	-	N/A	-	16.5	-	N/A	-	1.04	-	N/A	-	277	45
Total Market	87.6	-	N/A	-	14.6	-	N/A	-	1.01	-	N/A	-	228	23

057 : MARION COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	86.1	82.2	to	90.5	19.3	16.8	to	22.2	1.02	0.99	to	1.06	137	10
Commercial/Ind.	65.0	50.9	to	120.3	44.5	26.9	to	67.4	1.33	1.03	to	1.88	11	0
Vacant Lot	40.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	47.8	-	N/A	-	32.7	-	N/A	-	0.97	-	N/A	-	5	0
Ag. Land Only	5.2	-	N/A	-	43.9	-	N/A	-	1.07	-	N/A	-	15	0
Ag. (Impr.+ Land)	5.9	-	N/A	-	49.6	-	N/A	-	1.00	-	N/A	-	20	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	80.8	-	N/A	-	32.4	-	N/A	-	1.18	-	N/A	-	174	7
Total Market	85.3	-	N/A	-	21.7	-	N/A	-	1.05	-	N/A	-	149	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

058 : MARSHALL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.7	81.0	to	92.4	18.9	16.1	to	22.5	1.03	1.00	to	1.06	108	6
Commercial/Ind.	84.0	19.2	to	109.4	36.2	18.3	to	208.5	1.15	0.93	to	2.16	9	0
Vacant Lot	43.0	-	N/A	-	13.7	-	N/A	-	1.10	-	N/A	-	4	0
Farm & Home	55.2	-	N/A	-	55.5	-	N/A	-	1.29	-	N/A	-	2	0
Ag. Land Only	3.9	-	N/A	-	145.7	-	N/A	-	0.53	-	N/A	-	7	0
Ag. (Impr.+ Land)	8.9	-	N/A	-	214.4	-	N/A	-	0.69	-	N/A	-	12	1
Other/Ex/Ut/NP/M	105.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	83.8	-	N/A	-	25.6	-	N/A	-	1.14	-	N/A	-	136	9
Total Market	87.6	-	N/A	-	20.5	-	N/A	-	1.02	-	N/A	-	122	8

059 : MCPHERSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.3	91.7	to	96.0	12.4	10.9	to	14.3	1.00	0.99	to	1.02	171	11
Commercial/Ind.	80.0	74.3	to	91.5	8.9	5.0	to	13.9	1.00	0.94	to	1.06	6	0
Vacant Lot	69.5	-	N/A	-	40.4	-	N/A	-	1.14	-	N/A	-	7	1
Farm & Home	58.1	-	N/A	-	21.6	-	N/A	-	0.95	-	N/A	-	18	1
Ag. Land Only	3.1	-	N/A	-	112.9	-	N/A	-	0.69	-	N/A	-	37	0
Ag. (Impr.+ Land)	3.1	-	N/A	-	111.1	-	N/A	-	0.68	-	N/A	-	38	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	87.0	-	N/A	-	16.3	-	N/A	-	1.04	-	N/A	-	240	46
Total Market	93.3	-	N/A	-	13.2	-	N/A	-	1.01	-	N/A	-	184	12

060 : MEADE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	85.7	80.7	to	95.0	18.7	14.8	to	24.2	1.02	0.99	to	1.06	46	3
Commercial/Ind. <i>S-4</i>	75.3	49.0	to	120.8	34.9	15.7	to	83.7	1.20	1.03	to	1.62	6	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	1.0	-	N/A	-	30.8	-	N/A	-	1.30	-	N/A	-	2	0
Ag. (Impr.+ Land)	32.0	-	N/A	-	127.8	-	N/A	-	1.16	-	N/A	-	4	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	84.1	-	N/A	-	20.6	-	N/A	-	1.03	-	N/A	-	56	5
Total Market	84.8	-	N/A	-	19.3	-	N/A	-	1.01	-	N/A	-	52	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

061 : MIAMI COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.2	88.9	to	91.7	9.2	8.0	to	10.6	1.00	0.99	to	1.01	176	23
Commercial/Ind.	92.2	60.4	to	111.3	28.2	17.3	to	55.9	1.18	0.89	to	1.72	14	1
Vacant Lot	76.6	-	N/A	-	21.5	-	N/A	-	1.02	-	N/A	-	41	1
Farm & Home	53.2	-	N/A	-	42.0	-	N/A	-	1.22	-	N/A	-	40	1
Ag. Land Only	1.4	-	N/A	-	95.8	-	N/A	-	0.75	-	N/A	-	43	2
Ag. (Impr.+ Land)	1.7	-	N/A	-	90.7	-	N/A	-	0.79	-	N/A	-	49	2
Other/Ex/Ut/NP/M	600.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	81.5	-	N/A	-	33.8	-	N/A	-	1.13	-	N/A	-	321	9
Total Market	89.5	-	N/A	-	13.6	-	N/A	-	0.99	-	N/A	-	232	20

062 : MITCHELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.6	85.9	to	96.0	20.2	16.7	to	25.3	1.07	1.02	to	1.15	75	6
Commercial/Ind.	62.4	24.5	to	122.7	68.1	35.7	to	186.0	1.60	1.08	to	2.50	8	0
Vacant Lot	33.8	-	N/A	-	54.3	-	N/A	-	1.17	-	N/A	-	7	0
Farm & Home	156.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.8	-	N/A	-	14.9	-	N/A	-	1.00	-	N/A	-	6	0
Ag. (Impr.+ Land)	8.8	-	N/A	-	19.2	-	N/A	-	0.95	-	N/A	-	8	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	86.8	-	N/A	-	34.6	-	N/A	-	1.29	-	N/A	-	99	3
Total Market	88.9	-	N/A	-	27.9	-	N/A	-	1.10	-	N/A	-	90	4

063 : MONTGOMERY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.8	83.5	to	91.6	21.9	19.4	to	24.7	1.05	1.02	to	1.08	192	11
Commercial/Ind.	83.6	64.1	to	111.5	40.5	30.0	to	65.9	1.04	0.95	to	1.15	20	1
Vacant Lot	61.4	-	N/A	-	53.3	-	N/A	-	1.50	-	N/A	-	17	1
Farm & Home	52.4	-	N/A	-	39.5	-	N/A	-	1.10	-	N/A	-	18	0
Ag. Land Only	4.0	-	N/A	-	39.8	-	N/A	-	0.97	-	N/A	-	15	0
Ag. (Impr.+ Land)	4.2	-	N/A	-	42.9	-	N/A	-	0.96	-	N/A	-	19	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	82.8	-	N/A	-	32.4	-	N/A	-	1.23	-	N/A	-	266	12
Total Market	86.4	-	N/A	-	24.8	-	N/A	-	1.04	-	N/A	-	229	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

064 : MORRIS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.5	76.2	to	97.6	23.9	19.2	to	30.0	1.03	0.97	to	1.10	53	2
Commercial/Ind.	78.3	58.8	to	163.5	38.6	8.8	to	58.1	1.45	1.06	to	1.69	5	0
Vacant Lot	22.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	67.0	-	N/A	-	17.9	-	N/A	-	1.00	-	N/A	-	2	0
Ag. Land Only	5.8	-	N/A	-	47.1	-	N/A	-	1.17	-	N/A	-	7	0
Ag. (Impr.+ Land)	5.8	-	N/A	-	45.2	-	N/A	-	1.15	-	N/A	-	11	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	77.1	-	N/A	-	38.3	-	N/A	-	1.24	-	N/A	-	72	1
Total Market	84.0	-	N/A	-	25.6	-	N/A	-	1.02	-	N/A	-	59	3

065 : MORTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.2	82.2	to	100.3	17.1	13.9	to	21.8	1.01	0.98	to	1.06	50	3
Commercial/Ind.	97.8	90.0	to	254.3	44.3	2.0	to	48.3	1.28	1.01	to	1.46	4	0
Vacant Lot	68.6	-	N/A	-	37.8	-	N/A	-	1.10	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	1.8	-	N/A	-	214.8	-	N/A	-	0.62	-	N/A	-	12	0
Ag. (Impr.+ Land)	1.9	-	N/A	-	279.9	-	N/A	-	0.64	-	N/A	-	13	0
Other/Ex/Ut/NP/M	109.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	83.2	-	N/A	-	35.3	-	N/A	-	1.34	-	N/A	-	70	2
Total Market	91.2	-	N/A	-	16.8	-	N/A	-	1.01	-	N/A	-	57	4

066 : NEMAHA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.9	86.2	to	97.3	16.5	14.0	to	19.8	1.03	1.00	to	1.06	109	11
Commercial/Ind.	95.4	85.4	to	115.2	16.4	9.1	to	34.7	1.05	0.97	to	1.17	11	1
Vacant Lot	112.7	-	N/A	-	44.7	-	N/A	-	1.20	-	N/A	-	8	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	9.7	-	N/A	-	44.8	-	N/A	-	1.02	-	N/A	-	21	0
Ag. (Impr.+ Land)	10.8	-	N/A	-	42.6	-	N/A	-	1.04	-	N/A	-	28	4
Other/Ex/Ut/NP/M	101.3	-	N/A	-	45.6	-	N/A	-	0.95	-	N/A	-	3	0
Total w/Ag.&F&H	87.1	-	N/A	-	22.8	-	N/A	-	1.11	-	N/A	-	159	30
Total Market	94.2	-	N/A	-	16.8	-	N/A	-	1.03	-	N/A	-	131	16

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	86.6	81.5	to	91.9	24.3	21.4	to	27.5	1.04	1.01	to	1.06	197	13
Commercial/Ind.	86.7	39.5	to	102.4	38.7	19.9	to	104.3	1.16	0.92	to	1.81	12	1
Vacant Lot	27.1	-	N/A	-	114.4	-	N/A	-	1.99	-	N/A	-	5	0
Farm & Home	22.7	-	N/A	-	110.8	-	N/A	-	1.06	-	N/A	-	3	0
Ag. Land Only	5.6	-	N/A	-	32.1	-	N/A	-	1.06	-	N/A	-	9	0
Ag. (Impr.+ Land)	6.7	-	N/A	-	226.1	-	N/A	-	0.78	-	N/A	-	16	1
Other/Ex/Ut/NP/M	98.4	-	N/A	-	46.9	-	N/A	-	0.71	-	N/A	-	2	0
Total w/Ag.&F&H	83.5	-	N/A	-	33.1	-	N/A	-	1.13	-	N/A	-	235	10
Total Market	85.8	-	N/A	-	26.8	-	N/A	-	1.02	-	N/A	-	216	15

068 : NESS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	85.2	73.1	to	96.9	22.5	17.3	to	30.0	1.05	0.99	to	1.15	29	2
Commercial/Ind.	78.8	44.7	to	118.6	33.3	9.6	to	49.6	1.10	0.93	to	1.21	5	0
Vacant Lot	36.6	-	N/A	-	78.1	-	N/A	-	1.49	-	N/A	-	3	0
Farm & Home	15.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.1	-	N/A	-	3.6	-	N/A	-	1.00	-	N/A	-	7	0
Ag. (Impr.+ Land)	8.1	-	N/A	-	4.0	-	N/A	-	1.00	-	N/A	-	9	1
Other/Ex/Ut/NP/M	97.4	-	N/A	-	29.7	-	N/A	-	1.17	-	N/A	-	2	0
Total w/Ag.&F&H	73.1	-	N/A	-	43.2	-	N/A	-	1.47	-	N/A	-	49	2
Total Market	83.7	-	N/A	-	27.9	-	N/A	-	1.04	-	N/A	-	39	2

069 : NORTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.4	82.1	to	94.8	17.2	13.5	to	23.1	1.09	1.03	to	1.20	38	2
Commercial/Ind. <i>S-9</i>	84.3	66.2	to	120.2	23.0	11.8	to	52.5	1.21	0.94	to	1.58	11	2
Vacant Lot	59.0	-	N/A	-	42.0	-	N/A	-	1.40	-	N/A	-	5	0
Farm & Home	25.2	-	N/A	-	65.6	-	N/A	-	1.37	-	N/A	-	3	0
Ag. Land Only	9.0	-	N/A	-	39.4	-	N/A	-	0.95	-	N/A	-	10	0
Ag. (Impr.+ Land)	10.7	-	N/A	-	36.8	-	N/A	-	1.00	-	N/A	-	12	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.5	-	N/A	-	37.0	-	N/A	-	1.39	-	N/A	-	69	4
Total Market	86.0	-	N/A	-	20.2	-	N/A	-	1.14	-	N/A	-	54	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	89.3	85.8	to	93.7	19.5	17.2	to	22.0	1.03	1.02	to	1.05	224	25
Commercial/Ind.	82.9	72.1	to	98.9	28.6	18.9	to	59.5	0.94	0.81	to	1.05	13	0
Vacant Lot	104.3	-	N/A	-	60.5	-	N/A	-	1.60	-	N/A	-	14	0
Farm & Home	44.5	-	N/A	-	31.6	-	N/A	-	0.94	-	N/A	-	10	0
Ag. Land Only	5.0	-	N/A	-	63.5	-	N/A	-	0.93	-	N/A	-	40	2
Ag. (Impr.+ Land)	8.1	-	N/A	-	262.8	-	N/A	-	1.06	-	N/A	-	75	1
Other/Ex/Ut/NP/M	121.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	81.6	-	N/A	-	37.7	-	N/A	-	1.22	-	N/A	-	337	18
Total Market	90.2	-	N/A	-	20.3	-	N/A	-	1.03	-	N/A	-	252	30

071 : OSBORNE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	97.5	81.8	to	102.0	15.9	9.2	to	28.6	1.01	0.95	to	1.07	21	4
Commercial/Ind.	94.2	42.6	to	109.9	21.7	3.3	to	46.1	0.96	0.87	to	1.15	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	13.5	-	N/A	-	21.2	-	N/A	-	0.95	-	N/A	-	6	0
Ag. (Impr.+ Land)	13.5	-	N/A	-	21.2	-	N/A	-	0.95	-	N/A	-	6	0
Other/Ex/Ut/NP/M	259.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	88.8	-	N/A	-	39.2	-	N/A	-	1.74	-	N/A	-	32	2
Total Market	97.6	-	N/A	-	17.0	-	N/A	-	1.00	-	N/A	-	26	5

072 : OTTAWA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.0	83.2	to	99.5	18.4	14.4	to	23.4	1.05	1.01	to	1.10	50	2
Commercial/Ind.	85.8	26.4	to	122.5	37.5	12.4	to	116.3	1.13	0.83	to	1.72	5	0
Vacant Lot	35.0	-	N/A	-	86.5	-	N/A	-	6.08	-	N/A	-	6	0
Farm & Home	58.7	-	N/A	-	32.0	-	N/A	-	1.06	-	N/A	-	8	0
Ag. Land Only	10.3	-	N/A	-	31.7	-	N/A	-	1.19	-	N/A	-	27	0
Ag. (Impr.+ Land)	10.6	-	N/A	-	33.8	-	N/A	-	1.17	-	N/A	-	32	1
Other/Ex/Ut/NP/M	31.5	-	N/A	-	10.3	-	N/A	-	1.05	-	N/A	-	2	0
Total w/Ag.&F&H	64.7	-	N/A	-	57.9	-	N/A	-	1.58	-	N/A	-	103	0
Total Market	87.3	-	N/A	-	25.4	-	N/A	-	1.00	-	N/A	-	63	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

073 : PAWNEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	85.6	82.0	to	90.4	19.8	16.5	to	23.9	1.03	1.00	to	1.07	89	7
Commercial/Ind. <i>S-5</i>	58.3	47.8	to	95.1	36.6	9.2	to	47.3	1.13	1.03	to	1.39	7	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	36.2	-	N/A	-	45.2	-	N/A	-	1.93	-	N/A	-	3	0
Ag. Land Only	7.7	-	N/A	-	34.6	-	N/A	-	1.02	-	N/A	-	22	0
Ag. (Impr.+ Land)	8.1	-	N/A	-	31.2	-	N/A	-	0.98	-	N/A	-	28	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	74.0	-	N/A	-	41.9	-	N/A	-	1.76	-	N/A	-	127	5
Total Market	85.4	-	N/A	-	21.3	-	N/A	-	1.04	-	N/A	-	96	6

074 : PHILLIPS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	82.0	73.8	to	91.4	24.9	20.8	to	31.4	1.05	1.00	to	1.11	69	4
Commercial/Ind.	66.2	24.3	to	133.9	55.9	15.9	to	81.7	1.14	0.89	to	1.30	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	38.8	-	N/A	-	27.1	-	N/A	-	1.10	-	N/A	-	5	0
Ag. Land Only	7.7	-	N/A	-	30.7	-	N/A	-	1.10	-	N/A	-	9	0
Ag. (Impr.+ Land)	7.7	-	N/A	-	20.9	-	N/A	-	1.00	-	N/A	-	10	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	74.1	-	N/A	-	37.3	-	N/A	-	1.46	-	N/A	-	88	3
Total Market	82.0	-	N/A	-	26.2	-	N/A	-	1.05	-	N/A	-	73	4

075 : POTTAWATOMIE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.4	91.5	to	96.0	10.8	9.6	to	12.3	1.01	1.00	to	1.02	183	11
Commercial/Ind.	73.2	66.1	to	101.8	30.0	18.3	to	51.1	1.03	0.89	to	1.26	15	1
Vacant Lot	90.0	-	N/A	-	35.7	-	N/A	-	2.15	-	N/A	-	33	1
Farm & Home	59.8	-	N/A	-	35.8	-	N/A	-	1.20	-	N/A	-	12	1
Ag. Land Only	3.6	-	N/A	-	60.9	-	N/A	-	0.99	-	N/A	-	23	2
Ag. (Impr.+ Land)	3.7	-	N/A	-	65.6	-	N/A	-	0.96	-	N/A	-	26	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	90.3	-	N/A	-	16.3	-	N/A	-	1.04	-	N/A	-	269	38
Total Market	92.4	-	N/A	-	12.2	-	N/A	-	1.02	-	N/A	-	231	26

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	90.1	85.7	to	94.9	17.6	15.2	to	20.7	1.04	1.02	to	1.06	130	6
Commercial/Ind. <i>S-2</i>	60.4	42.6	to	93.9	36.4	19.9	to	65.0	1.29	1.07	to	1.73	8	0
Vacant Lot	39.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	56.4	-	N/A	-	10.1	-	N/A	-	1.07	-	N/A	-	2	0
Ag. Land Only	7.4	-	N/A	-	42.8	-	N/A	-	0.87	-	N/A	-	12	0
Ag. (Impr.+ Land)	10.0	-	N/A	-	97.0	-	N/A	-	1.03	-	N/A	-	20	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	84.9	-	N/A	-	21.7	-	N/A	-	1.14	-	N/A	-	161	18
Total Market	89.3	-	N/A	-	19.3	-	N/A	-	1.14	-	N/A	-	139	6

077 : RAWLINS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.0	73.2	to	96.7	16.9	13.1	to	24.7	1.04	0.99	to	1.11	23	3
Commercial/Ind.	47.5	12.2	to	123.2	92.9	13.9	to	177.9	2.22	0.91	to	3.04	4	0
Vacant Lot	73.2	-	N/A	-	28.9	-	N/A	-	1.31	-	N/A	-	3	0
Farm & Home	197.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	6.2	-	N/A	-	3.8	-	N/A	-	1.01	-	N/A	-	6	1
Ag. (Impr.+ Land)	6.1	-	N/A	-	4.4	-	N/A	-	1.00	-	N/A	-	7	1
Other/Ex/Ut/NP/M	46.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	73.2	-	N/A	-	42.5	-	N/A	-	1.94	-	N/A	-	39	2
Total Market	79.1	-	N/A	-	20.6	-	N/A	-	1.01	-	N/A	-	31	5

078 : RENO COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.7	86.2	to	90.2	14.1	12.6	to	15.9	1.03	1.01	to	1.05	231	22
Commercial/Ind.	81.4	73.4	to	100.9	18.4	12.8	to	27.1	1.02	0.95	to	1.12	17	0
Vacant Lot	54.2	-	N/A	-	66.8	-	N/A	-	1.86	-	N/A	-	36	5
Farm & Home	49.2	-	N/A	-	38.9	-	N/A	-	0.96	-	N/A	-	26	0
Ag. Land Only	5.3	-	N/A	-	81.5	-	N/A	-	1.00	-	N/A	-	65	2
Ag. (Impr.+ Land)	5.7	-	N/A	-	73.2	-	N/A	-	0.97	-	N/A	-	74	2
Other/Ex/Ut/NP/M	35.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	79.2	-	N/A	-	38.9	-	N/A	-	1.24	-	N/A	-	385	14
Total Market	86.9	-	N/A	-	18.0	-	N/A	-	1.02	-	N/A	-	285	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	90.2	73.8	to	97.2	19.6	15.0	to	25.5	1.02	0.97	to	1.09	47	1
Commercial/Ind. <i>S-6</i>	97.3	57.1	to	112.2	22.5	12.1	to	40.0	1.26	1.12	to	1.49	9	0
Vacant Lot	91.9	-	N/A	-	56.0	-	N/A	-	1.52	-	N/A	-	2	0
Farm & Home	40.7	-	N/A	-	22.8	-	N/A	-	1.09	-	N/A	-	3	0
Ag. Land Only	13.2	-	N/A	-	38.4	-	N/A	-	1.22	-	N/A	-	9	0
Ag. (Impr.+ Land)	13.2	-	N/A	-	38.4	-	N/A	-	1.22	-	N/A	-	9	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	77.2	-	N/A	-	35.1	-	N/A	-	1.56	-	N/A	-	70	0
Total Market	90.2	-	N/A	-	22.5	-	N/A	-	1.09	-	N/A	-	58	0

080 : RICE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	89.1	85.4	to	94.3	27.1	22.9	to	32.1	1.01	0.97	to	1.05	108	2
Commercial/Ind.	97.1	53.5	to	109.8	36.8	18.4	to	68.7	1.54	1.22	to	2.13	13	1
Vacant Lot	158.6	-	N/A	-	46.6	-	N/A	-	2.02	-	N/A	-	3	0
Farm & Home	46.9	-	N/A	-	65.4	-	N/A	-	1.03	-	N/A	-	4	0
Ag. Land Only	13.9	-	N/A	-	26.1	-	N/A	-	0.97	-	N/A	-	7	0
Ag. (Impr.+ Land)	13.9	-	N/A	-	56.5	-	N/A	-	0.94	-	N/A	-	13	2
Other/Ex/Ut/NP/M	404.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	87.7	-	N/A	-	33.7	-	N/A	-	1.20	-	N/A	-	142	7
Total Market	90.0	-	N/A	-	28.1	-	N/A	-	1.07	-	N/A	-	125	6

081 : RILEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.0	90.6	to	93.2	8.1	7.2	to	9.1	1.01	1.00	to	1.02	229	22
Commercial/Ind.	96.5	82.4	to	102.9	10.8	7.2	to	16.0	1.08	0.98	to	1.14	17	2
Vacant Lot	28.7	-	N/A	-	67.1	-	N/A	-	1.23	-	N/A	-	38	3
Farm & Home	48.7	-	N/A	-	37.9	-	N/A	-	1.09	-	N/A	-	8	0
Ag. Land Only	2.5	-	N/A	-	147.5	-	N/A	-	0.65	-	N/A	-	9	0
Ag. (Impr.+ Land)	3.2	-	N/A	-	108.2	-	N/A	-	0.66	-	N/A	-	12	1
Other/Ex/Ut/NP/M	108.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	89.8	-	N/A	-	10.5	-	N/A	-	1.01	-	N/A	-	305	59
Total Market	90.7	-	N/A	-	9.4	-	N/A	-	1.02	-	N/A	-	285	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

082 : ROOKS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	83.6	78.3	to	90.3	20.0	16.6	to	25.0	1.04	1.00	to	1.09	71	8
Commercial/Ind.	101.6	39.5	to	110.0	29.5	8.7	to	104.4	1.32	0.91	to	1.86	7	0
Vacant Lot	97.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	75.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	7.9	-	N/A	-	40.6	-	N/A	-	1.00	-	N/A	-	21	0
Ag. (Impr.+ Land)	7.2	-	N/A	-	45.2	-	N/A	-	1.02	-	N/A	-	24	0
Other/Ex/Ut/NP/M	994.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	75.7	-	N/A	-	46.6	-	N/A	-	1.49	-	N/A	-	105	1
Total Market	84.8	-	N/A	-	21.2	-	N/A	-	1.06	-	N/A	-	80	9

083 : RUSH COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	75.4	66.0	to	86.8	20.9	15.3	to	29.5	0.98	0.91	to	1.05	30	2
Commercial/Ind.	68.5	30.4	to	100.6	34.4	17.2	to	98.7	1.16	1.00	to	1.68	7	0
Vacant Lot	51.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	19.3	-	N/A	-	54.9	-	N/A	-	1.12	-	N/A	-	2	0
Ag. Land Only	7.0	-	N/A	-	35.1	-	N/A	-	0.97	-	N/A	-	15	0
Ag. (Impr.+ Land)	8.1	-	N/A	-	26.7	-	N/A	-	0.96	-	N/A	-	21	2
Other/Ex/Ut/NP/M	120.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	52.4	-	N/A	-	65.5	-	N/A	-	1.53	-	N/A	-	62	1
Total Market	74.6	-	N/A	-	25.0	-	N/A	-	0.98	-	N/A	-	39	2

084 : RUSSELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.5	87.6	to	96.8	15.1	12.9	to	18.4	1.04	1.01	to	1.07	95	8
Commercial/Ind.	64.6	55.9	to	101.9	45.9	31.4	to	100.9	1.09	0.88	to	1.32	12	0
Vacant Lot	83.8	-	N/A	-	34.4	-	N/A	-	0.78	-	N/A	-	7	0
Farm & Home	18.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.8	-	N/A	-	36.7	-	N/A	-	1.09	-	N/A	-	21	1
Ag. (Impr.+ Land)	9.2	-	N/A	-	39.7	-	N/A	-	0.99	-	N/A	-	29	5
Other/Ex/Ut/NP/M	33.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	82.8	-	N/A	-	37.8	-	N/A	-	1.32	-	N/A	-	145	2
Total Market	89.9	-	N/A	-	17.2	-	N/A	-	1.04	-	N/A	-	115	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

085 : SALINE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.1	89.8	to	93.2	10.7	9.6	to	12.1	1.01	1.00	to	1.02	225	19
Commercial/Ind.	79.2	61.1	to	93.3	29.3	21.6	to	44.8	1.07	0.96	to	1.28	29	3
Vacant Lot	33.4	-	N/A	-	87.0	-	N/A	-	1.24	-	N/A	-	27	2
Farm & Home	75.8	-	N/A	-	31.3	-	N/A	-	1.12	-	N/A	-	15	1
Ag. Land Only	3.3	-	N/A	-	131.9	-	N/A	-	1.01	-	N/A	-	20	1
Ag. (Impr.+ Land)	3.6	-	N/A	-	120.1	-	N/A	-	0.96	-	N/A	-	29	4
Other/Ex/Ut/NP/M	170.1	-	N/A	-	46.0	-	N/A	-	1.04	-	N/A	-	2	0
Total w/Ag.&F&H	89.1	-	N/A	-	16.2	-	N/A	-	1.06	-	N/A	-	327	53
Total Market	89.9	-	N/A	-	13.0	-	N/A	-	1.04	-	N/A	-	283	38

086 : SCOTT COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	86.4	80.3	to	92.9	16.4	13.8	to	19.9	1.05	1.02	to	1.09	84	8
Commercial/Ind. <i>S-5</i>	61.1	35.1	to	85.6	27.3	17.3	to	52.1	0.94	0.88	to	1.01	9	0
Vacant Lot	99.5	-	N/A	-	4.7	-	N/A	-	1.00	-	N/A	-	2	0
Farm & Home	95.0	-	N/A	-	20.1	-	N/A	-	1.28	-	N/A	-	3	0
Ag. Land Only	7.7	-	N/A	-	23.5	-	N/A	-	1.06	-	N/A	-	11	0
Ag. (Impr.+ Land)	7.5	-	N/A	-	23.8	-	N/A	-	1.05	-	N/A	-	12	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.7	-	N/A	-	18.7	-	N/A	-	1.04	-	N/A	-	110	19
Total Market	85.6	-	N/A	-	16.4	-	N/A	-	1.04	-	N/A	-	95	11

087 : SEDGWICK COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.6	87.0	to	90.2	10.7	9.9	to	11.7	0.99	0.98	to	1.00	363	26
Commercial/Ind.	81.8	76.0	to	88.1	25.6	22.7	to	29.4	1.02	0.95	to	1.10	153	1
Vacant Lot	68.0	-	N/A	-	53.9	-	N/A	-	1.32	-	N/A	-	189	4
Farm & Home	2.3	-	N/A	-	144.3	-	N/A	-	1.22	-	N/A	-	34	3
Ag. Land Only	0.6	-	N/A	-	96.4	-	N/A	-	0.67	-	N/A	-	97	9
Ag. (Impr.+ Land)	0.6	-	N/A	-	104.9	-	N/A	-	0.69	-	N/A	-	102	9
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.6	-	N/A	-	37.6	-	N/A	-	0.99	-	N/A	-	841	14
Total Market	85.8	-	N/A	-	20.6	-	N/A	-	1.01	-	N/A	-	705	51

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	85.2	82.9	to	88.0	12.1	10.6	to	13.9	1.02	1.00	to	1.03	169	17
Commercial/Ind.	84.9	60.0	to	99.1	29.0	20.0	to	49.6	1.26	1.08	to	1.60	22	1
Vacant Lot	9.9	-	N/A	-	47.4	-	N/A	-	1.39	-	N/A	-	9	1
Farm & Home	62.2	-	N/A	-	13.9	-	N/A	-	0.98	-	N/A	-	2	0
Ag. Land Only	4.9	-	N/A	-	131.8	-	N/A	-	1.06	-	N/A	-	16	1
Ag. (Impr.+ Land)	5.5	-	N/A	-	203.7	-	N/A	-	1.10	-	N/A	-	19	0
Other/Ex/Ut/NP/M	101.1	-	N/A	-	16.8	-	N/A	-	0.87	-	N/A	-	4	0
Total w/Ag.&F&H	82.9	-	N/A	-	15.8	-	N/A	-	1.06	-	N/A	-	225	39
Total Market	84.6	-	N/A	-	13.5	-	N/A	-	1.02	-	N/A	-	204	29

089 : SHAWNEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.1	88.5	to	92.4	12.4	11.4	to	13.5	1.02	1.00	to	1.05	312	15
Commercial/Ind.	97.2	88.7	to	106.7	23.5	19.7	to	28.5	1.14	1.06	to	1.26	83	5
Vacant Lot	61.4	-	N/A	-	51.5	-	N/A	-	1.26	-	N/A	-	106	5
Farm & Home	54.8	-	N/A	-	31.4	-	N/A	-	0.99	-	N/A	-	16	0
Ag. Land Only	2.2	-	N/A	-	106.5	-	N/A	-	0.72	-	N/A	-	19	1
Ag. (Impr.+ Land)	2.7	-	N/A	-	85.0	-	N/A	-	0.75	-	N/A	-	24	2
Other/Ex/Ut/NP/M	96.6	-	N/A	-	29.6	-	N/A	-	1.06	-	N/A	-	8	1
Total w/Ag.&F&H	87.2	-	N/A	-	20.4	-	N/A	-	1.02	-	N/A	-	549	56
Total Market	88.9	-	N/A	-	18.1	-	N/A	-	1.03	-	N/A	-	509	47

090 : SHERIDAN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.8	67.0	to	90.8	19.8	12.9	to	33.9	1.07	1.04	to	1.14	13	1
Commercial/Ind. <i>S-2</i>	94.2	76.6	to	106.9	13.5	2.4	to	15.5	0.97	0.92	to	1.01	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	34.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	9.1	-	N/A	-	30.4	-	N/A	-	1.21	-	N/A	-	12	0
Ag. (Impr.+ Land)	9.1	-	N/A	-	30.4	-	N/A	-	1.21	-	N/A	-	12	0
Other/Ex/Ut/NP/M	24.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	61.8	-	N/A	-	58.6	-	N/A	-	2.23	-	N/A	-	31	1
Total Market	84.5	-	N/A	-	20.7	-	N/A	-	1.30	-	N/A	-	18	1

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	85.4	79.8	to	91.1	16.6	13.8	to	20.3	1.02	0.99	to	1.07	79	5
Commercial/Ind. <i>S-6</i>	70.1	65.3	to	104.4	28.4	16.7	to	54.4	0.83	0.74	to	1.14	8	0
Vacant Lot	58.9	-	N/A	-	16.3	-	N/A	-	1.07	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	5.8	-	N/A	-	14.7	-	N/A	-	0.94	-	N/A	-	13	2
Ag. (Impr.+ Land)	6.1	-	N/A	-	49.5	-	N/A	-	0.96	-	N/A	-	15	1
Other/Ex/Ut/NP/M	27.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	79.4	-	N/A	-	21.4	-	N/A	-	1.05	-	N/A	-	105	15
Total Market	84.6	-	N/A	-	18.4	-	N/A	-	1.02	-	N/A	-	90	5

092 : SMITH COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	83.8	77.2	to	96.5	26.0	21.1	to	34.1	0.98	0.93	to	1.04	55	2
Commercial/Ind. <i>S-5</i>	94.4	72.3	to	96.9	17.1	4.2	to	276.9	1.59	0.99	to	3.53	8	1
Vacant Lot	104.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	16.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	7.5	-	N/A	-	17.9	-	N/A	-	0.92	-	N/A	-	9	1
Ag. (Impr.+ Land)	7.7	-	N/A	-	58.9	-	N/A	-	1.03	-	N/A	-	14	2
Other/Ex/Ut/NP/M	90.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	81.1	-	N/A	-	38.3	-	N/A	-	1.66	-	N/A	-	80	2
Total Market	89.0	-	N/A	-	22.7	-	N/A	-	0.99	-	N/A	-	65	4

093 : STAFFORD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.7	80.9	to	97.2	20.0	15.4	to	27.2	1.11	1.02	to	1.29	46	5
Commercial/Ind. <i>S-5</i>	90.0	61.5	to	95.8	3.1	0.7	to	4.3	1.01	0.99	to	1.02	6	1
Vacant Lot	34.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	21.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	6.1	-	N/A	-	74.5	-	N/A	-	1.10	-	N/A	-	17	0
Ag. (Impr.+ Land)	7.8	-	N/A	-	74.5	-	N/A	-	1.10	-	N/A	-	19	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	80.9	-	N/A	-	45.7	-	N/A	-	2.04	-	N/A	-	73	1
Total Market	90.3	-	N/A	-	19.9	-	N/A	-	1.09	-	N/A	-	53	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

094 : STANTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.9	59.3	to	99.0	27.1	17.1	to	43.6	1.09	1.00	to	1.26	14	0
Commercial/Ind. <i>S-2</i>	72.9	41.3	to	114.5	40.0	6.9	to	46.4	0.99	0.85	to	1.08	4	0
Vacant Lot	16.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	102.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	7.2	-	N/A	-	38.4	-	N/A	-	0.88	-	N/A	-	6	0
Ag. (Impr.+ Land)	7.7	-	N/A	-	43.5	-	N/A	-	0.86	-	N/A	-	7	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	57.6	-	N/A	-	60.8	-	N/A	-	1.25	-	N/A	-	27	0
Total Market	83.6	-	N/A	-	31.9	-	N/A	-	1.03	-	N/A	-	19	0

095 : STEVENS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.1	78.5	to	90.1	15.3	10.9	to	21.1	0.99	0.95	to	1.02	35	3
Commercial/Ind. <i>S-10</i>	70.7	58.2	to	83.5	21.6	15.8	to	46.7	1.33	1.03	to	1.56	12	1
Vacant Lot	18.7	-	N/A	-	91.8	-	N/A	-	0.84	-	N/A	-	3	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.9	-	N/A	-	23.4	-	N/A	-	1.09	-	N/A	-	7	1
Ag. (Impr.+ Land)	4.0	-	N/A	-	255.4	-	N/A	-	0.89	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	78.0	-	N/A	-	30.6	-	N/A	-	1.06	-	N/A	-	58	3
Total Market	81.2	-	N/A	-	18.1	-	N/A	-	1.09	-	N/A	-	50	5

096 : SUMNER COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	83.9	80.1	to	88.6	25.5	23.0	to	28.6	1.02	1.00	to	1.05	288	15
Commercial/Ind.	73.0	49.4	to	120.5	44.7	29.2	to	90.3	1.28	1.01	to	1.70	14	1
Vacant Lot	88.0	-	N/A	-	59.0	-	N/A	-	1.43	-	N/A	-	19	1
Farm & Home	19.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	3.0	-	N/A	-	82.0	-	N/A	-	0.73	-	N/A	-	46	2
Ag. (Impr.+ Land)	4.0	-	N/A	-	99.1	-	N/A	-	0.76	-	N/A	-	58	7
Other/Ex/Ut/NP/M	134.5	-	N/A	-	135.0	-	N/A	-	2.89	-	N/A	-	4	0
Total w/Ag.&F&H	77.4	-	N/A	-	39.6	-	N/A	-	1.08	-	N/A	-	384	20
Total Market	84.2	-	N/A	-	26.4	-	N/A	-	1.03	-	N/A	-	325	24

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	91.1	84.7	to	95.1	15.0	13.0	to	17.9	1.02	1.00	to	1.05	105	7
Commercial/Ind.	76.1	53.6	to	95.6	29.6	18.1	to	52.3	1.14	0.95	to	1.50	10	0
Vacant Lot	72.4	-	N/A	-	27.6	-	N/A	-	0.98	-	N/A	-	4	0
Farm & Home	29.5	-	N/A	-	58.3	-	N/A	-	1.11	-	N/A	-	2	0
Ag. Land Only	6.5	-	N/A	-	7.7	-	N/A	-	1.01	-	N/A	-	10	2
Ag. (Impr.+ Land)	6.6	-	N/A	-	8.5	-	N/A	-	0.99	-	N/A	-	11	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	86.9	-	N/A	-	18.2	-	N/A	-	1.05	-	N/A	-	132	15
Total Market	89.4	-	N/A	-	16.5	-	N/A	-	1.02	-	N/A	-	119	7

098 : TREGO COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.4	80.5	to	97.1	20.0	14.7	to	27.9	1.05	0.99	to	1.13	38	3
Commercial/Ind. <i>S-6</i>	73.5	55.7	to	102.0	33.9	18.5	to	247.4	1.75	0.86	to	2.66	7	0
Vacant Lot	59.7	-	N/A	-	84.6	-	N/A	-	1.46	-	N/A	-	5	0
Farm & Home	95.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	7.1	-	N/A	-	36.4	-	N/A	-	1.11	-	N/A	-	13	0
Ag. (Impr.+ Land)	8.8	-	N/A	-	27.2	-	N/A	-	1.04	-	N/A	-	15	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	75.6	-	N/A	-	45.6	-	N/A	-	1.44	-	N/A	-	66	2
Total Market	87.9	-	N/A	-	25.3	-	N/A	-	1.10	-	N/A	-	50	3

099 : WABAUNSEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	86.5	81.2	to	91.3	18.0	14.5	to	22.2	1.02	0.99	to	1.05	62	3
Commercial/Ind. <i>S-5</i>	86.2	59.1	to	98.3	22.9	7.6	to	404.2	1.16	0.96	to	1.52	8	1
Vacant Lot	48.4	-	N/A	-	55.9	-	N/A	-	1.13	-	N/A	-	4	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	5.4	-	N/A	-	45.2	-	N/A	-	0.88	-	N/A	-	12	0
Ag. (Impr.+ Land)	9.4	-	N/A	-	244.1	-	N/A	-	0.97	-	N/A	-	25	0
Other/Ex/Ut/NP/M	577.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	78.5	-	N/A	-	35.6	-	N/A	-	1.17	-	N/A	-	100	4
Total Market	86.3	-	N/A	-	19.0	-	N/A	-	1.05	-	N/A	-	75	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

100 : WALLACE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential <i>S-14</i>	77.5	59.4	to	98.0	32.2	22.6	to	52.1	1.13	1.04	to	1.31	19	0
Commercial/Ind. <i>S-4</i>	71.3	67.2	to	156.7	35.3	2.4	to	40.7	1.23	0.98	to	1.44	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	47.2	-	N/A	-	3.1	-	N/A	-	1.00	-	N/A	-	2	0
Ag. Land Only	5.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. (Impr.+ Land)	6.2	-	N/A	-	10.2	-	N/A	-	1.01	-	N/A	-	2	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	74.9	-	N/A	-	38.4	-	N/A	-	1.56	-	N/A	-	27	0
Total Market	76.7	-	N/A	-	32.9	-	N/A	-	1.16	-	N/A	-	23	0

101 : WASHINGTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.6	76.3	to	99.4	21.5	16.5	to	30.3	1.05	1.01	to	1.10	30	1
Commercial/Ind. <i>S-3</i>	129.1	98.8	to	239.9	42.4	12.9	to	73.7	1.34	1.08	to	1.79	6	0
Vacant Lot	307.0	-	N/A	-	68.2	-	N/A	-	2.57	-	N/A	-	2	0
Farm & Home	88.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.2	-	N/A	-	43.5	-	N/A	-	1.05	-	N/A	-	14	1
Ag. (Impr.+ Land)	9.3	-	N/A	-	44.9	-	N/A	-	1.03	-	N/A	-	18	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	78.4	-	N/A	-	51.1	-	N/A	-	2.44	-	N/A	-	57	2
Total Market	97.2	-	N/A	-	21.7	-	N/A	-	1.11	-	N/A	-	38	2

102 : WICHITA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.9	69.7	to	92.3	17.3	10.9	to	31.3	0.95	0.89	to	1.00	19	2
Commercial/Ind. <i>S-6</i>	80.0	41.1	to	124.1	39.5	21.7	to	77.3	1.30	1.11	to	1.69	8	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	59.4	-	N/A	-	35.1	-	N/A	-	1.53	-	N/A	-	4	0
Ag. Land Only	5.0	-	N/A	-	32.1	-	N/A	-	1.06	-	N/A	-	12	0
Ag. (Impr.+ Land)	5.0	-	N/A	-	32.1	-	N/A	-	1.06	-	N/A	-	12	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	67.2	-	N/A	-	54.5	-	N/A	-	2.35	-	N/A	-	43	0
Total Market	84.9	-	N/A	-	26.2	-	N/A	-	0.98	-	N/A	-	27	1

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	87.1	77.0	to	96.5	23.9	19.8	to	30.5	1.10	1.05	to	1.16	71	8
Commercial/Ind.	62.4	37.7	to	106.6	47.4	21.2	to	103.1	1.31	1.16	to	1.59	7	0
Vacant Lot	71.5	-	N/A	-	58.4	-	N/A	-	2.73	-	N/A	-	7	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	5.1	-	N/A	-	60.0	-	N/A	-	1.20	-	N/A	-	18	1
Ag. (Impr.+ Land)	8.2	-	N/A	-	87.3	-	N/A	-	1.03	-	N/A	-	27	1
Other/Ex/Ut/NP/M	66.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	72.7	-	N/A	-	47.3	-	N/A	-	1.67	-	N/A	-	113	6
Total Market	80.0	-	N/A	-	26.4	-	N/A	-	1.09	-	N/A	-	86	10

104 : WOODSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	98.1	92.1	to	112.3	25.1	16.9	to	37.4	1.11	1.05	to	1.21	30	2
Commercial/Ind. <i>S-4</i>	74.2	43.4	to	110.8	35.8	18.7	to	55.7	1.08	0.90	to	1.49	6	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.7	-	N/A	-	29.4	-	N/A	-	1.02	-	N/A	-	19	1
Ag. (Impr.+ Land)	4.3	-	N/A	-	37.1	-	N/A	-	0.96	-	N/A	-	25	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	73.1	-	N/A	-	68.3	-	N/A	-	3.82	-	N/A	-	61	1
Total Market	96.2	-	N/A	-	21.6	-	N/A	-	1.06	-	N/A	-	36	4

105 : WYANDOTTE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.0	83.5	to	90.4	16.4	14.7	to	18.3	1.00	0.99	to	1.02	248	22
Commercial/Ind.	74.2	67.3	to	86.8	30.0	24.9	to	37.0	1.12	0.99	to	1.29	68	4
Vacant Lot	52.8	-	N/A	-	55.2	-	N/A	-	1.22	-	N/A	-	73	2
Farm & Home	53.8	-	N/A	-	44.2	-	N/A	-	1.25	-	N/A	-	10	0
Ag. Land Only	1.5	-	N/A	-	21.9	-	N/A	-	0.85	-	N/A	-	8	1
Ag. (Impr.+ Land)	1.5	-	N/A	-	30.4	-	N/A	-	0.94	-	N/A	-	12	2
Other/Ex/Ut/NP/M	111.1	-	N/A	-	80.0	-	N/A	-	1.23	-	N/A	-	7	0
Total w/Ag.&F&H	80.8	-	N/A	-	27.7	-	N/A	-	1.11	-	N/A	-	418	29
Total Market	82.6	-	N/A	-	25.4	-	N/A	-	1.06	-	N/A	-	396	27

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

Median Ratio: 90.0 to 110.0

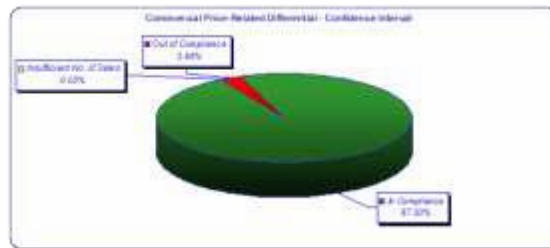
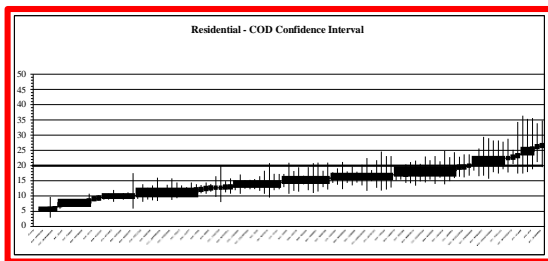
COD: 20.0 or less

PRD: .98 to 1.02

STATE TOTALS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval		COD	Confidence Interval		PRD	Confidence Interval		Valid Sales	Trim Sales			
Residential	88.6	-	N/A	-	16.5	-	N/A	-	1.02	-	N/A	-	12,113	909
Comm./Ind. <i>S-200</i>	81.6	-	N/A	-	31.6	-	N/A	-	1.25	-	N/A	-	1,610	70
Vacant Lot	66.1	-	N/A	-	43.9	-	N/A	-	1.15	-	N/A	-	2,139	107
Farm & Home	51.2	-	N/A	-	44	-	N/A	-	1.11	-	N/A	-	622	12
Ag. Land Only	4.6	-	N/A	-	76.6	-	N/A	-	0.99	-	N/A	-	1,698	52
Ag. (Impr.+ Land)	6.1	-	N/A	-	80.3	-	N/A	-	0.98	-	N/A	-	2,356	338
Other/Ex/Ut/NP/M	100.2	-	N/A	-	42.2	-	N/A	-	1.06	-	N/A	-	121	15
Total w/Ag.&F&H	83.3	-	N/A	-	32.8	-	N/A	-	-0.03	-	N/A	-	18,961	717
Total Market	88.2	-	N/A	-	19.8	-	N/A	-	0.59	-	N/A	-	15,983	1,364

1 Statewide Residential performance measures are weighted by county parcel counts within the subclass.
 2 Statewide Commercial/Industrial. performance measures are weighted by county parcel counts within the subclass.

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 2022 Final Ratio Study, *pages 10-44*, indicates that a large portion of the statewide property value estimates in the residential subclasses of property meet the state mandated mass appraisal performance standards. Commercial performance measures suggest that improvements are needed in both level and uniformity.

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 2022 certified appraisal values. These numbers are proportional to county abstract assessed valuation.

1. ***Exhibit I*** depicts the residential and commercial *median ratios*. The residential chart indicates that 96.3% of property value statewide falls within a median ratio range of 90.0 percent to 110.0 percent which is the recognized standard according to IAAO (*International Association of Assessing Officers*). Over 69% of the commercial/industrial property values are found in counties that meet the standard.
2. ***Exhibit II*** presents the residential and commercial *coefficient of dispersion (COD)*. The acceptable standard for horizontal appraisal equity in Kansas is a COD range of 20 or less. The pie charts indicates that 98% of the residential property value and about 68% of the commercial/industrial property values are found in counties that meet the state performance standard COD of 20.0 or less.

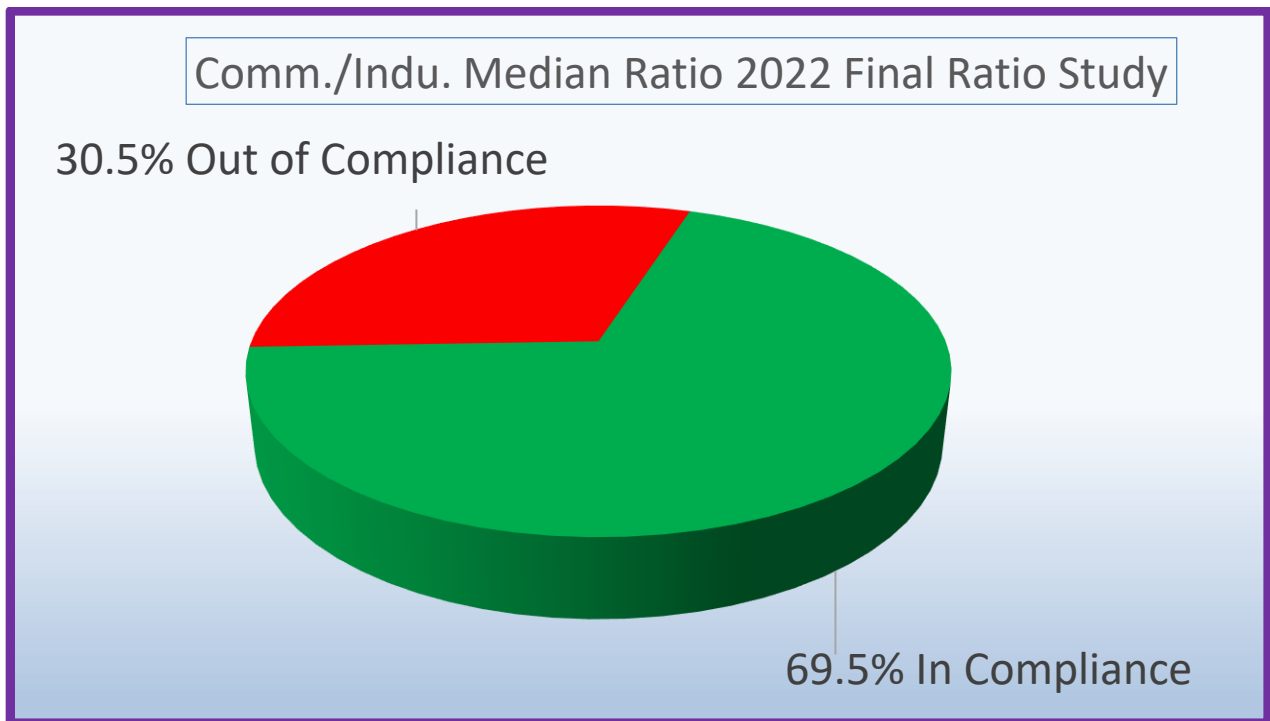
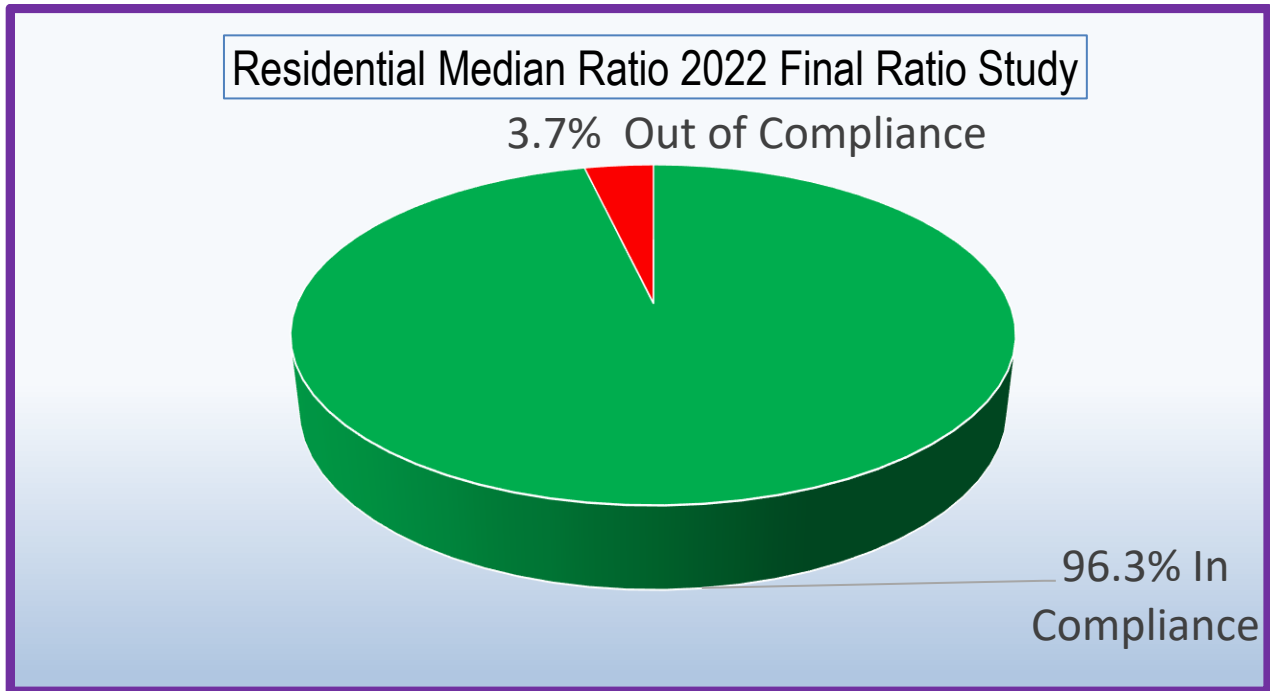
3. **Exhibit III** is a display of residential and commercial appraisal bias. The *price-related differential* provides only a general indication of vertical appraisal bias. When sample sizes are small, a price-related differential outside the acceptable range may occur simply because of random sampling error¹. The acceptable range for the PRD is between .98 and 1.03. This chart indicates that 99.6% of the residential property value and 85.7% of the commercial/industrial property values statewide fall within the acceptable range for the PRD.

4. **Bar Charts** have been prepared to show the residential and commercial/industrial sample point estimates and 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.

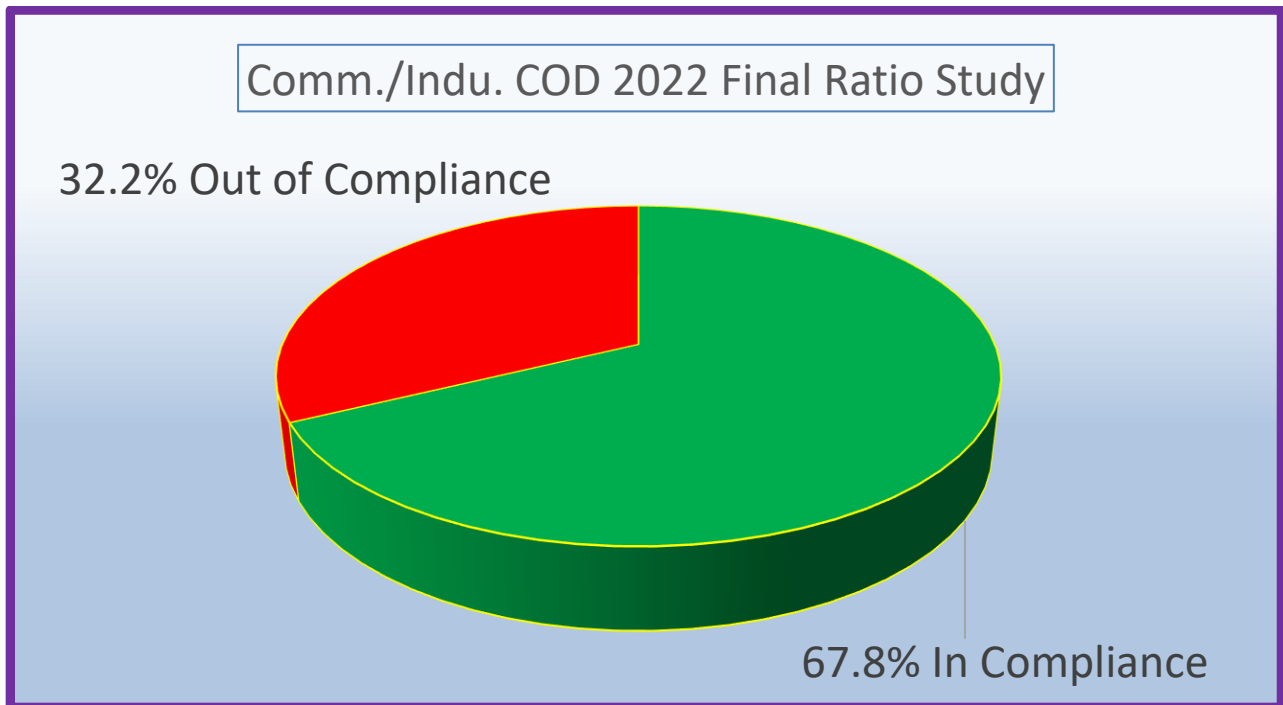
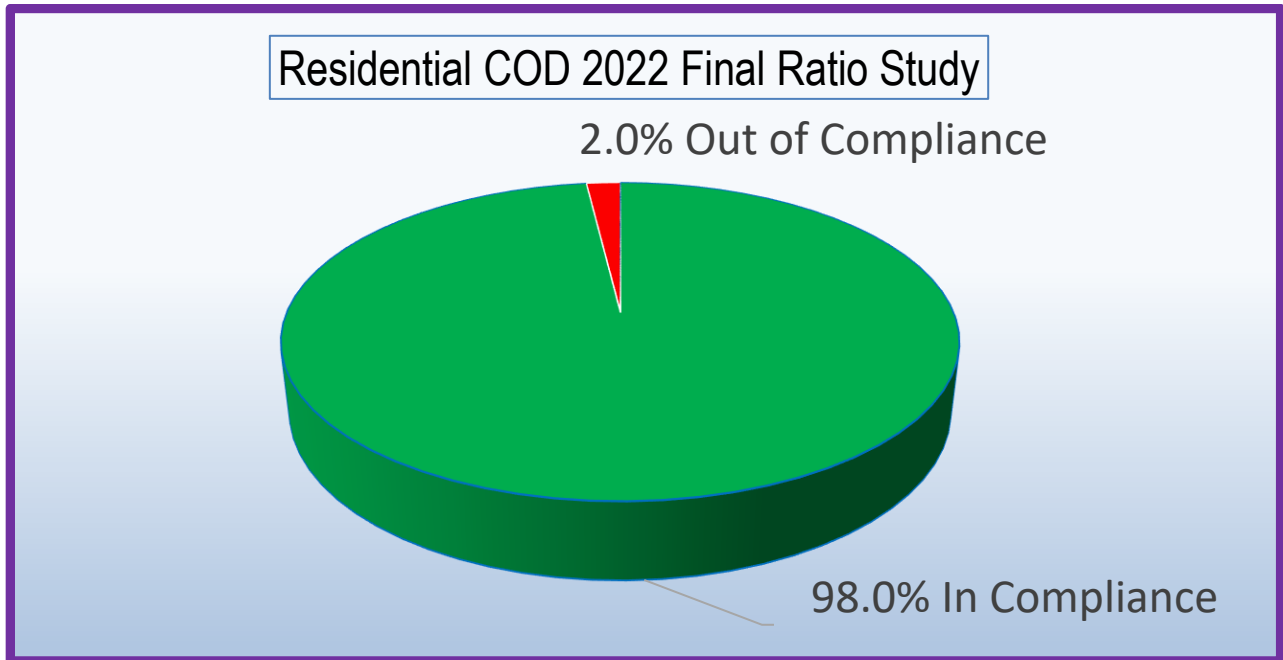
Pie Charts Based Upon Statewide Proportion of Appraised Value

Exhibit 1



2022 Kansas Appraisal/Sales Ratio Study
Pie Charts Based Upon Statewide Proportion of Appraised Value

Exhibit 2

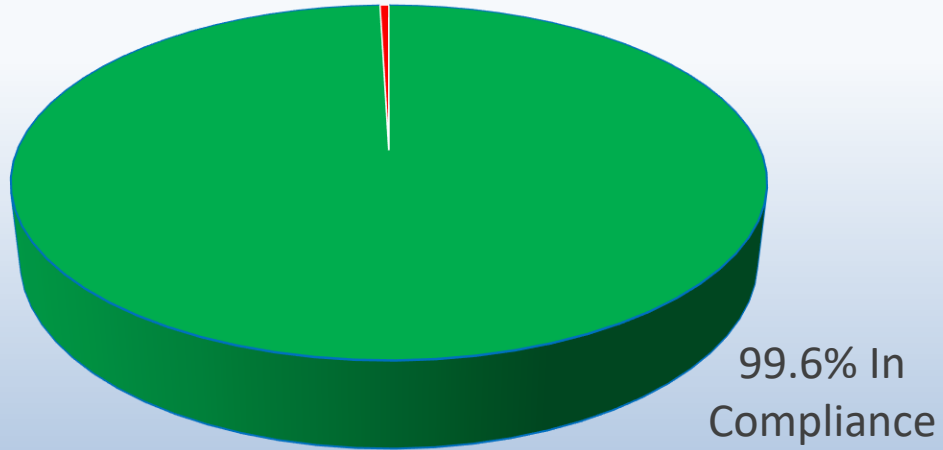


Pie Charts Based Upon Statewide Proportion of Appraised Value

Exhibit 3

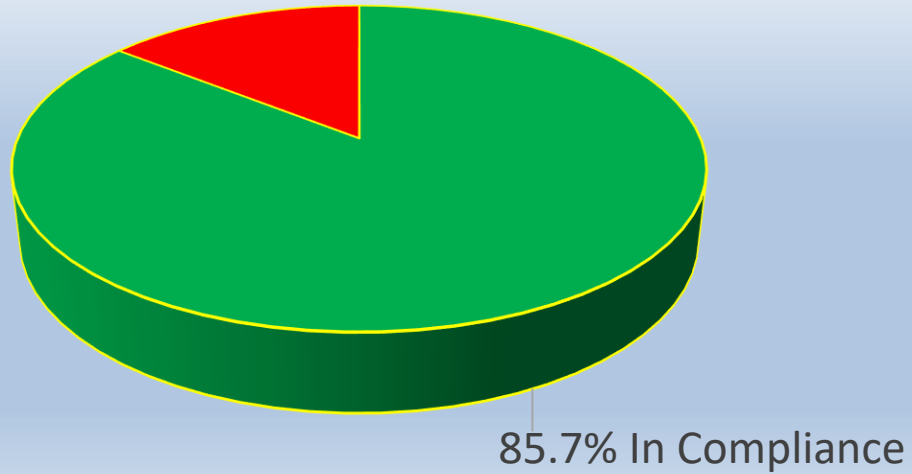
Residential PRD 2022 Final Ratio Study

0.4% Out of Compliance

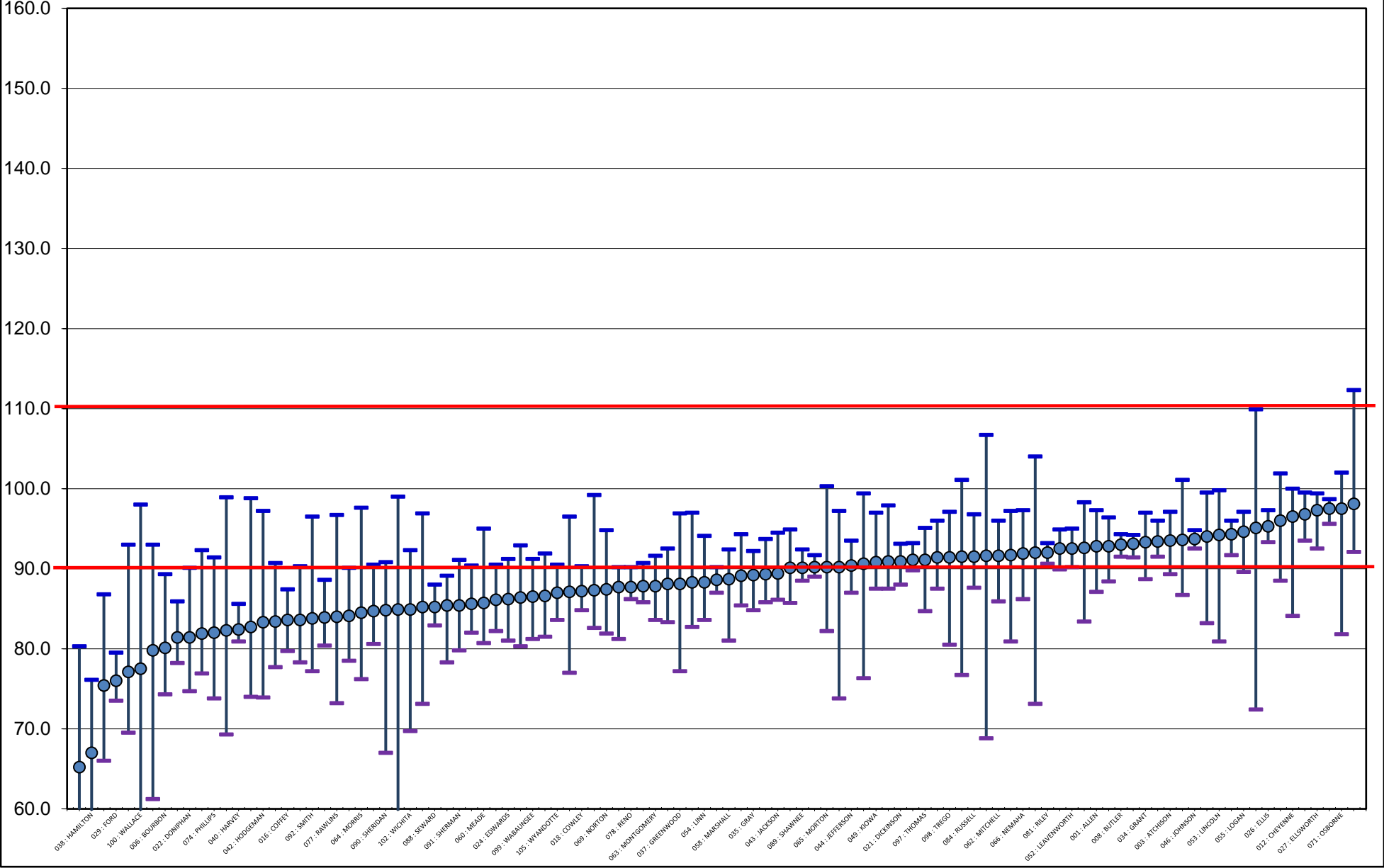


Comm./Indu. PRD 2022 Final Ratio Study

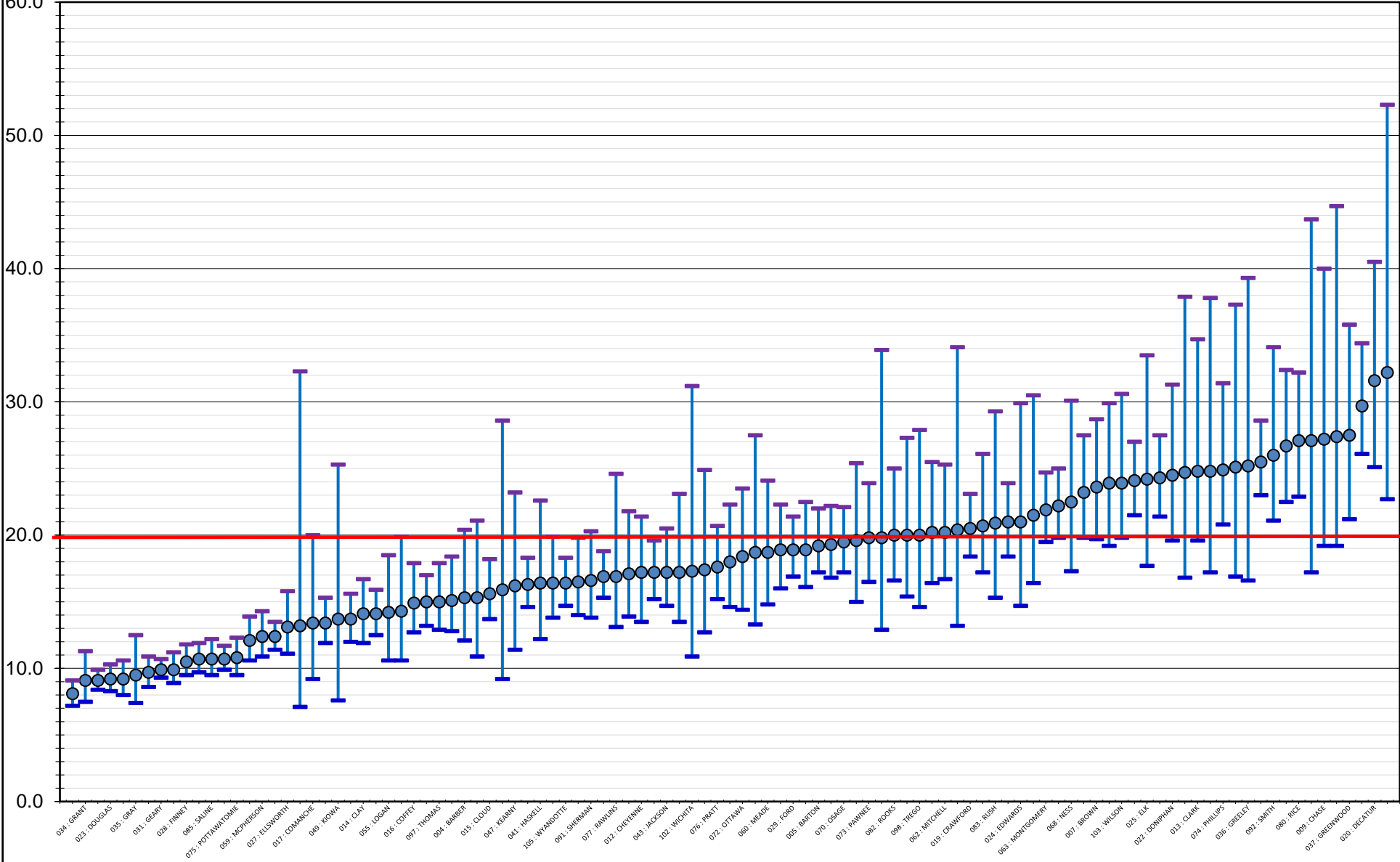
14.3% Out of Compliance



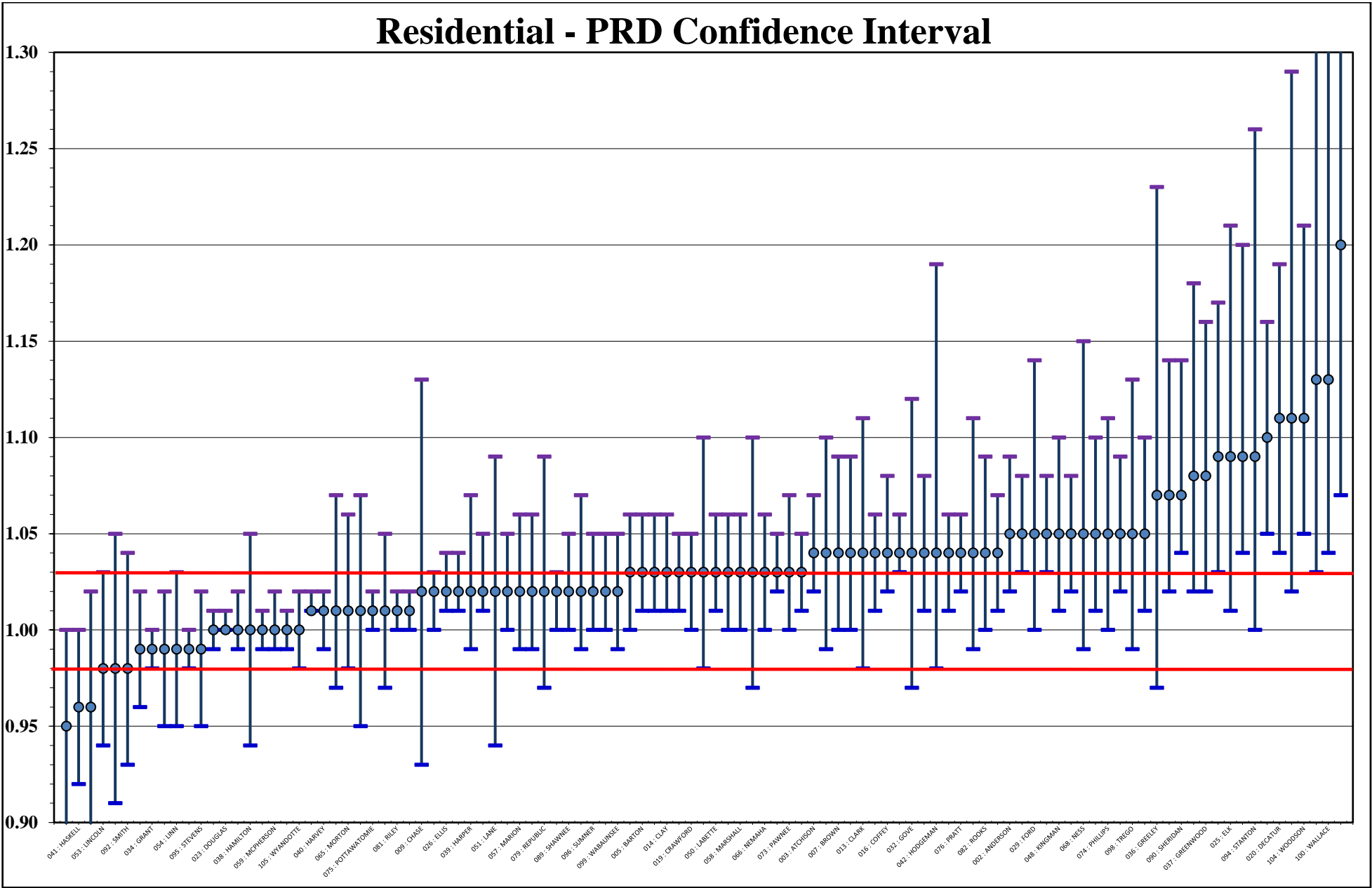
Residential - Median Ratio Confidence Interval



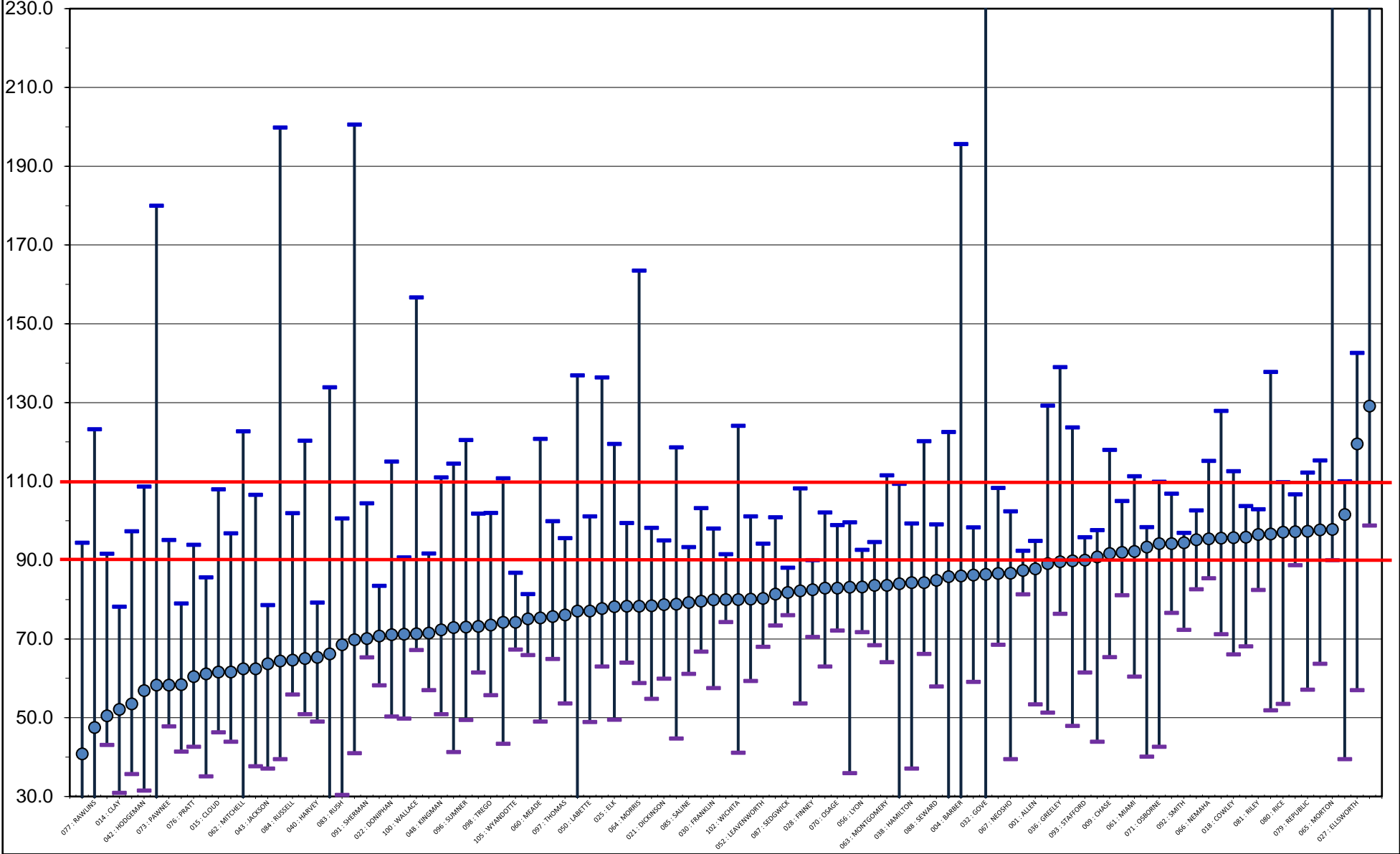
Residential - COD Confidence Interval



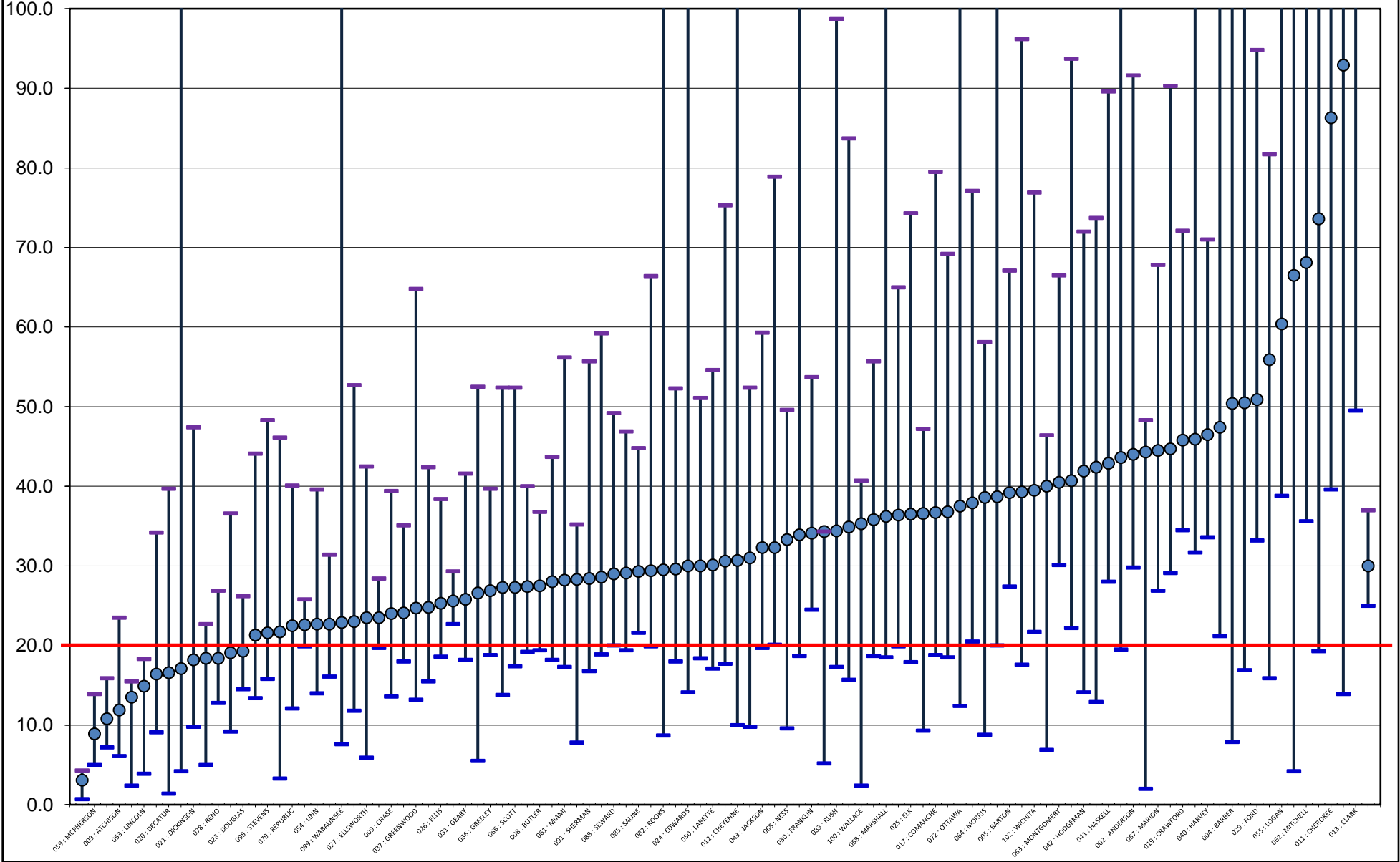
Residential - PRD Confidence Interval



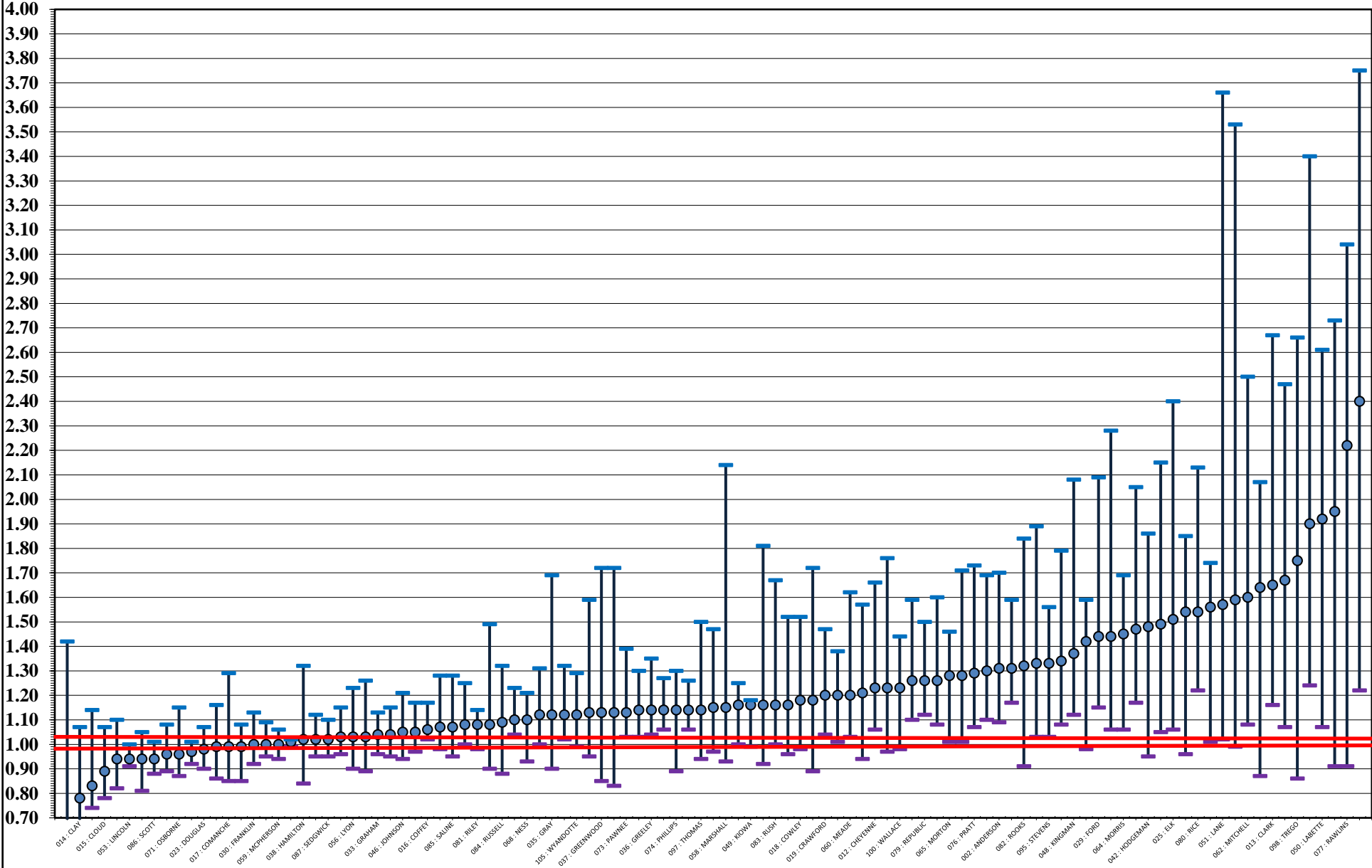
Commercial/Industrial - Median Ratio Confidence Interval



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		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	108	13	Original Number of Sales	71	13
Trimmed Outliers	10	0	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	98	13	Number of Ratios: Outliers Removed	65	13
Minimum Ratio	6.9	26.3	Minimum Ratio	19.2	41.8
Maximum Ratio	315.9	109.7	Maximum Ratio	255.7	212.8
Minimum Sale Price	4,640	14,700	Minimum Sale Price	9,690	25,000
Maximum Sale Price	412,230	175,150	Maximum Sale Price	399,400	1,200,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	92.8	87.8	Median Ratio	83.4	82.2
Lower Median Confidence Interval	87.1	53.4	Lower Median Confidence Interval	77.7	53.6
Upper Median Confidence Interval	97.3	94.9	Upper Median Confidence Interval	90.7	108.2
Broadened Median Ratio	92.9	78.9	Broadened Median Ratio	83.2	87.1
Coefficient of Dispersion (COD)	18.9	27.3	Coefficient of Dispersion (COD)	20.7	44.0
Lower COD Confidence Interval	16.0	13.8	Lower COD Confidence Interval	17.2	29.8
Upper COD Confidence Interval	22.3	52.4	Upper COD Confidence Interval	26.1	91.6
Value Weighted COD	16.3	23.8	Value Weighted COD	17.9	30.7
Coefficient of Concentration @10%	31.5	38.5	Coefficient of Concentration @10%	32.4	23.1
Coefficient of Concentration @15%	43.5	38.5	Coefficient of Concentration @15%	42.3	30.8
Coefficient of Concentration @20%	54.6	46.2	Coefficient of Concentration @20%	53.5	30.8
Coefficient of Concentration @50%	88.9	76.9	Coefficient of Concentration @50%	85.9	76.9
Coefficient of Concentration @100%	96.3	100.0	Coefficient of Concentration @100%	97.2	92.3
Coefficient of Interquartile Deviation	17.8	27.8	Coefficient of Interquartile Deviation	19.1	44.3
Median Percent Deviation	17.5	25.0	Median Percent Deviation	19.7	34.8
Lower Quartile (25 th Percentile)	73.5	46.9	Lower Quartile (25 th Percentile)	68.1	53.4
Upper Quartile (75 th Percentile)	106.6	95.7	Upper Quartile (75 th Percentile)	100.0	126.3
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	0.36	-0.40	Relative Skewness	0.59	1.03
Relative Kurtosis	3.05	1.70	Relative Kurtosis	3.74	3.36
Arithmetic Mean Ratio	89.8	73.0	Arithmetic Mean Ratio	83.9	96.2
Weighted Mean Ratio	87.5	74.0	Weighted Mean Ratio	80.0	73.6
Geometric Mean Ratio	87.2	66.6	Geometric Mean Ratio	81.1	86.0
Harmonic Mean Ratio	84.5	59.3	Harmonic Mean Ratio	78.1	77.5
Standard Deviation	21.7	28.6	Standard Deviation	22.0	49.3
Coefficient of Variation (COV)	24.2	39.1	Coefficient of Variation (COV)	26.2	51.3
Price-Related Differential (PRD)	1.03	0.99	Price-Related Differential (PRD)	1.05	1.31
Lower PRD Confidence Interval	1.00	0.86	Lower PRD Confidence Interval	1.02	1.09
Upper PRD Confidence interval	1.06	1.16	Upper PRD Confidence interval	1.09	1.70
Coef. of Price-Related Bias (PRB)	-0.07	0.10	Coef. of Price-Related Bias (PRB)	-0.18	-0.04
Lower PRB Confidence Interval	-0.13	-0.05	Lower PRB Confidence Interval	-0.29	-0.26
Upper PRB Confidence Interval	0.00	0.25	Upper PRB Confidence Interval	-0.07	0.18
Average Sale Price	93,392	78,165	Average Sale Price	124,724	294,846
Average Appraised Value	81,713	57,874	Average Appraised Value	99,805	217,059

Detailed Sample Statistics for the Residential and Commercial Subclasses

003 : ATCHISON			004 : BARBER S-4		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	178	12	Original Number of Sales	36	5
Trimmed Outliers	10	2	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	168	10	Number of Ratios: Outliers Removed	34	5
Minimum Ratio	36.9	37.5	Minimum Ratio	51.7	12.2
Maximum Ratio	281.0	158.9	Maximum Ratio	205.3	210.1
Minimum Sale Price	4,830	15,000	Minimum Sale Price	7,510	30,000
Maximum Sale Price	700,230	1,250,000	Maximum Sale Price	236,820	243,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	93.5	95.2	Median Ratio	93.6	86.0
Lower Median Confidence Interval	89.3	82.6	Lower Median Confidence Interval	86.7	19.2
Upper Median Confidence Interval	97.1	102.6	Upper Median Confidence Interval	101.1	195.6
Broadened Median Ratio	93.5	95.2	Broadened Median Ratio	92.4	81.8
Coefficient of Dispersion (COD)	21.0	11.9	Coefficient of Dispersion (COD)	15.3	50.4
Lower COD Confidence Interval	18.4	6.1	Lower COD Confidence Interval	12.1	7.9
Upper COD Confidence Interval	23.9	23.5	Upper COD Confidence Interval	20.4	190.7
Value Weighted COD	17.6	4.8	Value Weighted COD	17.6	50.3
Coefficient of Concentration @10%	30.9	41.7	Coefficient of Concentration @10%	41.7	40.0
Coefficient of Concentration @15%	42.1	58.3	Coefficient of Concentration @15%	55.6	40.0
Coefficient of Concentration @20%	51.7	66.7	Coefficient of Concentration @20%	66.7	60.0
Coefficient of Concentration @50%	87.1	83.3	Coefficient of Concentration @50%	94.4	60.0
Coefficient of Concentration @100%	96.6	100.0	Coefficient of Concentration @100%	97.2	80.0
Coefficient of Interquartile Deviation	19.4	12.1	Coefficient of Interquartile Deviation	13.5	63.0
Median Percent Deviation	19.5	11.1	Median Percent Deviation	13.6	18.0
Lower Quartile (25 th Percentile)	72.6	81.4	Lower Quartile (25 th Percentile)	83.9	41.4
Upper Quartile (75 th Percentile)	108.8	104.4	Upper Quartile (75 th Percentile)	109.3	149.6
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.30	1.12	Relative Skewness	-0.42	0.77
Relative Kurtosis	2.90	4.29	Relative Kurtosis	2.65	2.64
Arithmetic Mean Ratio	90.6	96.1	Arithmetic Mean Ratio	91.7	93.6
Weighted Mean Ratio	86.8	93.6	Weighted Mean Ratio	88.3	56.0
Geometric Mean Ratio	87.1	94.7	Geometric Mean Ratio	89.9	67.4
Harmonic Mean Ratio	83.6	93.5	Harmonic Mean Ratio	87.9	40.4
Standard Deviation	24.6	17.8	Standard Deviation	17.6	72.1
Coefficient of Variation (COV)	27.2	18.5	Coefficient of Variation (COV)	19.2	77.1
Price-Related Differential (PRD)	1.04	1.03	Price-Related Differential (PRD)	1.04	1.67
Lower PRD Confidence Interval	1.02	0.96	Lower PRD Confidence Interval	0.99	1.07
Upper PRD Confidence interval	1.07	1.15	Upper PRD Confidence interval	1.10	2.47
Coef. of Price-Related Bias (PRB)	-0.12	-0.10	Coef. of Price-Related Bias (PRB)	-0.09	-0.45
Lower PRB Confidence Interval	-0.17	-0.24	Lower PRB Confidence Interval	-0.20	-1.73
Upper PRB Confidence Interval	-0.07	0.03	Upper PRB Confidence Interval	0.02	0.83
Average Sale Price	133,462	251,100	Average Sale Price	75,064	116,600
Average Appraised Value	115,907	235,137	Average Appraised Value	66,302	65,316

Detailed Sample Statistics for the Residential and Commercial Subclasses

005 : BARTON			006 : BOURBON		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	163	22	Original Number of Sales	150	7
Trimmed Outliers	9	1	Trimmed Outliers	7	1
Number of Ratios: Outliers Removed	154	21	Number of Ratios: Outliers Removed	143	6
Minimum Ratio	18.2	19.9	Minimum Ratio	10.7	42.5
Maximum Ratio	221.2	185.7	Maximum Ratio	249.2	203.1
Minimum Sale Price	2,800	13,500	Minimum Sale Price	2,490	15,000
Maximum Sale Price	795,830	3,133,000	Maximum Sale Price	2,228,030	697,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.9	71.2	Median Ratio	80.1	78.4
Lower Median Confidence Interval	87.5	49.8	Lower Median Confidence Interval	74.3	54.8
Upper Median Confidence Interval	97.9	90.7	Upper Median Confidence Interval	89.3	98.2
Broadened Median Ratio	91.7	70.9	Broadened Median Ratio	79.9	74.1
Coefficient of Dispersion (COD)	19.2	39.2	Coefficient of Dispersion (COD)	29.7	24.8
Lower COD Confidence Interval	17.2	27.4	Lower COD Confidence Interval	26.1	15.5
Upper COD Confidence Interval	22.0	67.1	Upper COD Confidence Interval	34.4	42.4
Value Weighted COD	16.0	50.4	Value Weighted COD	28.5	21.5
Coefficient of Concentration @10%	32.5	18.2	Coefficient of Concentration @10%	19.3	28.6
Coefficient of Concentration @15%	44.8	18.2	Coefficient of Concentration @15%	34.7	28.6
Coefficient of Concentration @20%	57.7	27.3	Coefficient of Concentration @20%	42.7	28.6
Coefficient of Concentration @50%	91.4	77.3	Coefficient of Concentration @50%	75.3	85.7
Coefficient of Concentration @100%	96.9	90.9	Coefficient of Concentration @100%	95.3	85.7
Coefficient of Interquartile Deviation	16.8	36.9	Coefficient of Interquartile Deviation	23.9	27.6
Median Percent Deviation	16.3	33.3	Median Percent Deviation	23.1	25.1
Lower Quartile (25 th Percentile)	79.7	47.9	Lower Quartile (25 th Percentile)	65.3	54.8
Upper Quartile (75 th Percentile)	110.4	100.5	Upper Quartile (75 th Percentile)	103.6	98.2
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.25	1.06	Relative Skewness	0.18	0.07
Relative Kurtosis	2.71	4.35	Relative Kurtosis	2.90	1.71
Arithmetic Mean Ratio	94.0	73.1	Arithmetic Mean Ratio	81.8	69.6
Weighted Mean Ratio	91.0	49.0	Weighted Mean Ratio	72.2	74.4
Geometric Mean Ratio	91.5	65.5	Geometric Mean Ratio	75.5	67.0
Harmonic Mean Ratio	88.9	58.1	Harmonic Mean Ratio	66.7	64.3
Standard Deviation	21.5	35.1	Standard Deviation	29.6	20.7
Coefficient of Variation (COV)	22.9	48.1	Coefficient of Variation (COV)	36.1	29.7
Price-Related Differential (PRD)	1.03	1.49	Price-Related Differential (PRD)	1.13	0.94
Lower PRD Confidence Interval	1.01	1.05	Lower PRD Confidence Interval	1.03	0.82
Upper PRD Confidence interval	1.06	2.15	Upper PRD Confidence interval	1.32	1.10
Coef. of Price-Related Bias (PRB)	-0.03	-0.06	Coef. of Price-Related Bias (PRB)	-0.05	-0.08
Lower PRB Confidence Interval	-0.07	-0.19	Lower PRB Confidence Interval	-0.10	-0.49
Upper PRB Confidence Interval	0.01	0.08	Upper PRB Confidence Interval	0.01	0.32
Average Sale Price	108,065	469,318	Average Sale Price	122,553	230,333
Average Appraised Value	98,297	229,824	Average Appraised Value	88,441	171,462

Detailed Sample Statistics for the Residential and Commercial Subclasses

007 : BROWN			008 : BUTLER		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	104	13	Original Number of Sales	313	36
Trimmed Outliers	4	2	Trimmed Outliers	25	3
Number of Ratios: Outliers Removed	100	11	Number of Ratios: Outliers Removed	288	33
Minimum Ratio	16.0	27.9	Minimum Ratio	31.2	36.6
Maximum Ratio	266.5	351.8	Maximum Ratio	222.9	35910.2
Minimum Sale Price	3,790	15,000	Minimum Sale Price	18,160	4,600
Maximum Sale Price	415,500	2,100,000	Maximum Sale Price	1,429,960	2,050,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	96.0	82.9	Median Ratio	93.0	83.6
Lower Median Confidence Interval	88.5	63.0	Lower Median Confidence Interval	91.5	68.4
Upper Median Confidence Interval	101.9	102.1	Upper Median Confidence Interval	94.3	94.6
Broadened Median Ratio	96.1	82.2	Broadened Median Ratio	92.9	83.2
Coefficient of Dispersion (COD)	23.6	29.4	Coefficient of Dispersion (COD)	10.7	27.5
Lower COD Confidence Interval	19.7	19.9	Lower COD Confidence Interval	9.7	19.4
Upper COD Confidence Interval	28.7	66.4	Upper COD Confidence Interval	11.9	36.8
Value Weighted COD	21.4	51.8	Value Weighted COD	10.3	30.6
Coefficient of Concentration @10%	33.7	15.4	Coefficient of Concentration @10%	52.7	19.4
Coefficient of Concentration @15%	43.3	23.1	Coefficient of Concentration @15%	67.4	25.0
Coefficient of Concentration @20%	53.8	23.1	Coefficient of Concentration @20%	76.0	44.4
Coefficient of Concentration @50%	82.7	69.2	Coefficient of Concentration @50%	94.9	72.2
Coefficient of Concentration @100%	99.0	84.6	Coefficient of Concentration @100%	99.4	91.7
Coefficient of Interquartile Deviation	18.2	26.8	Coefficient of Interquartile Deviation	9.2	23.4
Median Percent Deviation	17.6	24.0	Median Percent Deviation	9.2	22.6
Lower Quartile (25 th Percentile)	74.8	59.8	Lower Quartile (25 th Percentile)	83.6	61.1
Upper Quartile (75 th Percentile)	109.8	104.3	Upper Quartile (75 th Percentile)	100.6	100.3
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectK
Relative Skewness	-0.17	-0.31	Relative Skewness	-0.01	0.62
Relative Kurtosis	2.88	1.98	Relative Kurtosis	3.07	2.97
Arithmetic Mean Ratio	92.0	73.3	Arithmetic Mean Ratio	91.7	81.2
Weighted Mean Ratio	88.6	44.6	Weighted Mean Ratio	91.5	71.2
Geometric Mean Ratio	86.4	68.2	Geometric Mean Ratio	90.7	76.1
Harmonic Mean Ratio	79.5	62.3	Harmonic Mean Ratio	89.7	71.1
Standard Deviation	29.2	26.0	Standard Deviation	13.0	29.4
Coefficient of Variation (COV)	31.8	35.5	Coefficient of Variation (COV)	14.2	36.2
Price-Related Differential (PRD)	1.04	1.64	Price-Related Differential (PRD)	1.00	1.14
Lower PRD Confidence Interval	1.00	0.87	Lower PRD Confidence Interval	0.99	1.03
Upper PRD Confidence interval	1.09	2.07	Upper PRD Confidence interval	1.01	1.30
Coef. of Price-Related Bias (PRB)	-0.03	0.06	Coef. of Price-Related Bias (PRB)	-0.03	10.86
Lower PRB Confidence Interval	-0.09	-0.45	Lower PRB Confidence Interval	-0.06	-5.22
Upper PRB Confidence Interval	0.03	0.56	Upper PRB Confidence Interval	0.00	26.93
Average Sale Price	109,504	267,682	Average Sale Price	216,002	407,680
Average Appraised Value	96,971	119,380	Average Appraised Value	197,691	290,104

Detailed Sample Statistics for the Residential and Commercial Subclasses

009 : CHASE			010 : CHAUTAUQUA		
S-6			S-8		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	23	10	Original Number of Sales	25	10
Trimmed Outliers	0	0	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	23	10	Number of Ratios: Outliers Removed	24	10
Minimum Ratio	20.1	61.6	Minimum Ratio	22.3	11.9
Maximum Ratio	124.4	148.1	Maximum Ratio	251.1	157.9
Minimum Sale Price	3,860	7,200	Minimum Sale Price	3,530	8,000
Maximum Sale Price	357,310	125,000	Maximum Sale Price	364,850	345,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	79.8	91.7	Median Ratio	91.6	83.1
Lower Median Confidence Interval	61.2	65.4	Lower Median Confidence Interval	68.8	35.9
Upper Median Confidence Interval	93.0	118.0	Upper Median Confidence Interval	106.7	99.6
Broadened Median Ratio	76.1	91.5	Broadened Median Ratio	94.5	78.8
Coefficient of Dispersion (COD)	27.2	24.0	Coefficient of Dispersion (COD)	27.4	39.3
Lower COD Confidence Interval	19.2	13.6	Lower COD Confidence Interval	19.2	17.6
Upper COD Confidence Interval	40.0	39.4	Upper COD Confidence Interval	44.7	96.2
Value Weighted COD	25.4	20.1	Value Weighted COD	29.5	59.8
Coefficient of Concentration @10%	17.4	50.0	Coefficient of Concentration @10%	12.0	30.0
Coefficient of Concentration @15%	17.4	50.0	Coefficient of Concentration @15%	24.0	40.0
Coefficient of Concentration @20%	30.4	50.0	Coefficient of Concentration @20%	40.0	40.0
Coefficient of Concentration @50%	91.3	90.0	Coefficient of Concentration @50%	80.0	60.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	96.0	100.0
Coefficient of Interquartile Deviation	27.4	23.9	Coefficient of Interquartile Deviation	27.9	38.4
Median Percent Deviation	26.3	19.2	Median Percent Deviation	24.7	35.6
Lower Quartile (25 th Percentile)	57.1	65.0	Lower Quartile (25 th Percentile)	60.5	34.0
Upper Quartile (75 th Percentile)	100.8	108.8	Upper Quartile (75 th Percentile)	111.6	97.9
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectK	Normality Test	RejectK	AcceptK
Relative Skewness	-0.13	0.68	Relative Skewness	-0.28	0.26
Relative Kurtosis	2.37	2.39	Relative Kurtosis	2.26	2.47
Arithmetic Mean Ratio	77.1	94.1	Arithmetic Mean Ratio	86.8	73.9
Weighted Mean Ratio	75.4	86.8	Weighted Mean Ratio	72.2	38.9
Geometric Mean Ratio	72.2	90.2	Geometric Mean Ratio	80.5	58.0
Harmonic Mean Ratio	65.8	86.7	Harmonic Mean Ratio	72.4	40.4
Standard Deviation	25.7	29.3	Standard Deviation	30.4	44.6
Coefficient of Variation (COV)	33.3	31.2	Coefficient of Variation (COV)	35.0	60.3
Price-Related Differential (PRD)	1.02	1.08	Price-Related Differential (PRD)	1.20	1.90
Lower PRD Confidence Interval	0.93	1.00	Lower PRD Confidence Interval	1.07	1.24
Upper PRD Confidence interval	1.13	1.25	Upper PRD Confidence interval	1.38	3.40
Coef. of Price-Related Bias (PRB)	0.01	-0.08	Coef. of Price-Related Bias (PRB)	-0.05	-0.28
Lower PRB Confidence Interval	-0.10	-0.26	Lower PRB Confidence Interval	-0.19	-0.50
Upper PRB Confidence Interval	0.12	0.11	Upper PRB Confidence Interval	0.08	-0.05
Average Sale Price	123,242	61,070	Average Sale Price	72,746	89,550
Average Appraised Value	92,878	53,020	Average Appraised Value	52,491	34,858

Detailed Sample Statistics for the Residential and Commercial Subclasses

011 : CHEROKEE			012 : CHEYENNE		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	216	13	Original Number of Sales	56	7
Trimmed Outliers	15	2	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	201	11	Number of Ratios: Outliers Removed	51	7
Minimum Ratio	28.0	31.8	Minimum Ratio	14.6	15.9
Maximum Ratio	282.5	1167.5	Maximum Ratio	235.9	155.7
Minimum Sale Price	2,750	400	Minimum Sale Price	8,830	30,000
Maximum Sale Price	438,760	800,000	Maximum Sale Price	432,740	150,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	84.7	64.4	Median Ratio	96.5	93.3
Lower Median Confidence Interval	80.6	39.5	Lower Median Confidence Interval	84.1	40.1
Upper Median Confidence Interval	90.5	199.8	Upper Median Confidence Interval	100.0	98.4
Broadened Median Ratio	84.7	68.8	Broadened Median Ratio	96.2	93.0
Coefficient of Dispersion (COD)	24.1	86.3	Coefficient of Dispersion (COD)	17.2	30.7
Lower COD Confidence Interval	21.5	39.6	Lower COD Confidence Interval	13.5	10.0
Upper COD Confidence Interval	27.0	183.9	Upper COD Confidence Interval	21.4	120.4
Value Weighted COD	19.9	152.0	Value Weighted COD	16.5	38.7
Coefficient of Concentration @10%	21.8	15.4	Coefficient of Concentration @10%	28.6	57.1
Coefficient of Concentration @15%	36.6	15.4	Coefficient of Concentration @15%	46.4	57.1
Coefficient of Concentration @20%	48.6	23.1	Coefficient of Concentration @20%	55.4	57.1
Coefficient of Concentration @50%	82.9	53.8	Coefficient of Concentration @50%	91.1	57.1
Coefficient of Concentration @100%	93.5	69.2	Coefficient of Concentration @100%	94.6	100.0
Coefficient of Interquartile Deviation	21.6	151.3	Coefficient of Interquartile Deviation	16.6	31.2
Median Percent Deviation	20.9	41.4	Median Percent Deviation	15.6	5.4
Lower Quartile (25 th Percentile)	67.5	38.9	Lower Quartile (25 th Percentile)	77.6	40.1
Upper Quartile (75 th Percentile)	104.1	233.7	Upper Quartile (75 th Percentile)	109.7	98.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.40	1.53	Relative Skewness	0.40	-0.06
Relative Kurtosis	2.95	3.89	Relative Kurtosis	2.75	2.45
Arithmetic Mean Ratio	84.4	87.2	Arithmetic Mean Ratio	93.4	84.2
Weighted Mean Ratio	81.8	127.6	Weighted Mean Ratio	89.9	68.3
Geometric Mean Ratio	80.6	66.9	Geometric Mean Ratio	91.2	69.5
Harmonic Mean Ratio	76.5	55.8	Harmonic Mean Ratio	89.1	51.2
Standard Deviation	25.3	77.1	Standard Deviation	20.4	45.0
Coefficient of Variation (COV)	29.9	88.5	Coefficient of Variation (COV)	21.9	53.5
Price-Related Differential (PRD)	1.03	0.68	Price-Related Differential (PRD)	1.04	1.23
Lower PRD Confidence Interval	1.01	0.47	Lower PRD Confidence Interval	1.00	1.06
Upper PRD Confidence interval	1.06	1.42	Upper PRD Confidence interval	1.09	1.66
Coef. of Price-Related Bias (PRB)	-0.11	-0.87	Coef. of Price-Related Bias (PRB)	-0.12	-0.30
Lower PRB Confidence Interval	-0.16	-2.35	Lower PRB Confidence Interval	-0.21	-1.22
Upper PRB Confidence Interval	-0.05	0.60	Upper PRB Confidence Interval	-0.04	0.63
Average Sale Price	101,321	150,182	Average Sale Price	116,696	85,397
Average Appraised Value	82,917	191,579	Average Appraised Value	104,942	58,363

Detailed Sample Statistics for the Residential and Commercial Subclasses

013 : CLARK			014 : CLAY		
<i>S-6</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	38	9	Original Number of Sales	97	7
Trimmed Outliers	2	0	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	36	9	Number of Ratios: Outliers Removed	92	7
Minimum Ratio	27.1	3.3	Minimum Ratio	42.4	23.5
Maximum Ratio	207.9	281.9	Maximum Ratio	208.8	80.9
Minimum Sale Price	7,690	5,000	Minimum Sale Price	4,790	20,000
Maximum Sale Price	216,220	140,000	Maximum Sale Price	308,530	725,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	82.7	58.3	Median Ratio	92.8	52.1
Lower Median Confidence Interval	74.0	14.4	Lower Median Confidence Interval	88.4	30.9
Upper Median Confidence Interval	98.8	180.0	Upper Median Confidence Interval	96.4	78.2
Broadened Median Ratio	83.2	58.5	Broadened Median Ratio	92.7	49.7
Coefficient of Dispersion (COD)	24.8	103.7	Coefficient of Dispersion (COD)	14.1	37.9
Lower COD Confidence Interval	19.6	49.5	Lower COD Confidence Interval	11.9	20.5
Upper COD Confidence Interval	34.7	503.5	Upper COD Confidence Interval	16.7	77.1
Value Weighted COD	23.2	58.3	Value Weighted COD	12.3	41.1
Coefficient of Concentration @10%	21.1	11.1	Coefficient of Concentration @10%	45.4	14.3
Coefficient of Concentration @15%	23.7	33.3	Coefficient of Concentration @15%	60.8	14.3
Coefficient of Concentration @20%	44.7	33.3	Coefficient of Concentration @20%	69.1	14.3
Coefficient of Concentration @50%	78.9	33.3	Coefficient of Concentration @50%	94.8	71.4
Coefficient of Concentration @100%	97.4	77.8	Coefficient of Concentration @100%	99.0	100.0
Coefficient of Interquartile Deviation	19.9	106.8	Coefficient of Interquartile Deviation	12.2	45.3
Median Percent Deviation	21.5	75.3	Median Percent Deviation	11.3	40.7
Lower Quartile (25 th Percentile)	69.2	19.3	Lower Quartile (25 th Percentile)	79.7	30.9
Upper Quartile (75 th Percentile)	102.1	143.8	Upper Quartile (75 th Percentile)	102.3	78.2
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	RejectK	Normality Test	RejectK	Reject4
Relative Skewness	-0.10	1.21	Relative Skewness	0.17	0.07
Relative Kurtosis	2.74	3.32	Relative Kurtosis	2.81	1.38
Arithmetic Mean Ratio	82.3	87.4	Arithmetic Mean Ratio	92.2	51.8
Weighted Mean Ratio	79.0	53.1	Weighted Mean Ratio	89.1	66.7
Geometric Mean Ratio	77.9	47.5	Geometric Mean Ratio	90.6	46.8
Harmonic Mean Ratio	72.6	18.7	Harmonic Mean Ratio	89.0	42.1
Standard Deviation	25.4	90.7	Standard Deviation	16.8	23.7
Coefficient of Variation (COV)	30.9	103.8	Coefficient of Variation (COV)	18.3	45.8
Price-Related Differential (PRD)	1.04	1.65	Price-Related Differential (PRD)	1.03	0.78
Lower PRD Confidence Interval	0.98	1.16	Lower PRD Confidence Interval	1.01	0.62
Upper PRD Confidence interval	1.11	2.67	Upper PRD Confidence interval	1.06	1.07
Coef. of Price-Related Bias (PRB)	-0.09	0.03	Coef. of Price-Related Bias (PRB)	-0.11	0.16
Lower PRB Confidence Interval	-0.22	-1.04	Lower PRB Confidence Interval	-0.16	-0.04
Upper PRB Confidence Interval	0.03	1.09	Upper PRB Confidence Interval	-0.05	0.36
Average Sale Price	79,893	41,111	Average Sale Price	116,015	172,714
Average Appraised Value	63,099	21,834	Average Appraised Value	103,423	115,234

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	140	7	Original Number of Sales	107	7
Trimmed Outliers	14	0	Trimmed Outliers	14	0
Number of Ratios: Outliers Removed	126	7	Number of Ratios: Outliers Removed	93	7
Minimum Ratio	18.4	43.0	Minimum Ratio	35.6	55.6
Maximum Ratio	255.3	165.3	Maximum Ratio	306.0	193.2
Minimum Sale Price	4,750	10,250	Minimum Sale Price	5,490	55,000
Maximum Sale Price	283,140	95,000	Maximum Sale Price	419,630	125,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	88.1	61.6	Median Ratio	83.6	77.7
Lower Median Confidence Interval	83.3	46.3	Lower Median Confidence Interval	79.7	63.0
Upper Median Confidence Interval	92.5	108.0	Upper Median Confidence Interval	87.4	136.4
Broadened Median Ratio	87.8	62.6	Broadened Median Ratio	83.5	81.1
Coefficient of Dispersion (COD)	15.6	43.6	Coefficient of Dispersion (COD)	14.9	40.7
Lower COD Confidence Interval	13.7	19.5	Lower COD Confidence Interval	12.7	22.2
Upper COD Confidence Interval	18.2	111.1	Upper COD Confidence Interval	17.9	93.7
Value Weighted COD	14.4	62.9	Value Weighted COD	14.2	33.2
Coefficient of Concentration @10%	37.9	42.9	Coefficient of Concentration @10%	35.5	28.6
Coefficient of Concentration @15%	52.9	42.9	Coefficient of Concentration @15%	54.2	42.9
Coefficient of Concentration @20%	62.1	42.9	Coefficient of Concentration @20%	68.2	57.1
Coefficient of Concentration @50%	88.6	71.4	Coefficient of Concentration @50%	86.9	71.4
Coefficient of Concentration @100%	96.4	85.7	Coefficient of Concentration @100%	95.3	85.7
Coefficient of Interquartile Deviation	14.5	50.1	Coefficient of Interquartile Deviation	14.1	47.2
Median Percent Deviation	13.6	24.8	Median Percent Deviation	14.0	19.0
Lower Quartile (25 th Percentile)	76.7	46.3	Lower Quartile (25 th Percentile)	72.5	63.0
Upper Quartile (75 th Percentile)	102.3	108.0	Upper Quartile (75 th Percentile)	96.1	136.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectW	Normality Test	RejectK	RejectW
Relative Skewness	0.24	1.26	Relative Skewness	0.13	1.14
Relative Kurtosis	3.11	3.20	Relative Kurtosis	3.34	2.90
Arithmetic Mean Ratio	87.6	78.6	Arithmetic Mean Ratio	81.3	98.8
Weighted Mean Ratio	84.6	88.4	Weighted Mean Ratio	77.8	93.0
Geometric Mean Ratio	85.9	70.6	Geometric Mean Ratio	79.8	90.3
Harmonic Mean Ratio	84.1	64.8	Harmonic Mean Ratio	78.1	83.8
Standard Deviation	17.2	43.7	Standard Deviation	15.7	49.1
Coefficient of Variation (COV)	19.7	55.6	Coefficient of Variation (COV)	19.4	49.7
Price-Related Differential (PRD)	1.04	0.89	Price-Related Differential (PRD)	1.04	1.06
Lower PRD Confidence Interval	1.01	0.78	Lower PRD Confidence Interval	1.02	1.02
Upper PRD Confidence interval	1.06	1.07	Upper PRD Confidence interval	1.08	1.17
Coef. of Price-Related Bias (PRB)	-0.08	0.34	Coef. of Price-Related Bias (PRB)	-0.11	0.72
Lower PRB Confidence Interval	-0.14	-0.16	Lower PRB Confidence Interval	-0.18	-1.02
Upper PRB Confidence Interval	-0.02	0.82	Upper PRB Confidence Interval	-0.04	2.47
Average Sale Price	83,001	55,107	Average Sale Price	146,180	73,214
Average Appraised Value	70,224	48,727	Average Appraised Value	113,759	68,066

Detailed Sample Statistics for the Residential and Commercial Subclasses

017 : COMANCHE			018 : COWLEY		
<i>S-6</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	21	8	Original Number of Sales	189	21
Trimmed Outliers	3	0	Trimmed Outliers	15	0
Number of Ratios: Outliers Removed	18	8	Number of Ratios: Outliers Removed	174	21
Minimum Ratio	30.4	26.5	Minimum Ratio	27.6	30.5
Maximum Ratio	258.3	146.9	Maximum Ratio	317.8	148.7
Minimum Sale Price	5,950	10,000	Minimum Sale Price	1,850	25,000
Maximum Sale Price	139,960	85,000	Maximum Sale Price	346,260	675,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	81.9	96.6	Median Ratio	87.2	95.7
Lower Median Confidence Interval	76.9	51.9	Lower Median Confidence Interval	84.8	66.1
Upper Median Confidence Interval	92.3	137.8	Upper Median Confidence Interval	90.3	112.6
Broadened Median Ratio	82.2	93.6	Broadened Median Ratio	87.2	92.6
Coefficient of Dispersion (COD)	13.4	36.7	Coefficient of Dispersion (COD)	17.2	29.1
Lower COD Confidence Interval	9.2	18.8	Lower COD Confidence Interval	15.2	19.4
Upper COD Confidence Interval	20.0	79.5	Upper COD Confidence Interval	19.6	46.9
Value Weighted COD	12.4	35.6	Value Weighted COD	15.2	38.1
Coefficient of Concentration @10%	38.1	0.0	Coefficient of Concentration @10%	35.4	19.0
Coefficient of Concentration @15%	47.6	25.0	Coefficient of Concentration @15%	50.8	23.8
Coefficient of Concentration @20%	61.9	37.5	Coefficient of Concentration @20%	63.0	38.1
Coefficient of Concentration @50%	85.7	75.0	Coefficient of Concentration @50%	89.4	76.2
Coefficient of Concentration @100%	90.5	100.0	Coefficient of Concentration @100%	96.3	100.0
Coefficient of Interquartile Deviation	13.9	40.4	Coefficient of Interquartile Deviation	15.6	30.2
Median Percent Deviation	15.2	40.1	Median Percent Deviation	14.5	24.7
Lower Quartile (25 th Percentile)	72.0	54.0	Lower Quartile (25 th Percentile)	75.5	56.8
Upper Quartile (75 th Percentile)	94.8	132.1	Upper Quartile (75 th Percentile)	102.7	114.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptK
Relative Skewness	-0.44	-0.15	Relative Skewness	-0.28	-0.08
Relative Kurtosis	2.37	1.73	Relative Kurtosis	3.08	1.93
Arithmetic Mean Ratio	80.8	91.4	Arithmetic Mean Ratio	86.5	89.0
Weighted Mean Ratio	81.7	92.4	Weighted Mean Ratio	84.3	75.4
Geometric Mean Ratio	79.4	80.6	Geometric Mean Ratio	84.1	82.1
Harmonic Mean Ratio	78.0	68.2	Harmonic Mean Ratio	81.3	74.6
Standard Deviation	14.5	42.8	Standard Deviation	19.4	33.6
Coefficient of Variation (COV)	17.9	46.8	Coefficient of Variation (COV)	22.4	37.7
Price-Related Differential (PRD)	0.99	0.99	Price-Related Differential (PRD)	1.03	1.18
Lower PRD Confidence Interval	0.96	0.85	Lower PRD Confidence Interval	1.01	0.98
Upper PRD Confidence interval	1.02	1.29	Upper PRD Confidence interval	1.05	1.52
Coef. of Price-Related Bias (PRB)	-0.27	0.06	Coef. of Price-Related Bias (PRB)	-0.09	-0.01
Lower PRB Confidence Interval	-0.57	-0.29	Lower PRB Confidence Interval	-0.14	-0.16
Upper PRB Confidence Interval	0.04	0.40	Upper PRB Confidence Interval	-0.04	0.15
Average Sale Price	63,566	40,313	Average Sale Price	114,227	135,528
Average Appraised Value	51,922	37,239	Average Appraised Value	96,334	102,125

Detailed Sample Statistics for the Residential and Commercial Subclasses

019 : CRAWFORD			020 : DECATUR		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	209	32	Original Number of Sales	46	4
Trimmed Outliers	9	3	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	200	29	Number of Ratios: Outliers Removed	45	4
Minimum Ratio	8.0	16.5	Minimum Ratio	31.9	41.6
Maximum Ratio	263.8	737.3	Maximum Ratio	211.9	97.9
Minimum Sale Price	3,730	4,000	Minimum Sale Price	2,760	33,000
Maximum Sale Price	691,550	4,125,000	Maximum Sale Price	255,220	120,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	81.4	58.4	Median Ratio	65.2	90.8
Lower Median Confidence Interval	78.2	41.4	Lower Median Confidence Interval	59.9	43.9
Upper Median Confidence Interval	85.9	79.0	Upper Median Confidence Interval	80.3	97.6
Broadened Median Ratio	81.5	57.5	Broadened Median Ratio	65.7	83.8
Coefficient of Dispersion (COD)	20.5	45.8	Coefficient of Dispersion (COD)	31.6	16.6
Lower COD Confidence Interval	18.4	34.5	Lower COD Confidence Interval	25.1	1.4
Upper COD Confidence Interval	23.1	72.1	Upper COD Confidence Interval	40.5	39.7
Value Weighted COD	16.9	27.8	Value Weighted COD	21.7	27.1
Coefficient of Concentration @10%	29.7	12.5	Coefficient of Concentration @10%	30.4	75.0
Coefficient of Concentration @15%	45.5	18.8	Coefficient of Concentration @15%	43.5	75.0
Coefficient of Concentration @20%	56.5	25.0	Coefficient of Concentration @20%	47.8	75.0
Coefficient of Concentration @50%	88.0	56.3	Coefficient of Concentration @50%	73.9	75.0
Coefficient of Concentration @100%	97.6	87.5	Coefficient of Concentration @100%	95.7	100.0
Coefficient of Interquartile Deviation	17.5	48.8	Coefficient of Interquartile Deviation	26.6	23.8
Median Percent Deviation	16.3	46.1	Median Percent Deviation	21.9	5.0
Lower Quartile (25 th Percentile)	68.8	34.0	Lower Quartile (25 th Percentile)	58.1	53.4
Upper Quartile (75 th Percentile)	97.3	91.0	Upper Quartile (75 th Percentile)	92.7	96.6
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectW
Relative Skewness	-0.03	0.44	Relative Skewness	0.68	-1.08
Relative Kurtosis	2.92	2.41	Relative Kurtosis	2.40	2.28
Arithmetic Mean Ratio	81.8	56.7	Arithmetic Mean Ratio	75.0	80.3
Weighted Mean Ratio	79.8	47.1	Weighted Mean Ratio	67.7	69.1
Geometric Mean Ratio	78.8	48.8	Geometric Mean Ratio	70.5	76.1
Harmonic Mean Ratio	75.3	40.9	Harmonic Mean Ratio	66.3	71.0
Standard Deviation	21.2	29.5	Standard Deviation	27.0	26.1
Coefficient of Variation (COV)	25.9	52.0	Coefficient of Variation (COV)	36.0	32.5
Price-Related Differential (PRD)	1.03	1.20	Price-Related Differential (PRD)	1.11	1.16
Lower PRD Confidence Interval	1.00	1.04	Lower PRD Confidence Interval	1.04	1.00
Upper PRD Confidence interval	1.05	1.47	Upper PRD Confidence interval	1.19	1.25
Coef. of Price-Related Bias (PRB)	-0.08	-0.39	Coef. of Price-Related Bias (PRB)	-0.13	0.00
Lower PRB Confidence Interval	-0.12	-0.87	Lower PRB Confidence Interval	-0.24	0.00
Upper PRB Confidence Interval	-0.04	0.10	Upper PRB Confidence Interval	-0.02	0.00
Average Sale Price	126,987	358,910	Average Sale Price	88,057	64,500
Average Appraised Value	101,397	168,968	Average Appraised Value	59,630	44,558

Detailed Sample Statistics for the Residential and Commercial Subclasses

021 : DICKINSON			022 : DONIPHAN		
			<i>S-2</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	236	9	Original Number of Sales	55	5
Trimmed Outliers	19	1	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	217	8	Number of Ratios: Outliers Removed	52	5
Minimum Ratio	20.2	36.1	Minimum Ratio	22.7	47.7
Maximum Ratio	278.9	353.1	Maximum Ratio	280.8	116.9
Minimum Sale Price	4,420	10,000	Minimum Sale Price	4,830	32,000
Maximum Sale Price	347,060	634,950	Maximum Sale Price	392,810	1,600,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.9	78.7	Median Ratio	81.4	71.1
Lower Median Confidence Interval	88.0	59.9	Lower Median Confidence Interval	74.7	50.3
Upper Median Confidence Interval	93.1	95.0	Upper Median Confidence Interval	90.1	115.0
Broadened Median Ratio	90.9	81.6	Broadened Median Ratio	81.6	80.6
Coefficient of Dispersion (COD)	16.3	18.2	Coefficient of Dispersion (COD)	24.5	28.3
Lower COD Confidence Interval	14.6	9.8	Lower COD Confidence Interval	19.6	7.8
Upper COD Confidence Interval	18.3	47.4	Upper COD Confidence Interval	31.3	35.2
Value Weighted COD	14.5	19.5	Value Weighted COD	23.5	31.5
Coefficient of Concentration @10%	39.0	22.2	Coefficient of Concentration @10%	27.3	40.0
Coefficient of Concentration @15%	53.4	44.4	Coefficient of Concentration @15%	38.2	40.0
Coefficient of Concentration @20%	61.9	55.6	Coefficient of Concentration @20%	43.6	40.0
Coefficient of Concentration @50%	91.1	77.8	Coefficient of Concentration @50%	83.6	80.0
Coefficient of Concentration @100%	97.9	88.9	Coefficient of Concentration @100%	94.5	100.0
Coefficient of Interquartile Deviation	13.2	18.5	Coefficient of Interquartile Deviation	22.5	35.4
Median Percent Deviation	13.7	15.2	Median Percent Deviation	21.5	33.0
Lower Quartile (25 th Percentile)	77.2	63.7	Lower Quartile (25 th Percentile)	64.0	58.7
Upper Quartile (75 th Percentile)	101.1	92.8	Upper Quartile (75 th Percentile)	100.6	109.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	AcceptW
Relative Skewness	-0.12	-0.87	Relative Skewness	0.05	0.17
Relative Kurtosis	2.81	2.80	Relative Kurtosis	2.88	1.67
Arithmetic Mean Ratio	89.3	74.3	Arithmetic Mean Ratio	79.3	81.3
Weighted Mean Ratio	87.8	77.2	Weighted Mean Ratio	72.9	52.0
Geometric Mean Ratio	87.2	71.5	Geometric Mean Ratio	74.9	77.5
Harmonic Mean Ratio	84.9	68.0	Harmonic Mean Ratio	69.7	73.7
Standard Deviation	18.9	19.5	Standard Deviation	25.1	27.5
Coefficient of Variation (COV)	21.1	26.2	Coefficient of Variation (COV)	31.7	33.8
Price-Related Differential (PRD)	1.02	0.96	Price-Related Differential (PRD)	1.09	1.56
Lower PRD Confidence Interval	1.00	0.89	Lower PRD Confidence Interval	1.03	1.01
Upper PRD Confidence interval	1.03	1.08	Upper PRD Confidence interval	1.17	1.74
Coef. of Price-Related Bias (PRB)	-0.04	-0.50	Coef. of Price-Related Bias (PRB)	-0.25	-0.14
Lower PRB Confidence Interval	-0.08	-1.10	Lower PRB Confidence Interval	-0.38	-0.37
Upper PRB Confidence Interval	-0.01	0.10	Upper PRB Confidence Interval	-0.13	0.10
Average Sale Price	131,618	250,744	Average Sale Price	107,071	362,800
Average Appraised Value	115,574	193,685	Average Appraised Value	78,038	188,702

Detailed Sample Statistics for the Residential and Commercial Subclasses

023 : DOUGLAS			024 : EDWARDS S-6		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	256	37	Original Number of Sales	29	6
Trimmed Outliers	19	2	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	237	35	Number of Ratios: Outliers Removed	28	6
Minimum Ratio	49.2	22.8	Minimum Ratio	37.1	25.4
Maximum Ratio	258.9	126.7	Maximum Ratio	168.4	131.6
Minimum Sale Price	61,990	67,170	Minimum Sale Price	4,620	5,000
Maximum Sale Price	1,224,430	10,567,350	Maximum Sale Price	168,330	120,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	93.1	75.1	Median Ratio	86.2	89.8
Lower Median Confidence Interval	91.4	65.9	Lower Median Confidence Interval	81.0	47.9
Upper Median Confidence Interval	94.2	81.4	Upper Median Confidence Interval	91.2	123.7
Broadened Median Ratio	93.1	74.9	Broadened Median Ratio	86.3	90.9
Coefficient of Dispersion (COD)	9.2	19.3	Coefficient of Dispersion (COD)	21.0	30.0
Lower COD Confidence Interval	8.3	14.5	Lower COD Confidence Interval	14.7	14.1
Upper COD Confidence Interval	10.3	26.2	Upper COD Confidence Interval	29.9	115.5
Value Weighted COD	9.2	15.7	Value Weighted COD	20.3	21.2
Coefficient of Concentration @10%	59.0	35.1	Coefficient of Concentration @10%	41.4	33.3
Coefficient of Concentration @15%	74.2	45.9	Coefficient of Concentration @15%	41.4	33.3
Coefficient of Concentration @20%	83.2	59.5	Coefficient of Concentration @20%	51.7	33.3
Coefficient of Concentration @50%	98.0	83.8	Coefficient of Concentration @50%	89.7	83.3
Coefficient of Concentration @100%	99.6	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	8.1	15.8	Coefficient of Interquartile Deviation	21.7	33.8
Median Percent Deviation	8.3	16.3	Median Percent Deviation	19.2	25.3
Lower Quartile (25 th Percentile)	84.7	61.3	Lower Quartile (25 th Percentile)	67.2	59.1
Upper Quartile (75 th Percentile)	99.9	85.1	Upper Quartile (75 th Percentile)	104.6	119.8
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.02	0.17	Relative Skewness	0.35	-0.54
Relative Kurtosis	3.15	3.10	Relative Kurtosis	3.21	2.38
Arithmetic Mean Ratio	92.1	74.7	Arithmetic Mean Ratio	85.7	87.1
Weighted Mean Ratio	91.7	75.9	Weighted Mean Ratio	79.2	77.2
Geometric Mean Ratio	91.4	72.2	Geometric Mean Ratio	82.0	77.6
Harmonic Mean Ratio	90.8	69.4	Harmonic Mean Ratio	78.1	65.1
Standard Deviation	11.0	19.1	Standard Deviation	25.1	37.3
Coefficient of Variation (COV)	11.9	25.5	Coefficient of Variation (COV)	29.3	42.8
Price-Related Differential (PRD)	1.00	0.98	Price-Related Differential (PRD)	1.08	1.13
Lower PRD Confidence Interval	1.00	0.90	Lower PRD Confidence Interval	1.02	0.95
Upper PRD Confidence interval	1.01	1.07	Upper PRD Confidence interval	1.18	1.59
Coef. of Price-Related Bias (PRB)	-0.03	0.01	Coef. of Price-Related Bias (PRB)	-0.01	-0.13
Lower PRB Confidence Interval	-0.06	-0.05	Lower PRB Confidence Interval	-0.13	-0.45
Upper PRB Confidence Interval	0.02	0.06	Upper PRB Confidence Interval	0.10	0.19
Average Sale Price	313,005	1,791,085	Average Sale Price	57,592	64,559
Average Appraised Value	286,914	1,358,799	Average Appraised Value	45,620	49,847

Detailed Sample Statistics for the Residential and Commercial Subclasses

025 : ELK			026 : ELLIS		
S-8					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	28	9	Original Number of Sales	200	31
Trimmed Outliers	1	0	Trimmed Outliers	8	2
Number of Ratios: Outliers Removed	27	9	Number of Ratios: Outliers Removed	192	29
Minimum Ratio	34.8	39.1	Minimum Ratio	35.5	26.9
Maximum Ratio	176.1	177.3	Maximum Ratio	197.2	192.9
Minimum Sale Price	3,610	3,000	Minimum Sale Price	26,200	39,870
Maximum Sale Price	173,060	1,000,000	Maximum Sale Price	813,830	1,823,650
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	77.1	78.2	Median Ratio	95.3	92.0
Lower Median Confidence Interval	69.5	49.5	Lower Median Confidence Interval	93.3	81.1
Upper Median Confidence Interval	93.0	119.5	Upper Median Confidence Interval	97.3	105.0
Broadened Median Ratio	77.1	75.6	Broadened Median Ratio	95.4	91.2
Coefficient of Dispersion (COD)	24.2	36.5	Coefficient of Dispersion (COD)	9.7	25.3
Lower COD Confidence Interval	17.7	17.9	Lower COD Confidence Interval	8.6	18.6
Upper COD Confidence Interval	33.5	74.3	Upper COD Confidence Interval	10.9	38.4
Value Weighted COD	15.9	33.6	Value Weighted COD	10.3	34.4
Coefficient of Concentration @10%	32.1	22.2	Coefficient of Concentration @10%	56.5	19.4
Coefficient of Concentration @15%	39.3	44.4	Coefficient of Concentration @15%	73.5	41.9
Coefficient of Concentration @20%	50.0	44.4	Coefficient of Concentration @20%	86.5	48.4
Coefficient of Concentration @50%	85.7	77.8	Coefficient of Concentration @50%	99.0	77.4
Coefficient of Concentration @100%	96.4	88.9	Coefficient of Concentration @100%	99.5	96.8
Coefficient of Interquartile Deviation	24.5	33.3	Coefficient of Interquartile Deviation	8.4	19.3
Median Percent Deviation	21.4	32.5	Median Percent Deviation	7.9	21.6
Lower Quartile (25 th Percentile)	65.1	51.1	Lower Quartile (25 th Percentile)	86.5	71.1
Upper Quartile (75 th Percentile)	102.9	103.2	Upper Quartile (75 th Percentile)	102.5	106.6
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	0.65	1.22	Relative Skewness	-0.13	-0.55
Relative Kurtosis	3.06	3.66	Relative Kurtosis	2.81	2.85
Arithmetic Mean Ratio	81.6	83.5	Arithmetic Mean Ratio	94.1	86.6
Weighted Mean Ratio	74.6	55.3	Weighted Mean Ratio	92.1	75.3
Geometric Mean Ratio	78.1	75.6	Geometric Mean Ratio	93.4	80.2
Harmonic Mean Ratio	74.6	69.1	Harmonic Mean Ratio	92.6	71.5
Standard Deviation	24.8	42.5	Standard Deviation	11.7	29.3
Coefficient of Variation (COV)	30.3	50.9	Coefficient of Variation (COV)	12.4	33.8
Price-Related Differential (PRD)	1.09	1.51	Price-Related Differential (PRD)	1.02	1.15
Lower PRD Confidence Interval	1.01	1.06	Lower PRD Confidence Interval	1.01	0.97
Upper PRD Confidence interval	1.21	2.40	Upper PRD Confidence interval	1.04	1.47
Coef. of Price-Related Bias (PRB)	-0.09	-0.05	Coef. of Price-Related Bias (PRB)	-0.06	-0.03
Lower PRB Confidence Interval	-0.20	-0.24	Lower PRB Confidence Interval	-0.09	-0.15
Upper PRB Confidence Interval	0.02	0.14	Upper PRB Confidence Interval	-0.03	0.09
Average Sale Price	47,283	133,333	Average Sale Price	201,698	317,690
Average Appraised Value	35,260	73,761	Average Appraised Value	185,766	239,162

Detailed Sample Statistics for the Residential and Commercial Subclasses

027 : ELLSWORTH			028 : FINNEY		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	92	5	Original Number of Sales	186	31
Trimmed Outliers	5	0	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	87	5	Number of Ratios: Outliers Removed	181	31
Minimum Ratio	57.2	53.2	Minimum Ratio	41.7	11.7
Maximum Ratio	222.6	143.6	Maximum Ratio	177.5	145.0
Minimum Sale Price	6,660	9,000	Minimum Sale Price	38,510	88,840
Maximum Sale Price	336,250	500,000	Maximum Sale Price	564,650	9,114,810
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	97.3	119.5	Median Ratio	92.5	82.5
Lower Median Confidence Interval	92.5	57.0	Lower Median Confidence Interval	89.9	70.5
Upper Median Confidence Interval	99.4	142.6	Upper Median Confidence Interval	94.9	90.0
Broadened Median Ratio	97.0	113.3	Broadened Median Ratio	92.4	80.9
Coefficient of Dispersion (COD)	13.1	23.5	Coefficient of Dispersion (COD)	10.5	27.4
Lower COD Confidence Interval	11.1	5.9	Lower COD Confidence Interval	9.5	19.2
Upper COD Confidence Interval	15.8	42.5	Upper COD Confidence Interval	11.8	40.0
Value Weighted COD	13.5	29.9	Value Weighted COD	9.8	43.7
Coefficient of Concentration @10%	44.6	20.0	Coefficient of Concentration @10%	56.5	25.8
Coefficient of Concentration @15%	64.1	40.0	Coefficient of Concentration @15%	72.0	41.9
Coefficient of Concentration @20%	76.1	40.0	Coefficient of Concentration @20%	84.4	51.6
Coefficient of Concentration @50%	94.6	80.0	Coefficient of Concentration @50%	98.9	80.6
Coefficient of Concentration @100%	98.9	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	11.3	29.4	Coefficient of Interquartile Deviation	8.7	22.8
Median Percent Deviation	11.3	20.2	Median Percent Deviation	8.5	18.9
Lower Quartile (25 th Percentile)	84.0	69.2	Lower Quartile (25 th Percentile)	84.9	59.0
Upper Quartile (75 th Percentile)	106.0	139.5	Upper Quartile (75 th Percentile)	100.9	96.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	-0.29	-0.52	Relative Skewness	0.20	-0.20
Relative Kurtosis	2.81	1.74	Relative Kurtosis	2.76	3.04
Arithmetic Mean Ratio	93.7	107.3	Arithmetic Mean Ratio	93.3	77.1
Weighted Mean Ratio	88.8	89.3	Weighted Mean Ratio	91.9	52.4
Geometric Mean Ratio	92.3	101.0	Geometric Mean Ratio	92.5	69.3
Harmonic Mean Ratio	90.7	93.9	Harmonic Mean Ratio	91.7	57.5
Standard Deviation	15.8	37.6	Standard Deviation	12.1	29.8
Coefficient of Variation (COV)	16.9	35.1	Coefficient of Variation (COV)	13.0	38.6
Price-Related Differential (PRD)	1.05	1.20	Price-Related Differential (PRD)	1.01	1.47
Lower PRD Confidence Interval	1.03	1.01	Lower PRD Confidence Interval	1.01	1.17
Upper PRD Confidence interval	1.08	1.38	Upper PRD Confidence interval	1.02	2.05
Coef. of Price-Related Bias (PRB)	-0.10	-0.09	Coef. of Price-Related Bias (PRB)	-0.01	-0.11
Lower PRB Confidence Interval	-0.14	-0.32	Lower PRB Confidence Interval	-0.05	-0.18
Upper PRB Confidence Interval	-0.06	0.13	Upper PRB Confidence Interval	0.03	-0.03
Average Sale Price	111,785	188,800	Average Sale Price	232,915	1,461,874
Average Appraised Value	99,293	168,588	Average Appraised Value	214,008	766,687

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	185	16	Original Number of Sales	356	18
Trimmed Outliers	11	1	Trimmed Outliers	38	2
Number of Ratios: Outliers Removed	174	15	Number of Ratios: Outliers Removed	318	16
Minimum Ratio	3.2	20.9	Minimum Ratio	24.8	33.7
Maximum Ratio	202.2	416.4	Maximum Ratio	659.3	379.5
Minimum Sale Price	4,130	5,980	Minimum Sale Price	5,230	27,380
Maximum Sale Price	2,524,800	3,199,960	Maximum Sale Price	526,310	1,425,660
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	76.0	61.6	Median Ratio	96.8	79.9
Lower Median Confidence Interval	73.5	43.9	Lower Median Confidence Interval	93.5	57.5
Upper Median Confidence Interval	79.5	96.8	Upper Median Confidence Interval	99.5	98.0
Broadened Median Ratio	76.0	63.2	Broadened Median Ratio	96.8	78.4
Coefficient of Dispersion (COD)	18.9	50.9	Coefficient of Dispersion (COD)	16.9	34.1
Lower COD Confidence Interval	16.9	33.2	Lower COD Confidence Interval	15.3	24.5
Upper COD Confidence Interval	21.4	94.8	Upper COD Confidence Interval	18.8	53.7
Value Weighted COD	18.8	36.2	Value Weighted COD	15.1	26.6
Coefficient of Concentration @10%	31.4	18.8	Coefficient of Concentration @10%	39.6	11.1
Coefficient of Concentration @15%	45.4	18.8	Coefficient of Concentration @15%	50.8	16.7
Coefficient of Concentration @20%	57.8	25.0	Coefficient of Concentration @20%	61.5	22.2
Coefficient of Concentration @50%	88.1	62.5	Coefficient of Concentration @50%	86.5	72.2
Coefficient of Concentration @100%	96.8	81.3	Coefficient of Concentration @100%	94.7	88.9
Coefficient of Interquartile Deviation	17.3	46.9	Coefficient of Interquartile Deviation	14.0	30.7
Median Percent Deviation	17.1	33.4	Median Percent Deviation	14.5	28.0
Lower Quartile (25 th Percentile)	65.0	43.1	Lower Quartile (25 th Percentile)	81.1	55.4
Upper Quartile (75 th Percentile)	91.3	100.8	Upper Quartile (75 th Percentile)	108.1	104.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptK
Relative Skewness	0.38	1.21	Relative Skewness	0.06	0.25
Relative Kurtosis	3.08	3.68	Relative Kurtosis	3.33	2.00
Arithmetic Mean Ratio	76.9	72.2	Arithmetic Mean Ratio	92.6	74.2
Weighted Mean Ratio	73.2	50.3	Weighted Mean Ratio	88.9	74.5
Geometric Mean Ratio	74.7	62.1	Geometric Mean Ratio	90.1	68.9
Harmonic Mean Ratio	72.5	53.7	Harmonic Mean Ratio	87.4	63.7
Standard Deviation	18.2	43.2	Standard Deviation	20.8	28.3
Coefficient of Variation (COV)	23.6	59.8	Coefficient of Variation (COV)	22.4	38.1
Price-Related Differential (PRD)	1.05	1.44	Price-Related Differential (PRD)	1.04	1.00
Lower PRD Confidence Interval	1.00	1.15	Lower PRD Confidence Interval	1.03	0.92
Upper PRD Confidence interval	1.14	2.09	Upper PRD Confidence interval	1.06	1.13
Coef. of Price-Related Bias (PRB)	-0.09	-0.46	Coef. of Price-Related Bias (PRB)	-0.27	-0.12
Lower PRB Confidence Interval	-0.14	-0.80	Lower PRB Confidence Interval	-0.33	-0.66
Upper PRB Confidence Interval	-0.04	-0.12	Upper PRB Confidence Interval	-0.21	0.43
Average Sale Price	182,324	668,759	Average Sale Price	166,713	274,874
Average Appraised Value	133,487	336,212	Average Appraised Value	148,138	204,698

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	600	18	Original Number of Sales	24	5
Trimmed Outliers	65	1	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	535	17	Number of Ratios: Outliers Removed	23	5
Minimum Ratio	15.4	26.8	Minimum Ratio	28.1	15.7
Maximum Ratio	481.4	412.8	Maximum Ratio	210.0	293.9
Minimum Sale Price	4,140	19,510	Minimum Sale Price	24,060	10,000
Maximum Sale Price	34,230,180	1,299,320	Maximum Sale Price	214,040	130,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	97.5	86.6	Median Ratio	92.0	86.4
Lower Median Confidence Interval	95.6	68.5	Lower Median Confidence Interval	73.1	23.1
Upper Median Confidence Interval	98.7	108.3	Upper Median Confidence Interval	104.0	269.1
Broadened Median Ratio	97.5	87.9	Broadened Median Ratio	90.8	83.6
Coefficient of Dispersion (COD)	9.9	25.8	Coefficient of Dispersion (COD)	24.7	66.5
Lower COD Confidence Interval	9.3	18.2	Lower COD Confidence Interval	16.8	4.2
Upper COD Confidence Interval	10.7	41.6	Upper COD Confidence Interval	37.9	169.1
Value Weighted COD	8.1	19.2	Value Weighted COD	23.2	76.7
Coefficient of Concentration @10%	53.0	16.7	Coefficient of Concentration @10%	25.0	40.0
Coefficient of Concentration @15%	70.5	27.8	Coefficient of Concentration @15%	41.7	60.0
Coefficient of Concentration @20%	79.3	38.9	Coefficient of Concentration @20%	45.8	60.0
Coefficient of Concentration @50%	91.2	83.3	Coefficient of Concentration @50%	83.3	60.0
Coefficient of Concentration @100%	96.8	94.4	Coefficient of Concentration @100%	95.8	80.0
Coefficient of Interquartile Deviation	9.4	28.5	Coefficient of Interquartile Deviation	22.5	83.2
Median Percent Deviation	9.5	23.3	Median Percent Deviation	22.2	10.2
Lower Quartile (25 th Percentile)	88.4	67.1	Lower Quartile (25 th Percentile)	65.4	46.6
Upper Quartile (75 th Percentile)	106.8	116.4	Upper Quartile (75 th Percentile)	106.7	190.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectW
Relative Skewness	0.07	-0.04	Relative Skewness	-0.32	1.19
Relative Kurtosis	3.39	2.70	Relative Kurtosis	2.46	2.94
Arithmetic Mean Ratio	96.6	86.8	Arithmetic Mean Ratio	85.0	112.1
Weighted Mean Ratio	94.4	77.2	Weighted Mean Ratio	82.0	57.5
Geometric Mean Ratio	95.8	81.7	Geometric Mean Ratio	79.3	76.9
Harmonic Mean Ratio	95.0	75.2	Harmonic Mean Ratio	72.3	48.5
Standard Deviation	12.3	28.2	Standard Deviation	28.7	105.9
Coefficient of Variation (COV)	12.7	32.5	Coefficient of Variation (COV)	33.7	94.5
Price-Related Differential (PRD)	1.02	1.12	Price-Related Differential (PRD)	1.04	1.95
Lower PRD Confidence Interval	1.01	1.00	Lower PRD Confidence Interval	0.97	0.91
Upper PRD Confidence interval	1.04	1.31	Upper PRD Confidence interval	1.12	2.73
Coef. of Price-Related Bias (PRB)	-0.13	-0.02	Coef. of Price-Related Bias (PRB)	0.00	0.06
Lower PRB Confidence Interval	-0.17	-0.32	Lower PRB Confidence Interval	-0.22	-1.78
Upper PRB Confidence Interval	-0.10	0.30	Upper PRB Confidence Interval	0.22	1.90
Average Sale Price	242,034	263,344	Average Sale Price	91,385	39,000
Average Appraised Value	228,438	203,371	Average Appraised Value	74,927	22,418

Detailed Sample Statistics for the Residential and Commercial Subclasses

033 : GRAHAM			034 : GRANT		
<i>S-6</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	31	7	Original Number of Sales	69	6
Trimmed Outliers	1	0	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	30	7	Number of Ratios: Outliers Removed	66	6
Minimum Ratio	45.5	50.3	Minimum Ratio	55.9	19.2
Maximum Ratio	148.6	109.6	Maximum Ratio	158.1	178.8
Minimum Sale Price	15,170	9,500	Minimum Sale Price	16,070	30,000
Maximum Sale Price	153,950	70,000	Maximum Sale Price	273,770	2,200,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	92.6	80.1	Median Ratio	93.3	77.1
Lower Median Confidence Interval	83.4	59.3	Lower Median Confidence Interval	88.7	22.5
Upper Median Confidence Interval	98.3	101.1	Upper Median Confidence Interval	97.0	136.9
Broadened Median Ratio	91.6	84.3	Broadened Median Ratio	93.3	71.5
Coefficient of Dispersion (COD)	14.3	21.3	Coefficient of Dispersion (COD)	9.1	50.5
Lower COD Confidence Interval	10.6	13.4	Lower COD Confidence Interval	7.5	16.9
Upper COD Confidence Interval	19.9	44.1	Upper COD Confidence Interval	11.3	152.5
Value Weighted COD	15.6	14.5	Value Weighted COD	8.5	66.7
Coefficient of Concentration @10%	48.4	28.6	Coefficient of Concentration @10%	68.1	33.3
Coefficient of Concentration @15%	61.3	28.6	Coefficient of Concentration @15%	81.2	33.3
Coefficient of Concentration @20%	67.7	42.9	Coefficient of Concentration @20%	85.5	33.3
Coefficient of Concentration @50%	93.5	100.0	Coefficient of Concentration @50%	98.6	50.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	100.0	83.3
Coefficient of Interquartile Deviation	13.8	26.1	Coefficient of Interquartile Deviation	7.6	59.6
Median Percent Deviation	10.3	26.0	Median Percent Deviation	6.9	45.0
Lower Quartile (25 th Percentile)	74.9	59.3	Lower Quartile (25 th Percentile)	85.3	24.1
Upper Quartile (75 th Percentile)	100.5	101.1	Upper Quartile (75 th Percentile)	99.5	116.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	-0.62	-0.21	Relative Skewness	-0.64	0.73
Relative Kurtosis	2.73	1.73	Relative Kurtosis	2.97	2.61
Arithmetic Mean Ratio	87.6	81.9	Arithmetic Mean Ratio	91.3	78.8
Weighted Mean Ratio	84.4	78.4	Weighted Mean Ratio	92.0	32.8
Geometric Mean Ratio	85.9	79.2	Geometric Mean Ratio	90.7	60.7
Harmonic Mean Ratio	84.0	76.4	Harmonic Mean Ratio	90.0	45.1
Standard Deviation	16.4	21.8	Standard Deviation	10.6	57.7
Coefficient of Variation (COV)	18.7	26.6	Coefficient of Variation (COV)	11.6	73.2
Price-Related Differential (PRD)	1.04	1.04	Price-Related Differential (PRD)	0.99	2.40
Lower PRD Confidence Interval	1.01	0.96	Lower PRD Confidence Interval	0.98	1.22
Upper PRD Confidence interval	1.08	1.13	Upper PRD Confidence interval	1.00	3.75
Coef. of Price-Related Bias (PRB)	-0.06	-0.02	Coef. of Price-Related Bias (PRB)	-0.03	-0.17
Lower PRB Confidence Interval	-0.15	-0.32	Lower PRB Confidence Interval	-0.08	-0.64
Upper PRB Confidence Interval	0.03	0.27	Upper PRB Confidence Interval	0.02	0.31
Average Sale Price	65,436	31,857	Average Sale Price	147,863	505,000
Average Appraised Value	55,259	24,974	Average Appraised Value	136,099	165,848

Detailed Sample Statistics for the Residential and Commercial Subclasses

035 : GRAY			036 : GREELEY		
S-6			S-6		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	42	9	Original Number of Sales	17	8
Trimmed Outliers	3	0	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	39	9	Number of Ratios: Outliers Removed	16	8
Minimum Ratio	50.3	28.7	Minimum Ratio	41.4	65.5
Maximum Ratio	223.2	274.9	Maximum Ratio	204.5	150.0
Minimum Sale Price	39,430	30,000	Minimum Sale Price	750	10,000
Maximum Sale Price	342,680	200,000	Maximum Sale Price	282,870	70,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	89.2	69.8	Median Ratio	95.1	89.6
Lower Median Confidence Interval	84.8	41.0	Lower Median Confidence Interval	72.4	76.4
Upper Median Confidence Interval	92.2	200.6	Upper Median Confidence Interval	109.9	139.0
Broadened Median Ratio	89.4	62.7	Broadened Median Ratio	93.8	90.9
Coefficient of Dispersion (COD)	9.5	73.6	Coefficient of Dispersion (COD)	25.2	26.9
Lower COD Confidence Interval	7.4	19.3	Lower COD Confidence Interval	16.6	18.8
Upper COD Confidence Interval	12.5	150.0	Upper COD Confidence Interval	39.3	39.7
Value Weighted COD	9.7	76.4	Value Weighted COD	22.0	20.0
Coefficient of Concentration @10%	57.1	22.2	Coefficient of Concentration @10%	23.5	25.0
Coefficient of Concentration @15%	69.0	33.3	Coefficient of Concentration @15%	35.3	50.0
Coefficient of Concentration @20%	83.3	33.3	Coefficient of Concentration @20%	47.1	50.0
Coefficient of Concentration @50%	95.2	66.7	Coefficient of Concentration @50%	76.5	75.0
Coefficient of Concentration @100%	97.6	77.8	Coefficient of Concentration @100%	94.1	100.0
Coefficient of Interquartile Deviation	9.3	69.4	Coefficient of Interquartile Deviation	23.8	30.3
Median Percent Deviation	8.3	37.6	Median Percent Deviation	23.9	17.7
Lower Quartile (25 th Percentile)	79.8	42.3	Lower Quartile (25 th Percentile)	71.7	77.0
Upper Quartile (75 th Percentile)	96.4	139.2	Upper Quartile (75 th Percentile)	116.9	131.3
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	RejectK
Relative Skewness	0.14	1.38	Relative Skewness	0.01	0.64
Relative Kurtosis	2.84	3.34	Relative Kurtosis	2.25	1.96
Arithmetic Mean Ratio	88.3	94.9	Arithmetic Mean Ratio	90.4	99.6
Weighted Mean Ratio	88.0	84.9	Weighted Mean Ratio	84.3	87.0
Geometric Mean Ratio	87.6	71.9	Geometric Mean Ratio	85.3	95.8
Harmonic Mean Ratio	86.9	58.8	Harmonic Mean Ratio	79.8	92.3
Standard Deviation	11.0	84.6	Standard Deviation	29.9	30.8
Coefficient of Variation (COV)	12.4	89.1	Coefficient of Variation (COV)	33.1	30.9
Price-Related Differential (PRD)	1.00	1.12	Price-Related Differential (PRD)	1.07	1.14
Lower PRD Confidence Interval	0.99	0.90	Lower PRD Confidence Interval	0.97	1.04
Upper PRD Confidence interval	1.02	1.69	Upper PRD Confidence interval	1.23	1.35
Coef. of Price-Related Bias (PRB)	-0.12	0.48	Coef. of Price-Related Bias (PRB)	-0.03	-0.32
Lower PRB Confidence Interval	-0.27	-0.57	Lower PRB Confidence Interval	-0.14	-0.57
Upper PRB Confidence Interval	0.03	1.52	Upper PRB Confidence Interval	0.08	-0.06
Average Sale Price	175,089	107,458	Average Sale Price	100,654	33,250
Average Appraised Value	154,140	91,187	Average Appraised Value	84,807	28,941

Detailed Sample Statistics for the Residential and Commercial Subclasses

037 : GREENWOOD			038 : HAMILTON		
			<i>S-1</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	64	7	Original Number of Sales	16	5
Trimmed Outliers	4	1	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	60	6	Number of Ratios: Outliers Removed	14	5
Minimum Ratio	26.4	33.4	Minimum Ratio	31.3	35.7
Maximum Ratio	239.6	172.3	Maximum Ratio	154.1	99.9
Minimum Sale Price	5,400	2,600	Minimum Sale Price	11,710	20,000
Maximum Sale Price	328,370	285,000	Maximum Sale Price	225,130	250,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	88.1	79.6	Median Ratio	67.0	84.3
Lower Median Confidence Interval	77.2	66.8	Lower Median Confidence Interval	56.9	37.1
Upper Median Confidence Interval	96.9	103.2	Upper Median Confidence Interval	76.1	99.3
Broadened Median Ratio	88.7	80.0	Broadened Median Ratio	66.2	75.5
Coefficient of Dispersion (COD)	27.5	24.7	Coefficient of Dispersion (COD)	20.4	26.6
Lower COD Confidence Interval	21.2	13.2	Lower COD Confidence Interval	13.2	5.5
Upper COD Confidence Interval	35.8	64.8	Upper COD Confidence Interval	34.1	52.5
Value Weighted COD	25.4	43.4	Value Weighted COD	20.1	19.3
Coefficient of Concentration @10%	18.8	14.3	Coefficient of Concentration @10%	31.3	20.0
Coefficient of Concentration @15%	35.9	14.3	Coefficient of Concentration @15%	50.0	40.0
Coefficient of Concentration @20%	46.9	57.1	Coefficient of Concentration @20%	50.0	60.0
Coefficient of Concentration @50%	79.7	71.4	Coefficient of Concentration @50%	81.3	80.0
Coefficient of Concentration @100%	93.8	85.7	Coefficient of Concentration @100%	87.5	100.0
Coefficient of Interquartile Deviation	24.2	22.9	Coefficient of Interquartile Deviation	20.6	33.3
Median Percent Deviation	23.0	17.0	Median Percent Deviation	17.2	18.4
Lower Quartile (25 th Percentile)	60.3	66.8	Lower Quartile (25 th Percentile)	54.6	41.4
Upper Quartile (75 th Percentile)	103.0	103.2	Upper Quartile (75 th Percentile)	82.3	97.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	AcceptK	AcceptW
Relative Skewness	0.17	-0.52	Relative Skewness	0.06	-0.36
Relative Kurtosis	3.11	2.38	Relative Kurtosis	2.75	1.33
Arithmetic Mean Ratio	81.8	73.9	Arithmetic Mean Ratio	63.5	72.4
Weighted Mean Ratio	75.9	65.3	Weighted Mean Ratio	63.8	70.8
Geometric Mean Ratio	75.8	69.7	Geometric Mean Ratio	61.2	67.0
Harmonic Mean Ratio	68.9	64.6	Harmonic Mean Ratio	58.6	61.3
Standard Deviation	29.6	24.5	Standard Deviation	17.3	29.1
Coefficient of Variation (COV)	36.2	33.2	Coefficient of Variation (COV)	27.2	40.2
Price-Related Differential (PRD)	1.08	1.13	Price-Related Differential (PRD)	1.00	1.02
Lower PRD Confidence Interval	1.02	0.85	Lower PRD Confidence Interval	0.94	0.84
Upper PRD Confidence interval	1.16	1.72	Upper PRD Confidence interval	1.05	1.32
Coef. of Price-Related Bias (PRB)	-0.11	-0.09	Coef. of Price-Related Bias (PRB)	-0.28	-0.05
Lower PRB Confidence Interval	-0.20	-0.33	Lower PRB Confidence Interval	-0.54	-0.52
Upper PRB Confidence Interval	-0.02	0.14	Upper PRB Confidence Interval	-0.03	0.41
Average Sale Price	86,192	97,933	Average Sale Price	139,103	90,800
Average Appraised Value	65,413	63,940	Average Appraised Value	88,700	64,328

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	66	5	Original Number of Sales	207	30
Trimmed Outliers	9	0	Trimmed Outliers	21	1
Number of Ratios: Outliers Removed	57	5	Number of Ratios: Outliers Removed	186	29
Minimum Ratio	11.4	51.0	Minimum Ratio	22.2	7.4
Maximum Ratio	272.2	131.7	Maximum Ratio	165.6	832.5
Minimum Sale Price	3,490	20,000	Minimum Sale Price	12,850	56,240
Maximum Sale Price	230,230	500,000	Maximum Sale Price	792,260	1,102,680
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	87.3	89.1	Median Ratio	82.4	65.3
Lower Median Confidence Interval	82.6	51.3	Lower Median Confidence Interval	80.9	49.0
Upper Median Confidence Interval	99.2	129.2	Upper Median Confidence Interval	85.6	79.2
Broadened Median Ratio	87.8	84.6	Broadened Median Ratio	82.5	66.0
Coefficient of Dispersion (COD)	20.2	31.0	Coefficient of Dispersion (COD)	13.4	46.5
Lower COD Confidence Interval	16.4	9.8	Lower COD Confidence Interval	11.9	33.6
Upper COD Confidence Interval	25.5	52.4	Upper COD Confidence Interval	15.3	71.0
Value Weighted COD	17.2	38.1	Value Weighted COD	11.9	47.6
Coefficient of Concentration @10%	24.2	20.0	Coefficient of Concentration @10%	45.4	13.3
Coefficient of Concentration @15%	45.5	20.0	Coefficient of Concentration @15%	57.5	20.0
Coefficient of Concentration @20%	53.0	20.0	Coefficient of Concentration @20%	68.1	26.7
Coefficient of Concentration @50%	81.8	100.0	Coefficient of Concentration @50%	91.8	60.0
Coefficient of Concentration @100%	92.4	100.0	Coefficient of Concentration @100%	99.5	93.3
Coefficient of Interquartile Deviation	18.4	38.7	Coefficient of Interquartile Deviation	11.8	42.5
Median Percent Deviation	16.3	39.7	Median Percent Deviation	12.1	39.8
Lower Quartile (25 th Percentile)	76.8	52.4	Lower Quartile (25 th Percentile)	74.0	40.1
Upper Quartile (75 th Percentile)	108.8	121.3	Upper Quartile (75 th Percentile)	93.4	95.7
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	0.30	0.10	Relative Skewness	-0.07	0.27
Relative Kurtosis	3.31	1.45	Relative Kurtosis	3.20	2.29
Arithmetic Mean Ratio	88.8	87.3	Arithmetic Mean Ratio	82.1	66.1
Weighted Mean Ratio	86.7	61.3	Weighted Mean Ratio	81.6	52.5
Geometric Mean Ratio	85.7	81.4	Geometric Mean Ratio	80.8	52.0
Harmonic Mean Ratio	82.4	75.7	Harmonic Mean Ratio	79.4	34.1
Standard Deviation	23.0	35.3	Standard Deviation	14.3	37.8
Coefficient of Variation (COV)	26.0	40.4	Coefficient of Variation (COV)	17.4	57.2
Price-Related Differential (PRD)	1.02	1.42	Price-Related Differential (PRD)	1.01	1.26
Lower PRD Confidence Interval	0.99	0.98	Lower PRD Confidence Interval	0.99	1.10
Upper PRD Confidence interval	1.07	1.59	Upper PRD Confidence interval	1.02	1.59
Coef. of Price-Related Bias (PRB)	-0.21	-0.11	Coef. of Price-Related Bias (PRB)	0.00	0.89
Lower PRB Confidence Interval	-0.31	-0.48	Lower PRB Confidence Interval	-0.04	0.33
Upper PRB Confidence Interval	-0.11	0.27	Upper PRB Confidence Interval	0.04	1.44
Average Sale Price	71,060	124,100	Average Sale Price	162,775	304,721
Average Appraised Value	61,625	76,096	Average Appraised Value	132,833	160,059

Detailed Sample Statistics for the Residential and Commercial Subclasses

041 : HASKELL			042 : HODGEMAN		
<i>S-3</i>			<i>S-3</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	37	6	Original Number of Sales	7	5
Trimmed Outliers	4	0	Trimmed Outliers	0	0
Number of Ratios: Outliers Removed	33	6	Number of Ratios: Outliers Removed	7	5
Minimum Ratio	7.9	26.4	Minimum Ratio	54.1	31.1
Maximum Ratio	328.2	108.0	Maximum Ratio	99.9	113.9
Minimum Sale Price	13,190	50,000	Minimum Sale Price	9,000	35,000
Maximum Sale Price	471,090	149,000	Maximum Sale Price	85,000	1,300,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	88.3	53.5	Median Ratio	83.3	56.9
Lower Median Confidence Interval	82.7	35.7	Lower Median Confidence Interval	73.9	31.5
Upper Median Confidence Interval	97.0	97.3	Upper Median Confidence Interval	97.2	108.7
Broadened Median Ratio	88.9	57.6	Broadened Median Ratio	85.3	53.6
Coefficient of Dispersion (COD)	16.4	42.9	Coefficient of Dispersion (COD)	13.2	41.9
Lower COD Confidence Interval	12.2	28.0	Lower COD Confidence Interval	7.1	14.1
Upper COD Confidence Interval	22.6	89.6	Upper COD Confidence Interval	32.3	72.0
Value Weighted COD	12.1	34.5	Value Weighted COD	11.5	38.4
Coefficient of Concentration @10%	35.1	0.0	Coefficient of Concentration @10%	42.9	20.0
Coefficient of Concentration @15%	51.4	33.3	Coefficient of Concentration @15%	57.1	20.0
Coefficient of Concentration @20%	56.8	50.0	Coefficient of Concentration @20%	85.7	20.0
Coefficient of Concentration @50%	89.2	50.0	Coefficient of Concentration @50%	100.0	80.0
Coefficient of Concentration @100%	91.9	83.3	Coefficient of Concentration @100%	100.0	80.0
Coefficient of Interquartile Deviation	17.2	48.3	Coefficient of Interquartile Deviation	14.0	52.3
Median Percent Deviation	14.5	33.2	Median Percent Deviation	11.3	40.5
Lower Quartile (25 th Percentile)	69.9	40.4	Lower Quartile (25 th Percentile)	73.9	32.5
Upper Quartile (75 th Percentile)	100.3	92.0	Upper Quartile (75 th Percentile)	97.2	92.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	AcceptW	AcceptW
Relative Skewness	-0.50	0.45	Relative Skewness	-0.80	0.73
Relative Kurtosis	2.38	1.92	Relative Kurtosis	2.74	2.22
Arithmetic Mean Ratio	84.6	62.2	Arithmetic Mean Ratio	83.0	61.2
Weighted Mean Ratio	87.7	56.5	Weighted Mean Ratio	80.1	41.5
Geometric Mean Ratio	82.4	56.1	Geometric Mean Ratio	81.6	54.5
Harmonic Mean Ratio	79.8	50.4	Harmonic Mean Ratio	79.9	48.9
Standard Deviation	18.6	30.1	Standard Deviation	15.6	33.7
Coefficient of Variation (COV)	22.0	48.4	Coefficient of Variation (COV)	18.8	55.0
Price-Related Differential (PRD)	0.96	1.10	Price-Related Differential (PRD)	1.04	1.48
Lower PRD Confidence Interval	0.92	1.04	Lower PRD Confidence Interval	0.98	0.95
Upper PRD Confidence interval	1.00	1.23	Upper PRD Confidence interval	1.19	1.86
Coef. of Price-Related Bias (PRB)	0.01	0.07	Coef. of Price-Related Bias (PRB)	-0.02	-0.14
Lower PRB Confidence Interval	-0.16	-1.71	Lower PRB Confidence Interval	-0.18	-0.63
Upper PRB Confidence Interval	0.17	1.85	Upper PRB Confidence Interval	0.14	0.35
Average Sale Price	143,727	81,133	Average Sale Price	53,143	358,400
Average Appraised Value	126,099	45,845	Average Appraised Value	42,543	148,584

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	110	14	Original Number of Sales	179	17
Trimmed Outliers	9	0	Trimmed Outliers	19	1
Number of Ratios: Outliers Removed	101	14	Number of Ratios: Outliers Removed	160	16
Minimum Ratio	32.2	23.9	Minimum Ratio	34.5	46.5
Maximum Ratio	293.2	100.9	Maximum Ratio	710.2	273.8
Minimum Sale Price	5,030	20,000	Minimum Sale Price	2,300	16,460
Maximum Sale Price	388,860	1,837,000	Maximum Sale Price	789,240	1,750,270
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	89.4	63.7	Median Ratio	90.4	75.7
Lower Median Confidence Interval	86.1	37.1	Lower Median Confidence Interval	87.0	64.9
Upper Median Confidence Interval	94.5	78.6	Upper Median Confidence Interval	93.5	99.9
Broadened Median Ratio	89.3	63.1	Broadened Median Ratio	90.4	74.9
Coefficient of Dispersion (COD)	17.2	32.3	Coefficient of Dispersion (COD)	15.0	28.0
Lower COD Confidence Interval	14.7	19.7	Lower COD Confidence Interval	13.2	18.2
Upper COD Confidence Interval	20.5	59.3	Upper COD Confidence Interval	17.0	43.7
Value Weighted COD	16.1	40.5	Value Weighted COD	15.4	15.1
Coefficient of Concentration @10%	35.5	14.3	Coefficient of Concentration @10%	34.6	29.4
Coefficient of Concentration @15%	48.2	14.3	Coefficient of Concentration @15%	55.3	41.2
Coefficient of Concentration @20%	64.5	28.6	Coefficient of Concentration @20%	64.8	52.9
Coefficient of Concentration @50%	87.3	78.6	Coefficient of Concentration @50%	89.4	76.5
Coefficient of Concentration @100%	96.4	100.0	Coefficient of Concentration @100%	95.5	94.1
Coefficient of Interquartile Deviation	14.3	34.7	Coefficient of Interquartile Deviation	13.1	28.6
Median Percent Deviation	15.2	32.3	Median Percent Deviation	12.8	19.6
Lower Quartile (25 th Percentile)	75.6	35.7	Lower Quartile (25 th Percentile)	78.8	64.2
Upper Quartile (75 th Percentile)	101.3	79.9	Upper Quartile (75 th Percentile)	102.5	107.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectK
Relative Skewness	0.12	-0.07	Relative Skewness	-0.06	1.01
Relative Kurtosis	3.25	1.72	Relative Kurtosis	2.86	3.35
Arithmetic Mean Ratio	88.2	60.4	Arithmetic Mean Ratio	88.2	81.0
Weighted Mean Ratio	83.9	49.1	Weighted Mean Ratio	86.0	72.2
Geometric Mean Ratio	85.9	55.3	Geometric Mean Ratio	86.5	76.7
Harmonic Mean Ratio	83.4	49.9	Harmonic Mean Ratio	84.7	73.0
Standard Deviation	19.7	24.4	Standard Deviation	16.8	28.7
Coefficient of Variation (COV)	22.3	40.3	Coefficient of Variation (COV)	19.1	35.5
Price-Related Differential (PRD)	1.05	1.23	Price-Related Differential (PRD)	1.02	1.12
Lower PRD Confidence Interval	1.03	0.97	Lower PRD Confidence Interval	1.01	1.02
Upper PRD Confidence interval	1.08	1.76	Upper PRD Confidence interval	1.05	1.32
Coef. of Price-Related Bias (PRB)	-0.22	-0.02	Coef. of Price-Related Bias (PRB)	-0.43	-0.18
Lower PRB Confidence Interval	-0.30	-0.15	Lower PRB Confidence Interval	-0.53	-0.45
Upper PRB Confidence Interval	-0.15	0.10	Upper PRB Confidence Interval	-0.32	0.09
Average Sale Price	149,325	431,857	Average Sale Price	204,272	287,992
Average Appraised Value	125,235	212,030	Average Appraised Value	175,680	207,968

Detailed Sample Statistics for the Residential and Commercial Subclasses

045 : JEWELL			046 : JOHNSON		
<i>S-7</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	27	10	Original Number of Sales	418	175
Trimmed Outliers	1	1	Trimmed Outliers	24	7
Number of Ratios: Outliers Removed	26	9	Number of Ratios: Outliers Removed	394	168
Minimum Ratio	45.6	39.2	Minimum Ratio	57.3	35.5
Maximum Ratio	203.9	201.8	Maximum Ratio	182.5	236.1
Minimum Sale Price	4,870	2,000	Minimum Sale Price	80,540	44,650
Maximum Sale Price	129,590	400,000	Maximum Sale Price	50,675,580	43,844,210
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	91.5	95.8	Median Ratio	93.7	87.4
Lower Median Confidence Interval	76.7	68.1	Lower Median Confidence Interval	92.5	81.3
Upper Median Confidence Interval	101.1	103.7	Upper Median Confidence Interval	94.8	92.4
Broadened Median Ratio	91.3	92.2	Broadened Median Ratio	93.7	87.3
Coefficient of Dispersion (COD)	18.7	19.1	Coefficient of Dispersion (COD)	9.1	22.6
Lower COD Confidence Interval	13.3	9.2	Lower COD Confidence Interval	8.4	19.9
Upper COD Confidence Interval	27.5	36.6	Upper COD Confidence Interval	9.9	25.8
Value Weighted COD	16.8	45.8	Value Weighted COD	9.4	27.2
Coefficient of Concentration @10%	29.6	40.0	Coefficient of Concentration @10%	59.6	28.6
Coefficient of Concentration @15%	51.9	50.0	Coefficient of Concentration @15%	74.2	39.4
Coefficient of Concentration @20%	63.0	50.0	Coefficient of Concentration @20%	84.0	55.4
Coefficient of Concentration @50%	92.6	80.0	Coefficient of Concentration @50%	98.3	85.7
Coefficient of Concentration @100%	96.3	90.0	Coefficient of Concentration @100%	100.0	98.9
Coefficient of Interquartile Deviation	20.8	17.5	Coefficient of Interquartile Deviation	7.6	17.8
Median Percent Deviation	13.7	19.5	Median Percent Deviation	7.4	17.9
Lower Quartile (25 th Percentile)	63.5	68.5	Lower Quartile (25 th Percentile)	86.8	71.5
Upper Quartile (75 th Percentile)	101.6	102.0	Upper Quartile (75 th Percentile)	101.0	102.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	-0.18	-0.69	Relative Skewness	0.10	0.11
Relative Kurtosis	2.30	2.35	Relative Kurtosis	3.01	2.80
Arithmetic Mean Ratio	85.4	82.6	Arithmetic Mean Ratio	93.6	85.9
Weighted Mean Ratio	83.2	53.6	Weighted Mean Ratio	94.7	81.9
Geometric Mean Ratio	82.7	79.3	Geometric Mean Ratio	92.9	82.1
Harmonic Mean Ratio	79.8	75.3	Harmonic Mean Ratio	92.3	77.9
Standard Deviation	20.9	22.6	Standard Deviation	10.9	24.7
Coefficient of Variation (COV)	24.5	27.3	Coefficient of Variation (COV)	11.7	28.7
Price-Related Differential (PRD)	1.03	1.54	Price-Related Differential (PRD)	0.99	1.05
Lower PRD Confidence Interval	0.98	0.96	Lower PRD Confidence Interval	0.95	0.94
Upper PRD Confidence interval	1.10	1.85	Upper PRD Confidence interval	1.02	1.21
Coef. of Price-Related Bias (PRB)	-0.08	-0.09	Coef. of Price-Related Bias (PRB)	-0.04	-0.01
Lower PRB Confidence Interval	-0.20	-0.26	Lower PRB Confidence Interval	-0.06	-0.04
Upper PRB Confidence Interval	0.03	0.08	Upper PRB Confidence Interval	-0.02	0.03
Average Sale Price	61,322	62,278	Average Sale Price	555,808	2,640,309
Average Appraised Value	51,042	33,407	Average Appraised Value	526,580	2,162,420

Detailed Sample Statistics for the Residential and Commercial Subclasses

047 : KEARNY			048 : KINGMAN		
S-3			S-6		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	32	5	Original Number of Sales	96	10
Trimmed Outliers	2	0	Trimmed Outliers	5	1
Number of Ratios: Outliers Removed	30	5	Number of Ratios: Outliers Removed	91	9
Minimum Ratio	45.3	56.6	Minimum Ratio	24.2	32.1
Maximum Ratio	201.0	92.0	Maximum Ratio	521.0	204.7
Minimum Sale Price	9,610	55,000	Minimum Sale Price	4,240	1,000
Maximum Sale Price	378,740	240,000	Maximum Sale Price	345,700	140,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	87.7	71.5	Median Ratio	85.4	72.3
Lower Median Confidence Interval	81.2	57.0	Lower Median Confidence Interval	78.3	50.9
Upper Median Confidence Interval	90.2	91.7	Upper Median Confidence Interval	89.1	111.0
Broadened Median Ratio	86.9	73.7	Broadened Median Ratio	84.8	74.3
Coefficient of Dispersion (COD)	16.2	18.4	Coefficient of Dispersion (COD)	26.7	32.3
Lower COD Confidence Interval	11.4	5.0	Lower COD Confidence Interval	22.5	20.1
Upper COD Confidence Interval	23.2	22.7	Upper COD Confidence Interval	32.4	78.9
Value Weighted COD	14.3	19.8	Value Weighted COD	21.8	31.7
Coefficient of Concentration @10%	40.6	20.0	Coefficient of Concentration @10%	32.3	30.0
Coefficient of Concentration @15%	56.3	20.0	Coefficient of Concentration @15%	38.5	30.0
Coefficient of Concentration @20%	62.5	40.0	Coefficient of Concentration @20%	49.0	30.0
Coefficient of Concentration @50%	90.6	100.0	Coefficient of Concentration @50%	78.1	50.0
Coefficient of Concentration @100%	96.9	100.0	Coefficient of Concentration @100%	94.8	90.0
Coefficient of Interquartile Deviation	15.8	23.0	Coefficient of Interquartile Deviation	23.3	41.8
Median Percent Deviation	12.8	20.8	Median Percent Deviation	21.7	38.0
Lower Quartile (25 th Percentile)	70.0	58.1	Lower Quartile (25 th Percentile)	62.7	51.8
Upper Quartile (75 th Percentile)	97.8	91.0	Upper Quartile (75 th Percentile)	102.4	112.2
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	0.44	0.11	Relative Skewness	0.23	0.11
Relative Kurtosis	3.90	1.27	Relative Kurtosis	2.93	1.93
Arithmetic Mean Ratio	83.6	73.9	Arithmetic Mean Ratio	82.7	72.5
Weighted Mean Ratio	82.7	74.0	Weighted Mean Ratio	78.8	53.0
Geometric Mean Ratio	81.4	72.4	Geometric Mean Ratio	77.4	66.7
Harmonic Mean Ratio	79.2	71.0	Harmonic Mean Ratio	71.3	60.7
Standard Deviation	19.2	16.5	Standard Deviation	28.4	29.5
Coefficient of Variation (COV)	23.0	22.4	Coefficient of Variation (COV)	34.3	40.7
Price-Related Differential (PRD)	1.01	1.00	Price-Related Differential (PRD)	1.05	1.37
Lower PRD Confidence Interval	0.97	0.95	Lower PRD Confidence Interval	1.01	1.12
Upper PRD Confidence interval	1.07	1.09	Upper PRD Confidence interval	1.10	2.08
Coef. of Price-Related Bias (PRB)	-0.09	0.00	Coef. of Price-Related Bias (PRB)	-0.13	-0.08
Lower PRB Confidence Interval	-0.20	-0.53	Lower PRB Confidence Interval	-0.26	-0.35
Upper PRB Confidence Interval	0.02	0.52	Upper PRB Confidence Interval	0.00	0.19
Average Sale Price	146,268	133,000	Average Sale Price	101,290	45,478
Average Appraised Value	120,969	98,462	Average Appraised Value	79,775	24,098

Detailed Sample Statistics for the Residential and Commercial Subclasses

049 : KIOWA			050 : LABETTE		
<i>S-2</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	13	3	Original Number of Sales	203	15
Trimmed Outliers	1	0	Trimmed Outliers	13	2
Number of Ratios: Outliers Removed	12	3	Number of Ratios: Outliers Removed	190	13
Minimum Ratio	59.8	42.6	Minimum Ratio	17.2	21.4
Maximum Ratio	145.7	94.6	Maximum Ratio	371.8	284.3
Minimum Sale Price	6,860	85,000	Minimum Sale Price	1,760	5,280
Maximum Sale Price	161,930	290,000	Maximum Sale Price	355,930	7,102,710
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.8	50.5	Median Ratio	91.4	77.1
Lower Median Confidence Interval	87.5	43.1	Lower Median Confidence Interval	87.5	48.9
Upper Median Confidence Interval	97.0	91.6	Upper Median Confidence Interval	96.0	101.1
Broadened Median Ratio	91.2	62.5	Broadened Median Ratio	91.4	74.8
Coefficient of Dispersion (COD)	13.7	34.3	Coefficient of Dispersion (COD)	22.2	30.1
Lower COD Confidence Interval	7.6	5.2	Lower COD Confidence Interval	19.8	17.1
Upper COD Confidence Interval	25.3	34.3	Upper COD Confidence Interval	25.0	54.6
Value Weighted COD	11.1	18.3	Value Weighted COD	19.8	58.9
Coefficient of Concentration @10%	53.8	33.3	Coefficient of Concentration @10%	29.1	20.0
Coefficient of Concentration @15%	61.5	33.3	Coefficient of Concentration @15%	40.9	26.7
Coefficient of Concentration @20%	61.5	66.7	Coefficient of Concentration @20%	49.8	26.7
Coefficient of Concentration @50%	92.3	66.7	Coefficient of Concentration @50%	86.7	73.3
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	95.1	86.7
Coefficient of Interquartile Deviation	13.8	51.5	Coefficient of Interquartile Deviation	20.2	36.8
Median Percent Deviation	6.9	15.6	Median Percent Deviation	21.2	34.5
Lower Quartile (25 th Percentile)	75.6	42.6	Lower Quartile (25 th Percentile)	74.6	44.4
Upper Quartile (75 th Percentile)	100.6	94.6	Upper Quartile (75 th Percentile)	111.6	101.1
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.44	0.64	Relative Skewness	0.27	-0.12
Relative Kurtosis	2.25	1.50	Relative Kurtosis	2.95	1.71
Arithmetic Mean Ratio	86.8	62.5	Arithmetic Mean Ratio	90.5	66.6
Weighted Mean Ratio	90.7	53.9	Weighted Mean Ratio	87.5	34.6
Geometric Mean Ratio	85.1	58.8	Geometric Mean Ratio	86.8	60.3
Harmonic Mean Ratio	83.3	55.7	Harmonic Mean Ratio	82.8	53.4
Standard Deviation	17.2	28.0	Standard Deviation	25.4	27.7
Coefficient of Variation (COV)	19.8	44.8	Coefficient of Variation (COV)	28.1	41.6
Price-Related Differential (PRD)	0.96	1.16	Price-Related Differential (PRD)	1.03	1.92
Lower PRD Confidence Interval	0.88	0.99	Lower PRD Confidence Interval	1.01	1.07
Upper PRD Confidence interval	1.02	1.18	Upper PRD Confidence interval	1.06	2.61
Coef. of Price-Related Bias (PRB)	0.10	0.00	Coef. of Price-Related Bias (PRB)	-0.10	-0.26
Lower PRB Confidence Interval	0.01	0.00	Lower PRB Confidence Interval	-0.16	-0.43
Upper PRB Confidence Interval	0.20	0.00	Upper PRB Confidence Interval	-0.05	-0.08
Average Sale Price	101,520	196,667	Average Sale Price	85,425	834,520
Average Appraised Value	92,044	106,083	Average Appraised Value	74,765	288,980

Detailed Sample Statistics for the Residential and Commercial Subclasses

051 : LANE			052 : LEAVENWORTH		
S-8					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	21	11	Original Number of Sales	239	25
Trimmed Outliers	1	1	Trimmed Outliers	34	1
Number of Ratios: Outliers Removed	20	10	Number of Ratios: Outliers Removed	205	24
Minimum Ratio	40.4	13.1	Minimum Ratio	10.2	33.3
Maximum Ratio	219.8	298.3	Maximum Ratio	236.1	300.5
Minimum Sale Price	4,510	4,000	Minimum Sale Price	36,590	49,750
Maximum Sale Price	260,940	404,295	Maximum Sale Price	808,940	7,604,680
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	82.3	97.7	Median Ratio	92.5	80.3
Lower Median Confidence Interval	69.3	63.7	Lower Median Confidence Interval	90.2	68.0
Upper Median Confidence Interval	98.9	115.3	Upper Median Confidence Interval	95.0	94.2
Broadened Median Ratio	81.6	93.4	Broadened Median Ratio	92.4	79.6
Coefficient of Dispersion (COD)	24.8	30.6	Coefficient of Dispersion (COD)	9.9	24.1
Lower COD Confidence Interval	17.2	17.7	Lower COD Confidence Interval	8.9	18.0
Upper COD Confidence Interval	37.8	75.3	Upper COD Confidence Interval	11.2	35.1
Value Weighted COD	18.7	49.6	Value Weighted COD	9.0	16.1
Coefficient of Concentration @10%	23.8	18.2	Coefficient of Concentration @10%	51.9	20.0
Coefficient of Concentration @15%	28.6	27.3	Coefficient of Concentration @15%	66.5	36.0
Coefficient of Concentration @20%	38.1	54.5	Coefficient of Concentration @20%	75.3	56.0
Coefficient of Concentration @50%	81.0	81.8	Coefficient of Concentration @50%	92.1	88.0
Coefficient of Concentration @100%	95.2	90.9	Coefficient of Concentration @100%	97.9	96.0
Coefficient of Interquartile Deviation	27.7	26.4	Coefficient of Interquartile Deviation	9.4	22.1
Median Percent Deviation	23.8	18.8	Median Percent Deviation	9.3	17.9
Lower Quartile (25 th Percentile)	55.8	63.7	Lower Quartile (25 th Percentile)	82.8	66.8
Upper Quartile (75 th Percentile)	101.4	115.3	Upper Quartile (75 th Percentile)	100.1	102.4
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	0.14	-0.65	Relative Skewness	-0.33	0.61
Relative Kurtosis	2.29	2.76	Relative Kurtosis	3.02	3.56
Arithmetic Mean Ratio	79.5	84.5	Arithmetic Mean Ratio	91.3	82.3
Weighted Mean Ratio	78.1	53.9	Weighted Mean Ratio	91.3	71.9
Geometric Mean Ratio	75.3	73.4	Geometric Mean Ratio	90.6	78.7
Harmonic Mean Ratio	71.0	54.9	Harmonic Mean Ratio	89.8	75.0
Standard Deviation	25.6	35.2	Standard Deviation	11.6	24.7
Coefficient of Variation (COV)	32.3	41.7	Coefficient of Variation (COV)	12.7	30.0
Price-Related Differential (PRD)	1.02	1.57	Price-Related Differential (PRD)	1.00	1.14
Lower PRD Confidence Interval	0.94	1.02	Lower PRD Confidence Interval	0.99	1.06
Upper PRD Confidence interval	1.09	3.66	Upper PRD Confidence interval	1.01	1.27
Coef. of Price-Related Bias (PRB)	-0.08	-0.18	Coef. of Price-Related Bias (PRB)	-0.03	0.01
Lower PRB Confidence Interval	-0.23	-0.44	Lower PRB Confidence Interval	-0.08	-0.14
Upper PRB Confidence Interval	0.08	0.07	Upper PRB Confidence Interval	0.02	0.16
Average Sale Price	70,646	100,115	Average Sale Price	263,917	795,396
Average Appraised Value	55,200	53,913	Average Appraised Value	241,054	571,775

Detailed Sample Statistics for the Residential and Commercial Subclasses

053 : LINCOLN			054 : LINN S-7		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	38	4	Original Number of Sales	123	11
Trimmed Outliers	0	0	Trimmed Outliers	6	1
Number of Ratios: Outliers Removed	38	4	Number of Ratios: Outliers Removed	117	10
Minimum Ratio	36.7	63.5	Minimum Ratio	19.2	45.7
Maximum Ratio	120.4	100.2	Maximum Ratio	254.2	230.5
Minimum Sale Price	7,030	100,000	Minimum Sale Price	1,210	8,500
Maximum Sale Price	373,960	499,000	Maximum Sale Price	717,450	150,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	94.2	78.3	Median Ratio	88.3	95.6
Lower Median Confidence Interval	80.9	64.0	Lower Median Confidence Interval	83.6	71.2
Upper Median Confidence Interval	99.8	99.4	Upper Median Confidence Interval	94.1	127.9
Broadened Median Ratio	93.6	79.5	Broadened Median Ratio	88.1	94.3
Coefficient of Dispersion (COD)	17.4	14.9	Coefficient of Dispersion (COD)	23.2	22.7
Lower COD Confidence Interval	12.7	3.9	Lower COD Confidence Interval	19.8	14.0
Upper COD Confidence Interval	24.9	18.3	Upper COD Confidence Interval	27.5	39.6
Value Weighted COD	15.4	13.8	Value Weighted COD	18.2	23.0
Coefficient of Concentration @10%	42.1	50.0	Coefficient of Concentration @10%	26.8	36.4
Coefficient of Concentration @15%	57.9	50.0	Coefficient of Concentration @15%	41.5	45.5
Coefficient of Concentration @20%	63.2	75.0	Coefficient of Concentration @20%	51.2	45.5
Coefficient of Concentration @50%	94.7	100.0	Coefficient of Concentration @50%	83.7	81.8
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	98.4	90.9
Coefficient of Interquartile Deviation	14.9	19.2	Coefficient of Interquartile Deviation	19.4	29.7
Median Percent Deviation	13.3	12.6	Median Percent Deviation	19.6	25.6
Lower Quartile (25 th Percentile)	72.7	66.0	Lower Quartile (25 th Percentile)	67.9	71.2
Upper Quartile (75 th Percentile)	100.7	96.0	Upper Quartile (75 th Percentile)	102.1	127.9
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.71	0.34	Relative Skewness	-0.14	0.09
Relative Kurtosis	2.70	1.79	Relative Kurtosis	3.10	2.40
Arithmetic Mean Ratio	86.8	80.1	Arithmetic Mean Ratio	84.9	91.9
Weighted Mean Ratio	88.3	84.8	Weighted Mean Ratio	85.7	85.7
Geometric Mean Ratio	83.9	79.0	Geometric Mean Ratio	80.2	88.0
Harmonic Mean Ratio	80.3	77.9	Harmonic Mean Ratio	74.1	83.9
Standard Deviation	20.8	15.7	Standard Deviation	25.8	27.2
Coefficient of Variation (COV)	24.0	19.5	Coefficient of Variation (COV)	30.4	29.6
Price-Related Differential (PRD)	0.98	0.94	Price-Related Differential (PRD)	0.99	1.07
Lower PRD Confidence Interval	0.94	0.91	Lower PRD Confidence Interval	0.95	0.98
Upper PRD Confidence interval	1.03	1.00	Upper PRD Confidence interval	1.03	1.28
Coef. of Price-Related Bias (PRB)	0.05	0.00	Coef. of Price-Related Bias (PRB)	0.03	-0.05
Lower PRB Confidence Interval	-0.01	0.00	Lower PRB Confidence Interval	-0.01	-0.36
Upper PRB Confidence Interval	0.10	0.00	Upper PRB Confidence Interval	0.07	0.26
Average Sale Price	88,959	247,250	Average Sale Price	128,850	65,850
Average Appraised Value	78,517	209,758	Average Appraised Value	110,414	56,428

Detailed Sample Statistics for the Residential and Commercial Subclasses

055 : LOGAN			056 : LYON		
S-7					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	46	8	Original Number of Sales	189	28
Trimmed Outliers	4	0	Trimmed Outliers	15	1
Number of Ratios: Outliers Removed	42	8	Number of Ratios: Outliers Removed	174	27
Minimum Ratio	23.7	19.0	Minimum Ratio	14.8	35.0
Maximum Ratio	239.1	105.4	Maximum Ratio	206.4	165.7
Minimum Sale Price	11,950	25,000	Minimum Sale Price	2,960	18,880
Maximum Sale Price	217,990	1,278,500	Maximum Sale Price	2,129,960	981,420
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	94.6	40.8	Median Ratio	87.8	83.2
Lower Median Confidence Interval	89.6	25.5	Lower Median Confidence Interval	85.8	71.7
Upper Median Confidence Interval	97.1	94.4	Upper Median Confidence Interval	90.7	92.6
Broadened Median Ratio	94.3	42.9	Broadened Median Ratio	88.0	81.8
Coefficient of Dispersion (COD)	14.2	60.4	Coefficient of Dispersion (COD)	13.7	22.7
Lower COD Confidence Interval	10.6	38.8	Lower COD Confidence Interval	12.0	16.1
Upper COD Confidence Interval	18.5	118.6	Upper COD Confidence Interval	15.6	31.4
Value Weighted COD	12.3	36.0	Value Weighted COD	11.7	27.7
Coefficient of Concentration @10%	45.7	25.0	Coefficient of Concentration @10%	44.4	25.0
Coefficient of Concentration @15%	54.3	25.0	Coefficient of Concentration @15%	59.8	42.9
Coefficient of Concentration @20%	60.9	25.0	Coefficient of Concentration @20%	70.9	57.1
Coefficient of Concentration @50%	91.3	50.0	Coefficient of Concentration @50%	92.1	82.1
Coefficient of Concentration @100%	97.8	75.0	Coefficient of Concentration @100%	98.9	100.0
Coefficient of Interquartile Deviation	13.9	74.4	Coefficient of Interquartile Deviation	11.9	18.2
Median Percent Deviation	12.2	45.4	Median Percent Deviation	11.4	16.0
Lower Quartile (25 th Percentile)	76.0	26.4	Lower Quartile (25 th Percentile)	78.7	66.3
Upper Quartile (75 th Percentile)	102.3	87.1	Upper Quartile (75 th Percentile)	99.6	96.5
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	0.23	0.66	Relative Skewness	-0.02	0.37
Relative Kurtosis	2.87	1.91	Relative Kurtosis	3.37	2.79
Arithmetic Mean Ratio	92.9	52.5	Arithmetic Mean Ratio	86.7	82.6
Weighted Mean Ratio	90.5	36.5	Weighted Mean Ratio	85.1	80.4
Geometric Mean Ratio	91.2	44.4	Geometric Mean Ratio	85.2	78.9
Harmonic Mean Ratio	89.4	37.9	Harmonic Mean Ratio	83.6	75.0
Standard Deviation	18.1	32.5	Standard Deviation	15.8	24.7
Coefficient of Variation (COV)	19.5	61.9	Coefficient of Variation (COV)	18.3	29.9
Price-Related Differential (PRD)	1.03	1.44	Price-Related Differential (PRD)	1.02	1.03
Lower PRD Confidence Interval	1.00	1.06	Lower PRD Confidence Interval	1.00	0.90
Upper PRD Confidence interval	1.06	2.28	Upper PRD Confidence interval	1.05	1.23
Coef. of Price-Related Bias (PRB)	-0.07	-0.06	Coef. of Price-Related Bias (PRB)	-0.08	-0.01
Lower PRB Confidence Interval	-0.17	-0.44	Lower PRB Confidence Interval	-0.12	-0.13
Upper PRB Confidence Interval	0.04	0.33	Upper PRB Confidence Interval	-0.05	0.11
Average Sale Price	93,346	393,975	Average Sale Price	174,193	224,745
Average Appraised Value	84,438	143,714	Average Appraised Value	148,184	180,712

Detailed Sample Statistics for the Residential and Commercial Subclasses

057 : MARION			058 : MARSHALL		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	137	11	Original Number of Sales	108	9
Trimmed Outliers	10	0	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	127	11	Number of Ratios: Outliers Removed	102	9
Minimum Ratio	2.4	48.4	Minimum Ratio	36.6	10.0
Maximum Ratio	278.6	144.7	Maximum Ratio	205.9	139.6
Minimum Sale Price	2,680	4,500	Minimum Sale Price	4,540	15,000
Maximum Sale Price	484,280	1,077,426	Maximum Sale Price	517,300	305,240
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	86.1	65.0	Median Ratio	88.7	84.0
Lower Median Confidence Interval	82.2	50.9	Lower Median Confidence Interval	81.0	19.2
Upper Median Confidence Interval	90.5	120.3	Upper Median Confidence Interval	92.4	109.4
Broadened Median Ratio	86.1	64.2	Broadened Median Ratio	88.7	82.3
Coefficient of Dispersion (COD)	19.3	44.5	Coefficient of Dispersion (COD)	18.9	36.2
Lower COD Confidence Interval	16.8	26.9	Lower COD Confidence Interval	16.1	18.5
Upper COD Confidence Interval	22.2	67.8	Upper COD Confidence Interval	22.5	211.1
Value Weighted COD	18.2	28.9	Value Weighted COD	17.0	35.8
Coefficient of Concentration @10%	31.4	36.4	Coefficient of Concentration @10%	28.7	22.2
Coefficient of Concentration @15%	43.1	36.4	Coefficient of Concentration @15%	47.2	33.3
Coefficient of Concentration @20%	55.5	36.4	Coefficient of Concentration @20%	61.1	44.4
Coefficient of Concentration @50%	89.1	63.6	Coefficient of Concentration @50%	89.8	66.7
Coefficient of Concentration @100%	96.4	81.8	Coefficient of Concentration @100%	98.1	100.0
Coefficient of Interquartile Deviation	18.5	53.5	Coefficient of Interquartile Deviation	15.7	37.3
Median Percent Deviation	18.6	25.4	Median Percent Deviation	15.5	22.9
Lower Quartile (25 th Percentile)	69.9	50.9	Lower Quartile (25 th Percentile)	73.6	42.0
Upper Quartile (75 th Percentile)	101.8	120.3	Upper Quartile (75 th Percentile)	101.4	104.7
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectK	Normality Test	RejectK	AcceptK
Relative Skewness	0.02	0.60	Relative Skewness	0.17	-0.35
Relative Kurtosis	2.72	1.63	Relative Kurtosis	3.02	2.28
Arithmetic Mean Ratio	84.8	83.0	Arithmetic Mean Ratio	85.5	76.6
Weighted Mean Ratio	83.2	62.3	Weighted Mean Ratio	83.4	66.7
Geometric Mean Ratio	82.1	76.1	Geometric Mean Ratio	83.0	60.2
Harmonic Mean Ratio	79.2	70.4	Harmonic Mean Ratio	80.3	38.9
Standard Deviation	20.6	37.4	Standard Deviation	20.5	41.5
Coefficient of Variation (COV)	24.3	45.0	Coefficient of Variation (COV)	23.9	54.1
Price-Related Differential (PRD)	1.02	1.33	Price-Related Differential (PRD)	1.03	1.15
Lower PRD Confidence Interval	0.99	1.03	Lower PRD Confidence Interval	1.00	0.93
Upper PRD Confidence interval	1.06	1.89	Upper PRD Confidence interval	1.06	2.14
Coef. of Price-Related Bias (PRB)	-0.06	-0.14	Coef. of Price-Related Bias (PRB)	-0.05	-0.07
Lower PRB Confidence Interval	-0.11	-0.29	Lower PRB Confidence Interval	-0.10	-0.34
Upper PRB Confidence Interval	0.00	0.02	Upper PRB Confidence Interval	0.00	0.21
Average Sale Price	109,190	195,698	Average Sale Price	115,703	138,552
Average Appraised Value	90,868	121,980	Average Appraised Value	96,448	92,393

Detailed Sample Statistics for the Residential and Commercial Subclasses

059 : MCPHERSON			060 : MEADE		
			<i>S-4</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	171	6	Original Number of Sales	46	6
Trimmed Outliers	11	0	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	160	6	Number of Ratios: Outliers Removed	43	6
Minimum Ratio	8.8	74.0	Minimum Ratio	43.9	36.3
Maximum Ratio	191.1	97.8	Maximum Ratio	207.7	151.4
Minimum Sale Price	20,120	10,000	Minimum Sale Price	14,480	12,500
Maximum Sale Price	515,660	1,220,000	Maximum Sale Price	177,890	98,250
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	94.3	80.0	Median Ratio	85.7	75.3
Lower Median Confidence Interval	91.7	74.3	Lower Median Confidence Interval	80.7	49.0
Upper Median Confidence Interval	96.0	91.5	Upper Median Confidence Interval	95.0	120.8
Broadened Median Ratio	94.2	79.9	Broadened Median Ratio	85.7	75.6
Coefficient of Dispersion (COD)	12.4	8.9	Coefficient of Dispersion (COD)	18.7	34.9
Lower COD Confidence Interval	10.9	5.0	Lower COD Confidence Interval	14.8	15.7
Upper COD Confidence Interval	14.3	13.9	Upper COD Confidence Interval	24.1	83.7
Value Weighted COD	11.6	7.1	Value Weighted COD	15.8	33.4
Coefficient of Concentration @10%	48.5	83.3	Coefficient of Concentration @10%	32.6	33.3
Coefficient of Concentration @15%	65.5	83.3	Coefficient of Concentration @15%	50.0	33.3
Coefficient of Concentration @20%	76.0	83.3	Coefficient of Concentration @20%	54.3	66.7
Coefficient of Concentration @50%	95.3	100.0	Coefficient of Concentration @50%	91.3	66.7
Coefficient of Concentration @100%	99.4	100.0	Coefficient of Concentration @100%	95.7	83.3
Coefficient of Interquartile Deviation	10.8	8.7	Coefficient of Interquartile Deviation	17.4	33.3
Median Percent Deviation	11.7	6.6	Median Percent Deviation	15.2	18.9
Lower Quartile (25 th Percentile)	82.4	74.5	Lower Quartile (25 th Percentile)	76.0	55.4
Upper Quartile (75 th Percentile)	102.7	88.3	Upper Quartile (75 th Percentile)	105.8	105.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	-0.14	0.83	Relative Skewness	0.19	0.87
Relative Kurtosis	3.35	2.44	Relative Kurtosis	2.85	2.93
Arithmetic Mean Ratio	91.9	81.9	Arithmetic Mean Ratio	86.8	81.7
Weighted Mean Ratio	91.7	82.1	Weighted Mean Ratio	85.0	67.9
Geometric Mean Ratio	90.5	81.5	Geometric Mean Ratio	84.3	74.6
Harmonic Mean Ratio	89.1	81.1	Harmonic Mean Ratio	81.7	68.0
Standard Deviation	15.1	9.2	Standard Deviation	20.6	38.9
Coefficient of Variation (COV)	16.5	11.2	Coefficient of Variation (COV)	23.8	47.6
Price-Related Differential (PRD)	1.00	1.00	Price-Related Differential (PRD)	1.02	1.20
Lower PRD Confidence Interval	0.99	0.94	Lower PRD Confidence Interval	0.99	1.03
Upper PRD Confidence interval	1.02	1.06	Upper PRD Confidence interval	1.06	1.62
Coef. of Price-Related Bias (PRB)	0.01	0.01	Coef. of Price-Related Bias (PRB)	-0.13	-0.14
Lower PRB Confidence Interval	-0.03	-0.06	Lower PRB Confidence Interval	-0.27	-0.86
Upper PRB Confidence Interval	0.06	0.08	Upper PRB Confidence Interval	0.01	0.57
Average Sale Price	169,869	399,167	Average Sale Price	102,844	45,625
Average Appraised Value	155,727	327,893	Average Appraised Value	87,391	30,965

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	176	14	Original Number of Sales	75	8
Trimmed Outliers	23	1	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	153	13	Number of Ratios: Outliers Removed	69	8
Minimum Ratio	47.9	23.1	Minimum Ratio	9.7	13.6
Maximum Ratio	536.1	262.9	Maximum Ratio	323.0	160.2
Minimum Sale Price	9,830	10,000	Minimum Sale Price	4,090	5,000
Maximum Sale Price	737,100	1,500,000	Maximum Sale Price	559,940	1,482,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.2	92.2	Median Ratio	91.6	62.4
Lower Median Confidence Interval	89.0	60.4	Lower Median Confidence Interval	85.9	24.5
Upper Median Confidence Interval	91.7	111.3	Upper Median Confidence Interval	96.0	122.7
Broadened Median Ratio	90.2	90.2	Broadened Median Ratio	91.7	66.1
Coefficient of Dispersion (COD)	9.2	28.2	Coefficient of Dispersion (COD)	20.2	68.1
Lower COD Confidence Interval	8.0	17.3	Lower COD Confidence Interval	16.7	35.6
Upper COD Confidence Interval	10.6	56.2	Upper COD Confidence Interval	25.3	185.6
Value Weighted COD	8.4	38.9	Value Weighted COD	20.3	32.6
Coefficient of Concentration @10%	56.3	21.4	Coefficient of Concentration @10%	30.7	0.0
Coefficient of Concentration @15%	71.6	28.6	Coefficient of Concentration @15%	46.7	0.0
Coefficient of Concentration @20%	77.3	35.7	Coefficient of Concentration @20%	58.7	0.0
Coefficient of Concentration @50%	94.9	78.6	Coefficient of Concentration @50%	84.0	37.5
Coefficient of Concentration @100%	97.2	92.9	Coefficient of Concentration @100%	96.0	87.5
Coefficient of Interquartile Deviation	8.3	29.4	Coefficient of Interquartile Deviation	17.4	71.3
Median Percent Deviation	8.6	24.3	Median Percent Deviation	16.6	64.0
Lower Quartile (25 th Percentile)	81.3	57.9	Lower Quartile (25 th Percentile)	76.4	29.2
Upper Quartile (75 th Percentile)	96.4	112.2	Upper Quartile (75 th Percentile)	108.1	118.1
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	AcceptK
Relative Skewness	-0.35	-0.46	Relative Skewness	0.04	0.43
Relative Kurtosis	3.60	2.10	Relative Kurtosis	3.05	1.90
Arithmetic Mean Ratio	88.9	82.1	Arithmetic Mean Ratio	89.6	74.1
Weighted Mean Ratio	89.0	69.8	Weighted Mean Ratio	83.5	46.2
Geometric Mean Ratio	88.1	75.2	Geometric Mean Ratio	86.2	56.7
Harmonic Mean Ratio	87.4	66.4	Harmonic Mean Ratio	82.4	40.8
Standard Deviation	11.1	30.6	Standard Deviation	23.6	51.6
Coefficient of Variation (COV)	12.5	37.2	Coefficient of Variation (COV)	26.3	69.5
Price-Related Differential (PRD)	1.00	1.18	Price-Related Differential (PRD)	1.07	1.60
Lower PRD Confidence Interval	0.99	0.89	Lower PRD Confidence Interval	1.02	1.08
Upper PRD Confidence interval	1.01	1.72	Upper PRD Confidence interval	1.14	2.50
Coef. of Price-Related Bias (PRB)	-0.25	0.03	Coef. of Price-Related Bias (PRB)	-0.10	-0.12
Lower PRB Confidence Interval	-0.33	-0.20	Lower PRB Confidence Interval	-0.19	-0.45
Upper PRB Confidence Interval	-0.16	0.25	Upper PRB Confidence Interval	0.00	0.22
Average Sale Price	299,689	347,173	Average Sale Price	122,019	221,625
Average Appraised Value	266,668	242,458	Average Appraised Value	101,862	102,395

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	192	20	Original Number of Sales	53	5
Trimmed Outliers	11	1	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	181	19	Number of Ratios: Outliers Removed	51	5
Minimum Ratio	19.8	56.3	Minimum Ratio	34.7	58.8
Maximum Ratio	273.5	310.5	Maximum Ratio	183.9	172.6
Minimum Sale Price	7,990	10,000	Minimum Sale Price	6,340	6,500
Maximum Sale Price	642,040	375,000	Maximum Sale Price	291,550	130,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	87.8	83.6	Median Ratio	84.5	78.3
Lower Median Confidence Interval	83.6	64.1	Lower Median Confidence Interval	76.2	58.8
Upper Median Confidence Interval	91.6	111.5	Upper Median Confidence Interval	97.6	163.5
Broadened Median Ratio	87.6	85.5	Broadened Median Ratio	84.7	77.9
Coefficient of Dispersion (COD)	21.9	40.5	Coefficient of Dispersion (COD)	23.9	38.6
Lower COD Confidence Interval	19.5	30.1	Lower COD Confidence Interval	19.2	8.8
Upper COD Confidence Interval	24.7	66.5	Upper COD Confidence Interval	29.9	58.1
Value Weighted COD	19.2	33.2	Value Weighted COD	21.7	25.7
Coefficient of Concentration @10%	28.6	15.0	Coefficient of Concentration @10%	22.6	20.0
Coefficient of Concentration @15%	41.7	15.0	Coefficient of Concentration @15%	34.0	20.0
Coefficient of Concentration @20%	54.2	25.0	Coefficient of Concentration @20%	47.2	20.0
Coefficient of Concentration @50%	86.5	75.0	Coefficient of Concentration @50%	90.6	80.0
Coefficient of Concentration @100%	97.9	85.0	Coefficient of Concentration @100%	96.2	80.0
Coefficient of Interquartile Deviation	18.1	42.6	Coefficient of Interquartile Deviation	22.3	48.3
Median Percent Deviation	18.1	28.4	Median Percent Deviation	23.7	24.5
Lower Quartile (25 th Percentile)	73.5	62.3	Lower Quartile (25 th Percentile)	67.4	58.9
Upper Quartile (75 th Percentile)	105.2	133.5	Upper Quartile (75 th Percentile)	105.1	134.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	Reject3
Relative Skewness	0.24	1.08	Relative Skewness	-0.21	1.12
Relative Kurtosis	2.93	3.06	Relative Kurtosis	2.17	2.71
Arithmetic Mean Ratio	87.7	95.9	Arithmetic Mean Ratio	83.1	93.0
Weighted Mean Ratio	83.5	92.6	Weighted Mean Ratio	80.9	64.3
Geometric Mean Ratio	84.3	88.5	Geometric Mean Ratio	79.2	85.3
Harmonic Mean Ratio	80.5	82.6	Harmonic Mean Ratio	74.8	79.5
Standard Deviation	24.1	42.3	Standard Deviation	24.2	47.2
Coefficient of Variation (COV)	27.4	44.1	Coefficient of Variation (COV)	29.2	50.7
Price-Related Differential (PRD)	1.05	1.04	Price-Related Differential (PRD)	1.03	1.45
Lower PRD Confidence Interval	1.02	0.95	Lower PRD Confidence Interval	0.97	1.06
Upper PRD Confidence interval	1.08	1.15	Upper PRD Confidence interval	1.10	1.69
Coef. of Price-Related Bias (PRB)	-0.07	-0.09	Coef. of Price-Related Bias (PRB)	-0.01	-0.26
Lower PRB Confidence Interval	-0.12	-0.41	Lower PRB Confidence Interval	-0.09	-0.71
Upper PRB Confidence Interval	-0.02	0.22	Upper PRB Confidence Interval	0.07	0.20
Average Sale Price	90,831	82,500	Average Sale Price	103,894	52,300
Average Appraised Value	75,888	76,388	Average Appraised Value	84,037	33,608

Detailed Sample Statistics for the Residential and Commercial Subclasses

065 : MORTON			066 : NEMAHA		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	50	4	Original Number of Sales	109	11
Trimmed Outliers	3	0	Trimmed Outliers	11	1
Number of Ratios: Outliers Removed	47	4	Number of Ratios: Outliers Removed	98	10
Minimum Ratio	16.3	89.7	Minimum Ratio	7.9	74.5
Maximum Ratio	174.3	262.5	Maximum Ratio	327.8	276.3
Minimum Sale Price	9,850	20,000	Minimum Sale Price	6,840	6,000
Maximum Sale Price	286,590	125,000	Maximum Sale Price	528,130	250,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.2	97.8	Median Ratio	91.9	95.4
Lower Median Confidence Interval	82.2	90.0	Lower Median Confidence Interval	86.2	85.4
Upper Median Confidence Interval	100.3	254.3	Upper Median Confidence Interval	97.3	115.2
Broadened Median Ratio	89.9	123.9	Broadened Median Ratio	92.0	96.9
Coefficient of Dispersion (COD)	17.1	44.3	Coefficient of Dispersion (COD)	16.5	16.4
Lower COD Confidence Interval	13.9	2.0	Lower COD Confidence Interval	14.0	9.1
Upper COD Confidence Interval	21.8	48.3	Upper COD Confidence Interval	19.8	34.2
Value Weighted COD	16.7	18.5	Value Weighted COD	15.4	9.6
Coefficient of Concentration @10%	26.0	75.0	Coefficient of Concentration @10%	35.8	36.4
Coefficient of Concentration @15%	52.0	75.0	Coefficient of Concentration @15%	48.6	63.6
Coefficient of Concentration @20%	66.0	75.0	Coefficient of Concentration @20%	61.5	63.6
Coefficient of Concentration @50%	92.0	75.0	Coefficient of Concentration @50%	86.2	81.8
Coefficient of Concentration @100%	100.0	75.0	Coefficient of Concentration @100%	94.5	90.9
Coefficient of Interquartile Deviation	15.5	66.3	Coefficient of Interquartile Deviation	15.0	15.6
Median Percent Deviation	14.2	4.3	Median Percent Deviation	15.4	10.7
Lower Quartile (25 th Percentile)	78.6	91.6	Lower Quartile (25 th Percentile)	77.6	85.4
Upper Quartile (75 th Percentile)	106.5	221.4	Upper Quartile (75 th Percentile)	105.2	115.2
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectW	Normality Test	RejectK	RejectK
Relative Skewness	0.13	1.15	Relative Skewness	-0.19	1.55
Relative Kurtosis	2.93	2.33	Relative Kurtosis	3.57	4.85
Arithmetic Mean Ratio	89.9	137.0	Arithmetic Mean Ratio	89.5	100.6
Weighted Mean Ratio	88.7	107.3	Weighted Mean Ratio	87.2	96.0
Geometric Mean Ratio	87.9	122.5	Geometric Mean Ratio	87.2	98.5
Harmonic Mean Ratio	85.8	113.0	Harmonic Mean Ratio	84.5	96.6
Standard Deviation	18.9	83.8	Standard Deviation	19.3	23.8
Coefficient of Variation (COV)	21.1	61.2	Coefficient of Variation (COV)	21.5	23.6
Price-Related Differential (PRD)	1.01	1.28	Price-Related Differential (PRD)	1.03	1.05
Lower PRD Confidence Interval	0.98	1.01	Lower PRD Confidence Interval	1.00	0.97
Upper PRD Confidence interval	1.06	1.46	Upper PRD Confidence interval	1.06	1.17
Coef. of Price-Related Bias (PRB)	0.01	0.00	Coef. of Price-Related Bias (PRB)	-0.19	-0.30
Lower PRB Confidence Interval	-0.08	0.00	Lower PRB Confidence Interval	-0.26	-0.55
Upper PRB Confidence Interval	0.10	0.00	Upper PRB Confidence Interval	-0.11	-0.05
Average Sale Price	86,285	60,000	Average Sale Price	159,456	103,600
Average Appraised Value	76,507	64,400	Average Appraised Value	139,030	99,458

Detailed Sample Statistics for the Residential and Commercial Subclasses

067 : NEOSHO			068 : NESS		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	197	12	Original Number of Sales	29	5
Trimmed Outliers	13	1	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	184	11	Number of Ratios: Outliers Removed	27	5
Minimum Ratio	20.0	18.4	Minimum Ratio	50.9	42.6
Maximum Ratio	347.3	203.5	Maximum Ratio	233.0	119.1
Minimum Sale Price	1,870	13,500	Minimum Sale Price	11,140	46,000
Maximum Sale Price	368,390	301,000	Maximum Sale Price	258,020	250,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	86.6	86.7	Median Ratio	85.2	78.8
Lower Median Confidence Interval	81.5	39.5	Lower Median Confidence Interval	73.1	44.7
Upper Median Confidence Interval	91.9	102.4	Upper Median Confidence Interval	96.9	118.6
Broadened Median Ratio	86.4	85.7	Broadened Median Ratio	86.0	84.5
Coefficient of Dispersion (COD)	24.3	38.7	Coefficient of Dispersion (COD)	22.5	33.3
Lower COD Confidence Interval	21.4	20.0	Lower COD Confidence Interval	17.3	9.6
Upper COD Confidence Interval	27.5	104.8	Upper COD Confidence Interval	30.1	49.6
Value Weighted COD	21.4	36.5	Value Weighted COD	20.5	28.9
Coefficient of Concentration @10%	25.4	25.0	Coefficient of Concentration @10%	20.7	20.0
Coefficient of Concentration @15%	35.5	33.3	Coefficient of Concentration @15%	41.4	20.0
Coefficient of Concentration @20%	48.7	41.7	Coefficient of Concentration @20%	44.8	20.0
Coefficient of Concentration @50%	82.7	50.0	Coefficient of Concentration @50%	89.7	80.0
Coefficient of Concentration @100%	95.4	91.7	Coefficient of Concentration @100%	93.1	100.0
Coefficient of Interquartile Deviation	21.1	37.9	Coefficient of Interquartile Deviation	25.1	41.7
Median Percent Deviation	21.8	39.1	Median Percent Deviation	22.0	45.7
Lower Quartile (25 th Percentile)	67.1	39.4	Lower Quartile (25 th Percentile)	67.2	51.3
Upper Quartile (75 th Percentile)	103.6	105.0	Upper Quartile (75 th Percentile)	110.0	117.0
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.12	0.45	Relative Skewness	0.42	0.00
Relative Kurtosis	2.92	2.74	Relative Kurtosis	2.16	1.40
Arithmetic Mean Ratio	84.0	75.8	Arithmetic Mean Ratio	85.7	83.1
Weighted Mean Ratio	81.1	65.4	Weighted Mean Ratio	81.3	75.6
Geometric Mean Ratio	79.6	63.5	Geometric Mean Ratio	82.8	77.3
Harmonic Mean Ratio	74.5	50.9	Harmonic Mean Ratio	80.0	71.5
Standard Deviation	26.0	42.8	Standard Deviation	23.0	33.5
Coefficient of Variation (COV)	30.9	56.4	Coefficient of Variation (COV)	26.9	40.4
Price-Related Differential (PRD)	1.04	1.16	Price-Related Differential (PRD)	1.05	1.10
Lower PRD Confidence Interval	1.01	0.92	Lower PRD Confidence Interval	0.99	0.93
Upper PRD Confidence interval	1.06	1.81	Upper PRD Confidence interval	1.15	1.21
Coef. of Price-Related Bias (PRB)	-0.22	-0.08	Coef. of Price-Related Bias (PRB)	-0.09	0.04
Lower PRB Confidence Interval	-0.29	-0.42	Lower PRB Confidence Interval	-0.25	-0.77
Upper PRB Confidence Interval	-0.15	0.25	Upper PRB Confidence Interval	0.07	0.84
Average Sale Price	103,863	95,045	Average Sale Price	89,532	98,200
Average Appraised Value	84,227	62,187	Average Appraised Value	72,791	74,276

Detailed Sample Statistics for the Residential and Commercial Subclasses

069 : NORTON			070 : OSAGE		
S-9					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	38	11	Original Number of Sales	224	13
Trimmed Outliers	2	2	Trimmed Outliers	25	0
Number of Ratios: Outliers Removed	36	9	Number of Ratios: Outliers Removed	199	13
Minimum Ratio	56.0	34.4	Minimum Ratio	10.4	22.9
Maximum Ratio	216.2	491.7	Maximum Ratio	294.9	131.2
Minimum Sale Price	5,860	5,000	Minimum Sale Price	4,380	10,000
Maximum Sale Price	436,460	850,000	Maximum Sale Price	555,440	200,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	87.4	84.3	Median Ratio	89.3	82.9
Lower Median Confidence Interval	81.9	66.2	Lower Median Confidence Interval	85.8	72.1
Upper Median Confidence Interval	94.8	120.2	Upper Median Confidence Interval	93.7	98.9
Broadened Median Ratio	87.6	86.9	Broadened Median Ratio	89.4	86.3
Coefficient of Dispersion (COD)	17.2	23.0	Coefficient of Dispersion (COD)	19.5	28.6
Lower COD Confidence Interval	13.5	11.8	Lower COD Confidence Interval	17.2	18.9
Upper COD Confidence Interval	23.1	52.7	Upper COD Confidence Interval	22.1	59.2
Value Weighted COD	16.1	36.2	Value Weighted COD	17.3	28.6
Coefficient of Concentration @10%	36.8	27.3	Coefficient of Concentration @10%	31.7	23.1
Coefficient of Concentration @15%	47.4	36.4	Coefficient of Concentration @15%	46.0	46.2
Coefficient of Concentration @20%	57.9	45.5	Coefficient of Concentration @20%	59.4	53.8
Coefficient of Concentration @50%	89.5	72.7	Coefficient of Concentration @50%	83.5	76.9
Coefficient of Concentration @100%	94.7	81.8	Coefficient of Concentration @100%	93.3	100.0
Coefficient of Interquartile Deviation	15.6	32.0	Coefficient of Interquartile Deviation	16.9	28.4
Median Percent Deviation	16.1	21.4	Median Percent Deviation	16.3	19.3
Lower Quartile (25 th Percentile)	75.7	66.2	Lower Quartile (25 th Percentile)	75.3	64.4
Upper Quartile (75 th Percentile)	103.0	120.2	Upper Quartile (75 th Percentile)	105.5	111.5
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptK
Relative Skewness	0.59	-0.23	Relative Skewness	0.04	-0.26
Relative Kurtosis	3.33	2.36	Relative Kurtosis	3.09	2.46
Arithmetic Mean Ratio	88.1	78.1	Arithmetic Mean Ratio	87.6	85.5
Weighted Mean Ratio	80.5	64.6	Weighted Mean Ratio	84.8	91.3
Geometric Mean Ratio	86.1	73.5	Geometric Mean Ratio	84.6	78.2
Harmonic Mean Ratio	84.1	68.2	Harmonic Mean Ratio	81.2	68.7
Standard Deviation	19.4	26.4	Standard Deviation	22.2	32.2
Coefficient of Variation (COV)	22.0	33.8	Coefficient of Variation (COV)	25.3	37.6
Price-Related Differential (PRD)	1.09	1.21	Price-Related Differential (PRD)	1.03	0.94
Lower PRD Confidence Interval	1.04	0.94	Lower PRD Confidence Interval	1.02	0.81
Upper PRD Confidence interval	1.20	1.57	Upper PRD Confidence interval	1.05	1.05
Coef. of Price-Related Bias (PRB)	-0.20	-0.43	Coef. of Price-Related Bias (PRB)	-0.12	0.16
Lower PRB Confidence Interval	-0.28	-1.02	Lower PRB Confidence Interval	-0.18	-0.01
Upper PRB Confidence Interval	-0.12	0.16	Upper PRB Confidence Interval	-0.05	0.32
Average Sale Price	99,457	226,722	Average Sale Price	139,658	75,973
Average Appraised Value	80,059	146,474	Average Appraised Value	118,395	69,328

Detailed Sample Statistics for the Residential and Commercial Subclasses

071 : OSBORNE			072 : OTTAWA		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	21	4	Original Number of Sales	50	5
Trimmed Outliers	4	0	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	17	4	Number of Ratios: Outliers Removed	48	5
Minimum Ratio	24.2	40.2	Minimum Ratio	10.3	26.2
Maximum Ratio	245.6	110.5	Maximum Ratio	156.9	127.3
Minimum Sale Price	3,940	20,000	Minimum Sale Price	12,940	12,000
Maximum Sale Price	2,200,040	125,000	Maximum Sale Price	438,410	175,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	97.5	94.2	Median Ratio	94.0	85.8
Lower Median Confidence Interval	81.8	42.6	Lower Median Confidence Interval	83.2	26.4
Upper Median Confidence Interval	102.0	109.9	Upper Median Confidence Interval	99.5	122.5
Broadened Median Ratio	95.9	87.9	Broadened Median Ratio	93.2	67.3
Coefficient of Dispersion (COD)	15.9	21.7	Coefficient of Dispersion (COD)	18.4	37.5
Lower COD Confidence Interval	9.2	3.3	Lower COD Confidence Interval	14.4	12.4
Upper COD Confidence Interval	28.6	46.1	Upper COD Confidence Interval	23.5	116.3
Value Weighted COD	16.2	17.2	Value Weighted COD	17.4	32.3
Coefficient of Concentration @10%	42.9	50.0	Coefficient of Concentration @10%	36.0	40.0
Coefficient of Concentration @15%	52.4	50.0	Coefficient of Concentration @15%	50.0	40.0
Coefficient of Concentration @20%	61.9	75.0	Coefficient of Concentration @20%	58.0	40.0
Coefficient of Concentration @50%	71.4	75.0	Coefficient of Concentration @50%	94.0	60.0
Coefficient of Concentration @100%	95.2	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	14.9	29.5	Coefficient of Interquartile Deviation	15.8	46.9
Median Percent Deviation	13.7	11.7	Median Percent Deviation	15.1	48.3
Lower Quartile (25 th Percentile)	75.8	52.3	Lower Quartile (25 th Percentile)	73.9	27.1
Upper Quartile (75 th Percentile)	104.8	107.8	Upper Quartile (75 th Percentile)	103.6	107.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	AcceptK	AcceptW
Relative Skewness	-1.22	-0.88	Relative Skewness	-0.04	0.05
Relative Kurtosis	3.59	2.12	Relative Kurtosis	2.47	1.55
Arithmetic Mean Ratio	86.1	84.8	Arithmetic Mean Ratio	91.0	71.0
Weighted Mean Ratio	85.3	88.2	Weighted Mean Ratio	86.9	62.8
Geometric Mean Ratio	82.9	79.2	Geometric Mean Ratio	88.3	58.8
Harmonic Mean Ratio	78.7	72.4	Harmonic Mean Ratio	85.5	47.7
Standard Deviation	20.8	31.0	Standard Deviation	21.4	43.4
Coefficient of Variation (COV)	24.2	36.6	Coefficient of Variation (COV)	23.6	61.1
Price-Related Differential (PRD)	1.01	0.96	Price-Related Differential (PRD)	1.05	1.13
Lower PRD Confidence Interval	0.95	0.87	Lower PRD Confidence Interval	1.01	0.83
Upper PRD Confidence interval	1.07	1.15	Upper PRD Confidence interval	1.10	1.72
Coef. of Price-Related Bias (PRB)	-0.16	0.00	Coef. of Price-Related Bias (PRB)	-0.02	-0.15
Lower PRB Confidence Interval	-0.27	0.00	Lower PRB Confidence Interval	-0.08	-0.79
Upper PRB Confidence Interval	-0.05	0.00	Upper PRB Confidence Interval	0.06	0.50
Average Sale Price	92,780	51,250	Average Sale Price	132,062	75,380
Average Appraised Value	79,097	45,215	Average Appraised Value	114,813	47,310

Detailed Sample Statistics for the Residential and Commercial Subclasses

073 : PAWNEE			074 : PHILLIPS		
<i>S-5</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	89	7	Original Number of Sales	69	4
Trimmed Outliers	7	0	Trimmed Outliers	4	0
Number of Ratios: Outliers Removed	82	7	Number of Ratios: Outliers Removed	65	4
Minimum Ratio	21.4	38.5	Minimum Ratio	32.5	23.0
Maximum Ratio	278.8	98.9	Maximum Ratio	233.2	136.5
Minimum Sale Price	3,160	10,000	Minimum Sale Price	3,680	25,000
Maximum Sale Price	294,030	275,000	Maximum Sale Price	344,590	138,500
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	85.6	58.3	Median Ratio	82.0	66.2
Lower Median Confidence Interval	82.0	47.8	Lower Median Confidence Interval	73.8	24.3
Upper Median Confidence Interval	90.4	95.1	Upper Median Confidence Interval	91.4	133.9
Broadened Median Ratio	85.4	65.7	Broadened Median Ratio	80.5	70.7
Coefficient of Dispersion (COD)	19.8	36.6	Coefficient of Dispersion (COD)	24.9	55.9
Lower COD Confidence Interval	16.5	9.3	Lower COD Confidence Interval	20.8	15.9
Upper COD Confidence Interval	23.9	47.2	Upper COD Confidence Interval	31.4	81.7
Value Weighted COD	18.7	23.8	Value Weighted COD	21.2	42.6
Coefficient of Concentration @10%	31.5	14.3	Coefficient of Concentration @10%	21.7	0.0
Coefficient of Concentration @15%	46.1	14.3	Coefficient of Concentration @15%	37.7	0.0
Coefficient of Concentration @20%	53.9	42.9	Coefficient of Concentration @20%	44.9	0.0
Coefficient of Concentration @50%	88.8	57.1	Coefficient of Concentration @50%	85.5	50.0
Coefficient of Concentration @100%	94.4	100.0	Coefficient of Concentration @100%	95.7	75.0
Coefficient of Interquartile Deviation	17.3	40.6	Coefficient of Interquartile Deviation	22.3	70.8
Median Percent Deviation	17.6	34.0	Median Percent Deviation	21.1	45.6
Lower Quartile (25 th Percentile)	68.6	47.8	Lower Quartile (25 th Percentile)	63.4	29.5
Upper Quartile (75 th Percentile)	98.3	95.1	Upper Quartile (75 th Percentile)	99.9	123.2
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	Reject4	Normality Test	RejectK	AcceptW
Relative Skewness	0.28	0.17	Relative Skewness	0.62	0.39
Relative Kurtosis	2.94	1.25	Relative Kurtosis	3.43	1.76
Arithmetic Mean Ratio	83.2	68.2	Arithmetic Mean Ratio	81.6	73.0
Weighted Mean Ratio	80.5	60.2	Weighted Mean Ratio	78.0	64.1
Geometric Mean Ratio	80.4	64.0	Geometric Mean Ratio	77.8	59.8
Harmonic Mean Ratio	77.6	60.2	Harmonic Mean Ratio	73.9	48.1
Standard Deviation	21.3	25.6	Standard Deviation	25.2	49.0
Coefficient of Variation (COV)	25.6	37.6	Coefficient of Variation (COV)	30.9	67.2
Price-Related Differential (PRD)	1.03	1.13	Price-Related Differential (PRD)	1.05	1.14
Lower PRD Confidence Interval	1.00	1.03	Lower PRD Confidence Interval	1.00	0.89
Upper PRD Confidence interval	1.07	1.39	Upper PRD Confidence interval	1.11	1.30
Coef. of Price-Related Bias (PRB)	-0.19	-0.11	Coef. of Price-Related Bias (PRB)	-0.06	0.00
Lower PRB Confidence Interval	-0.27	-0.45	Lower PRB Confidence Interval	-0.14	0.00
Upper PRB Confidence Interval	-0.11	0.24	Upper PRB Confidence Interval	0.02	0.00
Average Sale Price	97,733	103,500	Average Sale Price	82,106	57,125
Average Appraised Value	78,678	62,326	Average Appraised Value	64,012	36,605

Detailed Sample Statistics for the Residential and Commercial Subclasses

075 : POTTAWATOMIE			076 : PRATT S-2		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	183	15	Original Number of Sales	130	8
Trimmed Outliers	11	1	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	172	14	Number of Ratios: Outliers Removed	124	8
Minimum Ratio	40.1	44.4	Minimum Ratio	25.1	38.9
Maximum Ratio	242.7	217.3	Maximum Ratio	276.3	131.4
Minimum Sale Price	22,900	2,990	Minimum Sale Price	4,930	35,000
Maximum Sale Price	593,090	1,596,460	Maximum Sale Price	432,690	3,250,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	93.4	73.2	Median Ratio	90.1	60.4
Lower Median Confidence Interval	91.5	61.5	Lower Median Confidence Interval	85.7	42.6
Upper Median Confidence Interval	96.0	101.8	Upper Median Confidence Interval	94.9	93.9
Broadened Median Ratio	93.5	75.2	Broadened Median Ratio	90.2	60.3
Coefficient of Dispersion (COD)	10.8	30.0	Coefficient of Dispersion (COD)	17.6	36.4
Lower COD Confidence Interval	9.5	18.4	Lower COD Confidence Interval	15.2	19.9
Upper COD Confidence Interval	12.3	51.1	Upper COD Confidence Interval	20.7	65.0
Value Weighted COD	10.5	14.9	Value Weighted COD	15.9	16.3
Coefficient of Concentration @10%	51.4	33.3	Coefficient of Concentration @10%	38.5	0.0
Coefficient of Concentration @15%	70.5	33.3	Coefficient of Concentration @15%	50.0	50.0
Coefficient of Concentration @20%	80.3	46.7	Coefficient of Concentration @20%	60.0	50.0
Coefficient of Concentration @50%	97.3	80.0	Coefficient of Concentration @50%	92.3	75.0
Coefficient of Concentration @100%	98.4	86.7	Coefficient of Concentration @100%	99.2	87.5
Coefficient of Interquartile Deviation	9.7	27.5	Coefficient of Interquartile Deviation	16.0	35.4
Median Percent Deviation	9.8	27.5	Median Percent Deviation	14.8	22.0
Lower Quartile (25 th Percentile)	84.5	61.5	Lower Quartile (25 th Percentile)	73.6	44.9
Upper Quartile (75 th Percentile)	102.7	101.8	Upper Quartile (75 th Percentile)	102.5	87.6
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	-0.33	1.18	Relative Skewness	-0.04	1.11
Relative Kurtosis	3.20	3.70	Relative Kurtosis	3.04	3.13
Arithmetic Mean Ratio	92.9	81.2	Arithmetic Mean Ratio	88.4	68.5
Weighted Mean Ratio	92.0	79.0	Weighted Mean Ratio	85.1	53.1
Geometric Mean Ratio	91.9	76.2	Geometric Mean Ratio	85.9	63.4
Harmonic Mean Ratio	90.9	72.0	Harmonic Mean Ratio	83.2	59.3
Standard Deviation	13.1	32.0	Standard Deviation	20.2	30.9
Coefficient of Variation (COV)	14.1	39.5	Coefficient of Variation (COV)	22.8	45.1
Price-Related Differential (PRD)	1.01	1.03	Price-Related Differential (PRD)	1.04	1.29
Lower PRD Confidence Interval	1.00	0.89	Lower PRD Confidence Interval	1.02	1.07
Upper PRD Confidence interval	1.02	1.26	Upper PRD Confidence interval	1.06	1.73
Coef. of Price-Related Bias (PRB)	-0.07	-0.06	Coef. of Price-Related Bias (PRB)	-0.06	-0.10
Lower PRB Confidence Interval	-0.11	-0.24	Lower PRB Confidence Interval	-0.10	-0.31
Upper PRB Confidence Interval	-0.03	0.11	Upper PRB Confidence Interval	-0.01	0.11
Average Sale Price	242,075	480,904	Average Sale Price	113,476	710,438
Average Appraised Value	222,668	379,755	Average Appraised Value	96,603	377,468

Detailed Sample Statistics for the Residential and Commercial Subclasses

077 : RAWLIN			078 : RENO		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	23	4	Original Number of Sales	231	17
Trimmed Outliers	3	0	Trimmed Outliers	22	0
Number of Ratios: Outliers Removed	20	4	Number of Ratios: Outliers Removed	209	17
Minimum Ratio	47.8	12.0	Minimum Ratio	21.8	47.9
Maximum Ratio	231.1	125.5	Maximum Ratio	653.1	119.4
Minimum Sale Price	9,190	8,000	Minimum Sale Price	4,930	35,000
Maximum Sale Price	173,410	320,000	Maximum Sale Price	553,850	1,899,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	84.0	47.5	Median Ratio	87.7	81.4
Lower Median Confidence Interval	73.2	12.2	Lower Median Confidence Interval	86.2	73.4
Upper Median Confidence Interval	96.7	123.2	Upper Median Confidence Interval	90.2	100.9
Broadened Median Ratio	84.5	54.6	Broadened Median Ratio	87.7	81.8
Coefficient of Dispersion (COD)	16.9	92.9	Coefficient of Dispersion (COD)	14.1	18.4
Lower COD Confidence Interval	13.1	13.9	Lower COD Confidence Interval	12.5	12.8
Upper COD Confidence Interval	24.6	177.9	Upper COD Confidence Interval	15.9	26.9
Value Weighted COD	16.7	83.7	Value Weighted COD	12.6	9.6
Coefficient of Concentration @10%	26.1	0.0	Coefficient of Concentration @10%	44.2	41.2
Coefficient of Concentration @15%	43.5	0.0	Coefficient of Concentration @15%	56.7	47.1
Coefficient of Concentration @20%	69.6	0.0	Coefficient of Concentration @20%	67.1	58.8
Coefficient of Concentration @50%	87.0	0.0	Coefficient of Concentration @50%	91.3	100.0
Coefficient of Concentration @100%	95.7	75.0	Coefficient of Concentration @100%	97.0	100.0
Coefficient of Interquartile Deviation	15.6	106.1	Coefficient of Interquartile Deviation	11.9	18.2
Median Percent Deviation	16.2	70.6	Median Percent Deviation	12.1	15.8
Lower Quartile (25 th Percentile)	71.7	13.0	Lower Quartile (25 th Percentile)	77.8	71.8
Upper Quartile (75 th Percentile)	97.9	113.9	Upper Quartile (75 th Percentile)	98.7	101.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.06	0.34	Relative Skewness	0.34	0.21
Relative Kurtosis	2.52	1.44	Relative Kurtosis	3.34	2.38
Arithmetic Mean Ratio	81.8	58.1	Arithmetic Mean Ratio	87.7	86.1
Weighted Mean Ratio	79.0	26.2	Weighted Mean Ratio	85.1	84.5
Geometric Mean Ratio	80.1	37.2	Geometric Mean Ratio	86.2	83.9
Harmonic Mean Ratio	78.3	24.0	Harmonic Mean Ratio	84.6	81.6
Standard Deviation	16.6	54.4	Standard Deviation	16.4	20.0
Coefficient of Variation (COV)	20.3	93.6	Coefficient of Variation (COV)	18.6	23.2
Price-Related Differential (PRD)	1.04	2.22	Price-Related Differential (PRD)	1.03	1.02
Lower PRD Confidence Interval	0.99	0.91	Lower PRD Confidence Interval	1.01	0.95
Upper PRD Confidence interval	1.11	3.04	Upper PRD Confidence interval	1.05	1.12
Coef. of Price-Related Bias (PRB)	-0.24	0.00	Coef. of Price-Related Bias (PRB)	-0.16	0.04
Lower PRB Confidence Interval	-0.42	0.00	Lower PRB Confidence Interval	-0.22	-0.05
Upper PRB Confidence Interval	-0.06	0.00	Upper PRB Confidence Interval	-0.09	0.13
Average Sale Price	95,158	102,000	Average Sale Price	151,413	216,765
Average Appraised Value	75,136	26,725	Average Appraised Value	128,900	183,257

Detailed Sample Statistics for the Residential and Commercial Subclasses

079 : REPUBLIC			080 : RICE		
<i>S-6</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	47	9	Original Number of Sales	108	13
Trimmed Outliers	1	0	Trimmed Outliers	2	1
Number of Ratios: Outliers Removed	46	9	Number of Ratios: Outliers Removed	106	12
Minimum Ratio	35.9	53.6	Minimum Ratio	14.2	31.8
Maximum Ratio	155.5	117.1	Maximum Ratio	298.3	230.6
Minimum Sale Price	2,980	20,000	Minimum Sale Price	2,490	20,000
Maximum Sale Price	333,140	585,000	Maximum Sale Price	312,470	880,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.2	97.3	Median Ratio	89.1	97.1
Lower Median Confidence Interval	73.8	57.1	Lower Median Confidence Interval	85.4	53.5
Upper Median Confidence Interval	97.2	112.2	Upper Median Confidence Interval	94.3	109.8
Broadened Median Ratio	88.3	89.3	Broadened Median Ratio	89.4	89.9
Coefficient of Dispersion (COD)	19.6	22.5	Coefficient of Dispersion (COD)	27.1	36.8
Lower COD Confidence Interval	15.0	12.1	Lower COD Confidence Interval	22.9	18.5
Upper COD Confidence Interval	25.4	40.1	Upper COD Confidence Interval	32.2	69.2
Value Weighted COD	18.7	32.3	Value Weighted COD	20.6	43.6
Coefficient of Concentration @10%	29.8	33.3	Coefficient of Concentration @10%	27.8	15.4
Coefficient of Concentration @15%	42.6	33.3	Coefficient of Concentration @15%	39.8	38.5
Coefficient of Concentration @20%	61.7	44.4	Coefficient of Concentration @20%	46.3	38.5
Coefficient of Concentration @50%	91.5	100.0	Coefficient of Concentration @50%	84.3	69.2
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	98.1	84.6
Coefficient of Interquartile Deviation	16.6	25.2	Coefficient of Interquartile Deviation	23.1	31.8
Median Percent Deviation	17.8	20.4	Median Percent Deviation	22.4	38.8
Lower Quartile (25 th Percentile)	71.4	59.1	Lower Quartile (25 th Percentile)	65.5	52.8
Upper Quartile (75 th Percentile)	101.3	108.1	Upper Quartile (75 th Percentile)	106.7	114.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	RejectA	Normality Test	RejectK	RejectK
Relative Skewness	-0.06	-0.14	Relative Skewness	0.22	1.02
Relative Kurtosis	3.00	1.28	Relative Kurtosis	3.06	3.90
Arithmetic Mean Ratio	85.3	85.9	Arithmetic Mean Ratio	88.9	88.0
Weighted Mean Ratio	83.5	67.9	Weighted Mean Ratio	88.1	56.9
Geometric Mean Ratio	82.4	82.3	Geometric Mean Ratio	82.4	77.9
Harmonic Mean Ratio	79.0	78.7	Harmonic Mean Ratio	73.9	68.7
Standard Deviation	21.5	25.6	Standard Deviation	31.7	45.8
Coefficient of Variation (COV)	25.2	29.8	Coefficient of Variation (COV)	35.6	52.1
Price-Related Differential (PRD)	1.02	1.26	Price-Related Differential (PRD)	1.01	1.54
Lower PRD Confidence Interval	0.97	1.12	Lower PRD Confidence Interval	0.97	1.22
Upper PRD Confidence interval	1.09	1.50	Upper PRD Confidence interval	1.05	2.13
Coef. of Price-Related Bias (PRB)	-0.01	-0.11	Coef. of Price-Related Bias (PRB)	0.03	-0.16
Lower PRB Confidence Interval	-0.07	-0.22	Lower PRB Confidence Interval	-0.04	-0.39
Upper PRB Confidence Interval	0.05	-0.01	Upper PRB Confidence Interval	0.10	0.07
Average Sale Price	90,704	153,778	Average Sale Price	97,232	179,833
Average Appraised Value	75,737	104,480	Average Appraised Value	85,699	102,403

Detailed Sample Statistics for the Residential and Commercial Subclasses

081 : RILEY			082 : ROOKS		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	229	17	Original Number of Sales	71	7
Trimmed Outliers	22	2	Trimmed Outliers	8	0
Number of Ratios: Outliers Removed	207	15	Number of Ratios: Outliers Removed	63	7
Minimum Ratio	31.9	32.8	Minimum Ratio	8.3	12.3
Maximum Ratio	264.3	185.8	Maximum Ratio	192.4	113.8
Minimum Sale Price	14,870	141,210	Minimum Sale Price	5,000	10,000
Maximum Sale Price	1,870,450	10,046,740	Maximum Sale Price	275,000	375,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	92.0	96.5	Median Ratio	83.6	101.6
Lower Median Confidence Interval	90.6	82.4	Lower Median Confidence Interval	78.3	39.5
Upper Median Confidence Interval	93.2	102.9	Upper Median Confidence Interval	90.3	110.0
Broadened Median Ratio	92.0	93.9	Broadened Median Ratio	83.6	90.2
Coefficient of Dispersion (COD)	8.1	10.8	Coefficient of Dispersion (COD)	20.0	29.5
Lower COD Confidence Interval	7.2	7.2	Lower COD Confidence Interval	16.6	8.7
Upper COD Confidence Interval	9.1	15.9	Upper COD Confidence Interval	25.0	104.4
Value Weighted COD	8.1	15.4	Value Weighted COD	19.3	47.0
Coefficient of Concentration @10%	61.1	52.9	Coefficient of Concentration @10%	36.6	42.9
Coefficient of Concentration @15%	73.8	64.7	Coefficient of Concentration @15%	43.7	57.1
Coefficient of Concentration @20%	84.7	70.6	Coefficient of Concentration @20%	54.9	57.1
Coefficient of Concentration @50%	95.6	88.2	Coefficient of Concentration @50%	85.9	71.4
Coefficient of Concentration @100%	99.1	100.0	Coefficient of Concentration @100%	95.8	100.0
Coefficient of Interquartile Deviation	7.3	11.9	Coefficient of Interquartile Deviation	17.1	34.7
Median Percent Deviation	7.2	9.4	Median Percent Deviation	17.1	11.9
Lower Quartile (25 th Percentile)	85.3	80.2	Lower Quartile (25 th Percentile)	69.3	39.5
Upper Quartile (75 th Percentile)	98.7	103.2	Upper Quartile (75 th Percentile)	97.9	110.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	AcceptK	AcceptW
Relative Skewness	-0.17	-0.03	Relative Skewness	0.05	-0.68
Relative Kurtosis	3.01	2.34	Relative Kurtosis	2.66	1.90
Arithmetic Mean Ratio	91.0	93.1	Arithmetic Mean Ratio	81.9	78.0
Weighted Mean Ratio	90.4	86.3	Weighted Mean Ratio	78.8	58.9
Geometric Mean Ratio	90.4	92.2	Geometric Mean Ratio	79.1	63.5
Harmonic Mean Ratio	89.9	91.3	Harmonic Mean Ratio	76.2	43.9
Standard Deviation	9.6	13.2	Standard Deviation	20.8	39.7
Coefficient of Variation (COV)	10.6	14.2	Coefficient of Variation (COV)	25.4	50.9
Price-Related Differential (PRD)	1.01	1.08	Price-Related Differential (PRD)	1.04	1.32
Lower PRD Confidence Interval	1.00	0.98	Lower PRD Confidence Interval	1.00	0.91
Upper PRD Confidence interval	1.02	1.14	Upper PRD Confidence interval	1.09	1.84
Coef. of Price-Related Bias (PRB)	-0.04	0.01	Coef. of Price-Related Bias (PRB)	-0.07	-0.04
Lower PRB Confidence Interval	-0.08	-0.11	Lower PRB Confidence Interval	-0.16	-0.30
Upper PRB Confidence Interval	0.00	0.13	Upper PRB Confidence Interval	0.02	0.22
Average Sale Price	263,283	1,525,621	Average Sale Price	91,481	87,791
Average Appraised Value	238,077	1,316,838	Average Appraised Value	72,078	51,739

Detailed Sample Statistics for the Residential and Commercial Subclasses

083 : RUSH			084 : RUSSELL		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	30	7	Original Number of Sales	95	12
Trimmed Outliers	2	0	Trimmed Outliers	8	0
Number of Ratios: Outliers Removed	28	7	Number of Ratios: Outliers Removed	87	12
Minimum Ratio	33.6	27.4	Minimum Ratio	6.9	22.1
Maximum Ratio	192.5	111.7	Maximum Ratio	200.5	151.0
Minimum Sale Price	7,170	3,000	Minimum Sale Price	5,780	12,000
Maximum Sale Price	351,510	95,000	Maximum Sale Price	1,130,100	455,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	75.4	68.5	Median Ratio	91.5	64.6
Lower Median Confidence Interval	66.0	30.4	Lower Median Confidence Interval	87.6	55.9
Upper Median Confidence Interval	86.8	100.6	Upper Median Confidence Interval	96.8	101.9
Broadened Median Ratio	75.9	67.4	Broadened Median Ratio	92.0	66.6
Coefficient of Dispersion (COD)	20.9	34.4	Coefficient of Dispersion (COD)	15.1	45.9
Lower COD Confidence Interval	15.3	17.3	Lower COD Confidence Interval	12.8	31.7
Upper COD Confidence Interval	29.3	98.7	Upper COD Confidence Interval	18.4	103.3
Value Weighted COD	18.4	27.3	Value Weighted COD	14.6	29.0
Coefficient of Concentration @10%	23.3	42.9	Coefficient of Concentration @10%	38.9	25.0
Coefficient of Concentration @15%	40.0	42.9	Coefficient of Concentration @15%	57.9	33.3
Coefficient of Concentration @20%	56.7	42.9	Coefficient of Concentration @20%	69.5	41.7
Coefficient of Concentration @50%	90.0	57.1	Coefficient of Concentration @50%	91.6	58.3
Coefficient of Concentration @100%	93.3	100.0	Coefficient of Concentration @100%	97.9	83.3
Coefficient of Interquartile Deviation	20.2	51.3	Coefficient of Interquartile Deviation	12.6	41.7
Median Percent Deviation	17.6	46.9	Median Percent Deviation	12.1	30.1
Lower Quartile (25 th Percentile)	58.0	30.4	Lower Quartile (25 th Percentile)	78.5	55.3
Upper Quartile (75 th Percentile)	88.4	100.6	Upper Quartile (75 th Percentile)	101.6	109.2
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	-0.24	0.04	Relative Skewness	-0.08	0.49
Relative Kurtosis	2.31	1.79	Relative Kurtosis	3.08	2.35
Arithmetic Mean Ratio	72.1	67.4	Arithmetic Mean Ratio	89.8	76.3
Weighted Mean Ratio	73.9	57.9	Weighted Mean Ratio	86.6	70.2
Geometric Mean Ratio	69.2	60.1	Geometric Mean Ratio	88.1	66.0
Harmonic Mean Ratio	66.1	52.6	Harmonic Mean Ratio	86.1	55.2
Standard Deviation	19.5	31.9	Standard Deviation	17.4	39.9
Coefficient of Variation (COV)	27.0	47.2	Coefficient of Variation (COV)	19.4	52.4
Price-Related Differential (PRD)	0.98	1.16	Price-Related Differential (PRD)	1.04	1.09
Lower PRD Confidence Interval	0.91	1.00	Lower PRD Confidence Interval	1.01	0.88
Upper PRD Confidence interval	1.05	1.67	Upper PRD Confidence interval	1.07	1.32
Coef. of Price-Related Bias (PRB)	-0.03	-0.16	Coef. of Price-Related Bias (PRB)	-0.06	0.03
Lower PRB Confidence Interval	-0.17	-0.50	Lower PRB Confidence Interval	-0.11	-0.28
Upper PRB Confidence Interval	0.11	0.18	Upper PRB Confidence Interval	-0.01	0.33
Average Sale Price	83,994	38,786	Average Sale Price	127,835	111,500
Average Appraised Value	62,041	22,454	Average Appraised Value	110,724	78,257

Detailed Sample Statistics for the Residential and Commercial Subclasses

085 : SALINE			086 : SCOTT		
			S-5		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	225	29	Original Number of Sales	84	9
Trimmed Outliers	19	3	Trimmed Outliers	8	0
Number of Ratios: Outliers Removed	206	26	Number of Ratios: Outliers Removed	76	9
Minimum Ratio	26.3	29.2	Minimum Ratio	47.2	34.3
Maximum Ratio	204.1	297.9	Maximum Ratio	317.3	89.7
Minimum Sale Price	32,610	9,780	Minimum Sale Price	14,720	39,900
Maximum Sale Price	711,740	3,321,040	Maximum Sale Price	587,540	150,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	91.1	79.2	Median Ratio	86.4	61.1
Lower Median Confidence Interval	89.8	61.1	Lower Median Confidence Interval	80.3	35.1
Upper Median Confidence Interval	93.2	93.3	Upper Median Confidence Interval	92.9	85.6
Broadened Median Ratio	91.1	78.2	Broadened Median Ratio	86.6	59.3
Coefficient of Dispersion (COD)	10.7	29.3	Coefficient of Dispersion (COD)	16.4	27.3
Lower COD Confidence Interval	9.5	21.6	Lower COD Confidence Interval	13.8	17.4
Upper COD Confidence Interval	12.2	44.8	Upper COD Confidence Interval	19.9	52.4
Value Weighted COD	9.5	30.0	Value Weighted COD	15.5	29.3
Coefficient of Concentration @10%	52.9	13.8	Coefficient of Concentration @10%	33.3	22.2
Coefficient of Concentration @15%	67.1	31.0	Coefficient of Concentration @15%	54.8	22.2
Coefficient of Concentration @20%	76.9	37.9	Coefficient of Concentration @20%	64.3	33.3
Coefficient of Concentration @50%	94.7	75.9	Coefficient of Concentration @50%	89.3	100.0
Coefficient of Concentration @100%	99.1	89.7	Coefficient of Concentration @100%	96.4	100.0
Coefficient of Interquartile Deviation	9.2	28.1	Coefficient of Interquartile Deviation	14.4	31.7
Median Percent Deviation	8.8	33.0	Median Percent Deviation	14.3	22.1
Lower Quartile (25 th Percentile)	82.4	51.9	Lower Quartile (25 th Percentile)	73.8	41.4
Upper Quartile (75 th Percentile)	99.1	96.4	Upper Quartile (75 th Percentile)	98.6	80.1
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	AcceptK	AcceptK	Normality Test	RejectK	AcceptK
Relative Skewness	0.01	-0.09	Relative Skewness	0.53	0.09
Relative Kurtosis	3.31	1.96	Relative Kurtosis	3.20	1.69
Arithmetic Mean Ratio	91.3	72.0	Arithmetic Mean Ratio	85.3	60.5
Weighted Mean Ratio	90.7	67.0	Weighted Mean Ratio	81.3	64.7
Geometric Mean Ratio	90.4	67.0	Geometric Mean Ratio	83.5	57.3
Harmonic Mean Ratio	89.4	61.5	Harmonic Mean Ratio	81.8	54.1
Standard Deviation	13.0	25.7	Standard Deviation	17.6	20.4
Coefficient of Variation (COV)	14.3	35.7	Coefficient of Variation (COV)	20.7	33.8
Price-Related Differential (PRD)	1.01	1.07	Price-Related Differential (PRD)	1.05	0.94
Lower PRD Confidence Interval	1.00	0.95	Lower PRD Confidence Interval	1.02	0.88
Upper PRD Confidence interval	1.02	1.28	Upper PRD Confidence interval	1.09	1.01
Coef. of Price-Related Bias (PRB)	-0.03	-0.32	Coef. of Price-Related Bias (PRB)	-0.22	0.29
Lower PRB Confidence Interval	-0.06	-0.50	Lower PRB Confidence Interval	-0.32	0.03
Upper PRB Confidence Interval	0.02	-0.14	Upper PRB Confidence Interval	-0.12	0.56
Average Sale Price	177,714	615,208	Average Sale Price	161,036	90,322
Average Appraised Value	161,265	412,316	Average Appraised Value	130,898	58,427

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	363	153	Original Number of Sales	169	22
Trimmed Outliers	26	1	Trimmed Outliers	17	1
Number of Ratios: Outliers Removed	337	152	Number of Ratios: Outliers Removed	152	21
Minimum Ratio	31.8	29.4	Minimum Ratio	9.8	30.6
Maximum Ratio	222.8	170.0	Maximum Ratio	281.8	206.1
Minimum Sale Price	13,530	27,340	Minimum Sale Price	24,500	50,000
Maximum Sale Price	682,850	8,332,330	Maximum Sale Price	445,170	1,050,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	88.6	81.8	Median Ratio	85.2	84.9
Lower Median Confidence Interval	87.0	76.0	Lower Median Confidence Interval	82.9	57.9
Upper Median Confidence Interval	90.2	88.1	Upper Median Confidence Interval	88.0	99.1
Broadened Median Ratio	88.6	82.0	Broadened Median Ratio	85.4	85.1
Coefficient of Dispersion (COD)	10.7	25.6	Coefficient of Dispersion (COD)	12.1	29.0
Lower COD Confidence Interval	9.9	22.7	Lower COD Confidence Interval	10.6	20.0
Upper COD Confidence Interval	11.7	29.3	Upper COD Confidence Interval	13.9	49.2
Value Weighted COD	10.0	23.5	Value Weighted COD	11.4	33.4
Coefficient of Concentration @10%	50.7	20.3	Coefficient of Concentration @10%	50.3	27.3
Coefficient of Concentration @15%	67.5	32.0	Coefficient of Concentration @15%	60.4	31.8
Coefficient of Concentration @20%	79.6	46.4	Coefficient of Concentration @20%	70.4	36.4
Coefficient of Concentration @50%	95.6	89.5	Coefficient of Concentration @50%	91.7	77.3
Coefficient of Concentration @100%	98.3	99.3	Coefficient of Concentration @100%	98.2	95.5
Coefficient of Interquartile Deviation	9.8	22.1	Coefficient of Interquartile Deviation	11.2	31.9
Median Percent Deviation	10.0	21.9	Median Percent Deviation	10.0	31.1
Lower Quartile (25 th Percentile)	80.6	65.1	Lower Quartile (25 th Percentile)	77.7	52.1
Upper Quartile (75 th Percentile)	98.0	101.3	Upper Quartile (75 th Percentile)	96.8	106.3
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	-0.15	0.42	Relative Skewness	0.45	0.26
Relative Kurtosis	2.92	2.76	Relative Kurtosis	3.17	2.46
Arithmetic Mean Ratio	88.3	83.5	Arithmetic Mean Ratio	85.8	80.5
Weighted Mean Ratio	89.2	81.6	Weighted Mean Ratio	84.4	63.8
Geometric Mean Ratio	87.5	79.5	Geometric Mean Ratio	84.8	74.5
Harmonic Mean Ratio	86.6	75.3	Harmonic Mean Ratio	83.7	68.4
Standard Deviation	12.0	26.0	Standard Deviation	13.4	30.7
Coefficient of Variation (COV)	13.5	31.1	Coefficient of Variation (COV)	15.6	38.2
Price-Related Differential (PRD)	0.99	1.02	Price-Related Differential (PRD)	1.02	1.26
Lower PRD Confidence Interval	0.98	0.95	Lower PRD Confidence Interval	1.00	1.08
Upper PRD Confidence interval	1.00	1.10	Upper PRD Confidence interval	1.03	1.60
Coef. of Price-Related Bias (PRB)	-0.02	0.03	Coef. of Price-Related Bias (PRB)	-0.11	-0.11
Lower PRB Confidence Interval	-0.05	0.00	Lower PRB Confidence Interval	-0.18	-0.30
Upper PRB Confidence Interval	0.01	0.06	Upper PRB Confidence Interval	-0.05	0.09
Average Sale Price	198,186	828,199	Average Sale Price	163,241	243,762
Average Appraised Value	176,809	675,916	Average Appraised Value	137,761	155,642

Detailed Sample Statistics for the Residential and Commercial Subclasses

089 : SHAWNEE			090 : SHERIDAN		
			<i>S-2</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	312	83	Original Number of Sales	13	4
Trimmed Outliers	15	5	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	297	78	Number of Ratios: Outliers Removed	12	4
Minimum Ratio	34.7	31.8	Minimum Ratio	60.1	76.2
Maximum Ratio	198.4	830.4	Maximum Ratio	231.1	107.0
Minimum Sale Price	12,540	18,380	Minimum Sale Price	29,070	22,000
Maximum Sale Price	6,358,860	5,010,150	Maximum Sale Price	231,140	100,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.1	97.2	Median Ratio	84.8	94.2
Lower Median Confidence Interval	88.5	88.7	Lower Median Confidence Interval	67.0	76.6
Upper Median Confidence Interval	92.4	106.7	Upper Median Confidence Interval	90.8	106.9
Broadened Median Ratio	90.1	97.4	Broadened Median Ratio	80.6	93.3
Coefficient of Dispersion (COD)	12.4	23.5	Coefficient of Dispersion (COD)	19.8	13.5
Lower COD Confidence Interval	11.4	19.7	Lower COD Confidence Interval	12.9	2.4
Upper COD Confidence Interval	13.5	28.4	Upper COD Confidence Interval	33.9	15.5
Value Weighted COD	11.8	22.7	Value Weighted COD	19.0	12.0
Coefficient of Concentration @10%	45.8	22.9	Coefficient of Concentration @10%	30.8	0.0
Coefficient of Concentration @15%	62.8	32.5	Coefficient of Concentration @15%	38.5	75.0
Coefficient of Concentration @20%	76.3	44.6	Coefficient of Concentration @20%	53.8	100.0
Coefficient of Concentration @50%	96.2	86.7	Coefficient of Concentration @50%	84.6	100.0
Coefficient of Concentration @100%	99.4	94.0	Coefficient of Concentration @100%	92.3	100.0
Coefficient of Interquartile Deviation	11.5	21.7	Coefficient of Interquartile Deviation	16.5	14.9
Median Percent Deviation	11.0	22.8	Median Percent Deviation	16.6	12.1
Lower Quartile (25 th Percentile)	80.6	73.9	Lower Quartile (25 th Percentile)	65.0	78.2
Upper Quartile (75 th Percentile)	101.3	116.0	Upper Quartile (75 th Percentile)	93.1	106.3
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptW
Relative Skewness	-0.04	0.01	Relative Skewness	1.28	-0.12
Relative Kurtosis	2.79	2.39	Relative Kurtosis	4.36	1.20
Arithmetic Mean Ratio	89.9	94.0	Arithmetic Mean Ratio	81.2	92.9
Weighted Mean Ratio	88.2	82.4	Weighted Mean Ratio	75.7	96.1
Geometric Mean Ratio	88.8	89.6	Geometric Mean Ratio	79.1	92.0
Harmonic Mean Ratio	87.6	84.7	Harmonic Mean Ratio	77.3	91.0
Standard Deviation	14.0	27.5	Standard Deviation	20.5	15.1
Coefficient of Variation (COV)	15.5	29.3	Coefficient of Variation (COV)	25.3	16.2
Price-Related Differential (PRD)	1.02	1.14	Price-Related Differential (PRD)	1.07	0.97
Lower PRD Confidence Interval	1.00	1.06	Lower PRD Confidence Interval	1.04	0.92
Upper PRD Confidence interval	1.05	1.26	Upper PRD Confidence interval	1.14	1.01
Coef. of Price-Related Bias (PRB)	-0.02	0.03	Coef. of Price-Related Bias (PRB)	-0.08	0.00
Lower PRB Confidence Interval	-0.04	-0.09	Lower PRB Confidence Interval	-0.56	0.00
Upper PRB Confidence Interval	0.01	0.15	Upper PRB Confidence Interval	0.39	0.00
Average Sale Price	214,899	540,622	Average Sale Price	116,938	66,750
Average Appraised Value	189,461	445,388	Average Appraised Value	88,482	64,170

Detailed Sample Statistics for the Residential and Commercial Subclasses

091 : SHERMAN			092 : SMITH		
S-6			S-5		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	79	8	Original Number of Sales	55	8
Trimmed Outliers	5	0	Trimmed Outliers	2	1
Number of Ratios: Outliers Removed	74	8	Number of Ratios: Outliers Removed	53	7
Minimum Ratio	30.0	48.1	Minimum Ratio	24.6	12.9
Maximum Ratio	155.1	141.7	Maximum Ratio	200.9	177.4
Minimum Sale Price	9,900	45,000	Minimum Sale Price	4,250	2,700
Maximum Sale Price	633,930	520,000	Maximum Sale Price	251,550	443,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	85.4	70.1	Median Ratio	83.8	94.4
Lower Median Confidence Interval	79.8	65.3	Lower Median Confidence Interval	77.2	72.3
Upper Median Confidence Interval	91.1	104.4	Upper Median Confidence Interval	96.5	96.9
Broadened Median Ratio	85.5	72.9	Broadened Median Ratio	84.7	94.2
Coefficient of Dispersion (COD)	16.6	28.4	Coefficient of Dispersion (COD)	26.0	17.1
Lower COD Confidence Interval	13.8	16.8	Lower COD Confidence Interval	21.1	4.2
Upper COD Confidence Interval	20.3	55.7	Upper COD Confidence Interval	34.1	275.5
Value Weighted COD	16.8	55.4	Value Weighted COD	21.8	47.7
Coefficient of Concentration @10%	35.4	50.0	Coefficient of Concentration @10%	21.8	62.5
Coefficient of Concentration @15%	58.2	50.0	Coefficient of Concentration @15%	32.7	62.5
Coefficient of Concentration @20%	64.6	50.0	Coefficient of Concentration @20%	45.5	62.5
Coefficient of Concentration @50%	93.7	87.5	Coefficient of Concentration @50%	81.8	75.0
Coefficient of Concentration @100%	100.0	87.5	Coefficient of Concentration @100%	96.4	100.0
Coefficient of Interquartile Deviation	12.6	25.2	Coefficient of Interquartile Deviation	22.0	10.5
Median Percent Deviation	13.1	18.1	Median Percent Deviation	20.9	3.0
Lower Quartile (25 th Percentile)	73.7	65.6	Lower Quartile (25 th Percentile)	68.3	77.0
Upper Quartile (75 th Percentile)	95.2	101.0	Upper Quartile (75 th Percentile)	105.2	96.8
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectW
Relative Skewness	0.07	1.02	Relative Skewness	-0.10	-1.75
Relative Kurtosis	2.93	3.09	Relative Kurtosis	2.79	4.44
Arithmetic Mean Ratio	84.8	82.1	Arithmetic Mean Ratio	82.8	79.8
Weighted Mean Ratio	83.2	98.8	Weighted Mean Ratio	84.1	50.2
Geometric Mean Ratio	82.8	78.1	Geometric Mean Ratio	77.6	68.5
Harmonic Mean Ratio	80.7	74.5	Harmonic Mean Ratio	71.4	48.5
Standard Deviation	18.1	29.5	Standard Deviation	27.3	30.7
Coefficient of Variation (COV)	21.4	35.9	Coefficient of Variation (COV)	33.0	38.5
Price-Related Differential (PRD)	1.02	0.83	Price-Related Differential (PRD)	0.98	1.59
Lower PRD Confidence Interval	0.99	0.74	Lower PRD Confidence Interval	0.93	0.99
Upper PRD Confidence interval	1.07	1.14	Upper PRD Confidence interval	1.04	3.53
Coef. of Price-Related Bias (PRB)	0.01	0.20	Coef. of Price-Related Bias (PRB)	0.06	-0.08
Lower PRB Confidence Interval	-0.06	-0.06	Lower PRB Confidence Interval	-0.03	-0.28
Upper PRB Confidence Interval	0.07	0.45	Upper PRB Confidence Interval	0.15	0.13
Average Sale Price	161,810	156,125	Average Sale Price	77,932	121,886
Average Appraised Value	134,660	154,245	Average Appraised Value	65,548	61,241

Detailed Sample Statistics for the Residential and Commercial Subclasses

093 : STAFFORD			094 : STANTON		
S-5			S-2		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	46	6	Original Number of Sales	14	4
Trimmed Outliers	5	1	Trimmed Outliers	0	0
Number of Ratios: Outliers Removed	41	5	Number of Ratios: Outliers Removed	14	4
Minimum Ratio	25.8	34.8	Minimum Ratio	47.8	40.8
Maximum Ratio	224.2	98.7	Maximum Ratio	151.0	115.6
Minimum Sale Price	3,480	21,500	Minimum Sale Price	36,390	20,000
Maximum Sale Price	327,610	85,000	Maximum Sale Price	266,480	90,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	91.7	90.0	Median Ratio	84.9	72.9
Lower Median Confidence Interval	80.9	61.5	Lower Median Confidence Interval	59.3	41.3
Upper Median Confidence Interval	97.2	95.8	Upper Median Confidence Interval	99.0	114.5
Broadened Median Ratio	91.4	90.2	Broadened Median Ratio	80.9	74.6
Coefficient of Dispersion (COD)	20.0	3.1	Coefficient of Dispersion (COD)	27.1	40.0
Lower COD Confidence Interval	15.4	0.7	Lower COD Confidence Interval	17.2	6.9
Upper COD Confidence Interval	27.3	4.3	Upper COD Confidence Interval	43.7	46.4
Value Weighted COD	21.3	2.1	Value Weighted COD	26.4	41.6
Coefficient of Concentration @10%	30.4	83.3	Coefficient of Concentration @10%	21.4	0.0
Coefficient of Concentration @15%	50.0	83.3	Coefficient of Concentration @15%	28.6	0.0
Coefficient of Concentration @20%	54.3	83.3	Coefficient of Concentration @20%	28.6	0.0
Coefficient of Concentration @50%	82.6	83.3	Coefficient of Concentration @50%	92.9	75.0
Coefficient of Concentration @100%	95.7	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	17.0	10.9	Coefficient of Interquartile Deviation	27.3	45.7
Median Percent Deviation	16.4	2.6	Median Percent Deviation	25.2	36.3
Lower Quartile (25 th Percentile)	72.8	74.8	Lower Quartile (25 th Percentile)	57.4	43.6
Upper Quartile (75 th Percentile)	104.0	94.4	Upper Quartile (75 th Percentile)	103.8	110.1
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	AcceptK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	0.00	0.93	Relative Skewness	0.71	0.14
Relative Kurtosis	3.27	2.43	Relative Kurtosis	2.95	1.30
Arithmetic Mean Ratio	87.2	91.9	Arithmetic Mean Ratio	83.5	75.5
Weighted Mean Ratio	78.8	91.5	Weighted Mean Ratio	76.7	76.2
Geometric Mean Ratio	83.9	91.9	Geometric Mean Ratio	79.0	69.2
Harmonic Mean Ratio	79.8	91.8	Harmonic Mean Ratio	74.8	63.4
Standard Deviation	23.2	4.1	Standard Deviation	29.4	35.1
Coefficient of Variation (COV)	26.6	4.5	Coefficient of Variation (COV)	35.2	46.5
Price-Related Differential (PRD)	1.11	1.01	Price-Related Differential (PRD)	1.09	0.99
Lower PRD Confidence Interval	1.02	0.99	Lower PRD Confidence Interval	1.00	0.85
Upper PRD Confidence interval	1.29	1.02	Upper PRD Confidence interval	1.26	1.08
Coef. of Price-Related Bias (PRB)	-0.08	-0.07	Coef. of Price-Related Bias (PRB)	-0.10	0.00
Lower PRB Confidence Interval	-0.17	-0.48	Lower PRB Confidence Interval	-0.38	0.00
Upper PRB Confidence Interval	0.02	0.34	Upper PRB Confidence Interval	0.19	0.00
Average Sale Price	78,305	52,500	Average Sale Price	127,116	61,250
Average Appraised Value	61,672	48,022	Average Appraised Value	97,445	46,685

Detailed Sample Statistics for the Residential and Commercial Subclasses

095 : STEVENS			096 : SUMNER		
<i>S-10</i>					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	35	12	Original Number of Sales	288	14
Trimmed Outliers	3	1	Trimmed Outliers	15	1
Number of Ratios: Outliers Removed	32	11	Number of Ratios: Outliers Removed	273	13
Minimum Ratio	30.4	41.0	Minimum Ratio	12.5	29.9
Maximum Ratio	174.4	190.3	Maximum Ratio	252.3	270.0
Minimum Sale Price	7,960	7,000	Minimum Sale Price	1,930	2,390
Maximum Sale Price	234,340	1,413,836	Maximum Sale Price	577,580	677,310
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	84.1	70.7	Median Ratio	83.9	73.0
Lower Median Confidence Interval	78.5	58.2	Lower Median Confidence Interval	80.4	49.4
Upper Median Confidence Interval	90.1	83.5	Upper Median Confidence Interval	88.6	120.5
Broadened Median Ratio	83.4	70.6	Broadened Median Ratio	84.0	77.8
Coefficient of Dispersion (COD)	15.3	21.6	Coefficient of Dispersion (COD)	25.5	44.7
Lower COD Confidence Interval	10.9	15.8	Lower COD Confidence Interval	23.0	29.1
Upper COD Confidence Interval	21.1	48.3	Upper COD Confidence Interval	28.6	90.3
Value Weighted COD	13.1	27.5	Value Weighted COD	22.5	35.3
Coefficient of Concentration @10%	48.6	16.7	Coefficient of Concentration @10%	22.6	14.3
Coefficient of Concentration @15%	54.3	33.3	Coefficient of Concentration @15%	31.9	28.6
Coefficient of Concentration @20%	57.1	58.3	Coefficient of Concentration @20%	43.8	28.6
Coefficient of Concentration @50%	88.6	91.7	Coefficient of Concentration @50%	84.0	42.9
Coefficient of Concentration @100%	97.1	91.7	Coefficient of Concentration @100%	95.8	85.7
Coefficient of Interquartile Deviation	12.0	18.5	Coefficient of Interquartile Deviation	22.7	55.7
Median Percent Deviation	10.9	17.7	Median Percent Deviation	21.5	52.6
Lower Quartile (25 th Percentile)	77.6	58.1	Lower Quartile (25 th Percentile)	63.3	41.5
Upper Quartile (75 th Percentile)	97.7	84.3	Upper Quartile (75 th Percentile)	101.5	123.0
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectK
Relative Skewness	0.41	-0.27	Relative Skewness	0.04	0.41
Relative Kurtosis	3.15	1.91	Relative Kurtosis	3.23	1.98
Arithmetic Mean Ratio	84.7	67.1	Arithmetic Mean Ratio	81.4	78.3
Weighted Mean Ratio	86.0	50.5	Weighted Mean Ratio	79.4	61.3
Geometric Mean Ratio	82.9	65.0	Geometric Mean Ratio	76.1	68.6
Harmonic Mean Ratio	81.1	62.7	Harmonic Mean Ratio	68.8	59.5
Standard Deviation	17.9	17.0	Standard Deviation	26.6	40.1
Coefficient of Variation (COV)	21.1	25.3	Coefficient of Variation (COV)	32.6	51.2
Price-Related Differential (PRD)	0.99	1.33	Price-Related Differential (PRD)	1.02	1.28
Lower PRD Confidence Interval	0.95	1.03	Lower PRD Confidence Interval	1.00	1.01
Upper PRD Confidence interval	1.02	1.56	Upper PRD Confidence interval	1.05	1.71
Coef. of Price-Related Bias (PRB)	0.08	-0.22	Coef. of Price-Related Bias (PRB)	-0.09	0.12
Lower PRB Confidence Interval	-0.03	-0.40	Lower PRB Confidence Interval	-0.14	-0.16
Upper PRB Confidence Interval	0.18	-0.03	Upper PRB Confidence Interval	-0.05	0.40
Average Sale Price	124,352	204,712	Average Sale Price	127,218	112,315
Average Appraised Value	106,977	103,453	Average Appraised Value	101,038	68,808

Detailed Sample Statistics for the Residential and Commercial Subclasses

097 : THOMAS			098 : TREGO S-6		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	105	10	Original Number of Sales	38	7
Trimmed Outliers	7	0	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	98	10	Number of Ratios: Outliers Removed	35	7
Minimum Ratio	42.5	36.6	Minimum Ratio	31.4	15.0
Maximum Ratio	209.9	132.6	Maximum Ratio	238.1	113.6
Minimum Sale Price	4,060	64,250	Minimum Sale Price	4,570	10,000
Maximum Sale Price	746,280	675,000	Maximum Sale Price	448,060	611,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	91.1	76.1	Median Ratio	91.4	73.5
Lower Median Confidence Interval	84.7	53.6	Lower Median Confidence Interval	80.5	55.7
Upper Median Confidence Interval	95.1	95.6	Upper Median Confidence Interval	97.1	102.0
Broadened Median Ratio	91.2	75.6	Broadened Median Ratio	90.9	74.6
Coefficient of Dispersion (COD)	15.0	29.6	Coefficient of Dispersion (COD)	20.0	33.9
Lower COD Confidence Interval	12.9	18.0	Lower COD Confidence Interval	14.6	18.7
Upper COD Confidence Interval	17.9	52.3	Upper COD Confidence Interval	27.9	247.4
Value Weighted COD	15.3	31.8	Value Weighted COD	17.0	65.0
Coefficient of Concentration @10%	39.0	20.0	Coefficient of Concentration @10%	34.2	14.3
Coefficient of Concentration @15%	58.1	20.0	Coefficient of Concentration @15%	47.4	14.3
Coefficient of Concentration @20%	67.6	40.0	Coefficient of Concentration @20%	57.9	28.6
Coefficient of Concentration @50%	93.3	80.0	Coefficient of Concentration @50%	81.6	71.4
Coefficient of Concentration @100%	99.0	100.0	Coefficient of Concentration @100%	94.7	100.0
Coefficient of Interquartile Deviation	12.7	26.9	Coefficient of Interquartile Deviation	16.1	31.5
Median Percent Deviation	12.1	25.3	Median Percent Deviation	16.8	24.2
Lower Quartile (25 th Percentile)	78.8	52.2	Lower Quartile (25 th Percentile)	74.2	55.7
Upper Quartile (75 th Percentile)	102.0	93.2	Upper Quartile (75 th Percentile)	103.6	102.0
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	-0.04	0.47	Relative Skewness	0.20	-0.51
Relative Kurtosis	2.90	2.54	Relative Kurtosis	3.65	2.39
Arithmetic Mean Ratio	89.0	76.4	Arithmetic Mean Ratio	86.4	72.9
Weighted Mean Ratio	86.9	66.9	Weighted Mean Ratio	82.6	41.7
Geometric Mean Ratio	87.3	71.5	Geometric Mean Ratio	82.9	62.8
Harmonic Mean Ratio	85.6	66.8	Harmonic Mean Ratio	78.9	48.5
Standard Deviation	16.9	28.7	Standard Deviation	23.7	33.2
Coefficient of Variation (COV)	19.0	37.6	Coefficient of Variation (COV)	27.5	45.5
Price-Related Differential (PRD)	1.02	1.14	Price-Related Differential (PRD)	1.05	1.75
Lower PRD Confidence Interval	1.00	0.94	Lower PRD Confidence Interval	0.99	0.86
Upper PRD Confidence interval	1.05	1.50	Upper PRD Confidence interval	1.13	2.66
Coef. of Price-Related Bias (PRB)	-0.08	-0.03	Coef. of Price-Related Bias (PRB)	-0.15	-0.05
Lower PRB Confidence Interval	-0.13	-0.31	Lower PRB Confidence Interval	-0.24	-0.35
Upper PRB Confidence Interval	-0.03	0.26	Upper PRB Confidence Interval	-0.06	0.25
Average Sale Price	162,816	201,825	Average Sale Price	126,872	132,214
Average Appraised Value	141,417	135,054	Average Appraised Value	104,802	55,163

Detailed Sample Statistics for the Residential and Commercial Subclasses

099 : WABAUNSEE			100 : WALLACE		
S-5			S-4		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	62	8	Original Number of Sales	19	4
Trimmed Outliers	3	1	Trimmed Outliers	0	0
Number of Ratios: Outliers Removed	59	7	Number of Ratios: Outliers Removed	19	4
Minimum Ratio	29.9	8.6	Minimum Ratio	25.7	67.2
Maximum Ratio	215.5	455.0	Maximum Ratio	148.7	161.0
Minimum Sale Price	13,520	2,300	Minimum Sale Price	30,000	9,100
Maximum Sale Price	356,030	1,280,000	Maximum Sale Price	375,000	85,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	86.5	86.2	Median Ratio	77.5	71.3
Lower Median Confidence Interval	81.2	59.1	Lower Median Confidence Interval	59.4	67.2
Upper Median Confidence Interval	91.2	98.3	Upper Median Confidence Interval	98.0	156.7
Broadened Median Ratio	86.1	86.7	Broadened Median Ratio	78.5	85.6
Coefficient of Dispersion (COD)	18.0	22.9	Coefficient of Dispersion (COD)	32.2	35.3
Lower COD Confidence Interval	14.6	7.6	Lower COD Confidence Interval	22.7	2.4
Upper COD Confidence Interval	22.3	389.6	Upper COD Confidence Interval	52.3	40.7
Value Weighted COD	15.3	28.0	Value Weighted COD	25.9	11.3
Coefficient of Concentration @10%	33.9	25.0	Coefficient of Concentration @10%	26.3	75.0
Coefficient of Concentration @15%	45.2	62.5	Coefficient of Concentration @15%	31.6	75.0
Coefficient of Concentration @20%	61.3	62.5	Coefficient of Concentration @20%	31.6	75.0
Coefficient of Concentration @50%	93.5	75.0	Coefficient of Concentration @50%	78.9	75.0
Coefficient of Concentration @100%	96.8	87.5	Coefficient of Concentration @100%	100.0	75.0
Coefficient of Interquartile Deviation	15.7	20.1	Coefficient of Interquartile Deviation	31.0	50.6
Median Percent Deviation	16.4	14.0	Median Percent Deviation	30.4	5.4
Lower Quartile (25 th Percentile)	73.6	63.6	Lower Quartile (25 th Percentile)	53.1	67.3
Upper Quartile (75 th Percentile)	100.7	98.3	Upper Quartile (75 th Percentile)	101.1	139.5
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectW	Normality Test	RejectK	RejectW
Relative Skewness	0.13	-1.37	Relative Skewness	0.47	1.14
Relative Kurtosis	2.93	3.61	Relative Kurtosis	2.52	2.32
Arithmetic Mean Ratio	86.1	73.4	Arithmetic Mean Ratio	81.2	92.7
Weighted Mean Ratio	84.7	63.4	Weighted Mean Ratio	71.5	75.4
Geometric Mean Ratio	83.7	60.1	Geometric Mean Ratio	74.7	86.1
Harmonic Mean Ratio	81.1	37.0	Harmonic Mean Ratio	67.8	81.3
Standard Deviation	20.2	31.5	Standard Deviation	32.8	45.7
Coefficient of Variation (COV)	23.5	43.0	Coefficient of Variation (COV)	40.4	49.2
Price-Related Differential (PRD)	1.02	1.16	Price-Related Differential (PRD)	1.13	1.23
Lower PRD Confidence Interval	0.99	0.96	Lower PRD Confidence Interval	1.04	0.98
Upper PRD Confidence interval	1.05	1.52	Upper PRD Confidence interval	1.31	1.44
Coef. of Price-Related Bias (PRB)	-0.07	-0.21	Coef. of Price-Related Bias (PRB)	-0.10	0.00
Lower PRB Confidence Interval	-0.16	-0.76	Lower PRB Confidence Interval	-0.34	0.00
Upper PRB Confidence Interval	0.02	0.34	Upper PRB Confidence Interval	0.14	0.00
Average Sale Price	159,553	250,329	Average Sale Price	99,566	45,900
Average Appraised Value	135,149	158,713	Average Appraised Value	71,203	34,623

Detailed Sample Statistics for the Residential and Commercial Subclasses

101 : WASHINGTON			102 : WICHITA		
	S-14	S-3		S-6	
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	30	6	Original Number of Sales	19	8
Trimmed Outliers	1	0	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	29	6	Number of Ratios: Outliers Removed	17	8
Minimum Ratio	42.8	96.7	Minimum Ratio	20.8	30.0
Maximum Ratio	157.8	319.8	Maximum Ratio	161.4	136.6
Minimum Sale Price	15,200	5,000	Minimum Sale Price	6,480	10,000
Maximum Sale Price	169,380	60,000	Maximum Sale Price	245,640	165,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	90.6	129.1	Median Ratio	84.9	80.0
Lower Median Confidence Interval	76.3	98.8	Lower Median Confidence Interval	69.7	41.1
Upper Median Confidence Interval	99.4	239.9	Upper Median Confidence Interval	92.3	124.1
Broadened Median Ratio	90.0	129.5	Broadened Median Ratio	84.8	77.7
Coefficient of Dispersion (COD)	21.5	42.4	Coefficient of Dispersion (COD)	17.3	39.5
Lower COD Confidence Interval	16.4	12.9	Lower COD Confidence Interval	10.9	21.7
Upper COD Confidence Interval	30.5	73.7	Upper COD Confidence Interval	31.2	76.9
Value Weighted COD	21.7	24.5	Value Weighted COD	14.4	36.7
Coefficient of Concentration @10%	26.7	0.0	Coefficient of Concentration @10%	36.8	0.0
Coefficient of Concentration @15%	43.3	0.0	Coefficient of Concentration @15%	47.4	25.0
Coefficient of Concentration @20%	50.0	33.3	Coefficient of Concentration @20%	63.2	37.5
Coefficient of Concentration @50%	93.3	83.3	Coefficient of Concentration @50%	84.2	62.5
Coefficient of Concentration @100%	100.0	83.3	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	19.7	38.8	Coefficient of Interquartile Deviation	15.8	45.4
Median Percent Deviation	20.5	22.9	Median Percent Deviation	16.8	41.8
Lower Quartile (25 th Percentile)	67.7	99.9	Lower Quartile (25 th Percentile)	67.2	43.8
Upper Quartile (75 th Percentile)	103.4	200.0	Upper Quartile (75 th Percentile)	94.0	116.5
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.16	1.40	Relative Skewness	-1.04	0.19
Relative Kurtosis	2.00	3.48	Relative Kurtosis	3.35	1.74
Arithmetic Mean Ratio	86.0	155.9	Arithmetic Mean Ratio	79.7	79.7
Weighted Mean Ratio	81.6	116.5	Weighted Mean Ratio	84.1	61.2
Geometric Mean Ratio	83.0	141.6	Geometric Mean Ratio	76.5	70.9
Harmonic Mean Ratio	79.8	131.5	Harmonic Mean Ratio	72.3	62.3
Standard Deviation	22.1	84.8	Standard Deviation	20.2	38.5
Coefficient of Variation (COV)	25.8	54.4	Coefficient of Variation (COV)	25.3	48.3
Price-Related Differential (PRD)	1.05	1.34	Price-Related Differential (PRD)	0.95	1.30
Lower PRD Confidence Interval	1.01	1.08	Lower PRD Confidence Interval	0.89	1.10
Upper PRD Confidence interval	1.10	1.79	Upper PRD Confidence interval	1.00	1.69
Coef. of Price-Related Bias (PRB)	-0.07	-0.32	Coef. of Price-Related Bias (PRB)	0.02	-0.22
Lower PRB Confidence Interval	-0.18	-0.90	Lower PRB Confidence Interval	-0.11	-0.60
Upper PRB Confidence Interval	0.05	0.26	Upper PRB Confidence Interval	0.15	0.16
Average Sale Price	80,257	26,333	Average Sale Price	100,708	52,125
Average Appraised Value	65,510	30,690	Average Appraised Value	84,738	31,916

Detailed Sample Statistics for the Residential and Commercial Subclasses

103 : WILSON			104 : WOODSON		
			<i>S-4</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	71	7	Original Number of Sales	30	6
Trimmed Outliers	8	0	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	63	7	Number of Ratios: Outliers Removed	28	6
Minimum Ratio	30.1	37.7	Minimum Ratio	43.6	40.8
Maximum Ratio	271.7	146.6	Maximum Ratio	294.2	112.4
Minimum Sale Price	1,870	18,000	Minimum Sale Price	1,960	825
Maximum Sale Price	261,070	90,000	Maximum Sale Price	122,960	95,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	87.1	62.4	Median Ratio	98.1	74.2
Lower Median Confidence Interval	77.0	37.7	Lower Median Confidence Interval	92.1	43.4
Upper Median Confidence Interval	96.5	106.6	Upper Median Confidence Interval	112.3	110.8
Broadened Median Ratio	85.5	57.0	Broadened Median Ratio	98.3	75.3
Coefficient of Dispersion (COD)	23.9	47.4	Coefficient of Dispersion (COD)	25.1	35.8
Lower COD Confidence Interval	19.8	21.2	Lower COD Confidence Interval	16.9	18.7
Upper COD Confidence Interval	30.6	103.1	Upper COD Confidence Interval	37.3	55.7
Value Weighted COD	19.0	40.7	Value Weighted COD	15.6	28.8
Coefficient of Concentration @10%	18.3	14.3	Coefficient of Concentration @10%	40.0	0.0
Coefficient of Concentration @15%	36.6	28.6	Coefficient of Concentration @15%	50.0	0.0
Coefficient of Concentration @20%	54.9	28.6	Coefficient of Concentration @20%	60.0	33.3
Coefficient of Concentration @50%	80.3	71.4	Coefficient of Concentration @50%	73.3	83.3
Coefficient of Concentration @100%	88.7	85.7	Coefficient of Concentration @100%	90.0	100.0
Coefficient of Interquartile Deviation	19.5	55.3	Coefficient of Interquartile Deviation	25.9	44.0
Median Percent Deviation	17.3	39.6	Median Percent Deviation	14.1	41.6
Lower Quartile (25 th Percentile)	72.4	37.7	Lower Quartile (25 th Percentile)	88.8	44.6
Upper Quartile (75 th Percentile)	106.4	106.6	Upper Quartile (75 th Percentile)	139.6	109.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	0.70	0.92	Relative Skewness	1.05	0.08
Relative Kurtosis	3.36	2.47	Relative Kurtosis	3.93	1.35
Arithmetic Mean Ratio	85.9	71.3	Arithmetic Mean Ratio	107.0	76.1
Weighted Mean Ratio	78.2	54.4	Weighted Mean Ratio	96.1	70.7
Geometric Mean Ratio	82.4	62.6	Geometric Mean Ratio	101.7	70.5
Harmonic Mean Ratio	78.7	56.0	Harmonic Mean Ratio	96.6	65.2
Standard Deviation	25.3	41.3	Standard Deviation	36.0	31.2
Coefficient of Variation (COV)	29.4	58.0	Coefficient of Variation (COV)	33.6	41.0
Price-Related Differential (PRD)	1.10	1.31	Price-Related Differential (PRD)	1.11	1.08
Lower PRD Confidence Interval	1.05	1.17	Lower PRD Confidence Interval	1.05	0.90
Upper PRD Confidence interval	1.16	1.59	Upper PRD Confidence interval	1.21	1.49
Coef. of Price-Related Bias (PRB)	-0.28	-0.76	Coef. of Price-Related Bias (PRB)	-0.11	-0.08
Lower PRB Confidence Interval	-0.37	-1.81	Lower PRB Confidence Interval	-0.24	-0.31
Upper PRB Confidence Interval	-0.19	0.29	Upper PRB Confidence Interval	0.03	0.16
Average Sale Price	92,154	45,571	Average Sale Price	49,753	38,388
Average Appraised Value	72,043	24,786	Average Appraised Value	47,789	27,147

Detailed Sample Statistics for the Residential and Commercial Subclasses

105 : WYANDOTTE		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	248	68
Trimmed Outliers	22	4
Number of Ratios: Outliers Removed	226	64
Minimum Ratio	26.1	24.6
Maximum Ratio	594.7	185.9
Minimum Sale Price	18,470	30,170
Maximum Sale Price	676,910	8,327,370
<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	87.0	74.2
Lower Median Confidence Interval	83.6	67.3
Upper Median Confidence Interval	90.5	86.8
Broadened Median Ratio	87.0	74.2
Coefficient of Dispersion (COD)	16.4	30.0
Lower COD Confidence Interval	14.7	25.0
Upper COD Confidence Interval	18.3	37.0
Value Weighted COD	15.1	32.2
Coefficient of Concentration @10%	36.3	20.6
Coefficient of Concentration @15%	52.8	29.4
Coefficient of Concentration @20%	63.3	36.8
Coefficient of Concentration @50%	89.9	76.5
Coefficient of Concentration @100%	96.4	94.1
Coefficient of Interquartile Deviation	14.4	26.1
Median Percent Deviation	14.2	26.1
Lower Quartile (25 th Percentile)	73.6	58.5
Upper Quartile (75 th Percentile)	98.7	97.2
<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	RejectK
Relative Skewness	0.01	0.44
Relative Kurtosis	3.07	2.74
Arithmetic Mean Ratio	84.7	76.6
Weighted Mean Ratio	84.6	68.5
Geometric Mean Ratio	82.7	71.6
Harmonic Mean Ratio	80.5	66.3
Standard Deviation	17.8	27.6
Coefficient of Variation (COV)	21.1	36.0
Price-Related Differential (PRD)	1.00	1.12
Lower PRD Confidence Interval	0.98	0.99
Upper PRD Confidence interval	1.02	1.29
Coef. of Price-Related Bias (PRB)	-0.08	-0.02
Lower PRB Confidence Interval	-0.16	-0.08
Upper PRB Confidence Interval	-0.01	0.05
Average Sale Price	198,019	913,476
Average Appraised Value	167,589	625,924

Section II

Kansas Real Estate

Sales Validation Questionnaire

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 _____ _____
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- Check any special factors that apply:
 - Sale between immediate family members: Specify the relationship _____
 - Sale involved corporate affiliates or related entities
 - Auction sale (absolute auction Yes No)
 - Short sale (amount of lien(s) exceeds sale proceeds)
 - Transfer in lieu of foreclosure or repossession
 - Sale involved a build-to-suit or leaseback arrangement
 - Sale by judicial order (by a guardian, executor, conservator, administrator, or trustee of an estate)
 - Sale involved a government agency or public utility
 - Buyer (new owner) is a religious, charitable, or benevolent organization, school or educational association
 - Buyer (new owner) is a financial institution, insurance company, pension fund, or mortgage corporation
 - Sale of only a partial interest in the real estate
 - Sale involved a trade or exchange of properties
 - None of the above
- Check use of property at the time of sale:
 - Single family residence Agricultural land
 - Farm/Ranch with residence Mineral rights included?
 - Condominium unit Yes No
 - Vacant land Apartment building
 - Other: (Specify) _____ Commercial/Industrial bldg.
- Was the property rented or leased at the time of sale?
 - Yes (number of years remaining on lease _____)
 - Tenant is buyer No
- Did the sale price include an operating business?
 - Yes (estimated value \$ _____) No
- Was any personal property included in the sale price (such as furniture, equipment, inventory, machinery, crops, etc.)?
 - Yes No If yes, please describe _____

Estimated value of all personal property items included in the sale price \$ _____

If Mobile Home: Year _____ Model _____

- Were any changes made to the property since January 1st?
 - Yes No
 - Demolition New construction Remodeling Additions
 - Date completed _____ Amount \$ _____
- Were any delinquent property taxes paid by the buyer? Amt. \$ _____
 - Yes AND the amount was included in the total sale price
 - Yes but the amount was not included in the total sale price
 - No delinquent property taxes were included in the sale
- Method of financing (check all that apply):
 - New loan(s) from a financial institution IRS 1031 Exchange
 - Seller financing Assumption of an existing loan(s)
 - All cash Trade of property Not applicable
- Was the property offered to other potential buyers?
 - Yes: Advertised (listed, Internet, yard sign, word-of-mouth, etc.)
 - No: Private purchase (not offered on the open market)
- Does the buyer hold title to any adjoining property?
 - Yes No
- Are there any additional facts that would cause this sale to be a distressed, forced, or non-arm's length exchange?
 - Yes No If yes, please describe _____

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.

12. TOTAL SALE PRICE \$ _____

DEED DATE ____/____/____

13. I have read the instructions for completing this form and certify that the above information is true and accurate.

Print name _____

Signature _____

Grantor (Seller) Grantee (Buyer)

Agent Daytime phone number (____) _____

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.

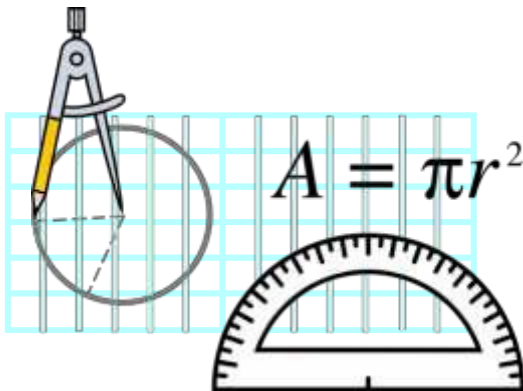
If you have any questions or need assistance completing this form, please call the county appraiser's office.

Section III

Statistical Methods

&

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 assessment 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>
1	\$25,000	\$20,000	1.25	125.0
2	\$45,000	\$50,000	0.90	90.0
3	\$12,000	\$15,000	0.80	80.0
4	\$30,000	\$30,000	1.00	100.0

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 very 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

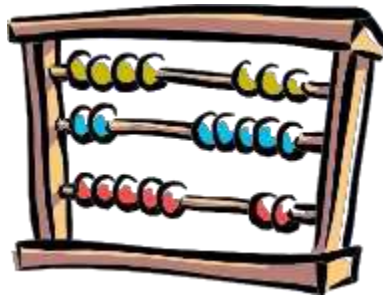
Example of odd numbered data set: 70.0 80.0, 90.0, 100.0, 120.0, 135.0, 143.0

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

Example of even numbered data set: 62.0, 75.0, 80.0, 90.0, 100.0, 120.0, 135.0, 143.0

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

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



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

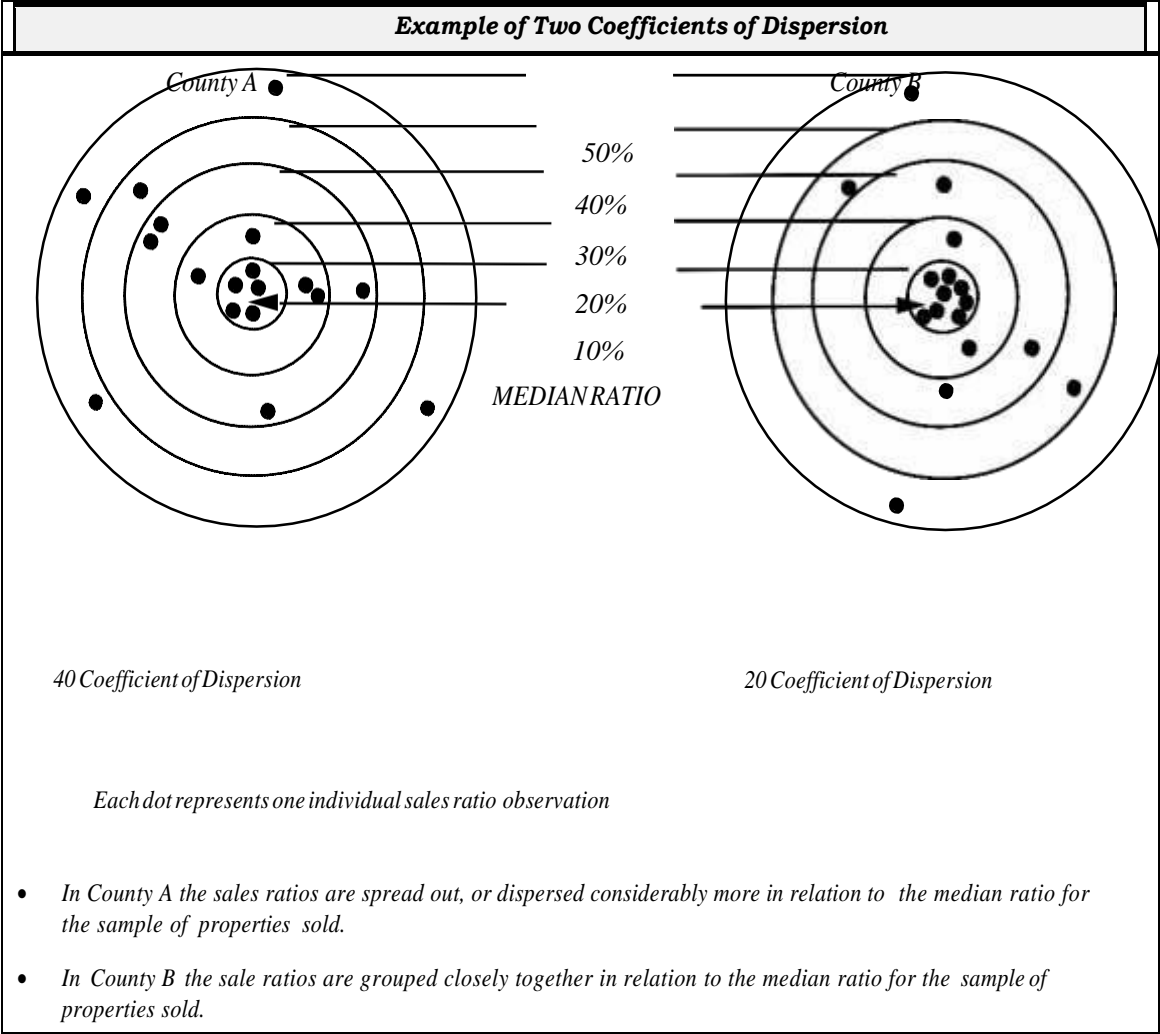
1. Subtract the median ratio from each ratio to find the absolute deviation (ignore plus or minus signs)
2. Sum the absolute deviations and divide by the sample size to find the average absolute deviation
3. Divide the **average absolute deviation** by the **median ratio** to obtain the percentage measure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

<i>Sale</i>	<i>Ratio</i>	<i>Median Ratio</i>	<i>Absolute Deviation from Median</i>
1	80.0	95.0	15.0
2	90.0	95.0	5.0
3	95.0	95.0	0.0
4	100.0	95.0	5.0
5	105.0	95.0	10.0
<i>Sum of Deviations</i>			35.0

$$\frac{15.0 + 5.0 + 0.0 + 5.0 + 10.0}{5} = \frac{35.0}{5} = \mathbf{7.0} \quad \text{average deviation from median}$$

$$\frac{7.0}{95.0} = \mathbf{7.4} \quad \text{Coefficient of Dispersion (COD)}$$

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

$$\frac{61.9}{5} = 12.4 \text{ (Value) Weighted Coefficient of Dispersion}$$



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.

Example: **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

$95.0 - 14.3 = 80.7$

$95.0 + 14.3 = 109.3$

15%: find the proportion of ratios that falls within the range:

$$95.0 \times 15.0 = 14.3$$

$$95.0 - 14.3 = 80.7$$

$$95.0 + 14.3 = 109.3$$

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

$$10 \div 15 = 0.667 \times 100 = \mathbf{66.7 \text{ Coefficient of Concentration @ 15\%}}$$



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) Ratio = 80.8
3rd Quartile = (Sale 6) Ratio = 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	0.0
4	105.0	100.0	5.0
5	115.0	100.0	15.0

Arrayed Deviations: 0.0, 5.0, 10.0, 15.0, 22.0, - Median Absolute Deviation (MAD) = 10.0

$$\frac{10.0}{100.0} = 0.1 \times 100 = \mathbf{10.0 \text{ Median Percent Deviation}}$$

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 percentile 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 Testing

A normality test of the sample data can be used to evaluate if the spread of ratios in the sample and make inferences about the population. A normal 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 residential and commercial/industrial 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 10% or less.

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

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



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

Sale	Appraised Value	Sale Price
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
Total	\$310,000	\$345,700

$$\frac{310,000}{345,700} = .897 \times 100 = \mathbf{89.7 \text{ (Value) Weighted Mean Ratio}}$$



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 nth root of the result, where n equals the number of ratios in the sample*
2. *Find the nth root of the product*

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

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

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
Total				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

Sale	Appraised Value	Sale Price	Ratio	Ratio Minus Mean	Square of Differences
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
Mean	103.0			Total	1480.0

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

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

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.

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



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
Total	\$131,200	\$131,000	515.0

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

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

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

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.

Coefficient of 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
Total	\$131,000

$$\frac{20,000 + 50,000 + 15,000 + 30,000 + 16,000}{5} = \mathbf{131,000} \quad \text{Average Sale Price}$$

Average Market 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
Total	\$131,200

$$\frac{25,000 + 45,000 + 12,000 + 30,000 + 19,000}{5} = \mathbf{131,200} \quad \text{Average Market Value Estimate}$$

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 adverse influence is greater when the sample size is 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 and unqualified sales; some invalid ratios may slip through. Uniform trimming procedures have been used to identify and remove the influence of outlier ratios prior to calculating the following statistics and performance measures.

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

Trimming Procedures for Removing Outlier Ratios
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 the base width for outlier trimming. A factor of 3 can be used to remove extreme outliers only.
3. The base width is added to the third quartile and subtracted from the first quartile to establish outlier trim points.

An additional screening limitation has been built into the trimming algorithm to restrict the maximum percentage of trimmed ratios to 20 percent of the sample size.

*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.*

Evaluating the 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 interpret small sample size limitations. A tolerance limit provides an interval wherein a prescribed proportion of ratio populations is expected to lie, with a given level of statistical probability. For sales ratio study samples in the 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 a 95 percent probability that 85 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 200 valid residential sales during the study year.

<i>Sample Sizes for Nonparametric Tolerance Limits</i>								
<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 Statistical Compliance

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 must also have a sufficient number of residential sale transfers to construct a representative sample with about 200 to 400 valid residential sales for the year. The twenty-two counties listed below meet the criteria for the 2022 study.

<i>Residential Sampling Counties 2022</i>					
<i>County</i>	<i>Sample Size</i>	<i>County</i>	<i>Sample Size</i>	<i>County</i>	<i>Sample Size</i>
<i>Barton</i>	<i>250</i>	<i>Finney</i>	<i>200</i>	<i>McPherson</i>	<i>200</i>
<i>Butler</i>	<i>300</i>	<i>Ford</i>	<i>200</i>	<i>Miami</i>	<i>200</i>
<i>Cowley</i>	<i>200</i>	<i>Harvey</i>	<i>200</i>	<i>Montgomery</i>	<i>200</i>
<i>Crawford</i>	<i>200</i>	<i>Johnson</i>	<i>400</i>	<i>Pottawatomie</i>	<i>200</i>
<i>Douglas</i>	<i>250</i>	<i>Leavenworth</i>	<i>250</i>	<i>Reno</i>	<i>250</i>
<i>Ellis</i>	<i>200</i>	<i>Lyon</i>	<i>200</i>	<i>Riley</i>	<i>250</i>
				<i>Saline</i>	<i>250</i>
				<i>Sedgwick</i>	<i>350</i>
				<i>Shawnee</i>	<i>350</i>
				<i>Wyandotte</i>	<i>250</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.

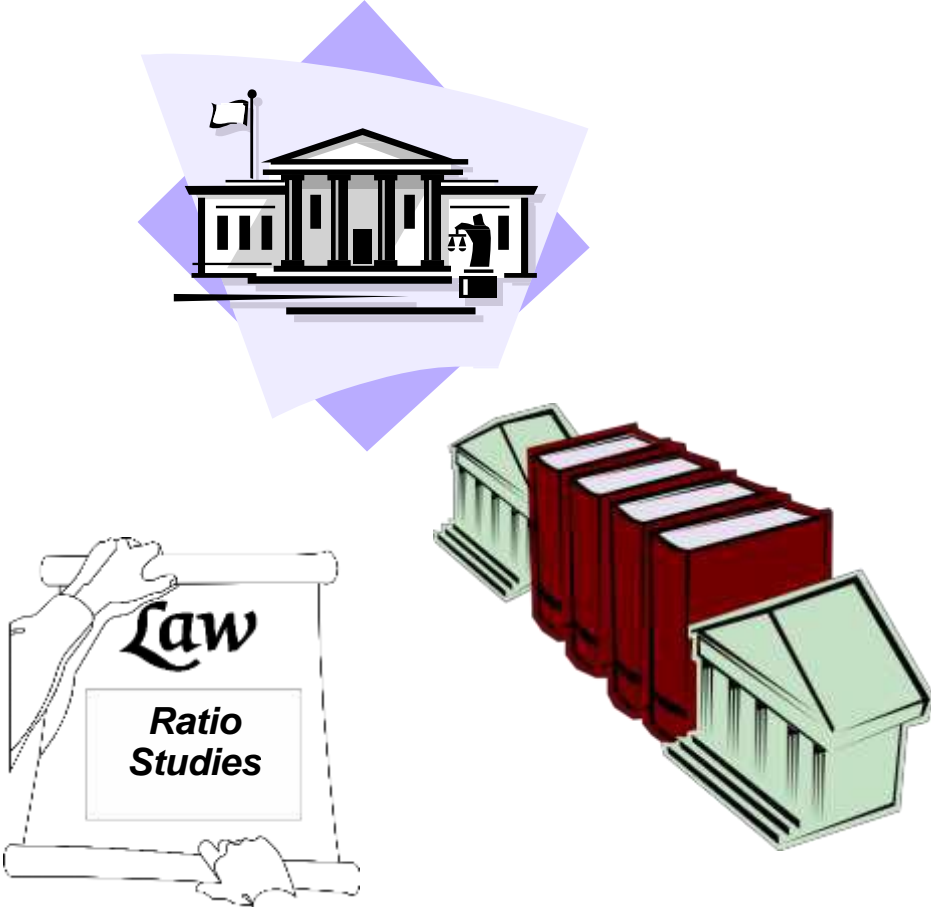
Supplemental Commercial/Industrial Sales

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, 2018, through December 31, 2021*) pursuant to K.S.A. 79-1488. Thirty-nine Kansas counties required supplemental sales for the commercial/industrial subclass for the year 2022. A total of 200 supplemental commercial/industrial sales have been included in the statistical analysis. One county (Washington) required 14 residential supplemental sales for the 2022 ratio study.

The appraised value for supplemental sales ratios reflects the certified 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.



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Mark A. Burghart, Secretary

Laura Kelly, Governor

DIRECTIVE #19-041

TO: **Register of Deeds**
SUBJECT: **Real Estate Sales Valuation Questionnaires; Submission Requirements.**
This Directive Supersedes Directive #03-041

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) provides as follows:

The real estate sales validation questionnaire 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.

Except where an exception pursuant to K.S.A. 79-1437e is applicable, 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 register of deeds unless such deed is accompanied by a real estate sales validation questionnaire in compliance with the provisions of K.S.A. 79-1437c. The specific requirements of K.S.A. 79-1437c supersede the general requirements of K.S.A. 58-2221(d) to record any deed to real estate immediately.

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. *(See Att’y Gen. Op. No. 92-122).*

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. *(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-23) 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-22- OP). The one-part form is intended be used in conjunction with image document management systems. Photocopies to of the questionnaire are not acceptable; however, filers may submit a computer-printed form. The digital version of the form (PV-RE-22-OP-CG) can be obtained from the department of revenue website. Counties accepting one-part forms are required to provide the original document(s) to the division of property valuation unless the register of deeds office has prior written approval from the director to submit document image files of the real estate sales validation questionnaires. Document image files shall be transmitted in monthly sessions to the Department of Revenue File Transfer Protocol (FTP) server.
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 the real estate validation questionnaire. The party completing the real estate validation questionnaire must print their name and sign section 13 to affirm the instructions have been read and the information provided is true and accurate. An agent signing the real estate validation questionnaire must also provide a daytime phone number.
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 fully completed. At a minimum, this requires that each real estate sales validation questionnaire be scrutinized for completion of the identification, contact and parcel 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 of the seller and buyer 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. Telephone numbers for both the buyer and the seller are required at the top of the form, even if the agent completes and signs section 13 of the 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). (*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 K.A.R. 93-4-2.

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.)

18. The Kansas Real Estate Sales Validation Questionnaire provides crucial information to fulfill requirements of the Kansas Real Estate Ratio Study Act (K.S.A 79-1486). All county officials share in

the duty to cooperate and assist the Director of Property Valuation in the development of information required by this act (K.S.A. 79-1487). Participation by the Register of Deeds is not optional.

19. Permanent Administrative Regulations and Directives promulgated by the Division of Property Valuation carry the force of law and must be given the same deference by the Register of Deeds as Kansas statutes.



Approved: August 27, 2019

David N. Harper
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%**

(KSCAMA Suffix Codes R, F)

- (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%**

(KSCAMA Suffix Codes A)

- (3) Vacant Lots **12.0%**

(KSCAMA Suffix Codes V)

- (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%**

(KSCAMA Suffix Codes N)

- (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%**

(KSCAMA Suffix Codes U)

- (6) Real property used for commercial and industrial purposes and buildings and other improvements located upon land devoted to agricultural use **25.0%**

(KSCAMA Suffix Codes C & A with agricultural improvements)

- (7) All other urban and rural real property not otherwise specifically sub-classed **30.0%**

(KSCAMA Suffix Codes O)

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.

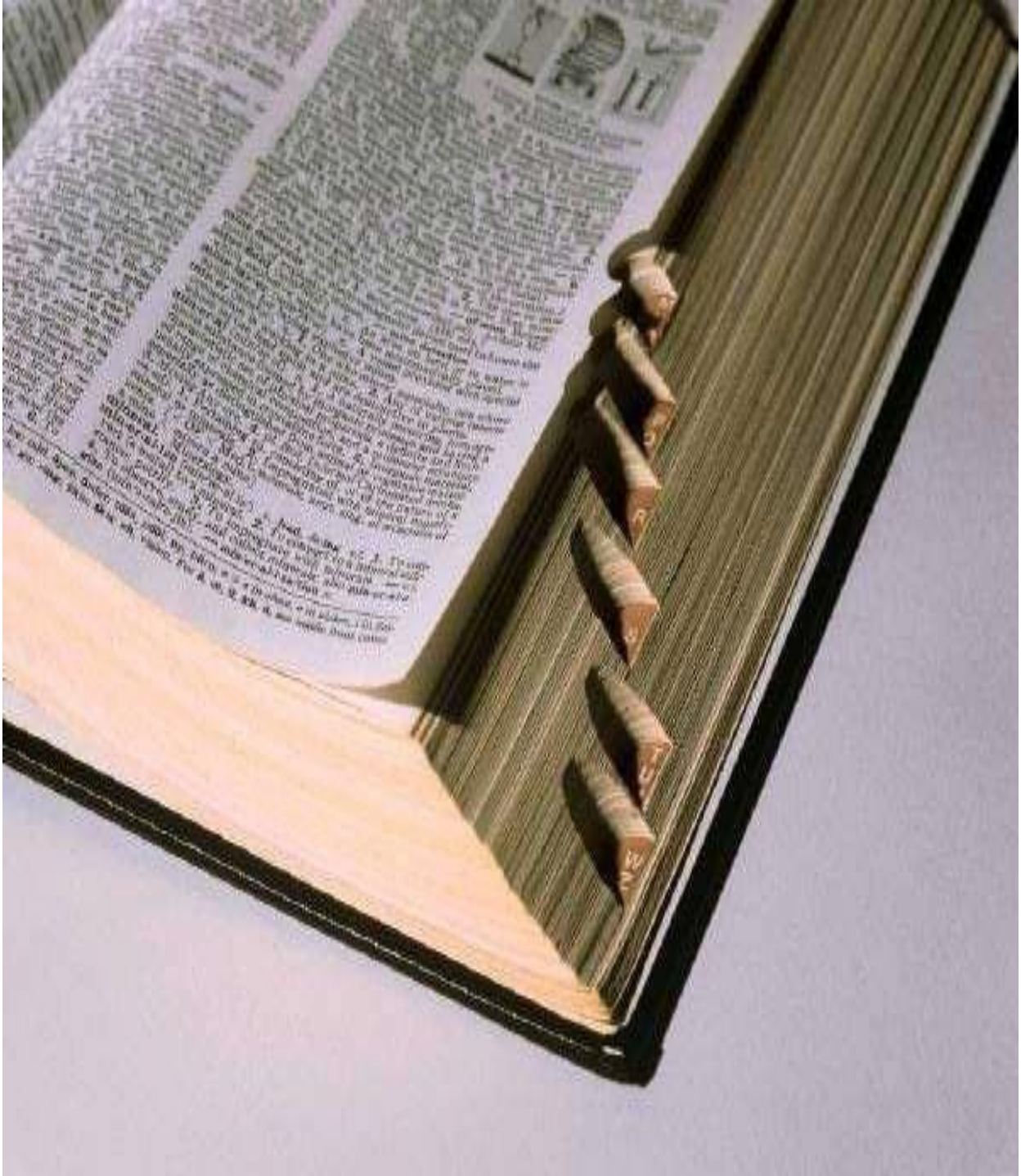
- (b) The county appraiser shall prepare and transmit the electronic assessment administration file of all appraised values to the director not later than three business days after the mailing of the annual valuation notices pursuant to K.S.A. 79-1460, and amendments thereto.
(Authorized by K.S.A. 79-1491; 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 (Regressivity)	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 (COC)	The percentage of ratios falling within a specified percentage range (\pm) of the median ratio.
Coefficient of Dispersion (COD)	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.

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 <i>n</i> 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.

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.

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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