



Division of Property Valuation

2020

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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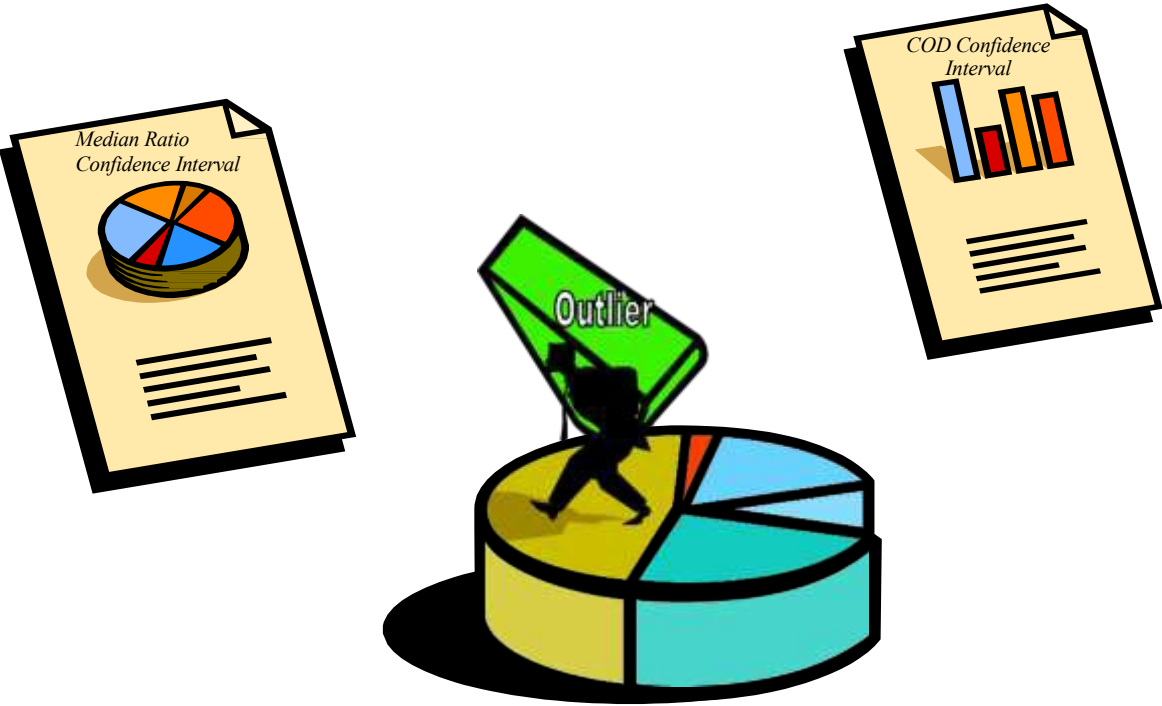
INTRODUCTION

This publication contains the Official 2020 Kansas Appraisal/Sales Ratio Study that is based upon real estate transfers occurring from January 1, 2020, through December 31, 2020. This study is conducted annually by the Kansas Department of Revenue, Division of Property Valuation for all 105 Kansas Counties.



<https://www.ksrevenue.gov/pvdratiostats.htm>

Section 1
Year 2020
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 2020 Official *Kansas Appraisal/Sales Ratio Study* is to meet the requirements pursuant to K.S.A. 79-1489. It also provides statistical information used to evaluate appraisal *level* and *uniformity* for substantial statutory compliance as set forth in Property Valuation's Directive #14-046 pursuant to the provisions of K.S.A 79-505. A copy of this Directive is located in Section IV of this publication.

The study includes sales that are considered to be *valid* arm's-length transactions. These real property transfers have been qualified independently by PVD 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 2020. 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 200 valid residential sales based on previous studies to be considered for sampling. The 2020 ratio study has used a representative sampling for those counties meeting the statutory criteria. A brief explanation of the sampling process is included in Section III of this publication.

The letter **T** denotes the subclass (residential or commercial/industrial) where sale prices have been trended back to January 1, 2020, the date of appraisal, where inflation or deflationary market trends were identifiable and documented by the county appraiser. No counties requested a trend adjustment in 2020.

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

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

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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	94.8	90.5	to	99.0	17.6	15.1	to	21.0	1.03	1.00	to	1.07	125	15
Commercial/Ind.	96.3	91.0	to	136.0	13.5	5.6	to	20.9	1.03	0.99	to	1.08	9	1
Vacant Lot	77.6	-	N/A	-	62.4	-	N/A	-	1.52	-	N/A	-	6	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	9.9	-	N/A	-	35.6	-	N/A	-	0.99	-	N/A	-	17	1
Ag. (Impr.+ Land)	10.3	-	N/A	-	42.2	-	N/A	-	1.09	-	N/A	-	24	4
Other/Ex/Ut/NP/M	193.0	-	N/A	-	29.1	-	N/A	-	0.71	-	N/A	-	4	0
Total w/Ag.&F&H	91.0	-	N/A	-	25.7	-	N/A	-	1.16	-	N/A	-	168	27
Total Market	95.6	-	N/A	-	18.1	-	N/A	-	1.03	-	N/A	-	144	21
002 : ANDERSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	83.0	78.0	to	91.1	25.4	21.4	to	30.8	1.03	0.99	to	1.06	98	8
Commercial/Ind. <i>S-5</i>	84.1	21.5	to	103.0	38.9	17.9	to	140.2	1.21	1.02	to	1.54	8	0
Vacant Lot	96.9	-	N/A	-	23.6	-	N/A	-	0.88	-	N/A	-	3	0
Farm & Home	50.7	-	N/A	-	6.2	-	N/A	-	1.02	-	N/A	-	3	0
Ag. Land Only	6.5	-	N/A	-	95.3	-	N/A	-	0.88	-	N/A	-	18	3
Ag. (Impr.+ Land)	28.8	-	N/A	-	86.7	-	N/A	-	1.07	-	N/A	-	39	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	75.8	-	N/A	-	39.2	-	N/A	-	1.24	-	N/A	-	151	9
Total Market	83.7	-	N/A	-	26.2	-	N/A	-	1.03	-	N/A	-	109	9
003 : ATCHISON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.1	87.9	to	93.6	12.3	10.7	to	14.3	1.03	1.02	to	1.05	155	22
Commercial/Ind. <i>S-2</i>	112.1	65.6	to	137.2	22.3	9.5	to	53.7	0.97	0.90	to	1.06	6	0
Vacant Lot	101.2	-	N/A	-	189.4	-	N/A	-	1.82	-	N/A	-	5	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	15.0	-	N/A	-	57.8	-	N/A	-	0.90	-	N/A	-	11	0
Ag. (Impr.+ Land)	35.0	-	N/A	-	66.3	-	N/A	-	1.02	-	N/A	-	24	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	89.3	-	N/A	-	16.7	-	N/A	-	1.06	-	N/A	-	190	30
Total Market	91.5	-	N/A	-	13.4	-	N/A	-	1.03	-	N/A	-	166	24

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	98.3	87.4	to	112.4	24.4	18.5	to	32.9	1.11	1.03	to	1.24	38	2
Commercial/Ind. <i>S-6</i>	101.9	58.1	to	172.3	45.7	24.0	to	114.1	1.18	0.91	to	1.68	9	0
Vacant Lot	87.2	-	N/A	-	16.3	-	N/A	-	1.16	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	15.3	-	N/A	-	40.9	-	N/A	-	1.05	-	N/A	-	6	0
Ag. (Impr.+ Land)	15.5	-	N/A	-	59.9	-	N/A	-	1.02	-	N/A	-	9	1
Other/Ex/Ut/NP/M	109.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	90.9	-	N/A	-	36.5	-	N/A	-	1.22	-	N/A	-	59	2
Total Market	99.6	-	N/A	-	24.5	-	N/A	-	1.09	-	N/A	-	50	3

005 : BARTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.5	88.4	to	96.6	17.6	15.5	to	20.0	1.00	0.98	to	1.02	183	19
Commercial/Ind.	71.3	65.0	to	86.7	26.5	19.3	to	40.3	1.35	1.04	to	1.69	21	1
Vacant Lot	58.2	-	N/A	-	64.0	-	N/A	-	1.75	-	N/A	-	6	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	18.2	-	N/A	-	36.7	-	N/A	-	1.17	-	N/A	-	21	0
Ag. (Impr.+ Land)	23.5	-	N/A	-	115.4	-	N/A	-	0.98	-	N/A	-	36	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	86.9	-	N/A	-	27.0	-	N/A	-	1.08	-	N/A	-	246	17
Total Market	89.3	-	N/A	-	20.0	-	N/A	-	1.09	-	N/A	-	210	20

006 : BOURBON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.0	83.6	to	91.1	16.7	14.8	to	19.1	1.01	0.99	to	1.04	193	20
Commercial/Ind.	92.6	85.5	to	161.5	47.4	32.8	to	2777.3	2.71	1.03	to	7.81	11	0
Vacant Lot	95.8	-	N/A	-	66.3	-	N/A	-	1.12	-	N/A	-	36	3
Farm & Home	54.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	4.5	-	N/A	-	30.1	-	N/A	-	0.97	-	N/A	-	28	4
Ag. (Impr.+ Land)	5.2	-	N/A	-	72.0	-	N/A	-	1.05	-	N/A	-	49	9
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	82.8	-	N/A	-	34.6	-	N/A	-	1.29	-	N/A	-	290	24
Total Market	88.8	-	N/A	-	18.8	-	N/A	-	1.01	-	N/A	-	240	36

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	95.6	91.1	to	102.6	16.9	14.4	to	20.4	1.02	0.99	to	1.05	102	14
Commercial/Ind.	84.3	21.7	to	97.5	48.2	17.9	to	142.3	1.50	1.03	to	2.21	9	0
Vacant Lot	70.7	-	N/A	-	136.1	-	N/A	-	3.20	-	N/A	-	4	0
Farm & Home	96.3	-	N/A	-	13.0	-	N/A	-	1.05	-	N/A	-	3	0
Ag. Land Only	16.9	-	N/A	-	13.5	-	N/A	-	1.03	-	N/A	-	15	3
Ag. (Impr.+ Land)	19.1	-	N/A	-	91.5	-	N/A	-	1.29	-	N/A	-	19	0
Other/Ex/Ut/NP/M	15.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	91.4	-	N/A	-	27.6	-	N/A	-	1.51	-	N/A	-	138	17
Total Market	94.5	-	N/A	-	17.6	-	N/A	-	1.04	-	N/A	-	116	20
008 : BUTLER COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.4	91.6	to	94.6	9.7	8.6	to	10.9	1.02	1.01	to	1.04	223	24
Commercial/Ind.	107.6	80.1	to	120.4	28.5	19.0	to	43.5	1.37	1.10	to	1.78	22	1
Vacant Lot	91.6	-	N/A	-	35.5	-	N/A	-	1.40	-	N/A	-	85	4
Farm & Home	70.8	-	N/A	-	21.3	-	N/A	-	1.03	-	N/A	-	16	0
Ag. Land Only	3.3	-	N/A	-	86.8	-	N/A	-	0.83	-	N/A	-	42	0
Ag. (Impr.+ Land)	8.3	-	N/A	-	315.6	-	N/A	-	0.88	-	N/A	-	94	0
Other/Ex/Ut/NP/M	100.2	-	N/A	-	43.5	-	N/A	-	1.10	-	N/A	-	4	0
Total w/Ag.&F&H	87.4	-	N/A	-	32.6	-	N/A	-	1.13	-	N/A	-	444	9
Total Market	93.4	-	N/A	-	15.0	-	N/A	-	1.05	-	N/A	-	334	37
009 : CHASE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.0	89.9	to	100.4	15.8	11.9	to	22.8	1.05	1.00	to	1.11	37	4
Commercial/Ind. <i>S-3</i>	99.5	84.4	to	146.7	21.1	5.4	to	24.7	1.13	0.95	to	1.22	5	0
Vacant Lot	20.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	2.9	-	N/A	-	60.0	-	N/A	-	1.41	-	N/A	-	3	0
Ag. (Impr.+ Land)	5.5	-	N/A	-	294.4	-	N/A	-	1.91	-	N/A	-	4	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	94.7	-	N/A	-	17.0	-	N/A	-	1.07	-	N/A	-	47	8
Total Market	96.5	-	N/A	-	16.5	-	N/A	-	1.07	-	N/A	-	43	5

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	93.5	85.6	to	105.9	25.0	17.5	to	41.7	1.10	0.99	to	1.30	33	6
Commercial/Ind. <i>S-4</i>	90.8	41.1	to	124.1	36.2	15.6	to	88.6	1.29	1.15	to	1.57	6	0
Vacant Lot	68.8	-	N/A	-	375.0	-	N/A	-	5.41	-	N/A	-	3	0
Farm & Home	25.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	4.9	-	N/A	-	35.1	-	N/A	-	1.06	-	N/A	-	11	0
Ag. (Impr.+ Land)	7.5	-	N/A	-	106.4	-	N/A	-	0.95	-	N/A	-	21	1
Other/Ex/Ut/NP/M	45.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	63.3	-	N/A	-	68.1	-	N/A	-	1.52	-	N/A	-	65	6
Total Market	92.0	-	N/A	-	25.8	-	N/A	-	1.06	-	N/A	-	43	8
011 : CHEROKEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.2	86.2	to	94.1	19.8	17.5	to	22.5	1.04	1.02	to	1.07	207	21
Commercial/Ind.	85.8	66.5	to	114.7	19.1	13.6	to	31.2	1.18	0.96	to	1.36	11	2
Vacant Lot	78.8	-	N/A	-	73.7	-	N/A	-	2.52	-	N/A	-	30	2
Farm & Home	71.9	-	N/A	-	15.2	-	N/A	-	0.99	-	N/A	-	2	0
Ag. Land Only	10.0	-	N/A	-	30.2	-	N/A	-	0.93	-	N/A	-	16	0
Ag. (Impr.+ Land)	12.4	-	N/A	-	112.9	-	N/A	-	1.16	-	N/A	-	31	2
Other/Ex/Ut/NP/M	101.4	-	N/A	-	31.6	-	N/A	-	0.92	-	N/A	-	2	0
Total w/Ag.&F&H	85.8	-	N/A	-	27.9	-	N/A	-	1.12	-	N/A	-	283	33
Total Market	89.9	-	N/A	-	22.8	-	N/A	-	1.04	-	N/A	-	250	28
012 : CHEYENNE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.9	90.6	to	97.0	13.5	10.4	to	17.3	0.99	0.97	to	1.02	59	3
Commercial/Ind. <i>S-4</i>	69.7	63.1	to	105.3	20.9	10.8	to	31.8	1.14	1.04	to	1.34	6	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	34.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	10.0	-	N/A	-	40.5	-	N/A	-	0.99	-	N/A	-	23	1
Ag. (Impr.+ Land)	10.0	-	N/A	-	43.1	-	N/A	-	0.97	-	N/A	-	27	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	82.4	-	N/A	-	40.8	-	N/A	-	1.43	-	N/A	-	93	1
Total Market	94.7	-	N/A	-	14.9	-	N/A	-	1.04	-	N/A	-	65	2

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	101.9	94.4	to	109.0	9.4	6.0	to	14.9	1.03	1.01	to	1.08	14	1
Commercial/Ind. <i>S-2</i>	76.6	16.6	to	272.5	99.3	18.8	to	159.2	1.10	0.64	to	1.38	4	0
Vacant Lot	139.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	3.9	-	N/A	-	33.1	-	N/A	-	0.73	-	N/A	-	4	0
Ag. (Impr.+ Land)	3.9	-	N/A	-	33.1	-	N/A	-	0.73	-	N/A	-	4	0
Other/Ex/Ut/NP/M	38.9	-	N/A	-	13.5	-	N/A	-	0.95	-	N/A	-	2	0
Total w/Ag.&F&H	94.8	-	N/A	-	36.2	-	N/A	-	1.41	-	N/A	-	25	1
Total Market	95.7	-	N/A	-	24.0	-	N/A	-	1.00	-	N/A	-	21	1

014 : CLAY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.2	91.9	to	99.0	13.5	11.4	to	16.1	1.03	1.01	to	1.05	118	14
Commercial/Ind.	96.4	52.0	to	118.9	37.2	20.8	to	109.9	1.24	1.01	to	1.77	14	0
Vacant Lot	32.0	-	N/A	-	56.8	-	N/A	-	1.43	-	N/A	-	2	0
Farm & Home	62.1	-	N/A	-	27.5	-	N/A	-	1.07	-	N/A	-	7	0
Ag. Land Only	16.1	-	N/A	-	35.1	-	N/A	-	1.03	-	N/A	-	20	0
Ag. (Impr.+ Land)	15.6	-	N/A	-	34.6	-	N/A	-	1.02	-	N/A	-	21	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	91.8	-	N/A	-	27.0	-	N/A	-	1.15	-	N/A	-	162	12
Total Market	95.7	-	N/A	-	16.2	-	N/A	-	1.04	-	N/A	-	134	14

015 : CLOUD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.0	90.7	to	97.6	13.6	11.7	to	16.0	1.03	1.01	to	1.06	132	16
Commercial/Ind.	97.9	70.0	to	102.6	19.1	6.1	to	51.9	1.03	0.84	to	1.23	7	0
Vacant Lot	41.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	79.1	-	N/A	-	17.1	-	N/A	-	1.05	-	N/A	-	2	0
Ag. Land Only	13.5	-	N/A	-	8.1	-	N/A	-	0.98	-	N/A	-	12	2
Ag. (Impr.+ Land)	13.9	-	N/A	-	10.1	-	N/A	-	0.96	-	N/A	-	14	2
Other/Ex/Ut/NP/M	117.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	92.6	-	N/A	-	15.2	-	N/A	-	1.03	-	N/A	-	157	26
Total Market	94.1	-	N/A	-	14.1	-	N/A	-	1.04	-	N/A	-	141	16

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	92.4	87.4	to	97.2	17.5	14.9	to	20.9	1.03	1.00	to	1.06	110	5
Commercial/Ind.	62.4	23.2	to	123.4	57.4	31.8	to	215.2	1.57	1.00	to	2.65	9	0
Vacant Lot	105.4	-	N/A	-	12.4	-	N/A	-	1.04	-	N/A	-	4	0
Farm & Home	58.1	-	N/A	-	11.5	-	N/A	-	0.99	-	N/A	-	8	1
Ag. Land Only	8.2	-	N/A	-	33.7	-	N/A	-	0.97	-	N/A	-	16	1
Ag. (Impr.+ Land)	9.2	-	N/A	-	31.0	-	N/A	-	1.00	-	N/A	-	19	1
Other/Ex/Ut/NP/M	67.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	86.3	-	N/A	-	31.3	-	N/A	-	1.19	-	N/A	-	151	3
Total Market	91.7	-	N/A	-	18.8	-	N/A	-	1.03	-	N/A	-	124	6

017 : COMANCHE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.8	84.8	to	127.6	31.1	23.0	to	46.2	1.12	1.06	to	1.21	24	1
Commercial/Ind. <i>S-4</i>	77.4	51.9	to	115.0	41.3	24.2	to	92.7	1.00	0.84	to	1.51	8	0
Vacant Lot	36.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	59.6	-	N/A	-	22.5	-	N/A	-	1.25	-	N/A	-	3	0
Ag. Land Only	3.5	-	N/A	-	53.6	-	N/A	-	1.14	-	N/A	-	7	0
Ag. (Impr.+ Land)	3.7	-	N/A	-	50.6	-	N/A	-	1.15	-	N/A	-	9	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	80.5	-	N/A	-	50.7	-	N/A	-	1.67	-	N/A	-	45	1
Total Market	88.4	-	N/A	-	34.9	-	N/A	-	1.07	-	N/A	-	33	1

018 : COWLEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.3	92.2	to	98.2	17.9	15.7	to	20.5	1.05	1.03	to	1.07	197	20
Commercial/Ind.	101.5	84.8	to	103.5	26.5	14.5	to	45.4	0.83	0.75	to	1.05	15	1
Vacant Lot	66.6	-	N/A	-	12.9	-	N/A	-	1.01	-	N/A	-	10	1
Farm & Home	61.2	-	N/A	-	39.2	-	N/A	-	0.87	-	N/A	-	6	0
Ag. Land Only	5.8	-	N/A	-	32.0	-	N/A	-	0.88	-	N/A	-	12	1
Ag. (Impr.+ Land)	9.7	-	N/A	-	254.2	-	N/A	-	0.93	-	N/A	-	25	0
Other/Ex/Ut/NP/M	98.1	-	N/A	-	6.2	-	N/A	-	0.94	-	N/A	-	2	0
Total w/Ag.&F&H	91.2	-	N/A	-	20.3	-	N/A	-	1.01	-	N/A	-	255	38
Total Market	94.7	-	N/A	-	18.5	-	N/A	-	1.00	-	N/A	-	224	23

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	89.2	87.0	to	92.3	14.8	12.9	to	17.0	1.00	0.99	to	1.03	194	28
Commercial/Ind.	93.8	79.2	to	102.9	23.3	16.5	to	35.1	1.22	1.00	to	1.74	24	1
Vacant Lot	74.3	-	N/A	-	101.6	-	N/A	-	3.03	-	N/A	-	25	0
Farm & Home	12.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	4.7	-	N/A	-	92.2	-	N/A	-	0.74	-	N/A	-	26	0
Ag. (Impr.+ Land)	6.4	-	N/A	-	109.9	-	N/A	-	0.81	-	N/A	-	39	5
Other/Ex/Ut/NP/M	264.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	84.7	-	N/A	-	32.3	-	N/A	-	1.10	-	N/A	-	284	24
Total Market	88.2	-	N/A	-	18.8	-	N/A	-	1.01	-	N/A	-	244	33

020 : DECATUR COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.5	86.3	to	102.2	23.5	18.2	to	31.5	1.07	1.01	to	1.13	46	4
Commercial/Ind. <i>S-5</i>	83.2	73.7	to	169.5	27.2	9.3	to	63.9	1.11	1.01	to	1.25	8	1
Vacant Lot	20.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	58.6	-	N/A	-	34.1	-	N/A	-	0.93	-	N/A	-	2	0
Ag. Land Only	16.1	-	N/A	-	17.8	-	N/A	-	0.90	-	N/A	-	7	0
Ag. (Impr.+ Land)	16.1	-	N/A	-	17.8	-	N/A	-	0.90	-	N/A	-	7	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	86.4	-	N/A	-	34.4	-	N/A	-	1.54	-	N/A	-	64	5
Total Market	91.3	-	N/A	-	25.6	-	N/A	-	1.05	-	N/A	-	55	5

021 : DICKINSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.4	90.2	to	96.1	18.6	16.6	to	20.9	1.04	1.02	to	1.06	276	34
Commercial/Ind.	76.6	66.8	to	280.0	45.4	10.7	to	123.3	1.33	0.98	to	2.16	9	1
Vacant Lot	91.8	-	N/A	-	62.4	-	N/A	-	1.32	-	N/A	-	8	1
Farm & Home	70.4	-	N/A	-	19.2	-	N/A	-	1.08	-	N/A	-	13	0
Ag. Land Only	12.0	-	N/A	-	51.3	-	N/A	-	0.98	-	N/A	-	18	0
Ag. (Impr.+ Land)	19.6	-	N/A	-	126.6	-	N/A	-	1.16	-	N/A	-	42	0
Other/Ex/Ut/NP/M	868.0	-	N/A	-	14.9	-	N/A	-	1.00	-	N/A	-	2	0
Total w/Ag.&F&H	88.4	-	N/A	-	20.7	-	N/A	-	1.05	-	N/A	-	350	64
Total Market	93.4	-	N/A	-	19.5	-	N/A	-	1.04	-	N/A	-	295	39

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	85.0	80.0	to	90.2	24.2	19.3	to	30.6	1.00	0.94	to	1.06	69	3
Commercial/Ind. <i>S-1</i>	89.6	35.7	to	145.5	39.3	13.2	to	98.6	1.30	1.06	to	1.49	5	0
Vacant Lot	103.8	-	N/A	-	44.0	-	N/A	-	1.49	-	N/A	-	4	0
Farm & Home	43.2	-	N/A	-	58.1	-	N/A	-	1.60	-	N/A	-	2	0
Ag. Land Only	17.0	-	N/A	-	36.9	-	N/A	-	0.84	-	N/A	-	6	0
Ag. (Impr.+ Land)	21.3	-	N/A	-	53.0	-	N/A	-	1.11	-	N/A	-	12	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	82.7	-	N/A	-	34.2	-	N/A	-	1.39	-	N/A	-	92	4
Total Market	85.5	-	N/A	-	25.0	-	N/A	-	1.01	-	N/A	-	78	5

023 : DOUGLAS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.9	92.4	to	94.8	8.0	7.2	to	8.9	1.00	0.99	to	1.01	284	19
Commercial/Ind.	90.9	84.5	to	97.5	12.8	8.7	to	18.9	0.97	0.91	to	1.07	27	2
Vacant Lot	97.7	-	N/A	-	12.8	-	N/A	-	1.00	-	N/A	-	99	11
Farm & Home	74.9	-	N/A	-	23.0	-	N/A	-	0.97	-	N/A	-	9	1
Ag. Land Only	2.9	-	N/A	-	122.9	-	N/A	-	0.99	-	N/A	-	29	0
Ag. (Impr.+ Land)	3.9	-	N/A	-	182.0	-	N/A	-	0.73	-	N/A	-	39	7
Other/Ex/Ut/NP/M	122.3	-	N/A	-	27.2	-	N/A	-	1.17	-	N/A	-	3	0
Total w/Ag.&F&H	92.9	-	N/A	-	10.2	-	N/A	-	1.00	-	N/A	-	461	61
Total Market	94.2	-	N/A	-	9.1	-	N/A	-	0.99	-	N/A	-	413	37

024 : EDWARDS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	101.1	79.5	to	126.4	30.8	20.0	to	47.7	1.21	1.08	to	1.47	21	2
Commercial/Ind. <i>S-4</i>	77.6	30.8	to	123.7	43.0	19.6	to	103.8	1.17	0.89	to	1.80	6	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	11.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	9.5	-	N/A	-	43.6	-	N/A	-	1.11	-	N/A	-	8	0
Ag. (Impr.+ Land)	11.1	-	N/A	-	43.4	-	N/A	-	1.12	-	N/A	-	9	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	76.2	-	N/A	-	64.5	-	N/A	-	2.27	-	N/A	-	37	1
Total Market	100.2	-	N/A	-	33.5	-	N/A	-	1.19	-	N/A	-	27	2

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	99.2	83.4	to	112.3	25.6	18.6	to	35.3	1.18	1.07	to	1.37	29	0
Commercial/Ind. <i>S-4</i>	82.1	49.5	to	108.3	26.8	15.0	to	70.2	1.54	1.12	to	1.89	7	0
Vacant Lot	24.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	20.8	-	N/A	-	70.9	-	N/A	-	1.21	-	N/A	-	5	0
Ag. Land Only	3.9	-	N/A	-	35.9	-	N/A	-	2.32	-	N/A	-	4	0
Ag. (Impr.+ Land)	4.2	-	N/A	-	26.9	-	N/A	-	2.12	-	N/A	-	6	1
Other/Ex/Ut/NP/M	98.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	82.4	-	N/A	-	42.9	-	N/A	-	2.75	-	N/A	-	49	0
Total Market	95.0	-	N/A	-	27.2	-	N/A	-	1.35	-	N/A	-	38	0

026 : ELLIS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.0	93.3	to	95.0	9.1	8.4	to	9.9	1.01	1.01	to	1.02	406	25
Commercial/Ind.	81.5	59.5	to	93.4	22.5	14.7	to	36.0	1.09	0.96	to	1.28	15	0
Vacant Lot	95.2	-	N/A	-	20.7	-	N/A	-	1.06	-	N/A	-	24	2
Farm & Home	53.1	-	N/A	-	33.1	-	N/A	-	1.00	-	N/A	-	3	0
Ag. Land Only	3.9	-	N/A	-	54.4	-	N/A	-	0.78	-	N/A	-	7	0
Ag. (Impr.+ Land)	7.6	-	N/A	-	41.4	-	N/A	-	0.91	-	N/A	-	13	2
Other/Ex/Ut/NP/M	82.8	-	N/A	-	21.7	-	N/A	-	0.92	-	N/A	-	2	0
Total w/Ag.&F&H	93.7	-	N/A	-	9.5	-	N/A	-	1.02	-	N/A	-	463	50
Total Market	93.9	-	N/A	-	9.5	-	N/A	-	1.02	-	N/A	-	447	35

027 : ELLSWORTH COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.0	96.5	to	102.4	7.6	6.2	to	9.6	1.00	0.99	to	1.01	83	14
Commercial/Ind. <i>S-6</i>	88.4	79.8	to	158.2	32.3	21.2	to	52.7	1.12	0.98	to	1.24	7	0
Vacant Lot	60.1	-	N/A	-	56.7	-	N/A	-	1.28	-	N/A	-	2	0
Farm & Home	53.5	-	N/A	-	67.6	-	N/A	-	0.85	-	N/A	-	2	0
Ag. Land Only	8.1	-	N/A	-	39.7	-	N/A	-	0.98	-	N/A	-	4	0
Ag. (Impr.+ Land)	10.5	-	N/A	-	64.1	-	N/A	-	1.03	-	N/A	-	7	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	97.8	-	N/A	-	11.2	-	N/A	-	1.01	-	N/A	-	101	15
Total Market	98.5	-	N/A	-	8.9	-	N/A	-	1.00	-	N/A	-	92	14

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	91.5	90.0	to	93.2	8.8	8.1	to	9.6	1.00	1.00	to	1.01	422	39
Commercial/Ind.	82.1	72.1	to	101.9	17.6	12.9	to	26.5	1.08	0.93	to	1.23	12	0
Vacant Lot	85.5	-	N/A	-	19.1	-	N/A	-	1.05	-	N/A	-	48	5
Farm & Home	106.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	10.9	-	N/A	-	35.6	-	N/A	-	0.92	-	N/A	-	14	0
Ag. (Impr.+ Land)	10.9	-	N/A	-	34.8	-	N/A	-	0.93	-	N/A	-	16	1
Other/Ex/Ut/NP/M	76.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	90.7	-	N/A	-	9.6	-	N/A	-	1.01	-	N/A	-	500	61
Total Market	91.0	-	N/A	-	9.5	-	N/A	-	1.01	-	N/A	-	483	47
029 : FORD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.8	82.1	to	87.4	16.2	14.3	to	18.6	0.99	0.98	to	1.01	189	5
Commercial/Ind.	80.5	62.2	to	128.3	29.5	17.0	to	52.3	1.14	0.93	to	1.44	11	1
Vacant Lot	48.8	-	N/A	-	79.2	-	N/A	-	2.37	-	N/A	-	11	0
Farm & Home	31.1	-	N/A	-	68.9	-	N/A	-	0.85	-	N/A	-	2	0
Ag. Land Only	10.1	-	N/A	-	42.2	-	N/A	-	1.18	-	N/A	-	18	0
Ag. (Impr.+ Land)	12.4	-	N/A	-	47.8	-	N/A	-	1.09	-	N/A	-	28	5
Other/Ex/Ut/NP/M	90.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	82.1	-	N/A	-	25.1	-	N/A	-	1.11	-	N/A	-	242	9
Total Market	84.7	-	N/A	-	16.9	-	N/A	-	1.01	-	N/A	-	212	12
030 : FRANKLIN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.3	89.8	to	94.5	14.0	12.7	to	15.4	1.03	1.01	to	1.04	347	45
Commercial/Ind.	115.8	87.8	to	150.4	27.9	19.6	to	51.7	1.07	0.94	to	1.22	12	1
Vacant Lot	104.1	-	N/A	-	28.7	-	N/A	-	1.19	-	N/A	-	39	2
Farm & Home	53.4	-	N/A	-	25.5	-	N/A	-	1.06	-	N/A	-	18	0
Ag. Land Only	3.7	-	N/A	-	65.6	-	N/A	-	0.88	-	N/A	-	39	2
Ag. (Impr.+ Land)	7.1	-	N/A	-	247.5	-	N/A	-	0.80	-	N/A	-	77	3
Other/Ex/Ut/NP/M	619.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	88.7	-	N/A	-	20.2	-	N/A	-	1.09	-	N/A	-	494	92
Total Market	93.2	-	N/A	-	16.2	-	N/A	-	1.03	-	N/A	-	399	49

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	94.5	93.4	to	95.7	8.8	8.1	to	9.6	1.01	1.01	to	1.02	478	51
Commercial/Ind.	85.5	64.4	to	100.2	20.0	13.0	to	33.2	1.14	1.05	to	1.32	11	0
Vacant Lot	48.3	-	N/A	-	128.6	-	N/A	-	2.24	-	N/A	-	13	0
Farm & Home	63.8	-	N/A	-	1.0	-	N/A	-	1.00	-	N/A	-	2	0
Ag. Land Only	3.5	-	N/A	-	171.2	-	N/A	-	0.70	-	N/A	-	8	1
Ag. (Impr.+ Land)	13.5	-	N/A	-	195.6	-	N/A	-	0.94	-	N/A	-	12	0
Other/Ex/Ut/NP/M	170.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	94.1	-	N/A	-	9.4	-	N/A	-	1.02	-	N/A	-	517	72
Total Market	94.4	-	N/A	-	9.1	-	N/A	-	1.01	-	N/A	-	503	63
032 : GOVE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	89.3	81.2	to	102.7	20.0	14.5	to	30.7	1.03	0.97	to	1.13	19	0
Commercial/Ind. <i>S-6</i>	85.3	61.4	to	154.6	32.6	21.9	to	54.0	1.27	1.11	to	1.54	9	1
Vacant Lot	43.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	42.0	-	N/A	-	56.3	-	N/A	-	0.93	-	N/A	-	2	0
Ag. Land Only	11.1	-	N/A	-	43.8	-	N/A	-	1.15	-	N/A	-	6	0
Ag. (Impr.+ Land)	12.4	-	N/A	-	35.5	-	N/A	-	1.03	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	75.1	-	N/A	-	43.5	-	N/A	-	1.32	-	N/A	-	39	1
Total Market	88.5	-	N/A	-	24.5	-	N/A	-	1.05	-	N/A	-	29	1
033 : GRAHAM COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	100.1	84.2	to	125.6	26.8	17.3	to	49.4	1.02	0.92	to	1.13	16	1
Commercial/Ind. <i>S-5</i>	90.6	77.3	to	121.7	20.6	7.0	to	27.0	0.99	0.95	to	1.04	8	1
Vacant Lot	69.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	66.3	-	N/A	-	5.0	-	N/A	-	0.97	-	N/A	-	2	0
Ag. Land Only	11.4	-	N/A	-	62.4	-	N/A	-	1.11	-	N/A	-	8	0
Ag. (Impr.+ Land)	11.4	-	N/A	-	62.4	-	N/A	-	1.11	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	80.1	-	N/A	-	46.5	-	N/A	-	1.45	-	N/A	-	35	2
Total Market	98.6	-	N/A	-	24.8	-	N/A	-	1.00	-	N/A	-	25	2

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	98.3	95.1	to	101.2	9.9	7.8	to	12.5	0.99	0.97	to	1.01	58	5
Commercial/Ind.	97.1	87.5	to	111.3	9.9	2.9	to	11.9	0.99	0.96	to	1.04	6	0
Vacant Lot	46.8	-	N/A	-	45.7	-	N/A	-	1.49	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	4.3	-	N/A	-	8.9	-	N/A	-	1.02	-	N/A	-	4	0
Ag. (Impr.+ Land)	4.3	-	N/A	-	8.9	-	N/A	-	1.02	-	N/A	-	4	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	97.4	-	N/A	-	11.1	-	N/A	-	0.99	-	N/A	-	70	8
Total Market	98.1	-	N/A	-	10.2	-	N/A	-	0.99	-	N/A	-	66	6

035 : GRAY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.7	88.4	to	100.2	13.1	10.7	to	16.4	0.98	0.93	to	1.02	53	2
Commercial/Ind. <i>S-5</i>	76.8	59.4	to	89.5	20.0	10.8	to	38.7	1.06	1.00	to	1.16	8	0
Vacant Lot	91.8	-	N/A	-	6.7	-	N/A	-	1.03	-	N/A	-	3	0
Farm & Home	72.9	-	N/A	-	3.7	-	N/A	-	1.02	-	N/A	-	2	0
Ag. Land Only	12.5	-	N/A	-	32.2	-	N/A	-	0.88	-	N/A	-	13	1
Ag. (Impr.+ Land)	14.8	-	N/A	-	102.9	-	N/A	-	1.18	-	N/A	-	19	0
Other/Ex/Ut/NP/M	65.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	84.9	-	N/A	-	26.0	-	N/A	-	1.05	-	N/A	-	86	6
Total Market	91.8	-	N/A	-	14.2	-	N/A	-	0.97	-	N/A	-	65	3

036 : GREELEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	107.6	85.9	to	147.3	29.9	17.3	to	56.1	1.13	1.01	to	1.42	10	0
Commercial/Ind. <i>S-2</i>	74.9	38.7	to	123.6	48.1	23.4	to	103.8	1.35	1.08	to	2.00	6	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	21.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	9.5	-	N/A	-	28.4	-	N/A	-	0.78	-	N/A	-	4	0
Ag. (Impr.+ Land)	9.2	-	N/A	-	26.7	-	N/A	-	0.82	-	N/A	-	7	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	61.5	-	N/A	-	79.4	-	N/A	-	2.12	-	N/A	-	24	0
Total Market	104.1	-	N/A	-	33.3	-	N/A	-	1.21	-	N/A	-	16	0

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	103.9	95.9	to	110.8	24.5	18.7	to	31.8	1.12	1.05	to	1.22	45	2
Commercial/Ind.	103.3	57.5	to	116.4	19.2	5.8	to	83.1	0.88	0.75	to	1.00	6	0
Vacant Lot	173.8	-	N/A	-	9.3	-	N/A	-	1.01	-	N/A	-	3	0
Farm & Home	39.3	-	N/A	-	44.1	-	N/A	-	1.14	-	N/A	-	8	0
Ag. Land Only	4.1	-	N/A	-	20.9	-	N/A	-	0.95	-	N/A	-	11	2
Ag. (Impr.+ Land)	5.4	-	N/A	-	91.0	-	N/A	-	1.08	-	N/A	-	19	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	83.4	-	N/A	-	54.5	-	N/A	-	1.61	-	N/A	-	81	1
Total Market	104.4	-	N/A	-	26.4	-	N/A	-	1.14	-	N/A	-	54	2
038 : HAMILTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.6	76.1	to	94.3	19.3	14.2	to	26.7	1.04	0.99	to	1.12	30	1
Commercial/Ind. <i>S-3</i>	75.9	33.8	to	190.0	54.4	12.6	to	91.2	1.54	0.97	to	1.86	5	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	88.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	6.2	-	N/A	-	8.2	-	N/A	-	0.98	-	N/A	-	6	0
Ag. (Impr.+ Land)	6.2	-	N/A	-	20.1	-	N/A	-	0.88	-	N/A	-	8	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	79.6	-	N/A	-	36.5	-	N/A	-	1.20	-	N/A	-	44	1
Total Market	87.7	-	N/A	-	19.3	-	N/A	-	1.04	-	N/A	-	35	3
039 : HARPER COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.4	91.9	to	100.0	14.1	11.6	to	17.4	1.02	0.99	to	1.06	73	5
Commercial/Ind. <i>S-3</i>	101.9	84.1	to	136.8	24.1	12.9	to	88.8	0.93	0.78	to	1.12	7	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	53.1	-	N/A	-	26.5	-	N/A	-	1.74	-	N/A	-	3	0
Ag. Land Only	9.2	-	N/A	-	40.7	-	N/A	-	1.02	-	N/A	-	18	1
Ag. (Impr.+ Land)	11.4	-	N/A	-	103.0	-	N/A	-	1.12	-	N/A	-	29	4
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	88.5	-	N/A	-	35.8	-	N/A	-	1.38	-	N/A	-	112	1
Total Market	96.5	-	N/A	-	14.7	-	N/A	-	1.02	-	N/A	-	80	6

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	91.5	89.9	to	94.2	11.7	10.3	to	13.2	1.02	1.00	to	1.03	191	19
Commercial/Ind.	100.1	62.2	to	128.9	22.7	13.2	to	41.2	1.10	1.00	to	1.31	9	0
Vacant Lot	58.6	-	N/A	-	70.5	-	N/A	-	1.35	-	N/A	-	12	0
Farm & Home	69.3	-	N/A	-	16.9	-	N/A	-	1.02	-	N/A	-	5	0
Ag. Land Only	3.4	-	N/A	-	127.6	-	N/A	-	0.75	-	N/A	-	22	0
Ag. (Impr.+ Land)	8.9	-	N/A	-	221.4	-	N/A	-	0.66	-	N/A	-	34	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	89.1	-	N/A	-	16.9	-	N/A	-	1.03	-	N/A	-	251	37
Total Market	91.5	-	N/A	-	12.9	-	N/A	-	1.02	-	N/A	-	212	26

041 : HASKELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.6	85.1	to	97.1	11.9	9.4	to	16.2	1.00	0.98	to	1.03	34	0
Commercial/Ind. <i>S-5</i>	84.2	54.3	to	146.3	37.5	26.6	to	60.8	1.23	1.07	to	1.52	7	1
Vacant Lot	58.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	32.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	9.1	-	N/A	-	76.3	-	N/A	-	1.16	-	N/A	-	6	0
Ag. (Impr.+ Land)	9.9	-	N/A	-	59.0	-	N/A	-	1.14	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	85.1	-	N/A	-	29.0	-	N/A	-	1.13	-	N/A	-	51	1
Total Market	88.5	-	N/A	-	14.1	-	N/A	-	0.99	-	N/A	-	42	3

042 : HODGEMAN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	98.7	88.6	to	159.4	23.9	10.1	to	44.0	1.04	0.99	to	1.13	10	1
Commercial/Ind.	54.2	31.5	to	111.7	52.9	10.3	to	60.2	1.41	0.92	to	1.80	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	12.9	-	N/A	-	146.3	-	N/A	-	1.50	-	N/A	-	3	0
Ag. Land Only	9.6	-	N/A	-	36.6	-	N/A	-	1.03	-	N/A	-	13	0
Ag. (Impr.+ Land)	9.6	-	N/A	-	41.4	-	N/A	-	1.01	-	N/A	-	14	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	19.6	-	N/A	-	207.0	-	N/A	-	1.86	-	N/A	-	31	1
Total Market	95.5	-	N/A	-	30.7	-	N/A	-	1.63	-	N/A	-	14	1

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	91.5	87.5	to	97.1	13.6	11.6	to	15.9	1.03	1.01	to	1.05	94	14
Commercial/Ind.	76.6	49.2	to	123.5	35.6	23.1	to	65.7	1.44	1.04	to	1.88	9	0
Vacant Lot	107.6	-	N/A	-	10.0	-	N/A	-	1.00	-	N/A	-	2	0
Farm & Home	83.1	-	N/A	-	24.6	-	N/A	-	1.14	-	N/A	-	20	0
Ag. Land Only	6.1	-	N/A	-	107.8	-	N/A	-	0.90	-	N/A	-	25	0
Ag. (Impr.+ Land)	34.6	-	N/A	-	95.6	-	N/A	-	1.10	-	N/A	-	64	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	82.6	-	N/A	-	28.0	-	N/A	-	1.18	-	N/A	-	189	23
Total Market	91.4	-	N/A	-	15.5	-	N/A	-	1.10	-	N/A	-	105	14

044 : JEFFERSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	89.2	87.4	to	91.4	12.1	10.6	to	13.9	1.03	1.02	to	1.05	196	24
Commercial/Ind.	96.5	43.3	to	153.1	49.6	6.1	to	57.3	1.36	0.90	to	1.59	4	0
Vacant Lot	115.4	-	N/A	-	83.6	-	N/A	-	1.96	-	N/A	-	25	2
Farm & Home	72.7	-	N/A	-	24.7	-	N/A	-	0.99	-	N/A	-	19	1
Ag. Land Only	3.4	-	N/A	-	88.5	-	N/A	-	0.73	-	N/A	-	33	3
Ag. (Impr.+ Land)	14.9	-	N/A	-	184.5	-	N/A	-	0.89	-	N/A	-	62	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	85.6	-	N/A	-	21.3	-	N/A	-	1.12	-	N/A	-	306	53
Total Market	90.1	-	N/A	-	14.6	-	N/A	-	1.06	-	N/A	-	225	32

045 : JEWELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.6	87.0	to	102.6	18.5	13.6	to	27.0	1.07	1.02	to	1.14	31	4
Commercial/Ind. <i>S-4</i>	88.4	66.3	to	197.1	49.2	8.9	to	51.0	1.12	0.88	to	1.28	4	0
Vacant Lot	100.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	85.5	-	N/A	-	17.5	-	N/A	-	0.98	-	N/A	-	2	0
Ag. Land Only	9.1	-	N/A	-	52.4	-	N/A	-	0.95	-	N/A	-	5	0
Ag. (Impr.+ Land)	11.6	-	N/A	-	81.8	-	N/A	-	1.18	-	N/A	-	6	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	92.0	-	N/A	-	23.1	-	N/A	-	1.36	-	N/A	-	44	8
Total Market	96.7	-	N/A	-	17.0	-	N/A	-	1.04	-	N/A	-	36	6

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	93.4	91.6	to	94.7	8.1	7.4	to	8.8	1.00	0.99	to	1.01	338	14
Commercial/Ind.	80.1	74.7	to	90.7	25.3	22.4	to	29.1	1.07	1.01	to	1.13	128	5
Vacant Lot	68.6	-	N/A	-	20.3	-	N/A	-	0.99	-	N/A	-	930	72
Farm & Home	64.2	-	N/A	-	17.7	-	N/A	-	1.00	-	N/A	-	17	2
Ag. Land Only	0.6	-	N/A	-	141.9	-	N/A	-	0.87	-	N/A	-	68	5
Ag. (Impr.+ Land)	0.8	-	N/A	-	193.7	-	N/A	-	0.78	-	N/A	-	88	11
Other/Ex/Ut/NP/M	80.1	-	N/A	-	35.1	-	N/A	-	0.86	-	N/A	-	7	0
Total w/Ag.&F&H	74.7	-	N/A	-	22.3	-	N/A	-	0.98	-	N/A	-	1508	135
Total Market	76.6	-	N/A	-	21.7	-	N/A	-	0.98	-	N/A	-	1403	64

047 : KEARNY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	89.1	84.4	to	105.6	10.9	8.4	to	16.1	1.00	0.97	to	1.03	15	2
Commercial/Ind. <i>S-5</i>	78.9	56.4	to	90.7	17.6	10.0	to	24.0	1.05	1.00	to	1.14	6	0
Vacant Lot	70.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	22.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	14.6	-	N/A	-	11.2	-	N/A	-	0.97	-	N/A	-	4	0
Ag. (Impr.+ Land)	14.5	-	N/A	-	24.8	-	N/A	-	0.86	-	N/A	-	5	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	84.4	-	N/A	-	33.1	-	N/A	-	1.35	-	N/A	-	28	0
Total Market	87.3	-	N/A	-	14.9	-	N/A	-	1.02	-	N/A	-	22	1

048 : KINGMAN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	97.3	88.1	to	101.3	14.2	11.1	to	18.0	1.07	1.04	to	1.12	60	7
Commercial/Ind.	50.7	12.1	to	225.0	142.7	15.9	to	337.9	0.85	0.57	to	1.08	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	52.9	-	N/A	-	15.0	-	N/A	-	1.06	-	N/A	-	3	0
Ag. Land Only	4.4	-	N/A	-	122.9	-	N/A	-	1.10	-	N/A	-	16	0
Ag. (Impr.+ Land)	6.3	-	N/A	-	110.5	-	N/A	-	1.05	-	N/A	-	24	2
Other/Ex/Ut/NP/M	41.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	85.2	-	N/A	-	42.8	-	N/A	-	1.31	-	N/A	-	92	3
Total Market	96.8	-	N/A	-	14.4	-	N/A	-	1.07	-	N/A	-	65	11

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	106.3	78.0	to	120.9	19.8	12.4	to	46.5	1.00	0.93	to	1.06	11	1
Commercial/Ind. <i>S-3</i>	59.4	43.0	to	89.7	27.8	6.5	to	31.4	0.96	0.84	to	1.12	4	0
Vacant Lot	112.4	-	N/A	-	17.5	-	N/A	-	1.18	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	12.3	-	N/A	-	42.2	-	N/A	-	0.98	-	N/A	-	10	0
Ag. (Impr.+ Land)	14.2	-	N/A	-	43.2	-	N/A	-	1.04	-	N/A	-	12	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	68.3	-	N/A	-	65.3	-	N/A	-	1.33	-	N/A	-	29	0
Total Market	92.8	-	N/A	-	24.4	-	N/A	-	1.23	-	N/A	-	17	1

050 : LABETTE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.7	97.1	to	102.5	16.4	14.0	to	19.2	1.07	1.02	to	1.18	154	20
Commercial/Ind.	75.6	52.6	to	95.5	30.2	17.5	to	66.8	2.22	1.75	to	3.02	10	0
Vacant Lot	234.1	-	N/A	-	66.9	-	N/A	-	2.85	-	N/A	-	4	0
Farm & Home	47.0	-	N/A	-	58.0	-	N/A	-	0.94	-	N/A	-	7	0
Ag. Land Only	5.9	-	N/A	-	34.3	-	N/A	-	0.94	-	N/A	-	12	0
Ag. (Impr.+ Land)	5.5	-	N/A	-	33.5	-	N/A	-	0.98	-	N/A	-	19	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	95.6	-	N/A	-	20.8	-	N/A	-	1.35	-	N/A	-	194	37
Total Market	99.2	-	N/A	-	17.2	-	N/A	-	1.15	-	N/A	-	168	23

051 : LANE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.9	83.2	to	106.8	21.9	14.7	to	34.8	1.08	1.00	to	1.21	24	3
Commercial/Ind. <i>S-4</i>	109.9	79.9	to	127.9	14.8	8.2	to	24.7	1.08	0.99	to	1.26	7	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	10.8	-	N/A	-	67.2	-	N/A	-	1.17	-	N/A	-	8	0
Ag. (Impr.+ Land)	9.6	-	N/A	-	77.8	-	N/A	-	1.09	-	N/A	-	9	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	88.8	-	N/A	-	43.7	-	N/A	-	1.62	-	N/A	-	40	2
Total Market	98.3	-	N/A	-	20.9	-	N/A	-	1.10	-	N/A	-	31	3

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	90.6	to	94.5	9.0	8.1	to	10.2	1.00	0.99	to	1.00	225	21
Commercial/Ind.	79.3	64.9	to	104.2	28.1	19.4	to	47.5	1.16	0.97	to	1.42	13	1
Vacant Lot	91.3	-	N/A	-	23.9	-	N/A	-	1.34	-	N/A	-	109	14
Farm & Home	79.0	-	N/A	-	13.8	-	N/A	-	1.01	-	N/A	-	17	1
Ag. Land Only	1.4	-	N/A	-	111.0	-	N/A	-	1.09	-	N/A	-	57	8
Ag. (Impr.+ Land)	5.1	-	N/A	-	547.0	-	N/A	-	0.69	-	N/A	-	106	0
Other/Ex/Ut/NP/M	75.8	-	N/A	-	51.9	-	N/A	-	1.29	-	N/A	-	3	0
Total w/Ag.&F&H	86.7	-	N/A	-	19.3	-	N/A	-	1.08	-	N/A	-	473	79
Total Market	91.7	-	N/A	-	11.7	-	N/A	-	1.00	-	N/A	-	350	47
053 : LINCOLN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.0	85.6	to	103.4	12.5	8.2	to	18.0	1.04	0.99	to	1.10	27	4
Commercial/Ind. <i>S-2</i>	64.8	53.1	to	96.2	23.7	6.5	to	23.8	1.11	0.97	to	1.15	3	0
Vacant Lot	121.9	-	N/A	-	33.3	-	N/A	-	1.13	-	N/A	-	2	0
Farm & Home	77.7	-	N/A	-	.	-	N/A	-	1.00	-	N/A	-	2	0
Ag. Land Only	13.3	-	N/A	-	42.0	-	N/A	-	0.98	-	N/A	-	8	0
Ag. (Impr.+ Land)	17.7	-	N/A	-	34.6	-	N/A	-	0.98	-	N/A	-	13	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.1	-	N/A	-	42.9	-	N/A	-	1.39	-	N/A	-	47	1
Total Market	98.7	-	N/A	-	14.5	-	N/A	-	1.05	-	N/A	-	32	5
054 : LINN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.3	80.5	to	95.0	30.8	26.5	to	36.9	1.04	0.98	to	1.10	144	14
Commercial/Ind.	97.4	44.0	to	143.5	38.8	16.9	to	121.6	1.54	0.98	to	2.82	7	1
Vacant Lot	52.6	-	N/A	-	55.8	-	N/A	-	1.16	-	N/A	-	253	13
Farm & Home	52.2	-	N/A	-	39.1	-	N/A	-	1.04	-	N/A	-	22	0
Ag. Land Only	4.7	-	N/A	-	49.0	-	N/A	-	0.93	-	N/A	-	30	0
Ag. (Impr.+ Land)	5.4	-	N/A	-	52.7	-	N/A	-	0.88	-	N/A	-	44	6
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	62.5	-	N/A	-	54.4	-	N/A	-	1.26	-	N/A	-	470	26
Total Market	66.7	-	N/A	-	48.9	-	N/A	-	0.89	-	N/A	-	404	27

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	94.9	92.7	to	100.9	10.8	7.9	to	15.3	1.00	0.97	to	1.03	27	1
Commercial/Ind. <i>S-6</i>	94.4	39.6	to	105.4	24.1	11.5	to	70.0	1.09	0.99	to	1.38	9	0
Vacant Lot	53.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	44.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	18.4	-	N/A	-	25.7	-	N/A	-	0.94	-	N/A	-	13	1
Ag. (Impr.+ Land)	18.2	-	N/A	-	30.3	-	N/A	-	1.03	-	N/A	-	14	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	87.7	-	N/A	-	36.5	-	N/A	-	1.19	-	N/A	-	52	0
Total Market	94.4	-	N/A	-	13.3	-	N/A	-	0.98	-	N/A	-	37	2
056 : LYON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.8	93.8	to	97.9	12.9	11.6	to	14.4	1.00	0.98	to	1.01	255	22
Commercial/Ind.	99.2	81.0	to	113.0	16.6	9.5	to	34.9	0.85	.74	to	1.01	10	1
Vacant Lot	105.6	-	N/A	-	43.7	-	N/A	-	5.90	-	N/A	-	17	0
Farm & Home	81.7	-	N/A	-	3.9	-	N/A	-	0.99	-	N/A	-	9	1
Ag. Land Only	5.8	-	N/A	-	50.4	-	N/A	-	1.81	-	N/A	-	13	1
Ag. (Impr.+ Land)	8.3	-	N/A	-	214.5	-	N/A	-	1.58	-	N/A	-	20	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	93.9	-	N/A	-	14.4	-	N/A	-	1.03	-	N/A	-	312	45
Total Market	95.8	-	N/A	-	14.1	-	N/A	-	1.03	-	N/A	-	283	28
057 : MARION COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.1	92.2	to	99.5	16.9	14.3	to	20.1	1.03	1.00	to	1.06	127	18
Commercial/Ind.	123.4	96.5	to	173.1	39.9	26.7	to	66.9	1.03	0.89	to	1.30	18	2
Vacant Lot	417.9	-	N/A	-	77.1	-	N/A	-	4.12	-	N/A	-	2	0
Farm & Home	43.0	-	N/A	-	43.4	-	N/A	-	0.89	-	N/A	-	6	0
Ag. Land Only	7.9	-	N/A	-	36.8	-	N/A	-	1.02	-	N/A	-	12	2
Ag. (Impr.+ Land)	8.8	-	N/A	-	65.9	-	N/A	-	1.12	-	N/A	-	18	1
Other/Ex/Ut/NP/M	59.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	2	0
Total w/Ag.&F&H	93.4	-	N/A	-	23.3	-	N/A	-	1.06	-	N/A	-	173	34
Total Market	97.3	-	N/A	-	20.1	-	N/A	-	1.04	-	N/A	-	149	20

S-Supplemental commercial/industrial sales added from previous years to increase sample

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

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

058 : MARSHALL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.4	97.0	to	103.6	12.2	10.5	to	14.3	1.04	1.02	to	1.07	130	12
Commercial/Ind.	75.5	53.7	to	101.4	25.5	13.9	to	57.2	1.34	1.08	to	1.72	7	0
Vacant Lot	45.8	-	N/A	-	45.9	-	N/A	-	3.63	-	N/A	-	9	1
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	6.8	-	N/A	-	86.9	-	N/A	-	1.13	-	N/A	-	10	0
Ag. (Impr.+ Land)	18.2	-	N/A	-	103.7	-	N/A	-	1.18	-	N/A	-	19	1
Other/Ex/Ut/NP/M	35.8	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	95.8	-	N/A	-	17.4	-	N/A	-	1.05	-	N/A	-	166	25
Total Market	98.6	-	N/A	-	14.3	-	N/A	-	1.03	-	N/A	-	147	17
059 : MCPHERSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	98.3	97.3	to	99.7	7.5	6.7	to	8.5	1.00	1.00	to	1.01	184	14
Commercial/Ind.	88.5	58.1	to	98.7	20.7	11.3	to	38.4	1.34	1.19	to	1.57	12	0
Vacant Lot	79.7	-	N/A	-	11.8	-	N/A	-	1.09	-	N/A	-	8	1
Farm & Home	75.5	-	N/A	-	21.4	-	N/A	-	1.03	-	N/A	-	8	0
Ag. Land Only	11.4	-	N/A	-	27.9	-	N/A	-	1.03	-	N/A	-	20	1
Ag. (Impr.+ Land)	12.7	-	N/A	-	177.1	-	N/A	-	0.91	-	N/A	-	30	0
Other/Ex/Ut/NP/M	107.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	95.4	-	N/A	-	9.5	-	N/A	-	1.02	-	N/A	-	243	38
Total Market	97.9	-	N/A	-	7.8	-	N/A	-	1.00	-	N/A	-	205	20
060 : MEADE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.6	84.7	to	95.1	18.5	12.9	to	26.4	1.07	1.03	to	1.13	39	4
Commercial/Ind. <i>S-4</i>	72.3	36.7	to	142.7	42.5	11.6	to	79.5	1.38	1.06	to	1.62	5	0
Vacant Lot	32.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	65.6	-	N/A	-	12.3	-	N/A	-	1.04	-	N/A	-	2	0
Ag. Land Only	7.4	-	N/A	-	40.5	-	N/A	-	1.02	-	N/A	-	12	0
Ag. (Impr.+ Land)	7.4	-	N/A	-	40.5	-	N/A	-	1.06	-	N/A	-	14	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.1	-	N/A	-	42.8	-	N/A	-	1.56	-	N/A	-	61	2
Total Market	89.1	-	N/A	-	21.7	-	N/A	-	1.04	-	N/A	-	45	5

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	90.9	89.0	to	92.3	9.7	8.5	to	11.1	0.99	0.98	to	1.00	186	19
Commercial/Ind.	93.1	77.0	to	116.4	16.0	10.4	to	26.5	0.97	0.95	to	1.01	8	0
Vacant Lot	78.1	-	N/A	-	40.2	-	N/A	-	1.63	-	N/A	-	55	2
Farm & Home	53.2	-	N/A	-	34.0	-	N/A	-	1.00	-	N/A	-	15	1
Ag. Land Only	2.2	-	N/A	-	58.3	-	N/A	-	0.88	-	N/A	-	44	8
Ag. (Impr.+ Land)	6.7	-	N/A	-	317.2	-	N/A	-	0.66	-	N/A	-	81	1
Other/Ex/Ut/NP/M	177.1	-	N/A	-	152.2	-	N/A	-	5.53	-	N/A	-	3	0
Total w/Ag.&F&H	82.8	-	N/A	-	34.9	-	N/A	-	1.04	-	N/A	-	348	10
Total Market	89.3	-	N/A	-	12.5	-	N/A	-	0.99	-	N/A	-	252	35
062 : MITCHELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.5	90.0	to	100.0	20.3	16.3	to	24.9	1.07	1.03	to	1.13	72	6
Commercial/Ind.	69.9	22.7	to	105.9	37.2	9.9	to	86.9	1.09	0.93	to	1.51	5	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	45.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	18.1	-	N/A	-	26.4	-	N/A	-	1.09	-	N/A	-	4	0
Ag. (Impr.+ Land)	17.1	-	N/A	-	52.5	-	N/A	-	1.08	-	N/A	-	7	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	92.0	-	N/A	-	29.2	-	N/A	-	1.22	-	N/A	-	85	2
Total Market	93.4	-	N/A	-	20.9	-	N/A	-	1.07	-	N/A	-	77	6
063 : MONTGOMERY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.0	90.5	to	98.1	15.3	13.6	to	17.4	1.04	1.02	to	1.06	214	25
Commercial/Ind.	91.1	64.8	to	113.7	29.4	19.6	to	46.2	1.18	0.98	to	1.66	14	0
Vacant Lot	132.4	-	N/A	-	123.6	-	N/A	-	3.56	-	N/A	-	7	0
Farm & Home	73.7	-	N/A	-	25.7	-	N/A	-	0.94	-	N/A	-	7	0
Ag. Land Only	6.3	-	N/A	-	25.6	-	N/A	-	0.92	-	N/A	-	16	2
Ag. (Impr.+ Land)	6.7	-	N/A	-	42.2	-	N/A	-	1.01	-	N/A	-	30	5
Other/Ex/Ut/NP/M	354.4	-	N/A	-	67.4	-	N/A	-	1.13	-	N/A	-	2	0
Total w/Ag.&F&H	90.5	-	N/A	-	18.0	-	N/A	-	1.06	-	N/A	-	274	53
Total Market	95.5	-	N/A	-	16.8	-	N/A	-	1.04	-	N/A	-	237	30

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	96.2	90.5	to	98.4	9.5	7.3	to	12.6	0.98	0.96	to	1.01	54	8
Commercial/Ind. <i>S-6</i>	99.8	73.1	to	155.0	25.6	12.0	to	48.8	1.06	0.94	to	1.27	9	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	48.9	-	N/A	-	32.8	-	N/A	-	1.28	-	N/A	-	5	0
Ag. Land Only	6.8	-	N/A	-	32.7	-	N/A	-	0.87	-	N/A	-	2	0
Ag. (Impr.+ Land)	8.7	-	N/A	-	189.7	-	N/A	-	0.85	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	92.2	-	N/A	-	16.6	-	N/A	-	0.98	-	N/A	-	76	12
Total Market	97.0	-	N/A	-	9.3	-	N/A	-	0.98	-	N/A	-	63	11

065 : MORTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	103.9	96.2	to	123.3	18.9	13.7	to	30.0	1.02	0.97	to	1.10	25	3
Commercial/Ind.	101.2	76.0	to	112.7	10.4	2.3	to	18.1	0.95	0.93	to	1.00	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	5.2	-	N/A	-	96.9	-	N/A	-	0.83	-	N/A	-	7	0
Ag. (Impr.+ Land)	5.2	-	N/A	-	96.9	-	N/A	-	0.83	-	N/A	-	7	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	98.3	-	N/A	-	29.3	-	N/A	-	1.09	-	N/A	-	36	5
Total Market	103.0	-	N/A	-	15.0	-	N/A	-	0.99	-	N/A	-	29	4

066 : NEMAHA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.7	93.6	to	99.9	16.7	13.9	to	20.1	1.05	1.03	to	1.08	93	5
Commercial/Ind.	106.8	82.7	to	114.5	10.0	3.1	to	19.2	1.12	0.94	to	1.27	6	0
Vacant Lot	256.1	-	N/A	-	62.1	-	N/A	-	2.35	-	N/A	-	4	0
Farm & Home	55.3	-	N/A	-	50.3	-	N/A	-	1.07	-	N/A	-	5	0
Ag. Land Only	9.9	-	N/A	-	63.3	-	N/A	-	0.70	-	N/A	-	21	0
Ag. (Impr.+ Land)	12.3	-	N/A	-	78.8	-	N/A	-	0.82	-	N/A	-	27	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	90.0	-	N/A	-	34.5	-	N/A	-	1.34	-	N/A	-	135	4
Total Market	96.1	-	N/A	-	16.9	-	N/A	-	1.06	-	N/A	-	103	6

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	96.6	93.8	to	100.4	14.8	12.2	to	18.1	1.06	1.03	to	1.10	87	9
Commercial/Ind. <i>S-10</i>	103.2	61.6	to	130.7	35.4	20.8	to	71.3	1.16	0.98	to	1.42	13	1
Vacant Lot	30.4	-	N/A	-	36.1	-	N/A	-	1.41	-	N/A	-	5	0
Farm & Home	30.3	-	N/A	-	41.1	-	N/A	-	1.04	-	N/A	-	6	0
Ag. Land Only	5.9	-	N/A	-	34.9	-	N/A	-	0.86	-	N/A	-	8	0
Ag. (Impr.+ Land)	5.9	-	N/A	-	34.9	-	N/A	-	0.86	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	94.2	-	N/A	-	30.6	-	N/A	-	1.19	-	N/A	-	119	5
Total Market	96.0	-	N/A	-	20.6	-	N/A	-	1.06	-	N/A	-	105	8
068 : NESS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.2	95.1	to	102.6	6.5	4.8	to	9.8	1.00	0.99	to	1.02	29	5
Commercial/Ind. <i>S-7</i>	69.7	58.2	to	100.6	25.4	12.6	to	138.4	1.03	0.86	to	1.29	8	1
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	15.2	-	N/A	-	10.1	-	N/A	-	1.05	-	N/A	-	7	0
Ag. (Impr.+ Land)	14.5	-	N/A	-	11.5	-	N/A	-	1.04	-	N/A	-	8	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	94.4	-	N/A	-	28.6	-	N/A	-	1.24	-	N/A	-	45	1
Total Market	96.2	-	N/A	-	12.6	-	N/A	-	1.17	-	N/A	-	37	3
069 : NORTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.3	92.1	to	103.4	19.2	14.8	to	24.6	1.12	1.05	to	1.22	52	2
Commercial/Ind.	83.4	35.8	to	213.0	63.7	18.5	to	120.7	1.86	0.97	to	3.07	5	0
Vacant Lot	62.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	60.2	-	N/A	-	46.0	-	N/A	-	0.86	-	N/A	-	2	0
Ag. Land Only	16.1	-	N/A	-	11.1	-	N/A	-	1.01	-	N/A	-	15	2
Ag. (Impr.+ Land)	16.1	-	N/A	-	11.1	-	N/A	-	1.01	-	N/A	-	15	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	87.9	-	N/A	-	38.7	-	N/A	-	1.34	-	N/A	-	75	1
Total Market	98.6	-	N/A	-	21.2	-	N/A	-	1.18	-	N/A	-	58	3

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	93.6	89.8	to	97.6	20.1	17.8	to	23.0	1.06	1.03	to	1.09	207	22
Commercial/Ind.	72.5	60.5	to	130.7	58.3	45.2	to	105.4	1.46	1.13	to	1.90	16	0
Vacant Lot	225.4	-	N/A	-	63.3	-	N/A	-	2.15	-	N/A	-	20	2
Farm & Home	72.7	-	N/A	-	37.5	-	N/A	-	1.17	-	N/A	-	7	1
Ag. Land Only	4.7	-	N/A	-	66.9	-	N/A	-	0.92	-	N/A	-	41	2
Ag. (Impr.+ Land)	7.3	-	N/A	-	99.4	-	N/A	-	0.88	-	N/A	-	70	12
Other/Ex/Ut/NP/M	99.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	87.0	-	N/A	-	40.2	-	N/A	-	1.24	-	N/A	-	321	29
Total Market	96.1	-	N/A	-	25.1	-	N/A	-	1.12	-	N/A	-	244	29

071 : OSBORNE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	88.6	73.9	to	99.4	22.1	16.9	to	31.5	1.04	0.96	to	1.15	30	1
Commercial/Ind. <i>S-2</i>	123.6	55.7	to	206.8	47.6	12.1	to	60.7	1.21	1.03	to	1.41	4	0
Vacant Lot	52.9	-	N/A	-	83.4	-	N/A	-	3.71	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	12.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. (Impr.+ Land)	12.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	87.2	-	N/A	-	29.5	-	N/A	-	1.11	-	N/A	-	37	1
Total Market	88.6	-	N/A	-	23.6	-	N/A	-	1.06	-	N/A	-	36	3

072 : OTTAWA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	98.3	92.0	to	100.9	11.6	9.3	to	14.2	1.04	1.02	to	1.06	64	5
Commercial/Ind. <i>S-4</i>	97.5	79.1	to	114.4	12.2	3.1	to	31.8	1.16	1.05	to	1.50	6	0
Vacant Lot	49.0	-	N/A	-	35.1	-	N/A	-	10.45	-	N/A	-	3	0
Farm & Home	48.2	-	N/A	-	13.1	-	N/A	-	1.06	-	N/A	-	2	0
Ag. Land Only	8.4	-	N/A	-	61.6	-	N/A	-	1.12	-	N/A	-	14	0
Ag. (Impr.+ Land)	12.7	-	N/A	-	51.2	-	N/A	-	1.09	-	N/A	-	20	3
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	91.4	-	N/A	-	28.9	-	N/A	-	1.34	-	N/A	-	95	4
Total Market	98.0	-	N/A	-	11.6	-	N/A	-	1.04	-	N/A	-	73	8

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	99.9	96.0	to	102.4	11.7	9.1	to	15.2	1.00	0.97	to	1.02	68	9
Commercial/Ind.	76.7	39.5	to	98.7	31.7	8.5	to	42.4	1.15	1.00	to	1.17	4	0
Vacant Lot	81.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	31.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	16.3	-	N/A	-	40.8	-	N/A	-	1.05	-	N/A	-	9	0
Ag. (Impr.+ Land)	16.3	-	N/A	-	36.4	-	N/A	-	1.02	-	N/A	-	11	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	96.2	-	N/A	-	25.6	-	N/A	-	1.20	-	N/A	-	85	5
Total Market	99.6	-	N/A	-	12.6	-	N/A	-	1.01	-	N/A	-	73	9
074 : PHILLIPS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	85.1	80.6	to	98.9	18.8	14.6	to	24.6	1.02	0.98	to	1.08	39	1
Commercial/Ind. <i>S-5</i>	45.1	36.5	to	81.5	39.4	26.5	to	75.4	1.16	0.99	to	1.49	8	0
Vacant Lot	55.0	-	N/A	-	19.2	-	N/A	-	1.17	-	N/A	-	3	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	13.8	-	N/A	-	30.9	-	N/A	-	1.27	-	N/A	-	5	0
Ag. (Impr.+ Land)	13.8	-	N/A	-	30.9	-	N/A	-	1.27	-	N/A	-	5	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	80.6	-	N/A	-	30.5	-	N/A	-	1.16	-	N/A	-	55	1
Total Market	82.5	-	N/A	-	24.2	-	N/A	-	1.05	-	N/A	-	50	1
075 : POTTAWATOMIE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.9	93.8	to	96.0	8.0	7.3	to	8.9	1.01	1.00	to	1.01	373	47
Commercial/Ind.	74.6	52.9	to	91.2	24.0	16.8	to	39.9	1.12	0.94	to	1.37	10	1
Vacant Lot	79.7	-	N/A	-	27.5	-	N/A	-	1.14	-	N/A	-	32	1
Farm & Home	59.8	-	N/A	-	19.6	-	N/A	-	0.96	-	N/A	-	5	0
Ag. Land Only	7.9	-	N/A	-	80.8	-	N/A	-	1.04	-	N/A	-	17	1
Ag. (Impr.+ Land)	4.9	-	N/A	-	149.6	-	N/A	-	0.74	-	N/A	-	34	4
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	92.4	-	N/A	-	11.1	-	N/A	-	1.02	-	N/A	-	454	68
Total Market	94.5	-	N/A	-	9.3	-	N/A	-	1.00	-	N/A	-	415	54

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	99.4	97.5	to	102.8	10.3	8.7	to	12.4	1.01	0.99	to	1.04	117	13
Commercial/Ind. <i>S-3</i>	86.0	79.9	to	201.5	33.3	2.1	to	63.0	1.18	0.99	to	1.32	5	0
Vacant Lot	99.9	-	N/A	-	46.0	-	N/A	-	1.61	-	N/A	-	3	0
Farm & Home	73.4	-	N/A	-	14.5	-	N/A	-	1.08	-	N/A	-	5	0
Ag. Land Only	14.8	-	N/A	-	14.0	-	N/A	-	1.03	-	N/A	-	12	1
Ag. (Impr.+ Land)	15.4	-	N/A	-	13.0	-	N/A	-	1.03	-	N/A	-	14	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	97.5	-	N/A	-	11.9	-	N/A	-	1.02	-	N/A	-	144	27
Total Market	99.3	-	N/A	-	10.9	-	N/A	-	1.01	-	N/A	-	125	14

077 : RAWLINS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	97.3	61.7	to	111.3	22.5	12.0	to	37.9	1.10	1.01	to	1.33	10	0
Commercial/Ind. <i>S-4</i>	64.4	59.5	to	101.8	18.7	1.5	to	24.8	1.17	1.01	to	1.30	4	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	56.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	11.2	-	N/A	-	18.3	-	N/A	-	0.98	-	N/A	-	5	0
Ag. (Impr.+ Land)	13.0	-	N/A	-	18.3	-	N/A	-	0.98	-	N/A	-	6	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	62.5	-	N/A	-	45.9	-	N/A	-	1.44	-	N/A	-	21	0
Total Market	80.6	-	N/A	-	28.7	-	N/A	-	1.11	-	N/A	-	14	0

078 : RENO COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.0	91.5	to	94.5	10.6	9.8	to	11.6	1.01	1.00	to	1.03	414	28
Commercial/Ind.	103.3	74.5	to	114.0	27.5	19.8	to	43.2	1.09	0.90	to	1.28	23	0
Vacant Lot	91.5	-	N/A	-	44.6	-	N/A	-	1.29	-	N/A	-	37	6
Farm & Home	77.9	-	N/A	-	27.9	-	N/A	-	0.91	-	N/A	-	18	0
Ag. Land Only	6.8	-	N/A	-	95.7	-	N/A	-	1.02	-	N/A	-	42	1
Ag. (Impr.+ Land)	8.5	-	N/A	-	95.4	-	N/A	-	0.94	-	N/A	-	58	5
Other/Ex/Ut/NP/M	108.6	-	N/A	-	20.1	-	N/A	-	0.95	-	N/A	-	4	0
Total w/Ag.&F&H	90.9	-	N/A	-	14.1	-	N/A	-	1.02	-	N/A	-	554	85
Total Market	93.0	-	N/A	-	12.0	-	N/A	-	1.01	-	N/A	-	478	47

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	97.6	85.5	to	103.0	21.7	16.7	to	28.9	1.09	1.02	to	1.18	45	3
Commercial/Ind.	80.0	48.3	to	158.5	47.6	9.7	to	56.4	1.13	0.76	to	1.32	4	0
Vacant Lot	64.4	-	N/A	-	56.3	-	N/A	-	1.06	-	N/A	-	7	0
Farm & Home	61.6	-	N/A	-	31.5	-	N/A	-	1.32	-	N/A	-	6	0
Ag. Land Only	16.2	-	N/A	-	3.4	-	N/A	-	0.98	-	N/A	-	9	1
Ag. (Impr.+ Land)	16.5	-	N/A	-	20.9	-	N/A	-	0.95	-	N/A	-	15	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	79.8	-	N/A	-	44.9	-	N/A	-	1.61	-	N/A	-	77	2
Total Market	95.7	-	N/A	-	27.2	-	N/A	-	1.06	-	N/A	-	56	3
080 : RICE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	94.9	89.4	to	98.8	17.2	14.4	to	20.5	1.07	1.03	to	1.11	115	12
Commercial/Ind.	98.1	63.8	to	218.9	17.9	3.7	to	36.8	0.90	0.80	to	1.09	6	1
Vacant Lot	62.5	-	N/A	-	10.4	-	N/A	-	1.00	-	N/A	-	3	0
Farm & Home	69.5	-	N/A	-	20.5	-	N/A	-	1.06	-	N/A	-	4	0
Ag. Land Only	13.5	-	N/A	-	39.0	-	N/A	-	0.88	-	N/A	-	19	0
Ag. (Impr.+ Land)	14.1	-	N/A	-	41.9	-	N/A	-	0.87	-	N/A	-	22	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	89.2	-	N/A	-	30.8	-	N/A	-	1.23	-	N/A	-	150	7
Total Market	94.7	-	N/A	-	17.8	-	N/A	-	1.04	-	N/A	-	124	13
081 : RILEY COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.3	94.5	to	96.8	6.9	6.5	to	7.5	1.01	1.00	to	1.01	494	54
Commercial/Ind.	97.9	70.3	to	122.6	21.8	12.5	to	50.5	1.09	0.93	to	1.27	9	0
Vacant Lot	21.1	-	N/A	-	52.0	-	N/A	-	1.08	-	N/A	-	20	2
Farm & Home	65.6	-	N/A	-	23.3	-	N/A	-	1.05	-	N/A	-	7	1
Ag. Land Only	5.5	-	N/A	-	102.4	-	N/A	-	0.90	-	N/A	-	9	0
Ag. (Impr.+ Land)	9.2	-	N/A	-	202.4	-	N/A	-	1.20	-	N/A	-	14	1
Other/Ex/Ut/NP/M	71.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	95.0	-	N/A	-	7.2	-	N/A	-	1.01	-	N/A	-	545	92
Total Market	95.2	-	N/A	-	7.1	-	N/A	-	1.01	-	N/A	-	524	74

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	94.9	85.5	to	105.3	25.0	20.7	to	32.3	1.11	1.05	to	1.18	60	5
Commercial/Ind.	223.0	60.5	to	305.9	27.5	5.0	to	151.8	1.14	0.99	to	1.35	5	0
Vacant Lot	98.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	21.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	11.1	-	N/A	-	53.3	-	N/A	-	1.10	-	N/A	-	11	0
Ag. (Impr.+ Land)	13.8	-	N/A	-	41.8	-	N/A	-	1.04	-	N/A	-	13	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	89.2	-	N/A	-	40.2	-	N/A	-	1.44	-	N/A	-	80	8
Total Market	99.4	-	N/A	-	28.5	-	N/A	-	1.12	-	N/A	-	66	7
083 : RUSH COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	86.3	80.7	to	98.2	18.6	13.7	to	25.6	1.02	0.97	to	1.08	40	6
Commercial/Ind. <i>S-1</i>	146.8	66.7	to	417.6	90.3	44.1	to	241.1	2.24	1.34	to	5.19	6	0
Vacant Lot	69.4	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	78.6	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	8.2	-	N/A	-	71.3	-	N/A	-	1.02	-	N/A	-	9	0
Ag. (Impr.+ Land)	12.4	-	N/A	-	56.5	-	N/A	-	0.95	-	N/A	-	13	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.0	-	N/A	-	39.5	-	N/A	-	1.41	-	N/A	-	62	7
Total Market	87.2	-	N/A	-	24.2	-	N/A	-	1.06	-	N/A	-	48	6
084 : RUSSELL COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	87.6	82.6	to	92.3	17.8	15.0	to	21.8	0.99	0.96	to	1.04	104	10
Commercial/Ind.	80.3	44.4	to	123.5	43.9	27.2	to	75.4	1.28	1.05	to	1.65	8	1
Vacant Lot	82.2	-	N/A	-	85.4	-	N/A	-	1.58	-	N/A	-	6	0
Farm & Home	29.5	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	13.0	-	N/A	-	42.3	-	N/A	-	1.04	-	N/A	-	14	1
Ag. (Impr.+ Land)	16.8	-	N/A	-	45.8	-	N/A	-	0.95	-	N/A	-	19	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	82.6	-	N/A	-	32.6	-	N/A	-	1.11	-	N/A	-	138	9
Total Market	87.6	-	N/A	-	22.3	-	N/A	-	1.03	-	N/A	-	118	9

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	93.8	91.9	to	95.9	8.6	7.8	to	9.7	1.01	1.00	to	1.02	222	22
Commercial/Ind.	106.7	84.4	to	130.3	23.0	16.0	to	34.4	1.13	0.93	to	1.28	17	0
Vacant Lot	76.7	-	N/A	-	37.0	-	N/A	-	1.02	-	N/A	-	23	3
Farm & Home	79.2	-	N/A	-	13.9	-	N/A	-	1.13	-	N/A	-	7	1
Ag. Land Only	9.6	-	N/A	-	56.2	-	N/A	-	0.91	-	N/A	-	20	0
Ag. (Impr.+ Land)	10.8	-	N/A	-	56.4	-	N/A	-	0.90	-	N/A	-	26	3
Other/Ex/Ut/NP/M	176.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	92.1	-	N/A	-	11.9	-	N/A	-	1.03	-	N/A	-	296	47
Total Market	94.4	-	N/A	-	11.4	-	N/A	-	1.03	-	N/A	-	263	25
086 : SCOTT COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	84.0	78.6	to	94.5	17.8	14.6	to	22.6	1.05	1.01	to	1.11	52	3
Commercial/Ind.	49.4	40.6	to	63.6	23.2	15.2	to	48.3	1.04	0.94	to	1.21	7	0
Vacant Lot	61.3	-	N/A	-	7.4	-	N/A	-	0.98	-	N/A	-	6	1
Farm & Home	52.1	-	N/A	-	34.3	-	N/A	-	1.00	-	N/A	-	3	0
Ag. Land Only	12.2	-	N/A	-	96.0	-	N/A	-	1.86	-	N/A	-	4	0
Ag. (Impr.+ Land)	12.2	-	N/A	-	96.0	-	N/A	-	1.86	-	N/A	-	4	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	77.9	-	N/A	-	28.1	-	N/A	-	1.07	-	N/A	-	72	1
Total Market	78.9	-	N/A	-	22.4	-	N/A	-	1.00	-	N/A	-	65	3
087 : SEDGWICK COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.8	90.1	to	93.4	9.9	9.1	to	10.9	0.99	0.97	to	1.01	346	28
Commercial/Ind.	85.0	79.2	to	91.2	19.1	16.6	to	22.6	1.02	0.99	to	1.06	115	7
Vacant Lot	52.5	-	N/A	-	56.4	-	N/A	-	1.12	-	N/A	-	173	9
Farm & Home	66.8	-	N/A	-	42.0	-	N/A	-	1.03	-	N/A	-	20	0
Ag. Land Only	0.8	-	N/A	-	247.9	-	N/A	-	0.53	-	N/A	-	64	3
Ag. (Impr.+ Land)	1.0	-	N/A	-	232.7	-	N/A	-	0.52	-	N/A	-	68	4
Other/Ex/Ut/NP/M	104.0	-	N/A	-	21.9	-	N/A	-	0.95	-	N/A	-	3	0
Total w/Ag.&F&H	84.9	-	N/A	-	32.3	-	N/A	-	0.91	-	N/A	-	725	21
Total Market	88.0	-	N/A	-	19.9	-	N/A	-	0.97	-	N/A	-	637	57

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	97.3	96.1	to	99.0	11.0	9.5	to	12.7	1.00	0.99	to	1.01	173	18
Commercial/Ind.	77.0	52.3	to	94.1	32.2	22.0	to	53.7	1.24	1.05	to	1.54	17	0
Vacant Lot	34.5	-	N/A	-	202.4	-	N/A	-	2.58	-	N/A	-	4	0
Farm & Home	61.9	-	N/A	-	15.3	-	N/A	-	0.96	-	N/A	-	2	0
Ag. Land Only	8.9	-	N/A	-	99.1	-	N/A	-	0.75	-	N/A	-	3	0
Ag. (Impr.+ Land)	8.9	-	N/A	-	99.1	-	N/A	-	0.75	-	N/A	-	3	0
Other/Ex/Ut/NP/M	102.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	96.7	-	N/A	-	12.0	-	N/A	-	1.02	-	N/A	-	200	29
Total Market	96.9	-	N/A	-	11.9	-	N/A	-	1.01	-	N/A	-	195	25

089 : SHAWNEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.4	90.7	to	93.9	9.8	8.9	to	10.9	1.00	0.99	to	1.02	290	26
Commercial/Ind.	97.5	88.8	to	104.1	19.9	16.0	to	25.3	1.13	1.00	to	1.39	55	5
Vacant Lot	75.7	-	N/A	-	48.1	-	N/A	-	1.23	-	N/A	-	104	10
Farm & Home	70.5	-	N/A	-	23.3	-	N/A	-	1.29	-	N/A	-	9	1
Ag. Land Only	2.6	-	N/A	-	126.4	-	N/A	-	0.94	-	N/A	-	38	0
Ag. (Impr.+ Land)	3.7	-	N/A	-	150.7	-	N/A	-	0.81	-	N/A	-	57	11
Other/Ex/Ut/NP/M	138.8	-	N/A	-	25.4	-	N/A	-	1.15	-	N/A	-	4	0
Total w/Ag.&F&H	89.1	-	N/A	-	17.4	-	N/A	-	1.04	-	N/A	-	519	93
Total Market	91.6	-	N/A	-	12.9	-	N/A	-	1.04	-	N/A	-	453	78

090 : SHERIDAN COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	95.2	81.8	to	107.4	16.7	12.2	to	24.4	1.02	0.97	to	1.10	20	0
Commercial/Ind. <i>S-2</i>	76.2	67.2	to	134.9	31.7	4.2	to	31.7	1.21	1.01	to	1.25	3	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	10.1	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	12.5	-	N/A	-	16.6	-	N/A	-	1.06	-	N/A	-	4	0
Ag. (Impr.+ Land)	12.5	-	N/A	-	16.6	-	N/A	-	1.06	-	N/A	-	4	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	85.8	-	N/A	-	33.6	-	N/A	-	1.53	-	N/A	-	28	0
Total Market	92.8	-	N/A	-	19.1	-	N/A	-	1.03	-	N/A	-	23	0

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	88.3	83.4	to	92.5	15.9	13.4	to	19.2	1.01	0.99	to	1.03	107	10
Commercial/Ind. <i>S-5</i>	90.7	67.0	to	141.7	36.3	19.7	to	89.8	1.27	0.95	to	2.08	7	0
Vacant Lot	124.8	-	N/A	-	118.2	-	N/A	-	1.85	-	N/A	-	6	0
Farm & Home	13.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	10.1	-	N/A	-	38.4	-	N/A	-	0.81	-	N/A	-	14	0
Ag. (Impr.+ Land)	10.1	-	N/A	-	43.2	-	N/A	-	0.80	-	N/A	-	17	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	86.2	-	N/A	-	21.0	-	N/A	-	1.14	-	N/A	-	138	22
Total Market	90.3	-	N/A	-	16.0	-	N/A	-	1.04	-	N/A	-	120	14
092 : SMITH COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	90.3	77.7	to	99.8	20.5	14.6	to	32.1	1.01	0.93	to	1.12	29	2
Commercial/Ind. <i>S-5</i>	95.0	39.8	to	200.9	49.8	28.1	to	123.7	0.93	0.77	to	1.11	8	0
Vacant Lot	63.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	60.7	-	N/A	-	15.1	-	N/A	-	0.92	-	N/A	-	2	0
Ag. Land Only	11.5	-	N/A	-	47.9	-	N/A	-	0.95	-	N/A	-	5	0
Ag. (Impr.+ Land)	16.1	-	N/A	-	64.8	-	N/A	-	1.01	-	N/A	-	10	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	78.7	-	N/A	-	39.6	-	N/A	-	1.35	-	N/A	-	50	2
Total Market	90.8	-	N/A	-	25.8	-	N/A	-	1.01	-	N/A	-	38	2
093 : STAFFORD COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	98.0	89.9	to	100.0	8.1	6.0	to	11.3	0.99	0.96	to	1.02	41	8
Commercial/Ind. <i>S-5</i>	101.2	95.8	to	135.4	2.7	0.4	to	4.7	0.99	0.98	to	1.02	6	1
Vacant Lot	93.7	-	N/A	-	6.0	-	N/A	-	0.97	-	N/A	-	2	0
Farm & Home	49.9	-	N/A	-	62.7	-	N/A	-	2.15	-	N/A	-	4	0
Ag. Land Only	15.3	-	N/A	-	49.3	-	N/A	-	1.14	-	N/A	-	18	0
Ag. (Impr.+ Land)	15.9	-	N/A	-	51.9	-	N/A	-	1.14	-	N/A	-	21	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	88.2	-	N/A	-	38.4	-	N/A	-	2.00	-	N/A	-	74	2
Total Market	98.3	-	N/A	-	7.4	-	N/A	-	1.00	-	N/A	-	49	9

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	94.8	82.9	to	100.6	22.8	10.9	to	38.5	1.13	1.02	to	1.30	13	0
Commercial/Ind. <i>S-5</i>	100.9	76.4	to	113.1	14.5	8.3	to	26.0	1.11	1.00	to	1.23	6	0
Vacant Lot	0.9	-	N/A	-	5.4	-	N/A	-	1.00	-	N/A	-	2	0
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	13.0	-	N/A	-	18.9	-	N/A	-	1.04	-	N/A	-	2	0
Ag. (Impr.+ Land)	13.0	-	N/A	-	18.9	-	N/A	-	1.04	-	N/A	-	2	0
Other/Ex/Ut/NP/M	127.9	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	91.7	-	N/A	-	21.2	-	N/A	-	1.08	-	N/A	-	24	4
Total Market	94.2	-	N/A	-	15.0	-	N/A	-	1.08	-	N/A	-	22	4

095 : STEVENS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.8	95.0	to	99.1	8.3	7.0	to	9.7	1.01	1.00	to	1.03	111	10
Commercial/Ind.	66.5	56.3	to	89.6	25.2	15.0	to	48.8	1.04	0.89	to	1.36	8	0
Vacant Lot	63.2	-	N/A	-	45.6	-	N/A	-	1.60	-	N/A	-	2	0
Farm & Home	97.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	15.0	-	N/A	-	7.3	-	N/A	-	0.97	-	N/A	-	7	0
Ag. (Impr.+ Land)	15.3	-	N/A	-	7.3	-	N/A	-	0.97	-	N/A	-	8	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	95.6	-	N/A	-	9.5	-	N/A	-	1.02	-	N/A	-	130	19
Total Market	96.2	-	N/A	-	9.6	-	N/A	-	1.02	-	N/A	-	121	11

096 : SUMNER COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	93.5	90.1	to	96.4	15.8	14.1	to	18.0	1.02	1.00	to	1.04	210	23
Commercial/Ind.	86.0	55.7	to	117.8	26.3	16.9	to	58.7	0.95	0.83	to	1.14	9	0
Vacant Lot	100.6	-	N/A	-	59.8	-	N/A	-	1.87	-	N/A	-	16	2
Farm & Home	48.0	-	N/A	-	82.8	-	N/A	-	1.00	-	N/A	-	8	0
Ag. Land Only	7.5	-	N/A	-	47.2	-	N/A	-	0.94	-	N/A	-	26	0
Ag. (Impr.+ Land)	10.9	-	N/A	-	37.9	-	N/A	-	0.97	-	N/A	-	37	4
Other/Ex/Ut/NP/M	1.3	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Total w/Ag.&F&H	89.1	-	N/A	-	21.8	-	N/A	-	1.08	-	N/A	-	281	52
Total Market	93.5	-	N/A	-	16.7	-	N/A	-	1.02	-	N/A	-	236	31

S-Supplemental commercial/industrial sales added from previous years to increase sample

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

Median Ratio: 90.0 to 110.0

COD: 20.0 or less

PRD: .98 to 1.02

097 : THOMAS COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	96.8	95.0	to	99.1	8.3	7.1	to	9.7	1.01	1.00	to	1.03	111	10
Commercial/Ind.	66.5	56.3	to	89.6	25.2	15.3	to	48.8	1.04	0.89	to	1.36	8	0
Vacant Lot	63.2	-	N/A	-	45.6	-	N/A	-	1.60	-	N/A	-	2	0
Farm & Home	97.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	15.0	-	N/A	-	7.3	-	N/A	-	0.97	-	N/A	-	7	0
Ag. (Impr.+ Land)	15.3	-	N/A	-	7.3	-	N/A	-	0.97	-	N/A	-	8	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	95.6	-	N/A	-	9.5	-	N/A	-	1.02	-	N/A	-	130	19
Total Market	96.2	-	N/A	-	9.6	-	N/A	-	1.02	-	N/A	-	121	11

098 : TREGO COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	97.9	94.8	to	100.6	8.0	6.0	to	10.9	1.00	0.98	to	1.02	46	6
Commercial/Ind.	72.4	50.4	to	85.8	18.4	5.2	to	23.9	1.12	0.99	to	1.32	4	0
Vacant Lot	65.0	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Farm & Home	36.7	-	N/A	-	83.3	-	N/A	-	0.87	-	N/A	-	3	0
Ag. Land Only	12.8	-	N/A	-	26.5	-	N/A	-	1.07	-	N/A	-	10	0
Ag. (Impr.+ Land)	12.8	-	N/A	-	22.3	-	N/A	-	1.06	-	N/A	-	12	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	92.7	-	N/A	-	29.8	-	N/A	-	1.17	-	N/A	-	66	3
Total Market	96.7	-	N/A	-	8.9	-	N/A	-	0.99	-	N/A	-	51	8

099 : WABAUNSEE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.0	84.3	to	95.0	12.3	10.1	to	15.2	1.01	0.99	to	1.04	63	5
Commercial/Ind. <i>S-6</i>	92.5	74.9	to	108.2	17.1	9.0	to	34.5	1.01	0.95	to	1.10	8	0
Vacant Lot	56.6	-	N/A	-	11.9	-	N/A	-	0.92	-	N/A	-	5	0
Farm & Home	63.4	-	N/A	-	13.0	-	N/A	-	0.91	-	N/A	-	4	0
Ag. Land Only	9.2	-	N/A	-	64.1	-	N/A	-	0.91	-	N/A	-	11	0
Ag. (Impr.+ Land)	11.6	-	N/A	-	97.3	-	N/A	-	0.81	-	N/A	-	19	2
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	81.7	-	N/A	-	24.1	-	N/A	-	1.07	-	N/A	-	99	11
Total Market	90.7	-	N/A	-	14.4	-	N/A	-	1.00	-	N/A	-	76	6

S-Supplemental commercial/industrial sales added from previous years to increase sample

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	89.9	74.2	to	119.2	13.6	7.5	to	23.9	1.00	0.98	to	1.07	8	1
Commercial/Ind. <i>S-3</i>	74.9	68.3	to	91.0	10.8	3.1	to	10.9	0.96	0.94	to	1.01	3	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	13.2	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	11.1	-	N/A	-	14.0	-	N/A	-	0.91	-	N/A	-	5	0
Ag. (Impr.+ Land)	11.3	-	N/A	-	155.1	-	N/A	-	1.77	-	N/A	-	9	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	74.2	-	N/A	-	46.8	-	N/A	-	2.26	-	N/A	-	21	1
Total Market	88.2	-	N/A	-	13.8	-	N/A	-	0.98	-	N/A	-	11	1
101 : WASHINGTON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	92.6	88.8	to	100.8	10.8	8.4	to	15.6	1.01	0.99	to	1.03	31	4
Commercial/Ind. <i>S-4</i>	86.3	75.3	to	196.0	40.0	10.0	to	66.4	1.18	1.01	to	1.69	7	1
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	73.6	-	N/A	-	30.4	-	N/A	-	1.29	-	N/A	-	3	0
Ag. Land Only	9.2	-	N/A	-	47.0	-	N/A	-	0.99	-	N/A	-	11	0
Ag. (Impr.+ Land)	9.2	-	N/A	-	47.0	-	N/A	-	0.99	-	N/A	-	11	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	88.2	-	N/A	-	32.3	-	N/A	-	1.68	-	N/A	-	52	1
Total Market	89.7	-	N/A	-	11.5	-	N/A	-	0.99	-	N/A	-	38	5
102 : WICHITA COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	81.9	74.9	to	86.1	15.2	11.0	to	21.2	1.04	1.00	to	1.10	28	1
Commercial/Ind. <i>S-5</i>	101.4	60.2	to	130.4	25.6	11.7	to	111.7	1.24	1.05	to	1.83	6	0
Vacant Lot	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Farm & Home	24.6	-	N/A	-	216.9	-	N/A	-	2.34	-	N/A	-	5	0
Ag. Land Only	12.9	-	N/A	-	44.2	-	N/A	-	0.93	-	N/A	-	5	0
Ag. (Impr.+ Land)	12.7	-	N/A	-	45.4	-	N/A	-	0.91	-	N/A	-	6	0
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	79.5	-	N/A	-	35.9	-	N/A	-	1.64	-	N/A	-	45	1
Total Market	83.7	-	N/A	-	17.8	-	N/A	-	1.08	-	N/A	-	34	2

S-Supplemental commercial/industrial sales added from previous years to increase sample

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

Median Ratio: 90.0 to 110.0

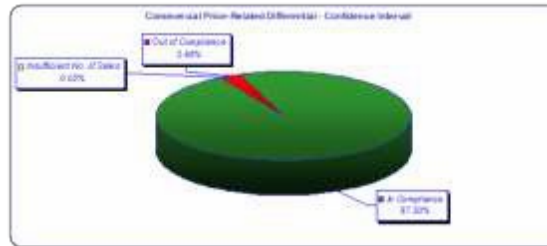
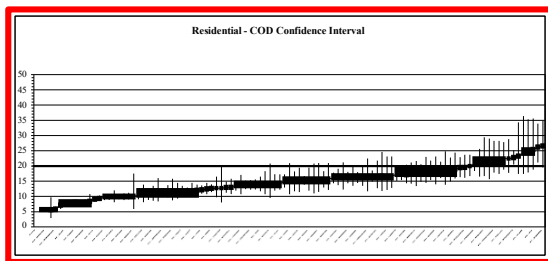
COD: 20.0 or less

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	94.3	96.3	to	112.1	31.6	25.4	to	39.2	1.09	1.03	to	1.17	63	6
Commercial/Ind. <i>S-6</i>	83.0	75.8	to	193.3	34.5	14.4	to	51.7	1.01	0.86	to	1.35		1
Vacant Lot	92.8	-	N/A	-	50.6	-	N/A	-	2.33	-	N/A	-	14	1
Farm & Home	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Ag. Land Only	10.0	-	N/A	-	50.5	-	N/A	-	0.91	-	N/A	-	13	1
Ag. (Impr.+ Land)	14.1	-	N/A	-	96.4	-	N/A	-	0.71	-	N/A	-	24	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	89.1	-	N/A	-	51.4	-	N/A	-	1.39	-	N/A	-	125	9
Total Market	97.3	-	N/A	-	39.1	-	N/A	-	1.12	-	N/A	-	101	8
104 : WOODSON COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	99.1	87.9	to	110.9	16.3	11.7	to	23.3	1.03	1.00	to	1.08	24	1
Commercial/Ind. <i>S-5</i>	91.7	67.2	to	112.4	27.0	15.9	to	57.1	1.19	1.01	to	1.69	7	1
Vacant Lot	72.2	-	N/A	-	179.0	-	N/A	-	3.02	-	N/A	-	4	0
Farm & Home	46.7	-	N/A	-	-	-	N/A	-	-	-	N/A	-	1	0
Ag. Land Only	5.5	-	N/A	-	16.9	-	N/A	-	0.98	-	N/A	-	6	0
Ag. (Impr.+ Land)	5.9	-	N/A	-	34.2	-	N/A	-	1.05	-	N/A	-	8	1
Other/Ex/Ut/NP/M	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Total w/Ag.&F&H	87.7	-	N/A	-	38.2	-	N/A	-	1.41	-	N/A	-	44	3
Total Market	95.6	-	N/A	-	21.1	-	N/A	-	1.07	-	N/A	-	35	3
105 : WYANDOTTE COUNTY														
PROPERTY CLASS	Median Ratio	Confidence Interval			COD	Confidence Interval			PRD	Confidence Interval			Valid Sales	Trim Sales
Residential	91.4	88.2	to	94.1	15.2	13.6	to	17.1	0.99	0.98	to	1.01	268	27
Commercial/Ind.	92.8	82.4	to	1.0	30.8	24.5	to	39.1	1.16	0.98	to	1.39	66	4
Vacant Lot	50.0	-	N/A	-	49.8	-	N/A	-	1.16	-	N/A	-	97	8
Farm & Home	55.5	-	N/A	-	41.1	-	N/A	-	1.07	-	N/A	-	4	0
Ag. Land Only	1.6	-	N/A	-	172.4	-	N/A	-	2.02	-	N/A	-	7	0
Ag. (Impr.+ Land)	3.4	-	N/A	-	114.4	-	N/A	-	1.80	-	N/A	-	12	2
Other/Ex/Ut/NP/M	105.3	-	N/A	-	16.1	-	N/A	-	0.95	-	N/A	-	10	1
Total w/Ag.&F&H	86.7	-	N/A	-	28.0	-	N/A	-	1.03	-	N/A	-	457	34
Total Market	88.1	-	N/A	-	25.8	-	N/A	-	1.02	-	N/A	-	441	35

S-Supplemental commercial/industrial sales added from previous years to increase sample

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 2020 Final Ratio Study, *pages 15-49*, indicates that a large portion statewide property value estimates in the residential and commercial/industrial subclasses of property meet the state mandated mass appraisal performance standards.

GRAPHICS:

The following pie charts depict an overall appraisal performance for residential and commercial properties based on state standards. Value weighting calculations are based on the 2020 certified assessed values. These numbers are proportional to county abstract assessed valuation.

1. ***Exhibit I*** depicts the residential and commercial *median ratios*. The residential and commercial charts indicate that almost 100 percent of the residential value statewide falls within a range of 90.0 percent to 110.0 percent which is the recognized standard according to IAAO (*International Association of Assessing Officers*). Over 62% 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 bias in Kansas is a COD range of 0 to 20.0. This pie chart indicates that more than 99 percent of the residential property value and about 97 percent of the commercial/industrial property values are found in counties that meet the state performance standard COD of 20.0 or less.

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 in some counties. Additional sales validation documentation has been reviewed and outliers have been trimmed for the uniformity measurements (*COD and PRD*).

The information provided by this 2020 Final Ratio Study, *pages 12-46*, indicates that a large portion statewide property value estimates in the residential and commercial/industrial subclasses of property meet the state mandated mass appraisal performance standards.

GRAPHICS:

The following pie charts depict an overall appraisal performance for residential and commercial properties based on state standards. Value weighting calculations are based on the 2020 certified assessed values. These numbers are proportional to county abstract assessed valuation.

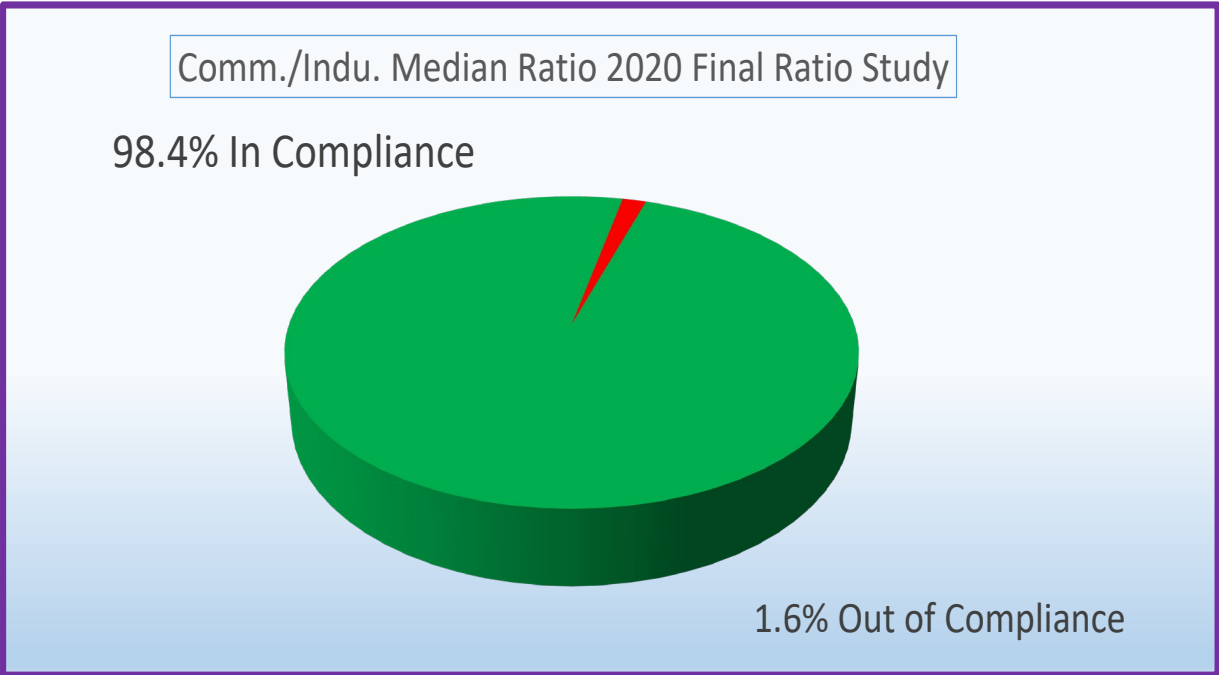
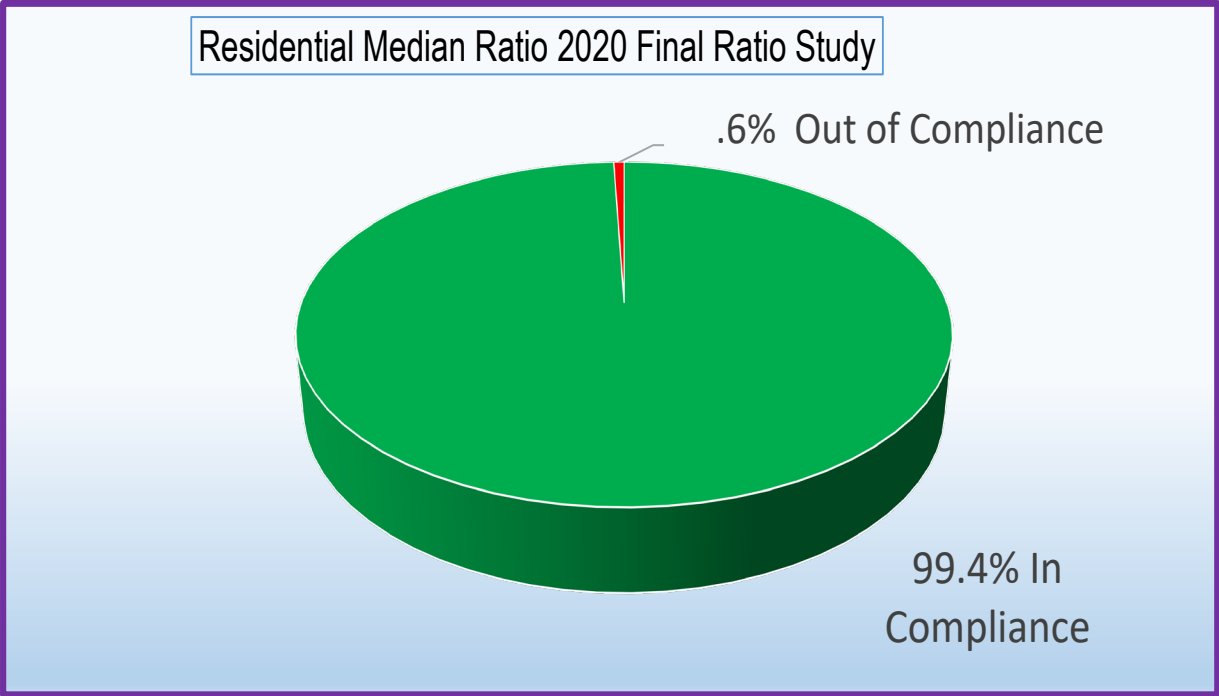
1. ***Exhibit 1*** depicts the residential and commercial/industrial median ratios. The charts indicate that almost 100 percent of the residential value statewide falls within a range of 90.0 percent to 110.0 percent which is the recognized standard according to IAAO (International Association of Assessing Officers). Over 98% of the commercial/industrial property values are found in counties that meet the standard

2. ***Exhibit 2*** presents the residential and commercial coefficient of dispersion (*COD*). The acceptable standard for horizontal appraisal bias in Kansas is a *COD* range of 0 to 20.0. This pie chart indicates that more than 99 percent of the residential property value and over 53% percent of the commercial/industrial property values are found in counties that meet the state performance standard *COD* of 20.0 or less.

Pie Charts Based Upon Statewide Proportion of Appraised Value

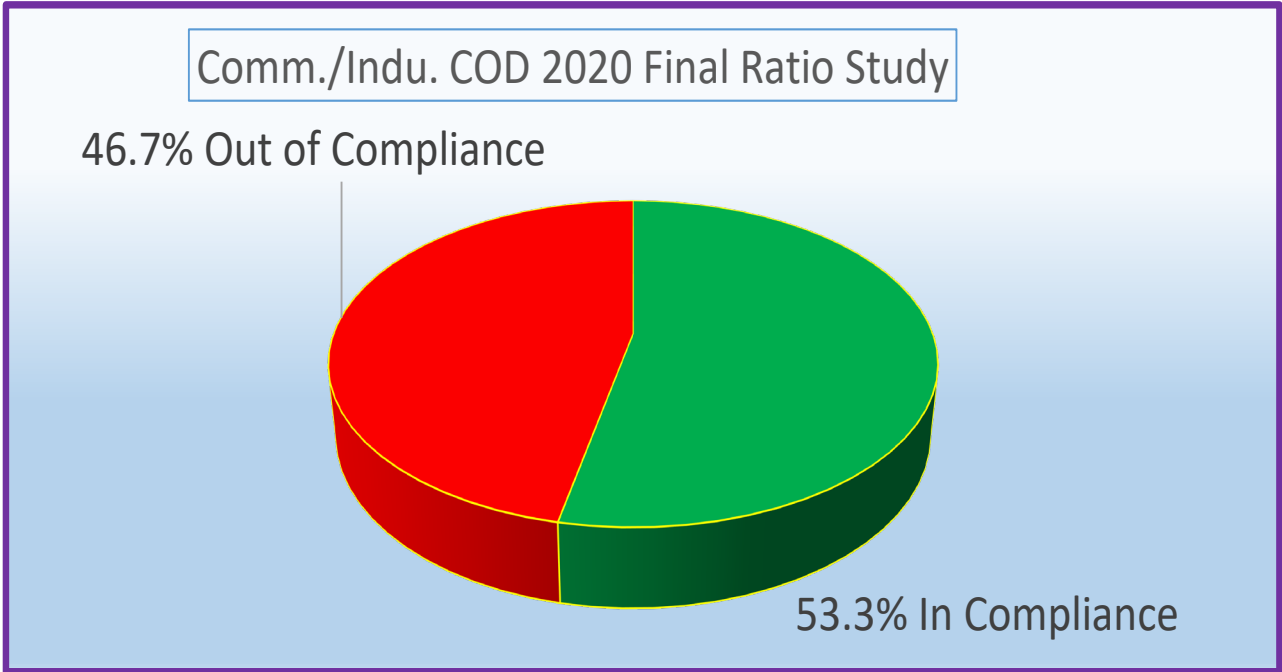
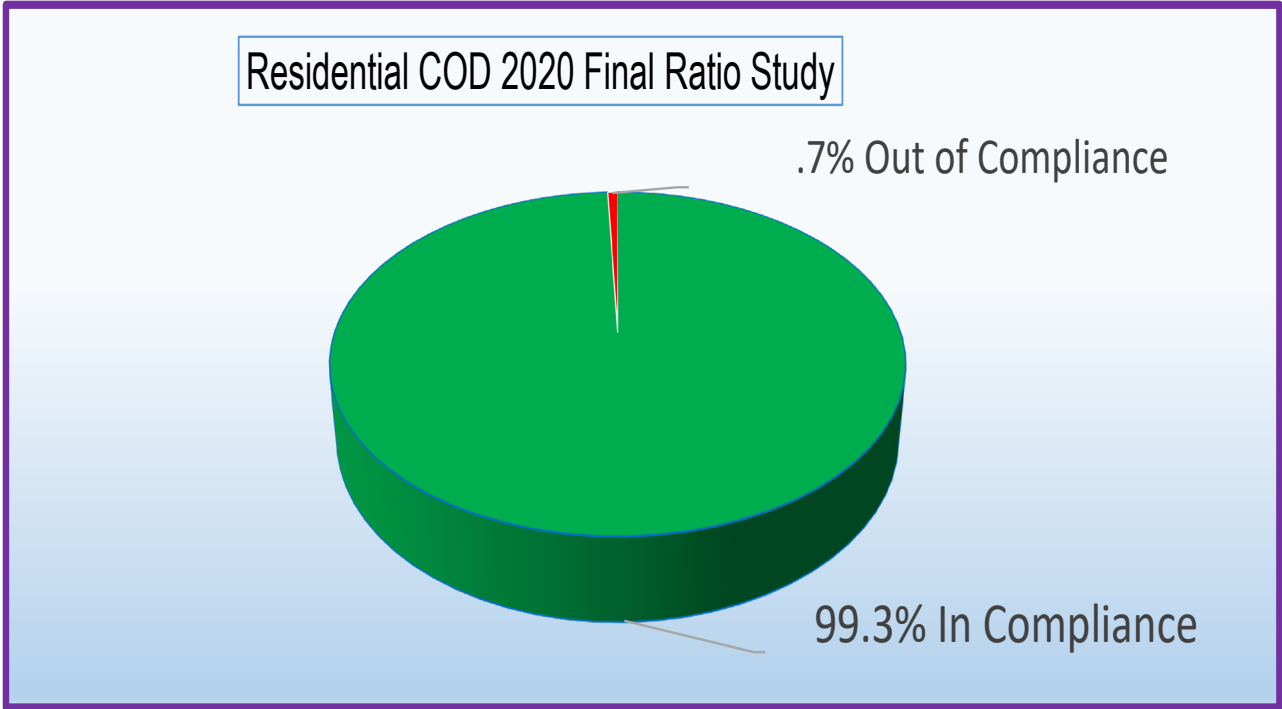
Exhibit 1

Median Ratio



Pie Charts Based Upon Statewide Proportion of Appraised Value
Exhibit 2

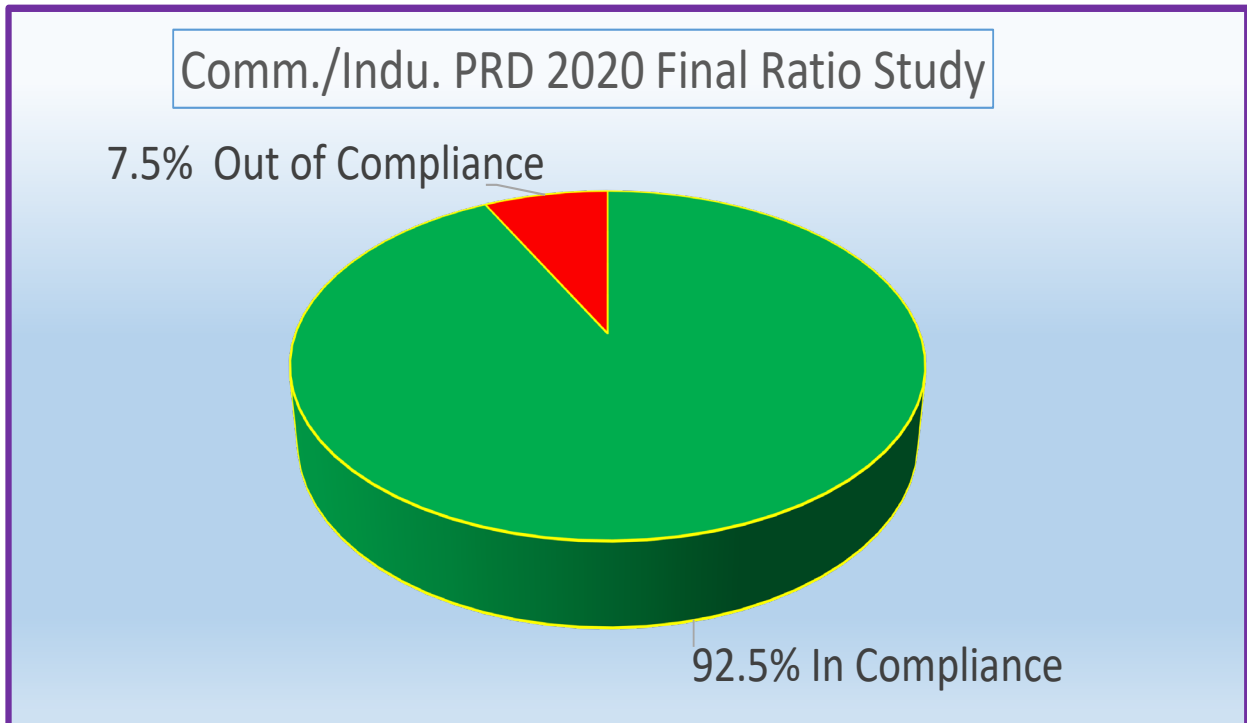
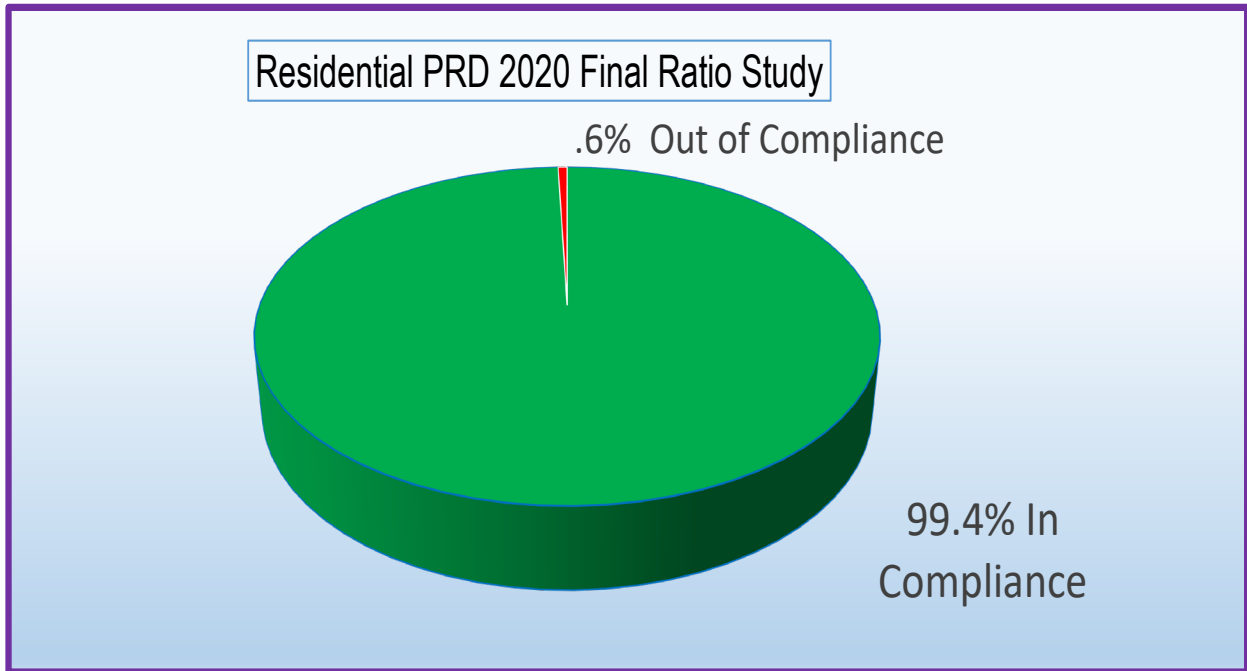
Coefficient of Dispersion (COD)

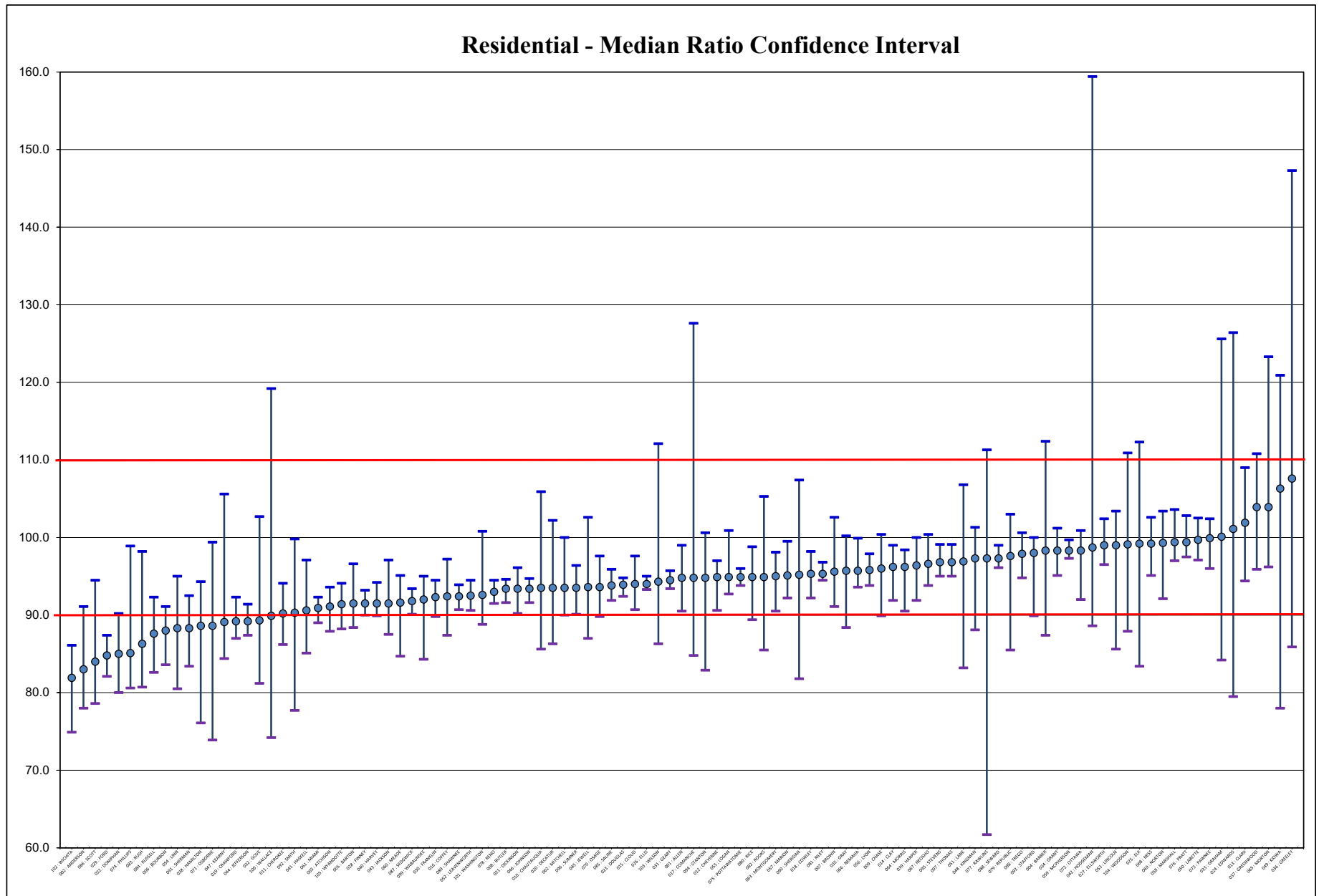


Pie Charts Based Upon Statewide Proportion of Appraised Value

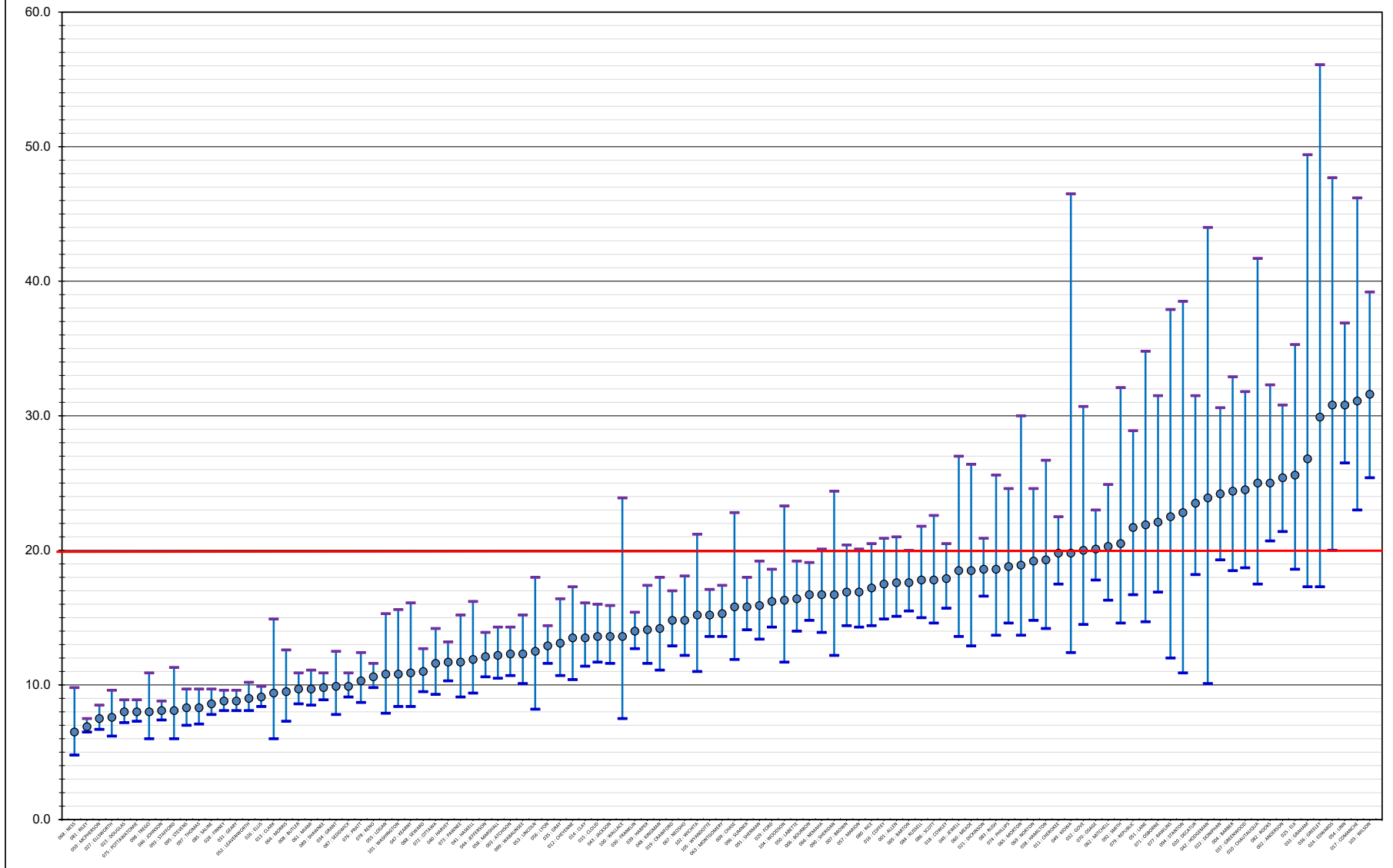
Exhibit 3

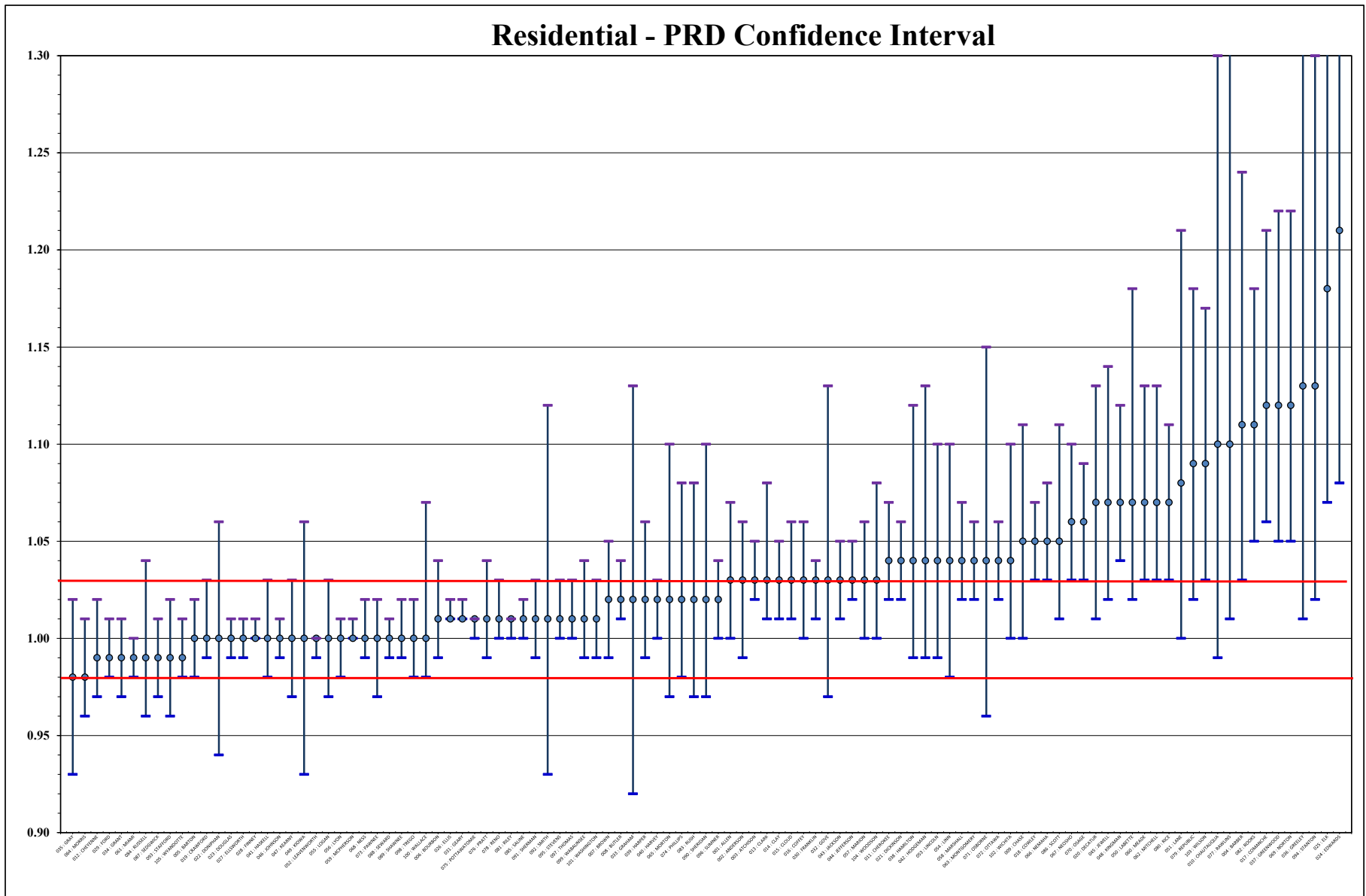
Price Related Differential (PRD)



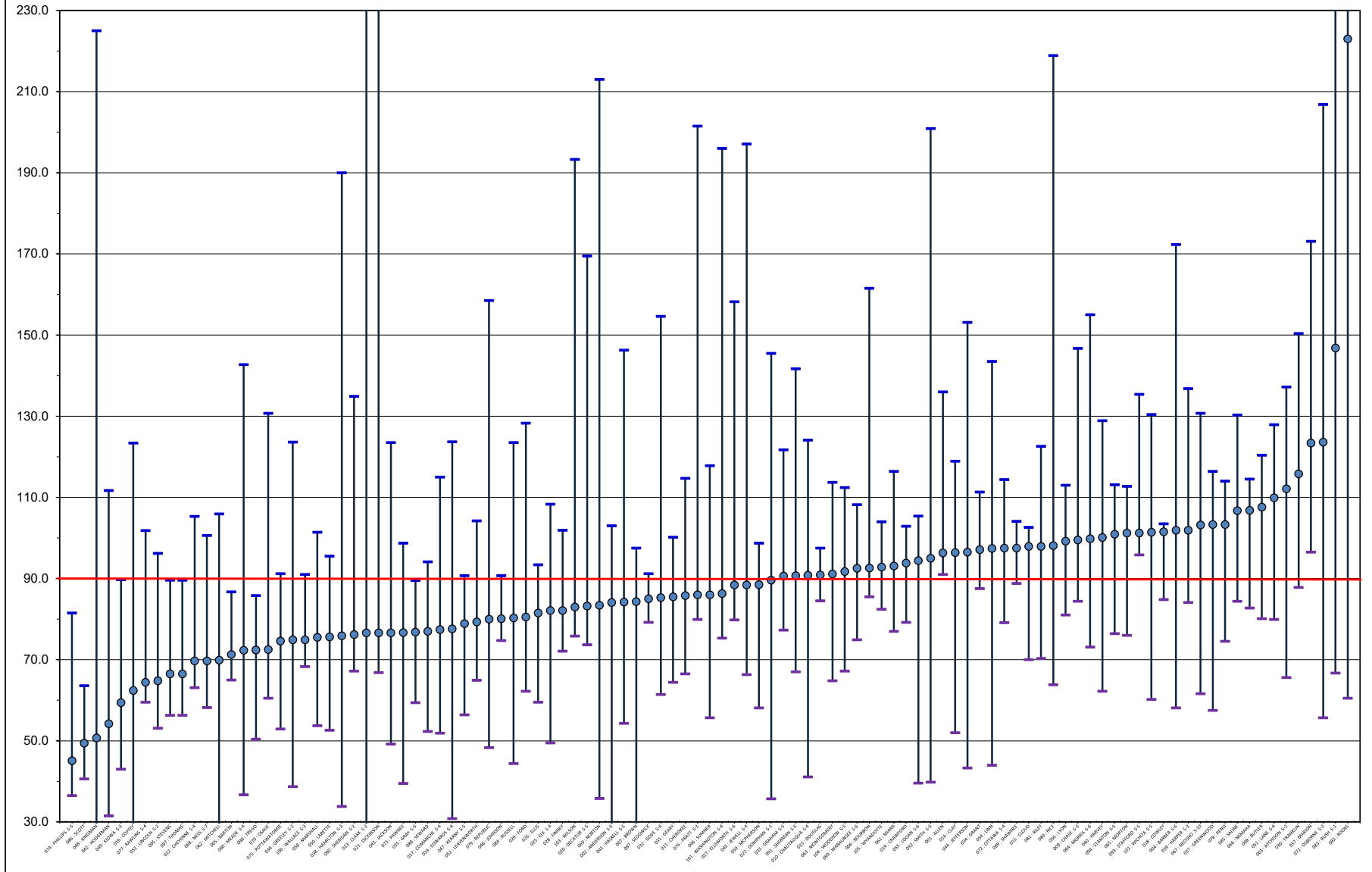


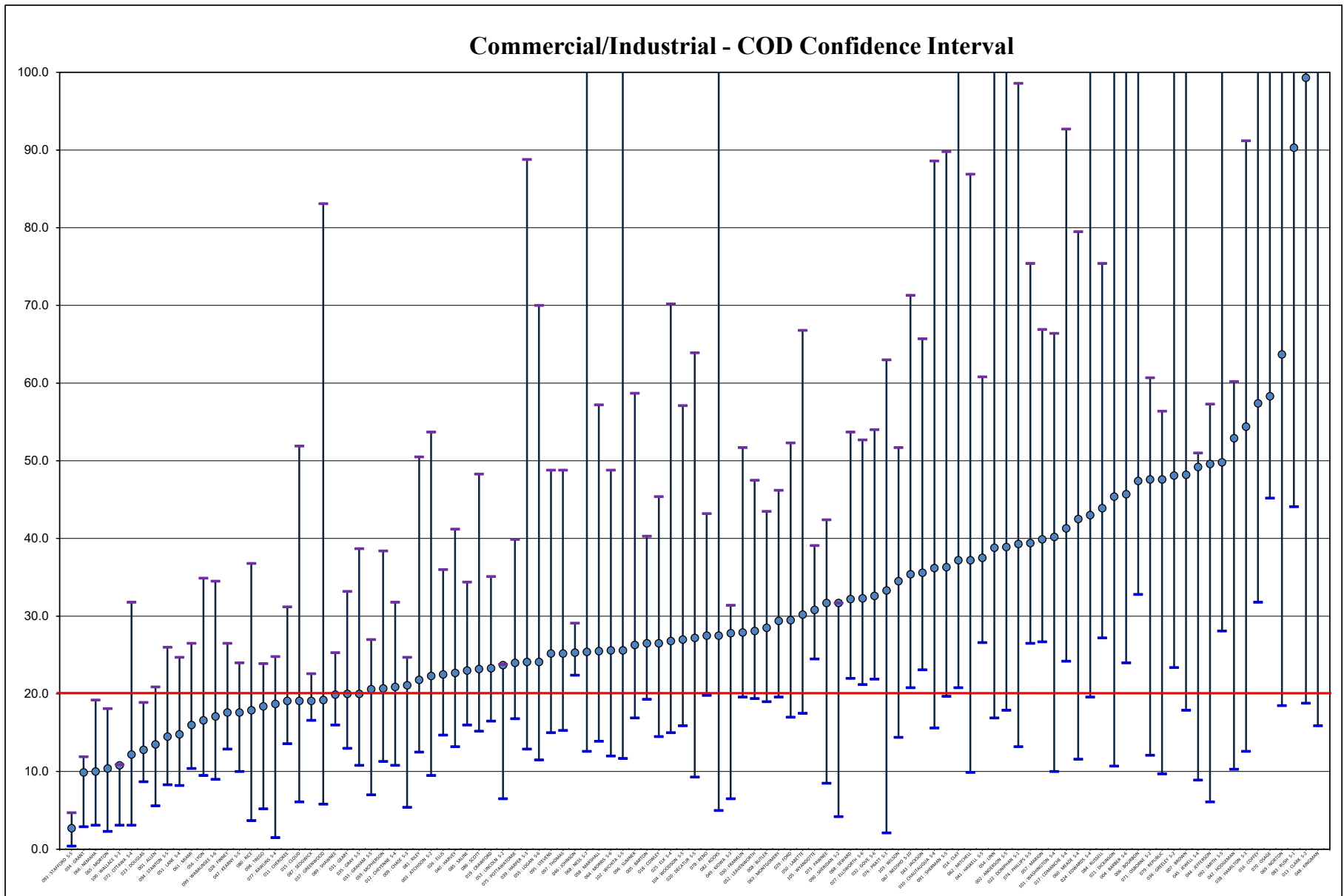
Residential - COD Confidence Interval



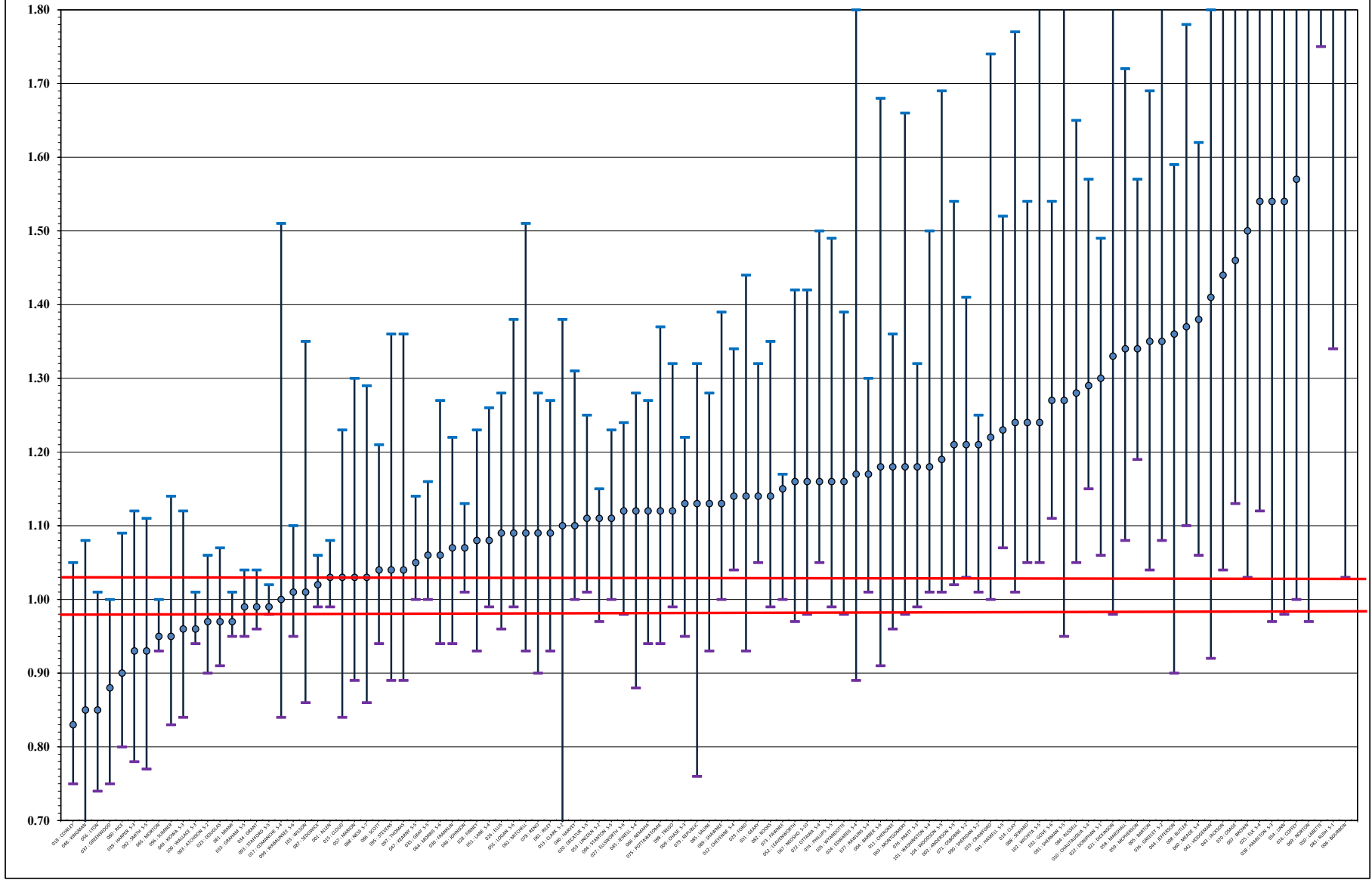


Commercial/Industrial - Median Ratio Confidence Interval





Commercial/Industrial - PRD Confidence Interval



Detailed Statistics

Residential and Commercial/Industrial

Subclass



Detailed Sample Statistics for the Residential and Commercial Subclasses

001 : ALLEN			002 : ANDERSON		
			<i>S-5</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	125	9	Original Number of Sales	98	8
Trimmed Outliers	15	1	Trimmed Outliers	8	0
Number of Ratios: Outliers Removed	110	8	Number of Ratios: Outliers Removed	90	8
Minimum Ratio	17.4	85.1	Minimum Ratio	19.9	17.9
Maximum Ratio	415.5	242.8	Maximum Ratio	596.4	137.4
Minimum Sale Price	1,200	6,000	Minimum Sale Price	1,400	30,000
Maximum Sale Price	324,000	125,000	Maximum Sale Price	245,000	350,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	94.8	96.3	Median Ratio	83.0	84.1
Lower Median Confidence Interval	90.5	91.0	Lower Median Confidence Interval	78.1	21.5
Upper Median Confidence Interval	99.0	136.0	Upper Median Confidence Interval	91.1	103.0
Broadened Median Ratio	94.5	97.7	Broadened Median Ratio	83.1	81.8
Coefficient of Dispersion (COD)	17.6	13.5	Coefficient of Dispersion (COD)	25.4	38.9
Lower COD Confidence Interval	15.1	5.6	Lower COD Confidence Interval	21.4	17.8
Upper COD Confidence Interval	20.9	20.9	Upper COD Confidence Interval	30.7	140.2
Value Weighted COD	16.3	10.1	Value Weighted COD	20.4	38.1
Coefficient of Concentration @10%	37.6	55.6	Coefficient of Concentration @10%	27.6	25.0
Coefficient of Concentration @15%	47.2	66.7	Coefficient of Concentration @15%	39.8	25.0
Coefficient of Concentration @20%	56.0	66.7	Coefficient of Concentration @20%	46.9	25.0
Coefficient of Concentration @50%	84.8	88.9	Coefficient of Concentration @50%	79.6	62.5
Coefficient of Concentration @100%	92.0	88.9	Coefficient of Concentration @100%	91.8	100.0
Coefficient of Interquartile Deviation	15.7	22.1	Coefficient of Interquartile Deviation	21.4	43.9
Median Percent Deviation	15.3	5.9	Median Percent Deviation	21.3	30.5
Lower Quartile (25 th Percentile)	79.7	92.9	Lower Quartile (25 th Percentile)	69.1	29.0
Upper Quartile (75 th Percentile)	109.5	135.5	Upper Quartile (75 th Percentile)	104.6	102.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptK
Relative Skewness	-0.19	0.95	Relative Skewness	0.35	-0.15
Relative Kurtosis	3.13	2.20	Relative Kurtosis	3.36	1.88
Arithmetic Mean Ratio	90.5	104.4	Arithmetic Mean Ratio	83.0	75.3
Weighted Mean Ratio	87.8	101.6	Weighted Mean Ratio	80.9	62.2
Geometric Mean Ratio	87.8	102.9	Geometric Mean Ratio	78.3	61.5
Harmonic Mean Ratio	84.6	101.5	Harmonic Mean Ratio	72.6	46.4
Standard Deviation	21.0	19.8	Standard Deviation	26.9	42.0
Coefficient of Variation (COV)	23.2	18.9	Coefficient of Variation (COV)	32.4	55.7
Price-Related Differential (PRD)	1.03	1.03	Price-Related Differential (PRD)	1.03	1.21
Lower PRD Confidence Interval	1.00	0.99	Lower PRD Confidence Interval	0.99	1.01
Upper PRD Confidence interval	1.07	1.08	Upper PRD Confidence interval	1.06	1.54
Coef. of Price-Related Bias (PRB)	-0.20	-0.15	Coef. of Price-Related Bias (PRB)	-0.16	0.01
Lower PRB Confidence Interval	-0.27	-0.44	Lower PRB Confidence Interval	-0.31	-0.44
Upper PRB Confidence Interval	-0.12	0.14	Upper PRB Confidence Interval	-0.01	0.45
Average Sale Price	79,238	58,625	Average Sale Price	86,807	83,013
Average Appraised Value	69,554	59,556	Average Appraised Value	70,236	51,640

Detailed Sample Statistics for the Residential and Commercial Subclasses

003 : ATCHISON			004 : BARBER		
<i>S-2</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	155	6	Original Number of Sales	38	9
Trimmed Outliers	22	0	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	133	6	Number of Ratios: Outliers Removed	36	9
Minimum Ratio	25.3	50.1	Minimum Ratio	31.3	55.7
Maximum Ratio	637.9	150.7	Maximum Ratio	246.4	279.4
Minimum Sale Price	2,480	25,000	Minimum Sale Price	2,500	3,500
Maximum Sale Price	439,510	100,000	Maximum Sale Price	250,000	175,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	91.1	112.1	Median Ratio	98.3	101.9
Lower Median Confidence Interval	87.9	65.6	Lower Median Confidence Interval	87.4	58.1
Upper Median Confidence Interval	93.6	137.2	Upper Median Confidence Interval	112.4	172.3
Broadened Median Ratio	91.1	108.9	Broadened Median Ratio	98.0	101.9
Coefficient of Dispersion (COD)	12.3	22.3	Coefficient of Dispersion (COD)	24.4	45.7
Lower COD Confidence Interval	10.7	9.3	Lower COD Confidence Interval	18.6	23.9
Upper COD Confidence Interval	14.3	53.7	Upper COD Confidence Interval	33.0	112.1
Value Weighted COD	11.1	25.0	Value Weighted COD	19.5	20.9
Coefficient of Concentration @10%	44.5	33.3	Coefficient of Concentration @10%	26.3	11.1
Coefficient of Concentration @15%	60.6	50.0	Coefficient of Concentration @15%	42.1	33.3
Coefficient of Concentration @20%	70.3	50.0	Coefficient of Concentration @20%	50.0	33.3
Coefficient of Concentration @50%	87.7	83.3	Coefficient of Concentration @50%	84.2	77.8
Coefficient of Concentration @100%	96.1	100.0	Coefficient of Concentration @100%	97.4	88.9
Coefficient of Interquartile Deviation	11.5	25.4	Coefficient of Interquartile Deviation	21.8	42.6
Median Percent Deviation	11.5	18.9	Median Percent Deviation	20.9	34.3
Lower Quartile (25 th Percentile)	80.7	73.4	Lower Quartile (25 th Percentile)	83.2	62.5
Upper Quartile (75 th Percentile)	101.7	130.4	Upper Quartile (75 th Percentile)	126.0	149.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	0.11	-0.38	Relative Skewness	0.38	1.39
Relative Kurtosis	3.52	2.21	Relative Kurtosis	3.45	4.01
Arithmetic Mean Ratio	90.5	105.0	Arithmetic Mean Ratio	99.7	118.3
Weighted Mean Ratio	87.7	108.4	Weighted Mean Ratio	89.8	100.2
Geometric Mean Ratio	89.3	99.2	Geometric Mean Ratio	94.5	103.6
Harmonic Mean Ratio	88.1	92.5	Harmonic Mean Ratio	88.4	92.7
Standard Deviation	14.5	35.1	Standard Deviation	31.5	70.9
Coefficient of Variation (COV)	16.0	33.4	Coefficient of Variation (COV)	31.6	59.9
Price-Related Differential (PRD)	1.03	0.97	Price-Related Differential (PRD)	1.11	1.18
Lower PRD Confidence Interval	1.02	0.90	Lower PRD Confidence Interval	1.03	0.92
Upper PRD Confidence interval	1.05	1.06	Upper PRD Confidence interval	1.24	1.68
Coef. of Price-Related Bias (PRB)	-0.20	0.17	Coef. of Price-Related Bias (PRB)	-0.15	-0.06
Lower PRB Confidence Interval	-0.28	-0.30	Lower PRB Confidence Interval	-0.24	-0.40
Upper PRB Confidence Interval	-0.12	0.65	Upper PRB Confidence Interval	-0.05	0.28
Average Sale Price	124,089	65,167	Average Sale Price	78,686	48,733
Average Appraised Value	108,877	70,632	Average Appraised Value	70,653	48,840

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	183	21	Original Number of Sales	193	11
Trimmed Outliers	19	1	Trimmed Outliers	20	0
Number of Ratios: Outliers Removed	164	20	Number of Ratios: Outliers Removed	173	11
Minimum Ratio	5.7	40.2	Minimum Ratio	30.0	1.9
Maximum Ratio	445.7	170.2	Maximum Ratio	380.6	185.3
Minimum Sale Price	3,000	9,000	Minimum Sale Price	500	4,000
Maximum Sale Price	425,000	2,550,000	Maximum Sale Price	420,000	525,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	91.5	71.3	Median Ratio	88.0	92.6
Lower Median Confidence Interval	88.4	65.0	Lower Median Confidence Interval	83.6	85.5
Upper Median Confidence Interval	96.6	86.7	Upper Median Confidence Interval	91.1	161.5
Broadened Median Ratio	91.5	73.8	Broadened Median Ratio	88.1	102.7
Coefficient of Dispersion (COD)	17.6	26.5	Coefficient of Dispersion (COD)	16.7	47.4
Lower COD Confidence Interval	15.5	19.3	Lower COD Confidence Interval	14.8	32.8
Upper COD Confidence Interval	20.0	39.9	Upper COD Confidence Interval	19.1	3269.2
Value Weighted COD	16.3	29.4	Value Weighted COD	15.8	75.7
Coefficient of Concentration @10%	32.2	28.6	Coefficient of Concentration @10%	37.3	36.4
Coefficient of Concentration @15%	47.5	33.3	Coefficient of Concentration @15%	50.8	36.4
Coefficient of Concentration @20%	60.7	47.6	Coefficient of Concentration @20%	61.1	36.4
Coefficient of Concentration @50%	85.8	85.7	Coefficient of Concentration @50%	86.5	54.5
Coefficient of Concentration @100%	96.7	95.2	Coefficient of Concentration @100%	94.3	90.9
Coefficient of Interquartile Deviation	15.3	23.6	Coefficient of Interquartile Deviation	14.7	41.1
Median Percent Deviation	15.6	21.2	Median Percent Deviation	14.3	43.1
Lower Quartile (25 th Percentile)	78.6	60.1	Lower Quartile (25 th Percentile)	76.1	85.5
Upper Quartile (75 th Percentile)	106.6	93.7	Upper Quartile (75 th Percentile)	101.9	161.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	0.09	0.66	Relative Skewness	0.12	-0.36
Relative Kurtosis	3.09	2.94	Relative Kurtosis	3.36	2.31
Arithmetic Mean Ratio	92.6	76.3	Arithmetic Mean Ratio	86.1	110.3
Weighted Mean Ratio	92.4	56.6	Weighted Mean Ratio	84.8	40.7
Geometric Mean Ratio	90.2	72.6	Geometric Mean Ratio	84.0	77.8
Harmonic Mean Ratio	87.5	68.9	Harmonic Mean Ratio	81.8	17.4
Standard Deviation	20.7	25.1	Standard Deviation	18.4	56.1
Coefficient of Variation (COV)	22.3	32.9	Coefficient of Variation (COV)	21.4	50.8
Price-Related Differential (PRD)	1.00	1.35	Price-Related Differential (PRD)	1.01	2.71
Lower PRD Confidence Interval	0.98	1.04	Lower PRD Confidence Interval	0.99	1.03
Upper PRD Confidence interval	1.02	1.69	Upper PRD Confidence interval	1.04	7.68
Coef. of Price-Related Bias (PRB)	-0.04	-0.05	Coef. of Price-Related Bias (PRB)	-0.10	-0.14
Lower PRB Confidence Interval	-0.10	-0.17	Lower PRB Confidence Interval	-0.15	-0.38
Upper PRB Confidence Interval	0.02	0.07	Upper PRB Confidence Interval	-0.05	0.11
Average Sale Price	102,715	273,924	Average Sale Price	99,812	77,136
Average Appraised Value	94,952	154,943	Average Appraised Value	84,679	31,418

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	102	9	Original Number of Sales	223	22
Trimmed Outliers	14	0	Trimmed Outliers	24	1
Number of Ratios: Outliers Removed	88	9	Number of Ratios: Outliers Removed	199	21
Minimum Ratio	42.0	21.2	Minimum Ratio	3.3	39.9
Maximum Ratio	1242.4	192.6	Maximum Ratio	471.5	462.4
Minimum Sale Price	2,500	12,000	Minimum Sale Price	4,000	5,500
Maximum Sale Price	289,000	439,000	Maximum Sale Price	1,125,000	3,850,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	95.6	84.3	Median Ratio	93.4	107.6
Lower Median Confidence Interval	91.2	21.7	Lower Median Confidence Interval	91.6	80.1
Upper Median Confidence Interval	102.6	97.5	Upper Median Confidence Interval	94.6	120.4
Broadened Median Ratio	95.6	71.4	Broadened Median Ratio	93.4	105.7
Coefficient of Dispersion (COD)	16.9	48.2	Coefficient of Dispersion (COD)	9.7	28.5
Lower COD Confidence Interval	14.4	18.1	Lower COD Confidence Interval	8.6	19.2
Upper COD Confidence Interval	20.4	142.6	Upper COD Confidence Interval	10.9	43.5
Value Weighted COD	13.6	49.6	Value Weighted COD	9.5	34.3
Coefficient of Concentration @10%	33.3	11.1	Coefficient of Concentration @10%	54.3	22.7
Coefficient of Concentration @15%	45.1	33.3	Coefficient of Concentration @15%	70.4	36.4
Coefficient of Concentration @20%	59.8	44.4	Coefficient of Concentration @20%	76.7	40.9
Coefficient of Concentration @50%	83.3	44.4	Coefficient of Concentration @50%	95.1	81.8
Coefficient of Concentration @100%	87.3	88.9	Coefficient of Concentration @100%	99.1	95.5
Coefficient of Interquartile Deviation	17.0	40.8	Coefficient of Interquartile Deviation	9.0	25.7
Median Percent Deviation	16.7	56.5	Median Percent Deviation	8.9	27.8
Lower Quartile (25 th Percentile)	82.1	27.4	Lower Quartile (25 th Percentile)	85.1	75.5
Upper Quartile (75 th Percentile)	114.7	96.2	Upper Quartile (75 th Percentile)	101.9	130.7
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	0.25	0.97	Relative Skewness	0.19	0.60
Relative Kurtosis	3.50	3.31	Relative Kurtosis	3.26	3.29
Arithmetic Mean Ratio	93.5	75.0	Arithmetic Mean Ratio	93.5	103.3
Weighted Mean Ratio	91.7	50.0	Weighted Mean Ratio	91.7	75.6
Geometric Mean Ratio	91.3	58.3	Geometric Mean Ratio	92.7	96.4
Harmonic Mean Ratio	88.8	45.2	Harmonic Mean Ratio	91.9	89.4
Standard Deviation	20.3	54.9	Standard Deviation	11.9	38.7
Coefficient of Variation (COV)	21.7	73.2	Coefficient of Variation (COV)	12.8	37.4
Price-Related Differential (PRD)	1.02	1.50	Price-Related Differential (PRD)	1.02	1.37
Lower PRD Confidence Interval	0.99	1.04	Lower PRD Confidence Interval	1.01	1.10
Upper PRD Confidence interval	1.05	2.21	Upper PRD Confidence interval	1.04	1.78
Coef. of Price-Related Bias (PRB)	-0.56	-0.07	Coef. of Price-Related Bias (PRB)	-0.13	-0.19
Lower PRB Confidence Interval	-0.80	-0.41	Lower PRB Confidence Interval	-0.19	-0.34
Upper PRB Confidence Interval	-0.33	0.26	Upper PRB Confidence Interval	-0.08	-0.04
Average Sale Price	95,386	106,050	Average Sale Price	172,360	486,560
Average Appraised Value	87,484	52,990	Average Appraised Value	158,124	368,048

Detailed Sample Statistics for the Residential and Commercial Subclasses

009 : CHASE			010 : CHAUTAUQUA		
<i>S-3</i>			<i>S-4</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	37	5	Original Number of Sales	33	6
Trimmed Outliers	4	0	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	33	5	Number of Ratios: Outliers Removed	27	6
Minimum Ratio	47.3	82.7	Minimum Ratio	38.3	30.3
Maximum Ratio	397.1	148.1	Maximum Ratio	648.0	128.8
Minimum Sale Price	2,300	7,200	Minimum Sale Price	500	16,000
Maximum Sale Price	510,000	125,000	Maximum Sale Price	320,000	70,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	96.0	99.5	Median Ratio	93.5	90.8
Lower Median Confidence Interval	89.9	84.4	Lower Median Confidence Interval	85.6	41.1
Upper Median Confidence Interval	100.4	146.7	Upper Median Confidence Interval	105.9	124.1
Broadened Median Ratio	96.1	110.8	Broadened Median Ratio	93.7	89.1
Coefficient of Dispersion (COD)	15.8	21.1	Coefficient of Dispersion (COD)	25.0	36.2
Lower COD Confidence Interval	11.9	5.4	Lower COD Confidence Interval	17.4	15.6
Upper COD Confidence Interval	22.8	24.7	Upper COD Confidence Interval	41.7	88.6
Value Weighted COD	11.9	15.3	Value Weighted COD	20.5	42.7
Coefficient of Concentration @10%	43.2	40.0	Coefficient of Concentration @10%	33.3	0.0
Coefficient of Concentration @15%	51.4	40.0	Coefficient of Concentration @15%	39.4	0.0
Coefficient of Concentration @20%	62.2	60.0	Coefficient of Concentration @20%	45.5	33.3
Coefficient of Concentration @50%	86.5	100.0	Coefficient of Concentration @50%	75.8	83.3
Coefficient of Concentration @100%	94.6	100.0	Coefficient of Concentration @100%	78.8	100.0
Coefficient of Interquartile Deviation	14.5	26.4	Coefficient of Interquartile Deviation	26.8	41.5
Median Percent Deviation	14.3	16.9	Median Percent Deviation	26.0	36.8
Lower Quartile (25 th Percentile)	79.8	89.6	Lower Quartile (25 th Percentile)	70.3	46.5
Upper Quartile (75 th Percentile)	107.6	142.2	Upper Quartile (75 th Percentile)	120.4	121.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	0.13	0.31	Relative Skewness	1.55	-0.27
Relative Kurtosis	3.72	1.41	Relative Kurtosis	7.35	1.55
Arithmetic Mean Ratio	92.4	112.6	Arithmetic Mean Ratio	88.6	85.3
Weighted Mean Ratio	88.4	99.8	Weighted Mean Ratio	80.7	66.3
Geometric Mean Ratio	90.2	109.9	Geometric Mean Ratio	83.4	76.0
Harmonic Mean Ratio	87.8	107.3	Harmonic Mean Ratio	78.5	65.8
Standard Deviation	19.9	28.0	Standard Deviation	33.1	39.4
Coefficient of Variation (COV)	21.6	24.9	Coefficient of Variation (COV)	37.4	46.1
Price-Related Differential (PRD)	1.05	1.13	Price-Related Differential (PRD)	1.10	1.29
Lower PRD Confidence Interval	1.00	0.96	Lower PRD Confidence Interval	0.99	1.15
Upper PRD Confidence interval	1.11	1.22	Upper PRD Confidence interval	1.29	1.57
Coef. of Price-Related Bias (PRB)	-0.14	-0.07	Coef. of Price-Related Bias (PRB)	-0.56	-0.68
Lower PRB Confidence Interval	-0.27	-0.35	Lower PRB Confidence Interval	-0.79	-1.18
Upper PRB Confidence Interval	-0.01	0.21	Upper PRB Confidence Interval	-0.34	-0.18
Average Sale Price	106,261	56,940	Average Sale Price	65,152	39,133
Average Appraised Value	93,925	56,802	Average Appraised Value	52,588	25,948

Detailed Sample Statistics for the Residential and Commercial Subclasses

011 : CHEROKEE			012 : CHEYENNE S-4		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	207	11	Original Number of Sales	59	6
Trimmed Outliers	21	2	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	186	9	Number of Ratios: Outliers Removed	56	6
Minimum Ratio	21.8	62.3	Minimum Ratio	52.8	58.3
Maximum Ratio	975.0	880.0	Maximum Ratio	224.0	113.2
Minimum Sale Price	1,000	500	Minimum Sale Price	4,000	40,000
Maximum Sale Price	435,000	1,188,685	Maximum Sale Price	218,000	975,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.2	85.8	Median Ratio	94.9	69.7
Lower Median Confidence Interval	86.2	66.5	Lower Median Confidence Interval	90.6	63.1
Upper Median Confidence Interval	94.1	114.7	Upper Median Confidence Interval	97.0	105.3
Broadened Median Ratio	90.2	88.3	Broadened Median Ratio	95.0	74.0
Coefficient of Dispersion (COD)	19.8	19.1	Coefficient of Dispersion (COD)	13.5	20.9
Lower COD Confidence Interval	17.5	13.5	Lower COD Confidence Interval	10.3	10.8
Upper COD Confidence Interval	22.5	30.9	Upper COD Confidence Interval	17.3	32.0
Value Weighted COD	15.6	17.5	Value Weighted COD	11.5	5.8
Coefficient of Concentration @10%	33.3	18.2	Coefficient of Concentration @10%	54.2	50.0
Coefficient of Concentration @15%	48.3	27.3	Coefficient of Concentration @15%	62.7	50.0
Coefficient of Concentration @20%	57.0	36.4	Coefficient of Concentration @20%	67.8	66.7
Coefficient of Concentration @50%	83.6	81.8	Coefficient of Concentration @50%	96.6	83.3
Coefficient of Concentration @100%	94.2	81.8	Coefficient of Concentration @100%	96.6	100.0
Coefficient of Interquartile Deviation	16.9	28.1	Coefficient of Interquartile Deviation	10.9	25.7
Median Percent Deviation	15.5	22.5	Median Percent Deviation	9.6	9.4
Lower Quartile (25 th Percentile)	78.2	66.5	Lower Quartile (25 th Percentile)	81.4	65.5
Upper Quartile (75 th Percentile)	108.7	114.7	Upper Quartile (75 th Percentile)	102.0	101.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptW
Relative Skewness	0.29	0.37	Relative Skewness	-0.46	0.74
Relative Kurtosis	3.12	1.79	Relative Kurtosis	2.61	1.98
Arithmetic Mean Ratio	90.2	83.5	Arithmetic Mean Ratio	89.8	79.4
Weighted Mean Ratio	86.3	70.7	Weighted Mean Ratio	90.5	69.9
Geometric Mean Ratio	87.1	81.6	Geometric Mean Ratio	88.1	77.2
Harmonic Mean Ratio	83.9	79.8	Harmonic Mean Ratio	86.2	75.3
Standard Deviation	23.0	19.1	Standard Deviation	16.8	21.1
Coefficient of Variation (COV)	25.5	22.9	Coefficient of Variation (COV)	18.7	26.6
Price-Related Differential (PRD)	1.04	1.18	Price-Related Differential (PRD)	0.99	1.14
Lower PRD Confidence Interval	1.02	0.96	Lower PRD Confidence Interval	0.97	1.04
Upper PRD Confidence interval	1.07	1.35	Upper PRD Confidence interval	1.02	1.37
Coef. of Price-Related Bias (PRB)	-0.27	-0.62	Coef. of Price-Related Bias (PRB)	-0.03	-0.09
Lower PRB Confidence Interval	-0.36	-1.44	Lower PRB Confidence Interval	-0.09	-0.31
Upper PRB Confidence Interval	-0.18	0.19	Upper PRB Confidence Interval	0.03	0.14
Average Sale Price	91,094	161,909	Average Sale Price	89,069	239,000
Average Appraised Value	78,618	114,516	Average Appraised Value	80,614	167,047

Detailed Sample Statistics for the Residential and Commercial Subclasses

013 : CLARK			014 : CLAY		
<i>S-2</i>					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	14	4	Original Number of Sales	118	14
Trimmed Outliers	1	0	Trimmed Outliers	14	0
Number of Ratios: Outliers Removed	13	4	Number of Ratios: Outliers Removed	104	14
Minimum Ratio	58.2	14.4	Minimum Ratio	42.2	11.3
Maximum Ratio	131.7	281.9	Maximum Ratio	667.5	143.8
Minimum Sale Price	17,000	10,000	Minimum Sale Price	8,000	3,000
Maximum Sale Price	138,000	70,000	Maximum Sale Price	314,750	250,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	101.9	76.6	Median Ratio	96.2	96.4
Lower Median Confidence Interval	94.4	16.6	Lower Median Confidence Interval	91.9	52.0
Upper Median Confidence Interval	109.0	272.5	Upper Median Confidence Interval	99.0	118.9
Broadened Median Ratio	101.6	100.4	Broadened Median Ratio	96.0	94.5
Coefficient of Dispersion (COD)	9.4	99.3	Coefficient of Dispersion (COD)	13.5	37.2
Lower COD Confidence Interval	6.1	18.8	Lower COD Confidence Interval	11.4	20.7
Upper COD Confidence Interval	14.9	159.2	Upper COD Confidence Interval	16.1	110.0
Value Weighted COD	10.1	57.8	Value Weighted COD	13.6	42.0
Coefficient of Concentration @10%	64.3	0.0	Coefficient of Concentration @10%	44.9	14.3
Coefficient of Concentration @15%	71.4	0.0	Coefficient of Concentration @15%	55.1	21.4
Coefficient of Concentration @20%	85.7	0.0	Coefficient of Concentration @20%	66.1	35.7
Coefficient of Concentration @50%	100.0	50.0	Coefficient of Concentration @50%	89.8	71.4
Coefficient of Concentration @100%	100.0	75.0	Coefficient of Concentration @100%	97.5	100.0
Coefficient of Interquartile Deviation	8.6	137.0	Coefficient of Interquartile Deviation	12.0	46.4
Median Percent Deviation	7.2	52.5	Median Percent Deviation	12.7	27.2
Lower Quartile (25 th Percentile)	91.9	25.4	Lower Quartile (25 th Percentile)	82.8	32.6
Upper Quartile (75 th Percentile)	109.3	235.1	Upper Quartile (75 th Percentile)	105.9	122.2
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW	Normality Test	AcceptK	RejectK
Relative Skewness	0.43	0.89	Relative Skewness	-0.01	-0.41
Relative Kurtosis	3.05	2.15	Relative Kurtosis	3.08	1.79
Arithmetic Mean Ratio	102.9	112.4	Arithmetic Mean Ratio	92.7	85.2
Weighted Mean Ratio	99.5	102.1	Weighted Mean Ratio	90.2	68.9
Geometric Mean Ratio	102.2	68.8	Geometric Mean Ratio	91.1	69.6
Harmonic Mean Ratio	101.4	39.7	Harmonic Mean Ratio	89.5	49.7
Standard Deviation	13.1	117.7	Standard Deviation	16.6	43.6
Coefficient of Variation (COV)	12.7	104.8	Coefficient of Variation (COV)	17.9	51.1
Price-Related Differential (PRD)	1.03	1.10	Price-Related Differential (PRD)	1.03	1.24
Lower PRD Confidence Interval	1.01	0.64	Lower PRD Confidence Interval	1.01	1.01
Upper PRD Confidence interval	1.08	1.38	Upper PRD Confidence interval	1.05	1.77
Coef. of Price-Related Bias (PRB)	-0.05	0.00	Coef. of Price-Related Bias (PRB)	-0.21	-0.08
Lower PRB Confidence Interval	-0.16	0.00	Lower PRB Confidence Interval	-0.32	-0.24
Upper PRB Confidence Interval	0.06	0.00	Upper PRB Confidence Interval	-0.10	0.09
Average Sale Price	59,115	31,250	Average Sale Price	123,316	86,514
Average Appraised Value	58,807	31,900	Average Appraised Value	111,181	59,599

Detailed Sample Statistics for the Residential and Commercial Subclasses

015 : CLOUD			016 : COFFEY		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	132	7	Original Number of Sales	110	9
Trimmed Outliers	16	0	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	116	7	Number of Ratios: Outliers Removed	105	9
Minimum Ratio	18.9	40.4	Minimum Ratio	34.2	9.9
Maximum Ratio	219.0	136.5	Maximum Ratio	889.0	128.8
Minimum Sale Price	2,500	2,500	Minimum Sale Price	5,000	11,000
Maximum Sale Price	385,000	110,000	Maximum Sale Price	390,000	729,900
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	94.0	97.9	Median Ratio	92.4	62.4
Lower Median Confidence Interval	90.7	70.0	Lower Median Confidence Interval	87.4	23.2
Upper Median Confidence Interval	97.6	102.6	Upper Median Confidence Interval	97.2	123.4
Broadened Median Ratio	93.9	97.4	Broadened Median Ratio	92.4	68.7
Coefficient of Dispersion (COD)	13.6	19.1	Coefficient of Dispersion (COD)	17.5	57.4
Lower COD Confidence Interval	11.7	6.1	Lower COD Confidence Interval	14.8	31.6
Upper COD Confidence Interval	16.0	51.1	Upper COD Confidence Interval	20.9	210.1
Value Weighted COD	11.4	13.7	Value Weighted COD	16.0	53.0
Coefficient of Concentration @10%	47.0	57.1	Coefficient of Concentration @10%	42.7	11.1
Coefficient of Concentration @15%	57.6	57.1	Coefficient of Concentration @15%	54.5	22.2
Coefficient of Concentration @20%	64.4	57.1	Coefficient of Concentration @20%	61.8	22.2
Coefficient of Concentration @50%	89.4	85.7	Coefficient of Concentration @50%	91.8	44.4
Coefficient of Concentration @100%	97.0	100.0	Coefficient of Concentration @100%	97.3	88.9
Coefficient of Interquartile Deviation	11.6	16.6	Coefficient of Interquartile Deviation	13.5	67.6
Median Percent Deviation	11.7	4.8	Median Percent Deviation	12.3	62.9
Lower Quartile (25 th Percentile)	83.6	70.0	Lower Quartile (25 th Percentile)	77.6	32.5
Upper Quartile (75 th Percentile)	105.4	102.6	Upper Quartile (75 th Percentile)	102.5	116.9
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	Reject4
Relative Skewness	0.34	-0.36	Relative Skewness	-0.16	0.02
Relative Kurtosis	3.22	2.76	Relative Kurtosis	2.92	1.60
Arithmetic Mean Ratio	94.1	91.7	Arithmetic Mean Ratio	89.5	71.5
Weighted Mean Ratio	91.1	89.4	Weighted Mean Ratio	87.3	45.7
Geometric Mean Ratio	92.6	86.6	Geometric Mean Ratio	87.0	55.6
Harmonic Mean Ratio	91.1	80.5	Harmonic Mean Ratio	84.2	37.7
Standard Deviation	16.7	29.8	Standard Deviation	20.4	43.6
Coefficient of Variation (COV)	17.8	32.5	Coefficient of Variation (COV)	22.8	60.9
Price-Related Differential (PRD)	1.03	1.03	Price-Related Differential (PRD)	1.03	1.57
Lower PRD Confidence Interval	1.01	0.85	Lower PRD Confidence Interval	1.00	1.00
Upper PRD Confidence interval	1.06	1.23	Upper PRD Confidence interval	1.06	2.64
Coef. of Price-Related Bias (PRB)	-0.08	0.07	Coef. of Price-Related Bias (PRB)	-0.17	-0.12
Lower PRB Confidence Interval	-0.13	-0.10	Lower PRB Confidence Interval	-0.33	-0.49
Upper PRB Confidence Interval	-0.04	0.24	Upper PRB Confidence Interval	-0.01	0.25
Average Sale Price	83,524	42,786	Average Sale Price	117,801	150,656
Average Appraised Value	76,094	38,239	Average Appraised Value	102,870	68,777

Detailed Sample Statistics for the Residential and Commercial Subclasses

017 : COMANCHE			018 : COWLEY		
<i>S-4</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	24	8	Original Number of Sales	197	15
Trimmed Outliers	1	0	Trimmed Outliers	20	1
Number of Ratios: Outliers Removed	23	8	Number of Ratios: Outliers Removed	177	14
Minimum Ratio	48.3	24.0	Minimum Ratio	29.3	48.0
Maximum Ratio	682.5	146.9	Maximum Ratio	700.1	247.7
Minimum Sale Price	400	10,000	Minimum Sale Price	3,500	30,000
Maximum Sale Price	85,000	90,000	Maximum Sale Price	375,000	1,300,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	94.8	77.4	Median Ratio	95.3	101.5
Lower Median Confidence Interval	84.8	51.9	Lower Median Confidence Interval	92.2	88.7
Upper Median Confidence Interval	127.6	115.0	Upper Median Confidence Interval	98.2	145.8
Broadened Median Ratio	95.7	78.5	Broadened Median Ratio	95.4	98.0
Coefficient of Dispersion (COD)	31.1	41.3	Coefficient of Dispersion (COD)	17.9	26.5
Lower COD Confidence Interval	22.9	24.4	Lower COD Confidence Interval	15.7	14.5
Upper COD Confidence Interval	45.7	92.3	Upper COD Confidence Interval	20.5	45.9
Value Weighted COD	21.5	50.5	Value Weighted COD	15.0	38.9
Coefficient of Concentration @10%	29.2	0.0	Coefficient of Concentration @10%	40.6	33.3
Coefficient of Concentration @15%	37.5	25.0	Coefficient of Concentration @15%	50.8	46.7
Coefficient of Concentration @20%	50.0	25.0	Coefficient of Concentration @20%	58.9	53.3
Coefficient of Concentration @50%	79.2	75.0	Coefficient of Concentration @50%	85.3	80.0
Coefficient of Concentration @100%	91.7	100.0	Coefficient of Concentration @100%	93.9	86.7
Coefficient of Interquartile Deviation	29.4	39.3	Coefficient of Interquartile Deviation	17.2	30.1
Median Percent Deviation	20.4	36.2	Median Percent Deviation	13.8	16.4
Lower Quartile (25 th Percentile)	81.2	52.4	Lower Quartile (25 th Percentile)	85.0	84.8
Upper Quartile (75 th Percentile)	136.9	113.2	Upper Quartile (75 th Percentile)	117.7	145.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectK
Relative Skewness	0.93	0.21	Relative Skewness	0.30	1.20
Relative Kurtosis	3.03	2.05	Relative Kurtosis	3.34	4.22
Arithmetic Mean Ratio	107.8	81.8	Arithmetic Mean Ratio	95.5	103.8
Weighted Mean Ratio	96.1	81.4	Weighted Mean Ratio	91.3	124.4
Geometric Mean Ratio	101.7	72.0	Geometric Mean Ratio	92.7	97.7
Harmonic Mean Ratio	96.2	61.4	Harmonic Mean Ratio	89.8	92.2
Standard Deviation	39.1	40.0	Standard Deviation	22.4	39.3
Coefficient of Variation (COV)	36.3	48.9	Coefficient of Variation (COV)	23.5	37.9
Price-Related Differential (PRD)	1.12	1.00	Price-Related Differential (PRD)	1.05	0.83
Lower PRD Confidence Interval	1.06	0.84	Lower PRD Confidence Interval	1.02	0.74
Upper PRD Confidence interval	1.21	1.51	Upper PRD Confidence interval	1.07	1.05
Coef. of Price-Related Bias (PRB)	-0.87	0.11	Coef. of Price-Related Bias (PRB)	-0.24	0.12
Lower PRB Confidence Interval	-1.14	-0.26	Lower PRB Confidence Interval	-0.32	-0.10
Upper PRB Confidence Interval	-0.61	0.48	Upper PRB Confidence Interval	-0.16	0.34
Average Sale Price	46,698	44,500	Average Sale Price	102,473	184,893
Average Appraised Value	44,896	36,235	Average Appraised Value	93,540	229,975

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	194	24	Original Number of Sales	46	8
Trimmed Outliers	28	1	Trimmed Outliers	4	1
Number of Ratios: Outliers Removed	166	23	Number of Ratios: Outliers Removed	42	7
Minimum Ratio	17.8	16.9	Minimum Ratio	35.0	46.1
Maximum Ratio	710.4	366.8	Maximum Ratio	295.7	372.8
Minimum Sale Price	2,000	5,000	Minimum Sale Price	700	15,000
Maximum Sale Price	765,000	750,000	Maximum Sale Price	125,000	55,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	89.2	93.8	Median Ratio	93.5	83.2
Lower Median Confidence Interval	87.0	79.2	Lower Median Confidence Interval	86.3	73.7
Upper Median Confidence Interval	92.3	102.9	Upper Median Confidence Interval	102.2	169.5
Broadened Median Ratio	89.2	92.3	Broadened Median Ratio	93.6	84.5
Coefficient of Dispersion (COD)	14.8	23.3	Coefficient of Dispersion (COD)	23.5	27.2
Lower COD Confidence Interval	12.9	16.5	Lower COD Confidence Interval	18.2	9.2
Upper COD Confidence Interval	17.0	35.3	Upper COD Confidence Interval	31.5	63.6
Value Weighted COD	13.3	30.9	Value Weighted COD	19.2	19.1
Coefficient of Concentration @10%	41.8	33.3	Coefficient of Concentration @10%	34.8	37.5
Coefficient of Concentration @15%	54.1	41.7	Coefficient of Concentration @15%	41.3	50.0
Coefficient of Concentration @20%	60.8	45.8	Coefficient of Concentration @20%	50.0	62.5
Coefficient of Concentration @50%	85.1	91.7	Coefficient of Concentration @50%	80.4	75.0
Coefficient of Concentration @100%	94.8	95.8	Coefficient of Concentration @100%	93.5	75.0
Coefficient of Interquartile Deviation	13.1	22.5	Coefficient of Interquartile Deviation	21.5	46.8
Median Percent Deviation	12.7	22.2	Median Percent Deviation	20.2	15.3
Lower Quartile (25 th Percentile)	78.0	72.7	Lower Quartile (25 th Percentile)	77.0	74.0
Upper Quartile (75 th Percentile)	101.3	114.9	Upper Quartile (75 th Percentile)	117.2	151.9
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectW
Relative Skewness	-0.07	-0.43	Relative Skewness	0.27	1.29
Relative Kurtosis	3.27	3.34	Relative Kurtosis	3.31	3.86
Arithmetic Mean Ratio	87.0	89.8	Arithmetic Mean Ratio	92.1	90.0
Weighted Mean Ratio	86.6	73.8	Weighted Mean Ratio	86.4	81.1
Geometric Mean Ratio	85.2	83.9	Geometric Mean Ratio	87.3	84.1
Harmonic Mean Ratio	83.2	74.0	Harmonic Mean Ratio	82.0	79.0
Standard Deviation	17.2	28.0	Standard Deviation	28.8	38.5
Coefficient of Variation (COV)	19.8	31.2	Coefficient of Variation (COV)	31.2	42.8
Price-Related Differential (PRD)	1.00	1.22	Price-Related Differential (PRD)	1.07	1.11
Lower PRD Confidence Interval	0.99	1.00	Lower PRD Confidence Interval	1.01	1.01
Upper PRD Confidence interval	1.03	1.73	Upper PRD Confidence interval	1.13	1.25
Coef. of Price-Related Bias (PRB)	-0.16	-0.17	Coef. of Price-Related Bias (PRB)	-0.23	0.78
Lower PRB Confidence Interval	-0.25	-0.32	Lower PRB Confidence Interval	-0.34	-1.10
Upper PRB Confidence Interval	-0.07	-0.02	Upper PRB Confidence Interval	-0.12	2.65
Average Sale Price	111,970	156,304	Average Sale Price	54,960	31,786
Average Appraised Value	96,957	115,422	Average Appraised Value	47,462	25,769

Detailed Sample Statistics for the Residential and Commercial Subclasses

021 : DICKINSON			022 : DONIPHAN		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	276	9	Original Number of Sales	69	5
Trimmed Outliers	34	1	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	242	8	Number of Ratios: Outliers Removed	66	5
Minimum Ratio	26.2	56.9	Minimum Ratio	20.8	35.7
Maximum Ratio	732.2	667.4	Maximum Ratio	447.2	152.4
Minimum Sale Price	900	2,000	Minimum Sale Price	3,700	35,000
Maximum Sale Price	367,200	135,000	Maximum Sale Price	545,000	159,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	93.4	76.6	Median Ratio	85.0	89.6
Lower Median Confidence Interval	90.2	66.8	Lower Median Confidence Interval	80.0	35.7
Upper Median Confidence Interval	96.1	280.0	Upper Median Confidence Interval	90.2	145.5
Broadened Median Ratio	93.4	79.0	Broadened Median Ratio	85.3	73.4
Coefficient of Dispersion (COD)	18.6	45.4	Coefficient of Dispersion (COD)	24.2	39.3
Lower COD Confidence Interval	16.6	10.7	Lower COD Confidence Interval	19.3	13.2
Upper COD Confidence Interval	20.9	121.7	Upper COD Confidence Interval	30.6	98.6
Value Weighted COD	15.2	11.4	Value Weighted COD	20.7	42.4
Coefficient of Concentration @10%	34.1	33.3	Coefficient of Concentration @10%	30.4	40.0
Coefficient of Concentration @15%	48.2	44.4	Coefficient of Concentration @15%	44.9	40.0
Coefficient of Concentration @20%	58.3	66.7	Coefficient of Concentration @20%	53.6	40.0
Coefficient of Concentration @50%	80.8	77.8	Coefficient of Concentration @50%	81.2	40.0
Coefficient of Concentration @100%	91.3	77.8	Coefficient of Concentration @100%	97.1	100.0
Coefficient of Interquartile Deviation	17.7	76.0	Coefficient of Interquartile Deviation	18.4	49.1
Median Percent Deviation	15.5	15.8	Median Percent Deviation	19.0	60.1
Lower Quartile (25 th Percentile)	81.0	69.2	Lower Quartile (25 th Percentile)	67.0	35.7
Upper Quartile (75 th Percentile)	114.0	185.7	Upper Quartile (75 th Percentile)	98.3	123.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	AcceptW
Relative Skewness	0.67	2.16	Relative Skewness	0.02	0.40
Relative Kurtosis	3.94	5.88	Relative Kurtosis	2.99	1.90
Arithmetic Mean Ratio	92.8	100.5	Arithmetic Mean Ratio	81.9	81.6
Weighted Mean Ratio	89.2	75.7	Weighted Mean Ratio	82.1	62.6
Geometric Mean Ratio	90.1	87.4	Geometric Mean Ratio	76.7	69.7
Harmonic Mean Ratio	87.2	80.6	Harmonic Mean Ratio	70.1	59.3
Standard Deviation	22.9	73.4	Standard Deviation	27.3	48.6
Coefficient of Variation (COV)	24.6	73.1	Coefficient of Variation (COV)	33.3	59.6
Price-Related Differential (PRD)	1.04	1.33	Price-Related Differential (PRD)	1.00	1.30
Lower PRD Confidence Interval	1.02	0.98	Lower PRD Confidence Interval	0.94	1.06
Upper PRD Confidence interval	1.06	2.16	Upper PRD Confidence interval	1.06	1.49
Coef. of Price-Related Bias (PRB)	-0.31	-0.84	Coef. of Price-Related Bias (PRB)	-0.06	-0.85
Lower PRB Confidence Interval	-0.38	-2.28	Lower PRB Confidence Interval	-0.18	-1.88
Upper PRB Confidence Interval	-0.24	0.59	Upper PRB Confidence Interval	0.06	0.18
Average Sale Price	126,083	61,388	Average Sale Price	103,860	99,300
Average Appraised Value	112,513	46,443	Average Appraised Value	85,310	62,168

Detailed Sample Statistics for the Residential and Commercial Subclasses

023 : DOUGLAS			024 : EDWARDS		
			<i>S-4</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	284	27	Original Number of Sales	21	6
Trimmed Outliers	19	2	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	265	25	Number of Ratios: Outliers Removed	19	6
Minimum Ratio	55.3	25.1	Minimum Ratio	40.1	25.4
Maximum Ratio	185.1	127.9	Maximum Ratio	428.6	131.6
Minimum Sale Price	22,000	19,000	Minimum Sale Price	4,500	5,000
Maximum Sale Price	975,000	14,750,000	Maximum Sale Price	175,000	120,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	93.9	90.9	Median Ratio	101.1	77.6
Lower Median Confidence Interval	92.4	84.5	Lower Median Confidence Interval	79.5	30.8
Upper Median Confidence Interval	94.9	97.5	Upper Median Confidence Interval	126.4	123.7
Broadened Median Ratio	93.9	91.5	Broadened Median Ratio	101.3	77.1
Coefficient of Dispersion (COD)	8.0	12.8	Coefficient of Dispersion (COD)	30.8	43.0
Lower COD Confidence Interval	7.2	8.7	Lower COD Confidence Interval	19.9	19.6
Upper COD Confidence Interval	8.8	18.8	Upper COD Confidence Interval	47.7	99.5
Value Weighted COD	8.2	9.9	Value Weighted COD	25.1	29.4
Coefficient of Concentration @10%	63.4	51.9	Coefficient of Concentration @10%	23.8	33.3
Coefficient of Concentration @15%	80.6	59.3	Coefficient of Concentration @15%	23.8	33.3
Coefficient of Concentration @20%	88.0	70.4	Coefficient of Concentration @20%	33.3	33.3
Coefficient of Concentration @50%	98.6	92.6	Coefficient of Concentration @50%	76.2	50.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	90.5	100.0
Coefficient of Interquartile Deviation	7.3	12.5	Coefficient of Interquartile Deviation	32.8	55.6
Median Percent Deviation	7.2	9.5	Median Percent Deviation	26.6	51.3
Lower Quartile (25 th Percentile)	85.9	76.5	Lower Quartile (25 th Percentile)	73.3	33.5
Upper Quartile (75 th Percentile)	99.5	99.1	Upper Quartile (75 th Percentile)	139.7	119.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	-0.08	-0.30	Relative Skewness	0.87	0.02
Relative Kurtosis	3.08	3.12	Relative Kurtosis	3.17	1.58
Arithmetic Mean Ratio	92.8	90.7	Arithmetic Mean Ratio	103.1	77.4
Weighted Mean Ratio	92.9	93.2	Weighted Mean Ratio	84.9	66.4
Geometric Mean Ratio	92.3	89.1	Geometric Mean Ratio	95.5	66.1
Harmonic Mean Ratio	91.7	87.4	Harmonic Mean Ratio	88.4	54.9
Standard Deviation	9.6	16.6	Standard Deviation	42.2	42.2
Coefficient of Variation (COV)	10.4	18.3	Coefficient of Variation (COV)	40.9	54.6
Price-Related Differential (PRD)	1.00	0.97	Price-Related Differential (PRD)	1.21	1.17
Lower PRD Confidence Interval	0.99	0.91	Lower PRD Confidence Interval	1.08	0.89
Upper PRD Confidence interval	1.01	1.07	Upper PRD Confidence interval	1.47	1.79
Coef. of Price-Related Bias (PRB)	-0.01	0.02	Coef. of Price-Related Bias (PRB)	-0.35	-0.18
Lower PRB Confidence Interval	-0.04	-0.04	Lower PRB Confidence Interval	-0.63	-0.63
Upper PRB Confidence Interval	0.02	0.07	Upper PRB Confidence Interval	-0.07	0.27
Average Sale Price	256,149	1,232,644	Average Sale Price	76,147	57,059
Average Appraised Value	237,841	1,149,335	Average Appraised Value	64,682	37,862

Detailed Sample Statistics for the Residential and Commercial Subclasses

025 : ELK			026 : ELLIS		
<i>S-4</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	29	7	Original Number of Sales	406	15
Trimmed Outliers	0	0	Trimmed Outliers	25	0
Number of Ratios: Outliers Removed	29	7	Number of Ratios: Outliers Removed	381	15
Minimum Ratio	35.2	39.1	Minimum Ratio	7.9	42.1
Maximum Ratio	173.7	119.5	Maximum Ratio	389.1	118.5
Minimum Sale Price	2,800	7,000	Minimum Sale Price	10,000	50,000
Maximum Sale Price	125,000	1,000,000	Maximum Sale Price	849,500	1,900,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	99.2	82.1	Median Ratio	94.0	81.5
Lower Median Confidence Interval	83.4	49.5	Lower Median Confidence Interval	93.3	59.5
Upper Median Confidence Interval	112.3	108.3	Upper Median Confidence Interval	95.0	89.7
Broadened Median Ratio	96.8	86.7	Broadened Median Ratio	94.0	81.0
Coefficient of Dispersion (COD)	25.6	26.8	Coefficient of Dispersion (COD)	9.1	22.5
Lower COD Confidence Interval	18.6	15.0	Lower COD Confidence Interval	8.4	14.7
Upper COD Confidence Interval	35.1	70.2	Upper COD Confidence Interval	9.9	35.9
Value Weighted COD	27.6	37.8	Value Weighted COD	8.6	21.9
Coefficient of Concentration @10%	24.1	28.6	Coefficient of Concentration @10%	59.9	40.0
Coefficient of Concentration @15%	34.5	28.6	Coefficient of Concentration @15%	74.6	46.7
Coefficient of Concentration @20%	48.3	42.9	Coefficient of Concentration @20%	82.5	53.3
Coefficient of Concentration @50%	89.7	85.7	Coefficient of Concentration @50%	97.0	100.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	99.5	100.0
Coefficient of Interquartile Deviation	23.8	35.8	Coefficient of Interquartile Deviation	7.8	20.7
Median Percent Deviation	22.2	31.8	Median Percent Deviation	7.6	17.7
Lower Quartile (25 th Percentile)	72.3	49.5	Lower Quartile (25 th Percentile)	87.8	59.5
Upper Quartile (75 th Percentile)	119.5	108.3	Upper Quartile (75 th Percentile)	102.4	93.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	0.21	-0.32	Relative Skewness	0.30	-0.01
Relative Kurtosis	2.74	1.83	Relative Kurtosis	2.97	2.09
Arithmetic Mean Ratio	97.1	82.4	Arithmetic Mean Ratio	94.9	79.5
Weighted Mean Ratio	82.1	53.5	Weighted Mean Ratio	93.6	72.8
Geometric Mean Ratio	91.4	77.1	Geometric Mean Ratio	94.2	76.0
Harmonic Mean Ratio	85.3	71.3	Harmonic Mean Ratio	93.6	72.3
Standard Deviation	32.2	29.5	Standard Deviation	11.1	23.6
Coefficient of Variation (COV)	33.2	35.8	Coefficient of Variation (COV)	11.7	29.6
Price-Related Differential (PRD)	1.18	1.54	Price-Related Differential (PRD)	1.01	1.09
Lower PRD Confidence Interval	1.07	1.12	Lower PRD Confidence Interval	1.01	0.96
Upper PRD Confidence interval	1.37	1.89	Upper PRD Confidence interval	1.02	1.28
Coef. of Price-Related Bias (PRB)	-0.14	-0.09	Coef. of Price-Related Bias (PRB)	-0.08	-0.01
Lower PRB Confidence Interval	-0.23	-0.24	Lower PRB Confidence Interval	-0.11	-0.12
Upper PRB Confidence Interval	-0.05	0.07	Upper PRB Confidence Interval	-0.06	0.10
Average Sale Price	41,197	165,571	Average Sale Price	188,863	507,731
Average Appraised Value	33,841	88,504	Average Appraised Value	176,828	369,639

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	83	7	Original Number of Sales	422	12
Trimmed Outliers	14	0	Trimmed Outliers	39	0
Number of Ratios: Outliers Removed	69	7	Number of Ratios: Outliers Removed	383	12
Minimum Ratio	54.8	73.9	Minimum Ratio	12.3	61.5
Maximum Ratio	500.0	168.0	Maximum Ratio	413.7	115.9
Minimum Sale Price	6,000	26,000	Minimum Sale Price	15,000	45,000
Maximum Sale Price	275,000	130,000	Maximum Sale Price	539,000	1,838,684
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	99.0	88.4	Median Ratio	91.5	82.1
Lower Median Confidence Interval	96.5	79.8	Lower Median Confidence Interval	90.0	72.1
Upper Median Confidence Interval	102.4	158.2	Upper Median Confidence Interval	93.2	101.9
Broadened Median Ratio	98.8	92.5	Broadened Median Ratio	91.6	82.8
Coefficient of Dispersion (COD)	7.6	32.3	Coefficient of Dispersion (COD)	8.8	17.6
Lower COD Confidence Interval	6.2	21.2	Lower COD Confidence Interval	8.1	12.9
Upper COD Confidence Interval	9.5	52.7	Upper COD Confidence Interval	9.6	26.4
Value Weighted COD	7.0	20.9	Value Weighted COD	8.5	22.1
Coefficient of Concentration @10%	61.4	42.9	Coefficient of Concentration @10%	61.1	41.7
Coefficient of Concentration @15%	71.1	42.9	Coefficient of Concentration @15%	75.6	41.7
Coefficient of Concentration @20%	77.1	57.1	Coefficient of Concentration @20%	82.5	50.0
Coefficient of Concentration @50%	96.4	71.4	Coefficient of Concentration @50%	94.3	100.0
Coefficient of Concentration @100%	97.6	100.0	Coefficient of Concentration @100%	98.3	100.0
Coefficient of Interquartile Deviation	6.9	44.4	Coefficient of Interquartile Deviation	7.7	19.7
Median Percent Deviation	6.1	16.4	Median Percent Deviation	7.7	20.7
Lower Quartile (25 th Percentile)	91.1	79.8	Lower Quartile (25 th Percentile)	83.7	69.7
Upper Quartile (75 th Percentile)	104.7	158.2	Upper Quartile (75 th Percentile)	97.8	102.1
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.52	0.74	Relative Skewness	-0.12	0.20
Relative Kurtosis	3.32	1.80	Relative Kurtosis	3.28	1.86
Arithmetic Mean Ratio	97.0	108.2	Arithmetic Mean Ratio	90.3	85.5
Weighted Mean Ratio	97.0	96.2	Weighted Mean Ratio	90.2	79.0
Geometric Mean Ratio	96.5	102.8	Geometric Mean Ratio	89.7	83.8
Harmonic Mean Ratio	95.9	98.2	Harmonic Mean Ratio	89.1	82.1
Standard Deviation	10.0	39.1	Standard Deviation	10.3	17.9
Coefficient of Variation (COV)	10.4	36.2	Coefficient of Variation (COV)	11.4	20.9
Price-Related Differential (PRD)	1.00	1.12	Price-Related Differential (PRD)	1.00	1.08
Lower PRD Confidence Interval	0.99	0.98	Lower PRD Confidence Interval	1.00	0.93
Upper PRD Confidence interval	1.01	1.24	Upper PRD Confidence interval	1.01	1.23
Coef. of Price-Related Bias (PRB)	-0.05	-0.39	Coef. of Price-Related Bias (PRB)	-0.07	-0.02
Lower PRB Confidence Interval	-0.16	-0.93	Lower PRB Confidence Interval	-0.12	-0.13
Upper PRB Confidence Interval	0.06	0.16	Upper PRB Confidence Interval	-0.03	0.10
Average Sale Price	90,197	70,500	Average Sale Price	199,930	364,890
Average Appraised Value	87,504	67,846	Average Appraised Value	180,328	288,134

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	189	11	Original Number of Sales	347	12
Trimmed Outliers	5	1	Trimmed Outliers	45	1
Number of Ratios: Outliers Removed	184	10	Number of Ratios: Outliers Removed	302	11
Minimum Ratio	11.6	33.3	Minimum Ratio	14.1	70.0
Maximum Ratio	209.9	347.7	Maximum Ratio	601.4	268.0
Minimum Sale Price	15,000	3,000	Minimum Sale Price	4,000	32,000
Maximum Sale Price	563,150	2,600,000	Maximum Sale Price	600,000	1,000,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	84.8	80.5	Median Ratio	92.3	115.8
Lower Median Confidence Interval	82.1	62.2	Lower Median Confidence Interval	89.8	87.8
Upper Median Confidence Interval	87.4	128.3	Upper Median Confidence Interval	94.5	150.4
Broadened Median Ratio	84.9	82.1	Broadened Median Ratio	92.2	118.3
Coefficient of Dispersion (COD)	16.2	29.5	Coefficient of Dispersion (COD)	14.0	27.9
Lower COD Confidence Interval	14.2	17.0	Lower COD Confidence Interval	12.7	19.7
Upper COD Confidence Interval	18.6	52.0	Upper COD Confidence Interval	15.4	53.3
Value Weighted COD	14.6	12.5	Value Weighted COD	12.4	14.6
Coefficient of Concentration @10%	39.2	27.3	Coefficient of Concentration @10%	42.7	25.0
Coefficient of Concentration @15%	57.1	36.4	Coefficient of Concentration @15%	55.6	25.0
Coefficient of Concentration @20%	68.3	36.4	Coefficient of Concentration @20%	66.9	25.0
Coefficient of Concentration @50%	96.3	63.6	Coefficient of Concentration @50%	86.2	83.3
Coefficient of Concentration @100%	98.9	90.9	Coefficient of Concentration @100%	91.6	91.7
Coefficient of Interquartile Deviation	14.4	41.1	Coefficient of Interquartile Deviation	12.8	28.8
Median Percent Deviation	12.4	24.8	Median Percent Deviation	12.5	24.2
Lower Quartile (25 th Percentile)	69.2	62.2	Lower Quartile (25 th Percentile)	80.0	87.8
Upper Quartile (75 th Percentile)	93.7	128.3	Upper Quartile (75 th Percentile)	103.6	154.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectK
Relative Skewness	-0.26	0.35	Relative Skewness	0.09	0.69
Relative Kurtosis	2.95	2.31	Relative Kurtosis	3.52	2.68
Arithmetic Mean Ratio	81.2	82.9	Arithmetic Mean Ratio	89.9	118.4
Weighted Mean Ratio	81.7	73.1	Weighted Mean Ratio	87.5	111.0
Geometric Mean Ratio	79.2	76.9	Geometric Mean Ratio	88.3	112.8
Harmonic Mean Ratio	76.9	70.6	Harmonic Mean Ratio	86.6	107.6
Standard Deviation	17.5	32.6	Standard Deviation	16.5	39.7
Coefficient of Variation (COV)	21.6	39.3	Coefficient of Variation (COV)	18.3	33.5
Price-Related Differential (PRD)	0.99	1.14	Price-Related Differential (PRD)	1.03	1.07
Lower PRD Confidence Interval	0.98	0.93	Lower PRD Confidence Interval	1.01	0.94
Upper PRD Confidence interval	1.01	1.44	Upper PRD Confidence interval	1.04	1.22
Coef. of Price-Related Bias (PRB)	0.03	-0.36	Coef. of Price-Related Bias (PRB)	-0.40	-0.08
Lower PRB Confidence Interval	-0.03	-0.60	Lower PRB Confidence Interval	-0.47	-0.29
Upper PRB Confidence Interval	0.08	-0.13	Upper PRB Confidence Interval	-0.33	0.13
Average Sale Price	147,538	507,300	Average Sale Price	167,072	322,509
Average Appraised Value	120,570	370,635	Average Appraised Value	146,184	358,131

Detailed Sample Statistics for the Residential and Commercial Subclasses

031 : GEARY			032 : GOVE S-6		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	478	11	Original Number of Sales	19	9
Trimmed Outliers	51	0	Trimmed Outliers	0	1
Number of Ratios: Outliers Removed	427	11	Number of Ratios: Outliers Removed	19	8
Minimum Ratio	15.8	51.8	Minimum Ratio	52.6	60.0
Maximum Ratio	308.7	122.4	Maximum Ratio	135.8	326.6
Minimum Sale Price	3,000	25,000	Minimum Sale Price	33,000	5,000
Maximum Sale Price	1,325,000	300,000	Maximum Sale Price	256,000	125,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	94.5	85.5	Median Ratio	89.3	85.3
Lower Median Confidence Interval	93.4	64.4	Lower Median Confidence Interval	81.2	61.4
Upper Median Confidence Interval	95.7	100.2	Upper Median Confidence Interval	102.7	154.6
Broadened Median Ratio	94.5	84.8	Broadened Median Ratio	91.1	87.9
Coefficient of Dispersion (COD)	8.8	20.0	Coefficient of Dispersion (COD)	20.0	32.6
Lower COD Confidence Interval	8.1	13.1	Lower COD Confidence Interval	14.5	21.8
Upper COD Confidence Interval	9.6	33.1	Upper COD Confidence Interval	30.7	53.8
Value Weighted COD	8.2	23.3	Value Weighted COD	19.2	24.0
Coefficient of Concentration @10%	58.2	36.4	Coefficient of Concentration @10%	36.8	11.1
Coefficient of Concentration @15%	73.0	36.4	Coefficient of Concentration @15%	42.1	22.2
Coefficient of Concentration @20%	81.6	54.5	Coefficient of Concentration @20%	63.2	22.2
Coefficient of Concentration @50%	92.5	100.0	Coefficient of Concentration @50%	89.5	66.7
Coefficient of Concentration @100%	96.7	100.0	Coefficient of Concentration @100%	100.0	88.9
Coefficient of Interquartile Deviation	8.3	21.0	Coefficient of Interquartile Deviation	17.1	45.6
Median Percent Deviation	7.9	18.5	Median Percent Deviation	16.1	28.1
Lower Quartile (25 th Percentile)	88.0	64.4	Lower Quartile (25 th Percentile)	74.9	63.9
Upper Quartile (75 th Percentile)	103.6	100.2	Upper Quartile (75 th Percentile)	105.5	141.7
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK	Normality Test	AcceptK	RejectK
Relative Skewness	0.36	0.18	Relative Skewness	0.20	0.80
Relative Kurtosis	3.55	2.15	Relative Kurtosis	2.56	2.27
Arithmetic Mean Ratio	94.5	83.7	Arithmetic Mean Ratio	91.5	91.9
Weighted Mean Ratio	93.2	73.6	Weighted Mean Ratio	88.7	72.4
Geometric Mean Ratio	93.9	81.2	Geometric Mean Ratio	88.6	86.8
Harmonic Mean Ratio	93.3	78.6	Harmonic Mean Ratio	85.6	82.5
Standard Deviation	10.9	21.4	Standard Deviation	23.3	34.5
Coefficient of Variation (COV)	11.6	25.5	Coefficient of Variation (COV)	25.5	37.6
Price-Related Differential (PRD)	1.01	1.14	Price-Related Differential (PRD)	1.03	1.27
Lower PRD Confidence Interval	1.01	1.05	Lower PRD Confidence Interval	0.97	1.11
Upper PRD Confidence interval	1.02	1.32	Upper PRD Confidence interval	1.13	1.54
Coef. of Price-Related Bias (PRB)	-0.18	-0.18	Coef. of Price-Related Bias (PRB)	0.06	-0.53
Lower PRB Confidence Interval	-0.21	-0.33	Lower PRB Confidence Interval	-0.12	-1.13
Upper PRB Confidence Interval	-0.15	-0.03	Upper PRB Confidence Interval	0.23	0.06
Average Sale Price	170,824	121,864	Average Sale Price	95,658	46,481
Average Appraised Value	159,184	89,718	Average Appraised Value	84,861	33,661

Detailed Sample Statistics for the Residential and Commercial Subclasses

033 : GRAHAM			034 : GRANT		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	16	8	Original Number of Sales	58	6
Trimmed Outliers	1	1	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	15	7	Number of Ratios: Outliers Removed	53	6
Minimum Ratio	39.5	59.3	Minimum Ratio	60.4	86.5
Maximum Ratio	227.5	514.0	Maximum Ratio	497.8	113.9
Minimum Sale Price	7,000	5,000	Minimum Sale Price	9,500	63,500
Maximum Sale Price	120,000	75,000	Maximum Sale Price	345,000	215,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	100.1	90.6	Median Ratio	98.3	97.1
Lower Median Confidence Interval	84.2	77.3	Lower Median Confidence Interval	95.1	87.5
Upper Median Confidence Interval	125.6	121.7	Upper Median Confidence Interval	101.2	111.3
Broadened Median Ratio	102.5	92.1	Broadened Median Ratio	98.4	97.6
Coefficient of Dispersion (COD)	26.8	20.6	Coefficient of Dispersion (COD)	9.9	9.9
Lower COD Confidence Interval	17.3	7.0	Lower COD Confidence Interval	7.8	3.0
Upper COD Confidence Interval	50.0	27.0	Upper COD Confidence Interval	12.5	11.9
Value Weighted COD	18.5	21.0	Value Weighted COD	8.0	10.8
Coefficient of Concentration @10%	37.5	0.0	Coefficient of Concentration @10%	55.2	50.0
Coefficient of Concentration @15%	37.5	50.0	Coefficient of Concentration @15%	67.2	83.3
Coefficient of Concentration @20%	37.5	50.0	Coefficient of Concentration @20%	77.6	100.0
Coefficient of Concentration @50%	68.8	87.5	Coefficient of Concentration @50%	98.3	100.0
Coefficient of Concentration @100%	93.8	87.5	Coefficient of Concentration @100%	98.3	100.0
Coefficient of Interquartile Deviation	25.4	22.6	Coefficient of Interquartile Deviation	8.1	11.3
Median Percent Deviation	26.8	18.3	Median Percent Deviation	7.9	9.9
Lower Quartile (25 th Percentile)	76.6	78.0	Lower Quartile (25 th Percentile)	90.4	88.0
Upper Quartile (75 th Percentile)	127.5	118.9	Upper Quartile (75 th Percentile)	106.4	109.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	-0.10	0.16	Relative Skewness	-0.17	0.23
Relative Kurtosis	2.31	1.86	Relative Kurtosis	2.94	1.44
Arithmetic Mean Ratio	99.8	90.0	Arithmetic Mean Ratio	97.0	98.6
Weighted Mean Ratio	97.9	91.0	Weighted Mean Ratio	97.8	99.4
Geometric Mean Ratio	92.8	87.7	Geometric Mean Ratio	96.1	98.1
Harmonic Mean Ratio	84.8	85.5	Harmonic Mean Ratio	95.2	97.6
Standard Deviation	36.0	21.7	Standard Deviation	12.9	11.3
Coefficient of Variation (COV)	36.1	24.1	Coefficient of Variation (COV)	13.3	11.5
Price-Related Differential (PRD)	1.02	0.99	Price-Related Differential (PRD)	0.99	0.99
Lower PRD Confidence Interval	0.92	0.95	Lower PRD Confidence Interval	0.97	0.96
Upper PRD Confidence interval	1.14	1.04	Upper PRD Confidence interval	1.01	1.04
Coef. of Price-Related Bias (PRB)	0.04	-1.32	Coef. of Price-Related Bias (PRB)	-0.14	0.04
Lower PRB Confidence Interval	-0.20	-2.96	Lower PRB Confidence Interval	-0.29	-0.17
Upper PRB Confidence Interval	0.28	0.33	Upper PRB Confidence Interval	0.01	0.24
Average Sale Price	42,060	50,929	Average Sale Price	129,716	133,500
Average Appraised Value	41,173	46,370	Average Appraised Value	126,905	132,723

Detailed Sample Statistics for the Residential and Commercial Subclasses

035 : GRAY			036 : GREELEY		
<i>S-5</i>			<i>S-2</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	53	8	Original Number of Sales	10	6
Trimmed Outliers	2	0	Trimmed Outliers	0	0
Number of Ratios: Outliers Removed	51	8	Number of Ratios: Outliers Removed	10	6
Minimum Ratio	61.8	41.8	Minimum Ratio	52.8	28.6
Maximum Ratio	367.3	111.1	Maximum Ratio	207.0	139.0
Minimum Sale Price	11,000	35,000	Minimum Sale Price	8,000	10,000
Maximum Sale Price	900,000	150,000	Maximum Sale Price	101,000	153,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	95.7	76.8	Median Ratio	107.6	74.9
Lower Median Confidence Interval	88.4	59.4	Lower Median Confidence Interval	85.9	38.7
Upper Median Confidence Interval	100.2	89.5	Upper Median Confidence Interval	147.3	123.6
Broadened Median Ratio	95.3	75.5	Broadened Median Ratio	108.9	76.1
Coefficient of Dispersion (COD)	13.1	20.0	Coefficient of Dispersion (COD)	29.9	48.1
Lower COD Confidence Interval	10.7	10.8	Lower COD Confidence Interval	17.2	23.4
Upper COD Confidence Interval	16.4	38.5	Upper COD Confidence Interval	56.0	103.8
Value Weighted COD	14.2	19.7	Value Weighted COD	27.0	41.9
Coefficient of Concentration @10%	43.4	37.5	Coefficient of Concentration @10%	30.0	0.0
Coefficient of Concentration @15%	64.2	37.5	Coefficient of Concentration @15%	40.0	0.0
Coefficient of Concentration @20%	79.2	62.5	Coefficient of Concentration @20%	50.0	0.0
Coefficient of Concentration @50%	96.2	100.0	Coefficient of Concentration @50%	70.0	66.7
Coefficient of Concentration @100%	96.2	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	11.1	17.7	Coefficient of Interquartile Deviation	26.7	48.2
Median Percent Deviation	11.0	16.8	Median Percent Deviation	19.7	39.6
Lower Quartile (25 th Percentile)	84.1	60.5	Lower Quartile (25 th Percentile)	82.7	43.7
Upper Quartile (75 th Percentile)	105.4	87.6	Upper Quartile (75 th Percentile)	140.2	115.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptW
Relative Skewness	0.34	0.13	Relative Skewness	0.70	0.20
Relative Kurtosis	2.87	2.60	Relative Kurtosis	2.78	1.60
Arithmetic Mean Ratio	95.3	75.1	Arithmetic Mean Ratio	115.8	79.0
Weighted Mean Ratio	97.2	70.9	Weighted Mean Ratio	102.2	58.6
Geometric Mean Ratio	94.0	72.4	Geometric Mean Ratio	107.9	68.8
Harmonic Mean Ratio	92.7	69.6	Harmonic Mean Ratio	100.3	59.1
Standard Deviation	15.8	20.9	Standard Deviation	46.0	42.4
Coefficient of Variation (COV)	16.5	27.8	Coefficient of Variation (COV)	39.8	53.7
Price-Related Differential (PRD)	0.98	1.06	Price-Related Differential (PRD)	1.13	1.35
Lower PRD Confidence Interval	0.93	1.00	Lower PRD Confidence Interval	1.01	1.08
Upper PRD Confidence interval	1.02	1.16	Upper PRD Confidence interval	1.43	2.00
Coef. of Price-Related Bias (PRB)	-0.12	-0.13	Coef. of Price-Related Bias (PRB)	-0.08	-0.27
Lower PRB Confidence Interval	-0.24	-0.52	Lower PRB Confidence Interval	-0.36	-0.81
Upper PRB Confidence Interval	0.01	0.27	Upper PRB Confidence Interval	0.20	0.28
Average Sale Price	159,706	75,625	Average Sale Price	54,200	61,667
Average Appraised Value	155,197	53,646	Average Appraised Value	55,408	36,140

Detailed Sample Statistics for the Residential and Commercial Subclasses

037 : GREENWOOD			038 : HAMILTON		
			<i>S-3</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	45	6	Original Number of Sales	30	5
Trimmed Outliers	2	0	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	43	6	Number of Ratios: Outliers Removed	29	5
Minimum Ratio	38.2	31.5	Minimum Ratio	30.4	30.0
Maximum Ratio	256.7	116.7	Maximum Ratio	125.9	203.0
Minimum Sale Price	5,000	5,000	Minimum Sale Price	7,500	30,000
Maximum Sale Price	176,000	50,000	Maximum Sale Price	232,000	240,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	103.9	103.3	Median Ratio	88.6	75.9
Lower Median Confidence Interval	95.9	57.5	Lower Median Confidence Interval	76.1	33.8
Upper Median Confidence Interval	110.8	116.4	Upper Median Confidence Interval	94.3	190.0
Broadened Median Ratio	104.3	102.1	Broadened Median Ratio	88.6	77.5
Coefficient of Dispersion (COD)	24.5	19.2	Coefficient of Dispersion (COD)	19.3	54.4
Lower COD Confidence Interval	18.7	5.8	Lower COD Confidence Interval	14.2	12.6
Upper COD Confidence Interval	31.8	83.1	Upper COD Confidence Interval	26.8	91.2
Value Weighted COD	22.0	13.8	Value Weighted COD	17.3	56.1
Coefficient of Concentration @10%	33.3	33.3	Coefficient of Concentration @10%	40.0	20.0
Coefficient of Concentration @15%	44.4	66.7	Coefficient of Concentration @15%	43.3	20.0
Coefficient of Concentration @20%	46.7	83.3	Coefficient of Concentration @20%	56.7	40.0
Coefficient of Concentration @50%	75.6	83.3	Coefficient of Concentration @50%	96.7	60.0
Coefficient of Concentration @100%	95.6	100.0	Coefficient of Concentration @100%	100.0	80.0
Coefficient of Interquartile Deviation	23.0	22.2	Coefficient of Interquartile Deviation	15.6	68.0
Median Percent Deviation	22.8	12.7	Median Percent Deviation	18.2	25.3
Lower Quartile (25 th Percentile)	80.1	70.4	Lower Quartile (25 th Percentile)	72.0	45.8
Upper Quartile (75 th Percentile)	127.8	116.3	Upper Quartile (75 th Percentile)	99.6	149.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectW	Normality Test	AcceptK	AcceptW
Relative Skewness	0.13	-1.29	Relative Skewness	-0.11	1.02
Relative Kurtosis	2.52	3.23	Relative Kurtosis	2.37	2.70
Arithmetic Mean Ratio	103.2	92.4	Arithmetic Mean Ratio	87.7	93.1
Weighted Mean Ratio	92.2	105.3	Weighted Mean Ratio	84.0	60.6
Geometric Mean Ratio	97.3	85.1	Geometric Mean Ratio	84.7	77.0
Harmonic Mean Ratio	90.9	74.7	Harmonic Mean Ratio	81.5	63.9
Standard Deviation	33.5	32.2	Standard Deviation	22.1	65.9
Coefficient of Variation (COV)	32.5	34.8	Coefficient of Variation (COV)	25.3	70.7
Price-Related Differential (PRD)	1.12	0.88	Price-Related Differential (PRD)	1.04	1.54
Lower PRD Confidence Interval	1.05	0.75	Lower PRD Confidence Interval	0.99	0.97
Upper PRD Confidence interval	1.21	1.00	Upper PRD Confidence interval	1.12	1.86
Coef. of Price-Related Bias (PRB)	-0.09	0.15	Coef. of Price-Related Bias (PRB)	-0.04	-0.19
Lower PRB Confidence Interval	-0.18	-0.08	Lower PRB Confidence Interval	-0.15	-1.85
Upper PRB Confidence Interval	0.00	0.37	Upper PRB Confidence Interval	0.07	1.46
Average Sale Price	58,859	18,667	Average Sale Price	84,447	83,000
Average Appraised Value	54,279	19,663	Average Appraised Value	70,922	50,270

Detailed Sample Statistics for the Residential and Commercial Subclasses

039 : HARPER			040 : HARVEY		
<i>S-3</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	73	7	Original Number of Sales	191	9
Trimmed Outliers	5	0	Trimmed Outliers	19	0
Number of Ratios: Outliers Removed	68	7	Number of Ratios: Outliers Removed	172	9
Minimum Ratio	53.0	39.6	Minimum Ratio	34.4	61.0
Maximum Ratio	332.6	141.5	Maximum Ratio	425.2	131.8
Minimum Sale Price	4,250	5,000	Minimum Sale Price	8,000	28,000
Maximum Sale Price	238,000	130,000	Maximum Sale Price	445,000	340,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	96.4	101.9	Median Ratio	91.5	100.1
Lower Median Confidence Interval	91.9	84.1	Lower Median Confidence Interval	89.9	62.2
Upper Median Confidence Interval	100.0	136.8	Upper Median Confidence Interval	94.2	128.9
Broadened Median Ratio	96.1	100.7	Broadened Median Ratio	91.5	95.5
Coefficient of Dispersion (COD)	14.1	24.1	Coefficient of Dispersion (COD)	11.7	22.7
Lower COD Confidence Interval	11.6	12.8	Lower COD Confidence Interval	10.3	13.1
Upper COD Confidence Interval	17.4	88.8	Upper COD Confidence Interval	13.2	41.1
Value Weighted COD	14.1	24.2	Value Weighted COD	10.4	25.1
Coefficient of Concentration @10%	43.8	28.6	Coefficient of Concentration @10%	49.2	22.2
Coefficient of Concentration @15%	57.5	42.9	Coefficient of Concentration @15%	62.8	33.3
Coefficient of Concentration @20%	67.1	57.1	Coefficient of Concentration @20%	72.8	44.4
Coefficient of Concentration @50%	93.2	85.7	Coefficient of Concentration @50%	93.2	100.0
Coefficient of Concentration @100%	98.6	100.0	Coefficient of Concentration @100%	96.9	100.0
Coefficient of Interquartile Deviation	12.3	25.9	Coefficient of Interquartile Deviation	10.5	28.7
Median Percent Deviation	11.1	17.5	Median Percent Deviation	10.1	28.8
Lower Quartile (25 th Percentile)	86.3	84.1	Lower Quartile (25 th Percentile)	82.9	63.0
Upper Quartile (75 th Percentile)	110.1	136.8	Upper Quartile (75 th Percentile)	102.2	120.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	Reject4
Relative Skewness	0.17	-0.51	Relative Skewness	-0.08	0.04
Relative Kurtosis	3.03	2.54	Relative Kurtosis	3.03	1.57
Arithmetic Mean Ratio	95.1	100.6	Arithmetic Mean Ratio	91.5	94.0
Weighted Mean Ratio	93.1	107.9	Weighted Mean Ratio	90.0	85.5
Geometric Mean Ratio	93.4	94.1	Geometric Mean Ratio	90.4	90.2
Harmonic Mean Ratio	91.7	85.9	Harmonic Mean Ratio	89.3	86.5
Standard Deviation	17.6	34.5	Standard Deviation	13.8	27.8
Coefficient of Variation (COV)	18.6	34.3	Coefficient of Variation (COV)	15.1	29.6
Price-Related Differential (PRD)	1.02	0.93	Price-Related Differential (PRD)	1.02	1.10
Lower PRD Confidence Interval	0.99	0.78	Lower PRD Confidence Interval	1.00	1.00
Upper PRD Confidence interval	1.06	1.12	Upper PRD Confidence interval	1.03	1.31
Coef. of Price-Related Bias (PRB)	-0.09	0.04	Coef. of Price-Related Bias (PRB)	-0.19	-0.07
Lower PRB Confidence Interval	-0.15	-0.18	Lower PRB Confidence Interval	-0.25	-0.23
Upper PRB Confidence Interval	-0.02	0.26	Upper PRB Confidence Interval	-0.12	0.10
Average Sale Price	70,116	52,429	Average Sale Price	140,683	179,556
Average Appraised Value	65,294	56,550	Average Appraised Value	126,566	153,488

Detailed Sample Statistics for the Residential and Commercial Subclasses

041 : HASKELL			042 : HODGEMAN		
<i>S-5</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	34	7	Original Number of Sales	10	4
Trimmed Outliers	0	1	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	34	6	Number of Ratios: Outliers Removed	9	4
Minimum Ratio	56.8	51.8	Minimum Ratio	49.8	31.1
Maximum Ratio	115.7	311.3	Maximum Ratio	439.2	113.9
Minimum Sale Price	35,000	18,500	Minimum Sale Price	13,000	35,000
Maximum Sale Price	305,000	135,000	Maximum Sale Price	74,000	1,181,270
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.6	84.2	Median Ratio	98.7	54.2
Lower Median Confidence Interval	85.1	54.3	Lower Median Confidence Interval	88.6	31.5
Upper Median Confidence Interval	97.1	146.3	Upper Median Confidence Interval	159.4	111.7
Broadened Median Ratio	90.5	101.1	Broadened Median Ratio	98.2	60.3
Coefficient of Dispersion (COD)	11.9	37.5	Coefficient of Dispersion (COD)	23.9	52.9
Lower COD Confidence Interval	9.4	25.6	Lower COD Confidence Interval	10.1	10.3
Upper COD Confidence Interval	16.3	60.1	Upper COD Confidence Interval	43.3	60.2
Value Weighted COD	10.8	34.6	Value Weighted COD	24.1	32.2
Coefficient of Concentration @10%	50.0	28.6	Coefficient of Concentration @10%	50.0	0.0
Coefficient of Concentration @15%	73.5	28.6	Coefficient of Concentration @15%	50.0	0.0
Coefficient of Concentration @20%	82.4	28.6	Coefficient of Concentration @20%	60.0	0.0
Coefficient of Concentration @50%	100.0	57.1	Coefficient of Concentration @50%	70.0	75.0
Coefficient of Concentration @100%	100.0	85.7	Coefficient of Concentration @100%	90.0	75.0
Coefficient of Interquartile Deviation	10.2	54.7	Coefficient of Interquartile Deviation	36.8	64.6
Median Percent Deviation	10.0	38.4	Median Percent Deviation	12.1	36.0
Lower Quartile (25 th Percentile)	81.6	54.3	Lower Quartile (25 th Percentile)	88.4	32.9
Upper Quartile (75 th Percentile)	100.1	146.3	Upper Quartile (75 th Percentile)	161.0	103.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	-0.40	0.41	Relative Skewness	0.60	0.58
Relative Kurtosis	3.06	1.52	Relative Kurtosis	2.59	1.76
Arithmetic Mean Ratio	90.1	92.6	Arithmetic Mean Ratio	104.5	63.4
Weighted Mean Ratio	89.9	75.1	Weighted Mean Ratio	100.5	44.8
Geometric Mean Ratio	89.0	85.3	Geometric Mean Ratio	98.9	55.6
Harmonic Mean Ratio	87.8	78.8	Harmonic Mean Ratio	93.4	49.2
Standard Deviation	13.8	41.1	Standard Deviation	36.5	37.7
Coefficient of Variation (COV)	15.3	44.4	Coefficient of Variation (COV)	34.9	59.5
Price-Related Differential (PRD)	1.00	1.23	Price-Related Differential (PRD)	1.04	1.41
Lower PRD Confidence Interval	0.98	1.07	Lower PRD Confidence Interval	0.99	0.92
Upper PRD Confidence interval	1.03	1.52	Upper PRD Confidence interval	1.13	1.80
Coef. of Price-Related Bias (PRB)	0.03	-0.33	Coef. of Price-Related Bias (PRB)	-0.28	0.00
Lower PRB Confidence Interval	-0.05	-2.00	Lower PRB Confidence Interval	-1.99	0.00
Upper PRB Confidence Interval	0.10	1.33	Upper PRB Confidence Interval	1.43	0.00
Average Sale Price	132,663	64,750	Average Sale Price	47,333	408,818
Average Appraised Value	119,271	48,638	Average Appraised Value	47,580	183,333

Detailed Sample Statistics for the Residential and Commercial Subclasses

043 : JACKSON			044 : JEFFERSON		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	94	9	Original Number of Sales	196	4
Trimmed Outliers	14	0	Trimmed Outliers	24	0
Number of Ratios: Outliers Removed	80	9	Number of Ratios: Outliers Removed	172	4
Minimum Ratio	24.5	43.6	Minimum Ratio	26.7	42.7
Maximum Ratio	392.3	144.6	Maximum Ratio	924.0	154.0
Minimum Sale Price	4,000	20,000	Minimum Sale Price	4,000	35,000
Maximum Sale Price	300,000	2,050,000	Maximum Sale Price	500,000	1,226,400
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	91.5	76.6	Median Ratio	89.2	96.5
Lower Median Confidence Interval	87.5	49.2	Lower Median Confidence Interval	87.4	43.3
Upper Median Confidence Interval	96.9	123.5	Upper Median Confidence Interval	91.4	153.1
Broadened Median Ratio	91.3	77.0	Broadened Median Ratio	89.3	97.1
Coefficient of Dispersion (COD)	13.6	35.6	Coefficient of Dispersion (COD)	12.1	49.6
Lower COD Confidence Interval	11.5	23.1	Lower COD Confidence Interval	10.6	6.1
Upper COD Confidence Interval	15.9	66.6	Upper COD Confidence Interval	13.9	57.3
Value Weighted COD	12.0	33.4	Value Weighted COD	11.4	45.5
Coefficient of Concentration @10%	34.0	11.1	Coefficient of Concentration @10%	48.5	0.0
Coefficient of Concentration @15%	50.0	11.1	Coefficient of Concentration @15%	61.2	0.0
Coefficient of Concentration @20%	66.0	33.3	Coefficient of Concentration @20%	68.9	0.0
Coefficient of Concentration @50%	85.1	77.8	Coefficient of Concentration @50%	90.3	50.0
Coefficient of Concentration @100%	93.6	100.0	Coefficient of Concentration @100%	95.9	100.0
Coefficient of Interquartile Deviation	15.8	39.0	Coefficient of Interquartile Deviation	10.6	53.6
Median Percent Deviation	15.0	32.2	Median Percent Deviation	10.7	48.6
Lower Quartile (25 th Percentile)	80.7	52.6	Lower Quartile (25 th Percentile)	80.9	46.1
Upper Quartile (75 th Percentile)	109.6	112.3	Upper Quartile (75 th Percentile)	99.8	149.6
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.35	0.55	Relative Skewness	0.26	0.02
Relative Kurtosis	2.41	2.09	Relative Kurtosis	3.39	1.10
Arithmetic Mean Ratio	91.0	83.2	Arithmetic Mean Ratio	88.8	97.4
Weighted Mean Ratio	88.5	57.6	Weighted Mean Ratio	86.0	71.6
Geometric Mean Ratio	89.8	77.1	Geometric Mean Ratio	87.6	84.3
Harmonic Mean Ratio	88.6	71.6	Harmonic Mean Ratio	86.3	72.7
Standard Deviation	15.0	34.6	Standard Deviation	14.5	56.0
Coefficient of Variation (COV)	16.5	41.6	Coefficient of Variation (COV)	16.4	57.5
Price-Related Differential (PRD)	1.03	1.44	Price-Related Differential (PRD)	1.03	1.36
Lower PRD Confidence Interval	1.01	1.03	Lower PRD Confidence Interval	1.02	0.90
Upper PRD Confidence interval	1.05	1.88	Upper PRD Confidence interval	1.05	1.59
Coef. of Price-Related Bias (PRB)	-0.41	-0.04	Coef. of Price-Related Bias (PRB)	-0.35	0.00
Lower PRB Confidence Interval	-0.50	-0.25	Lower PRB Confidence Interval	-0.48	0.00
Upper PRB Confidence Interval	-0.31	0.17	Upper PRB Confidence Interval	-0.22	0.00
Average Sale Price	132,306	302,989	Average Sale Price	159,196	415,350
Average Appraised Value	117,029	174,598	Average Appraised Value	136,925	297,238

Detailed Sample Statistics for the Residential and Commercial Subclasses

045 : JEWELL			046 : JOHNSON		
<i>S-4</i>					
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	31	4	Original Number of Sales	338	128
Trimmed Outliers	4	0	Trimmed Outliers	14	5
Number of Ratios: Outliers Removed	27	4	Number of Ratios: Outliers Removed	324	123
Minimum Ratio	2.2	66.1	Minimum Ratio	39.6	34.9
Maximum Ratio	510.0	201.8	Maximum Ratio	139.2	221.8
Minimum Sale Price	500	5,000	Minimum Sale Price	90,000	84,000
Maximum Sale Price	150,000	35,000	Maximum Sale Price	1,700,000	15,900,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	93.6	88.4	Median Ratio	93.4	80.1
Lower Median Confidence Interval	87.0	66.3	Lower Median Confidence Interval	91.6	74.7
Upper Median Confidence Interval	102.6	197.1	Upper Median Confidence Interval	94.7	90.7
Broadened Median Ratio	95.7	103.6	Broadened Median Ratio	93.3	80.3
Coefficient of Dispersion (COD)	18.5	49.2	Coefficient of Dispersion (COD)	8.1	25.3
Lower COD Confidence Interval	13.5	8.9	Lower COD Confidence Interval	7.4	22.4
Upper COD Confidence Interval	27.0	51.0	Upper COD Confidence Interval	8.8	29.1
Value Weighted COD	13.5	30.4	Value Weighted COD	8.3	25.4
Coefficient of Concentration @10%	35.5	0.0	Coefficient of Concentration @10%	64.5	18.0
Coefficient of Concentration @15%	48.4	0.0	Coefficient of Concentration @15%	83.4	29.7
Coefficient of Concentration @20%	58.1	0.0	Coefficient of Concentration @20%	89.6	39.1
Coefficient of Concentration @50%	80.6	75.0	Coefficient of Concentration @50%	99.7	86.7
Coefficient of Concentration @100%	90.3	75.0	Coefficient of Concentration @100%	100.0	96.9
Coefficient of Interquartile Deviation	16.5	63.0	Coefficient of Interquartile Deviation	7.1	22.4
Median Percent Deviation	15.6	23.4	Median Percent Deviation	7.0	24.8
Lower Quartile (25 th Percentile)	79.0	66.9	Lower Quartile (25 th Percentile)	86.1	65.3
Upper Quartile (75 th Percentile)	109.8	178.2	Upper Quartile (75 th Percentile)	99.3	101.2
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	0.94	0.88	Relative Skewness	-0.12	0.23
Relative Kurtosis	3.40	2.07	Relative Kurtosis	2.97	2.50
Arithmetic Mean Ratio	96.7	111.2	Arithmetic Mean Ratio	92.7	82.7
Weighted Mean Ratio	90.6	99.5	Weighted Mean Ratio	92.9	77.3
Geometric Mean Ratio	94.2	99.8	Geometric Mean Ratio	92.2	79.1
Harmonic Mean Ratio	91.9	91.3	Harmonic Mean Ratio	91.7	75.3
Standard Deviation	23.6	63.3	Standard Deviation	9.5	24.0
Coefficient of Variation (COV)	24.4	56.9	Coefficient of Variation (COV)	10.2	29.1
Price-Related Differential (PRD)	1.07	1.12	Price-Related Differential (PRD)	1.00	1.07
Lower PRD Confidence Interval	1.02	0.88	Lower PRD Confidence Interval	0.99	1.01
Upper PRD Confidence interval	1.14	1.28	Upper PRD Confidence interval	1.01	1.13
Coef. of Price-Related Bias (PRB)	-0.42	0.00	Coef. of Price-Related Bias (PRB)	0.02	-0.01
Lower PRB Confidence Interval	-0.61	0.00	Lower PRB Confidence Interval	0.00	-0.05
Upper PRB Confidence Interval	-0.22	0.00	Upper PRB Confidence Interval	0.04	0.04
Average Sale Price	50,693	16,250	Average Sale Price	346,222	1,869,990
Average Appraised Value	45,943	16,173	Average Appraised Value	321,679	1,445,526

Detailed Sample Statistics for the Residential and Commercial Subclasses

047 : KEARNY			048 : KINGMAN		
<i>S-5</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	15	6	Original Number of Sales	60	4
Trimmed Outliers	2	0	Trimmed Outliers	7	0
Number of Ratios: Outliers Removed	13	6	Number of Ratios: Outliers Removed	53	4
Minimum Ratio	9.4	56.2	Minimum Ratio	53.1	11.9
Maximum Ratio	114.2	92.0	Maximum Ratio	810.0	232.3
Minimum Sale Price	20,000	55,000	Minimum Sale Price	4,500	7,150
Maximum Sale Price	250,000	185,000	Maximum Sale Price	434,000	87,500
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	89.1	78.9	Median Ratio	97.3	50.7
Lower Median Confidence Interval	84.4	56.4	Lower Median Confidence Interval	88.1	12.1
Upper Median Confidence Interval	97.4	90.7	Upper Median Confidence Interval	101.3	225.0
Broadened Median Ratio	90.1	76.9	Broadened Median Ratio	97.3	74.5
Coefficient of Dispersion (COD)	10.9	17.6	Coefficient of Dispersion (COD)	14.2	142.7
Lower COD Confidence Interval	8.4	10.0	Lower COD Confidence Interval	11.1	15.9
Upper COD Confidence Interval	16.1	24.0	Upper COD Confidence Interval	18.0	337.9
Value Weighted COD	10.4	20.0	Value Weighted COD	14.3	141.8
Coefficient of Concentration @10%	53.3	33.3	Coefficient of Concentration @10%	35.0	0.0
Coefficient of Concentration @15%	53.3	50.0	Coefficient of Concentration @15%	66.7	0.0
Coefficient of Concentration @20%	66.7	66.7	Coefficient of Concentration @20%	68.3	0.0
Coefficient of Concentration @50%	93.3	100.0	Coefficient of Concentration @50%	88.3	0.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	95.0	75.0
Coefficient of Interquartile Deviation	11.9	21.2	Coefficient of Interquartile Deviation	12.8	180.2
Median Percent Deviation	9.4	14.9	Median Percent Deviation	12.8	72.2
Lower Quartile (25 th Percentile)	84.4	56.5	Lower Quartile (25 th Percentile)	84.7	13.0
Upper Quartile (75 th Percentile)	105.6	90.0	Upper Quartile (75 th Percentile)	109.5	195.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	0.19	-0.25	Relative Skewness	0.39	0.83
Relative Kurtosis	1.95	1.32	Relative Kurtosis	3.47	2.02
Arithmetic Mean Ratio	94.6	75.3	Arithmetic Mean Ratio	95.0	86.4
Weighted Mean Ratio	94.7	71.5	Weighted Mean Ratio	88.6	101.6
Geometric Mean Ratio	93.9	73.8	Geometric Mean Ratio	93.3	44.2
Harmonic Mean Ratio	93.2	72.2	Harmonic Mean Ratio	91.6	24.8
Standard Deviation	12.1	16.3	Standard Deviation	17.9	102.9
Coefficient of Variation (COV)	12.8	21.6	Coefficient of Variation (COV)	18.9	119.1
Price-Related Differential (PRD)	1.00	1.05	Price-Related Differential (PRD)	1.07	0.85
Lower PRD Confidence Interval	0.97	1.00	Lower PRD Confidence Interval	1.04	0.57
Upper PRD Confidence interval	1.03	1.14	Upper PRD Confidence interval	1.12	1.08
Coef. of Price-Related Bias (PRB)	-0.03	-0.13	Coef. of Price-Related Bias (PRB)	-0.53	0.00
Lower PRB Confidence Interval	-0.22	-0.49	Lower PRB Confidence Interval	-0.76	0.00
Upper PRB Confidence Interval	0.17	0.23	Upper PRB Confidence Interval	-0.30	0.00
Average Sale Price	120,515	113,333	Average Sale Price	125,497	48,850
Average Appraised Value	114,102	80,988	Average Appraised Value	111,219	49,648

Detailed Sample Statistics for the Residential and Commercial Subclasses

049 : KIOWA			050 : LABETTE		
<i>S-3</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	11	4	Original Number of Sales	154	10
Trimmed Outliers	1	0	Trimmed Outliers	20	0
Number of Ratios: Outliers Removed	10	4	Number of Ratios: Outliers Removed	134	10
Minimum Ratio	45.1	42.6	Minimum Ratio	3.6	28.9
Maximum Ratio	191.5	90.8	Maximum Ratio	927.1	134.6
Minimum Sale Price	13,000	120,000	Minimum Sale Price	1,000	15,000
Maximum Sale Price	153,500	2,100,000	Maximum Sale Price	999,999	3,650,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	106.3	59.4	Median Ratio	99.7	75.6
Lower Median Confidence Interval	78.0	43.0	Lower Median Confidence Interval	97.1	52.6
Upper Median Confidence Interval	120.9	89.7	Upper Median Confidence Interval	102.5	95.5
Broadened Median Ratio	105.5	61.8	Broadened Median Ratio	99.6	77.2
Coefficient of Dispersion (COD)	19.8	27.8	Coefficient of Dispersion (COD)	16.4	30.2
Lower COD Confidence Interval	12.4	6.5	Lower COD Confidence Interval	14.0	17.6
Upper COD Confidence Interval	46.6	31.4	Upper COD Confidence Interval	19.1	66.9
Value Weighted COD	17.1	17.8	Value Weighted COD	17.1	56.1
Coefficient of Concentration @10%	27.3	0.0	Coefficient of Concentration @10%	39.6	30.0
Coefficient of Concentration @15%	54.5	0.0	Coefficient of Concentration @15%	51.3	30.0
Coefficient of Concentration @20%	54.5	50.0	Coefficient of Concentration @20%	56.5	40.0
Coefficient of Concentration @50%	81.8	75.0	Coefficient of Concentration @50%	84.4	70.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	90.9	100.0
Coefficient of Interquartile Deviation	20.2	34.2	Coefficient of Interquartile Deviation	14.7	31.7
Median Percent Deviation	13.7	21.7	Median Percent Deviation	14.6	28.4
Lower Quartile (25 th Percentile)	78.0	44.5	Lower Quartile (25 th Percentile)	85.1	48.7
Upper Quartile (75 th Percentile)	120.9	85.2	Upper Quartile (75 th Percentile)	114.5	96.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.75	0.43	Relative Skewness	-0.03	0.18
Relative Kurtosis	2.75	1.68	Relative Kurtosis	3.18	2.54
Arithmetic Mean Ratio	97.5	63.0	Arithmetic Mean Ratio	95.8	76.0
Weighted Mean Ratio	97.9	65.4	Weighted Mean Ratio	89.2	34.2
Geometric Mean Ratio	93.8	60.4	Geometric Mean Ratio	93.3	69.5
Harmonic Mean Ratio	89.3	58.0	Harmonic Mean Ratio	90.6	62.4
Standard Deviation	25.4	21.4	Standard Deviation	21.2	31.3
Coefficient of Variation (COV)	26.0	34.0	Coefficient of Variation (COV)	22.1	41.2
Price-Related Differential (PRD)	1.00	0.96	Price-Related Differential (PRD)	1.07	2.22
Lower PRD Confidence Interval	0.93	0.84	Lower PRD Confidence Interval	1.02	1.75
Upper PRD Confidence interval	1.06	1.12	Upper PRD Confidence interval	1.18	3.00
Coef. of Price-Related Bias (PRB)	-0.13	0.00	Coef. of Price-Related Bias (PRB)	-0.40	-0.12
Lower PRB Confidence Interval	-0.39	0.00	Lower PRB Confidence Interval	-0.52	-0.21
Upper PRB Confidence Interval	0.13	0.00	Upper PRB Confidence Interval	-0.28	-0.04
Average Sale Price	93,330	681,250	Average Sale Price	90,994	585,300
Average Appraised Value	91,332	445,343	Average Appraised Value	81,168	200,127

Detailed Sample Statistics for the Residential and Commercial Subclasses

051 : LANE			052 : LEAVENWORTH		
<i>S-4</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	24	7	Original Number of Sales	225	13
Trimmed Outliers	3	0	Trimmed Outliers	21	1
Number of Ratios: Outliers Removed	21	7	Number of Ratios: Outliers Removed	204	12
Minimum Ratio	27.8	79.3	Minimum Ratio	17.4	37.6
Maximum Ratio	535.1	133.0	Maximum Ratio	1132.1	187.2
Minimum Sale Price	2,908	4,000	Minimum Sale Price	2,400	67,000
Maximum Sale Price	225,000	55,000	Maximum Sale Price	590,000	935,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	96.9	109.9	Median Ratio	92.5	79.3
Lower Median Confidence Interval	83.2	79.9	Lower Median Confidence Interval	90.6	64.9
Upper Median Confidence Interval	106.8	127.9	Upper Median Confidence Interval	94.5	104.2
Broadened Median Ratio	97.0	105.8	Broadened Median Ratio	92.4	80.9
Coefficient of Dispersion (COD)	21.9	14.8	Coefficient of Dispersion (COD)	9.0	28.1
Lower COD Confidence Interval	14.7	8.3	Lower COD Confidence Interval	8.1	19.4
Upper COD Confidence Interval	34.9	24.7	Upper COD Confidence Interval	10.2	48.6
Value Weighted COD	16.6	17.2	Value Weighted COD	8.9	35.3
Coefficient of Concentration @10%	29.2	28.6	Coefficient of Concentration @10%	60.0	23.1
Coefficient of Concentration @15%	45.8	42.9	Coefficient of Concentration @15%	74.2	30.8
Coefficient of Concentration @20%	58.3	57.1	Coefficient of Concentration @20%	80.9	38.5
Coefficient of Concentration @50%	75.0	100.0	Coefficient of Concentration @50%	94.7	76.9
Coefficient of Concentration @100%	87.5	100.0	Coefficient of Concentration @100%	97.3	92.3
Coefficient of Interquartile Deviation	23.5	21.8	Coefficient of Interquartile Deviation	8.0	27.7
Median Percent Deviation	17.1	16.4	Median Percent Deviation	7.7	24.0
Lower Quartile (25 th Percentile)	79.4	79.9	Lower Quartile (25 th Percentile)	84.2	63.2
Upper Quartile (75 th Percentile)	124.9	127.9	Upper Quartile (75 th Percentile)	99.1	107.1
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	AcceptW	Normality Test	RejectK	AcceptK
Relative Skewness	0.02	-0.04	Relative Skewness	-0.32	0.18
Relative Kurtosis	3.54	1.66	Relative Kurtosis	3.11	2.24
Arithmetic Mean Ratio	92.5	105.4	Arithmetic Mean Ratio	91.1	79.6
Weighted Mean Ratio	86.0	97.7	Weighted Mean Ratio	91.4	68.8
Geometric Mean Ratio	87.4	103.5	Geometric Mean Ratio	90.4	75.1
Harmonic Mean Ratio	80.8	101.6	Harmonic Mean Ratio	89.7	70.4
Standard Deviation	28.6	21.2	Standard Deviation	10.6	27.2
Coefficient of Variation (COV)	31.0	20.1	Coefficient of Variation (COV)	11.7	34.2
Price-Related Differential (PRD)	1.08	1.08	Price-Related Differential (PRD)	1.00	1.16
Lower PRD Confidence Interval	1.00	0.99	Lower PRD Confidence Interval	0.99	0.97
Upper PRD Confidence interval	1.21	1.26	Upper PRD Confidence interval	1.00	1.42
Coef. of Price-Related Bias (PRB)	-0.37	-0.06	Coef. of Price-Related Bias (PRB)	-0.46	0.00
Lower PRB Confidence Interval	-0.64	-0.21	Lower PRB Confidence Interval	-0.59	-0.31
Upper PRB Confidence Interval	-0.10	0.09	Upper PRB Confidence Interval	-0.33	0.31
Average Sale Price	79,357	21,265	Average Sale Price	220,876	280,167
Average Appraised Value	68,221	20,784	Average Appraised Value	201,825	192,850

Detailed Sample Statistics for the Residential and Commercial Subclasses

053 : LINCOLN			054 : LINN		
<i>S-2</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	27	3	Original Number of Sales	144	7
Trimmed Outliers	4	0	Trimmed Outliers	14	1
Number of Ratios: Outliers Removed	23	3	Number of Ratios: Outliers Removed	130	6
Minimum Ratio	27.4	52.2	Minimum Ratio	18.1	24.2
Maximum Ratio	232.5	98.4	Maximum Ratio	874.0	715.0
Minimum Sale Price	800	35,000	Minimum Sale Price	100	1,000
Maximum Sale Price	440,000	225,000	Maximum Sale Price	395,000	372,500
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	99.0	64.8	Median Ratio	88.3	97.4
Lower Median Confidence Interval	85.6	53.1	Lower Median Confidence Interval	80.6	44.0
Upper Median Confidence Interval	103.4	96.2	Upper Median Confidence Interval	95.0	143.5
Broadened Median Ratio	99.5	71.8	Broadened Median Ratio	88.3	106.9
Coefficient of Dispersion (COD)	12.5	23.7	Coefficient of Dispersion (COD)	30.8	38.8
Lower COD Confidence Interval	8.3	6.5	Lower COD Confidence Interval	26.5	16.9
Upper COD Confidence Interval	18.1	23.8	Upper COD Confidence Interval	36.7	120.4
Value Weighted COD	10.6	10.2	Value Weighted COD	20.3	46.4
Coefficient of Concentration @10%	44.4	33.3	Coefficient of Concentration @10%	21.5	28.6
Coefficient of Concentration @15%	55.6	33.3	Coefficient of Concentration @15%	33.3	28.6
Coefficient of Concentration @20%	59.3	66.7	Coefficient of Concentration @20%	42.4	28.6
Coefficient of Concentration @50%	85.2	66.7	Coefficient of Concentration @50%	69.4	57.1
Coefficient of Concentration @100%	96.3	100.0	Coefficient of Concentration @100%	90.3	85.7
Coefficient of Interquartile Deviation	12.2	35.6	Coefficient of Interquartile Deviation	24.8	51.1
Median Percent Deviation	13.6	19.5	Median Percent Deviation	24.7	47.3
Lower Quartile (25 th Percentile)	81.1	52.2	Lower Quartile (25 th Percentile)	65.8	44.0
Upper Quartile (75 th Percentile)	105.2	98.4	Upper Quartile (75 th Percentile)	109.6	143.5
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	0.28	0.49	Relative Skewness	0.31	-0.20
Relative Kurtosis	2.88	1.50	Relative Kurtosis	3.26	1.63
Arithmetic Mean Ratio	94.7	71.8	Arithmetic Mean Ratio	83.9	88.7
Weighted Mean Ratio	91.2	64.9	Weighted Mean Ratio	80.8	57.7
Geometric Mean Ratio	93.3	69.3	Geometric Mean Ratio	76.2	75.0
Harmonic Mean Ratio	92.0	67.1	Harmonic Mean Ratio	66.6	60.0
Standard Deviation	16.4	23.9	Standard Deviation	33.2	47.5
Coefficient of Variation (COV)	17.3	33.2	Coefficient of Variation (COV)	39.5	53.6
Price-Related Differential (PRD)	1.04	1.11	Price-Related Differential (PRD)	1.04	1.54
Lower PRD Confidence Interval	0.99	0.97	Lower PRD Confidence Interval	0.98	0.98
Upper PRD Confidence interval	1.10	1.15	Upper PRD Confidence interval	1.10	2.75
Coef. of Price-Related Bias (PRB)	-0.12	0.00	Coef. of Price-Related Bias (PRB)	-0.18	-0.89
Lower PRB Confidence Interval	-0.20	0.00	Lower PRB Confidence Interval	-0.25	-1.82
Upper PRB Confidence Interval	-0.03	0.00	Upper PRB Confidence Interval	-0.10	0.04
Average Sale Price	88,087	116,667	Average Sale Price	91,731	115,250
Average Appraised Value	80,352	75,770	Average Appraised Value	74,087	66,535

Detailed Sample Statistics for the Residential and Commercial Subclasses

055 : LOGAN			056 : LYON		
<i>S-6</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	27	9	Original Number of Sales	255	10
Trimmed Outliers	1	0	Trimmed Outliers	22	1
Number of Ratios: Outliers Removed	26	9	Number of Ratios: Outliers Removed	233	9
Minimum Ratio	55.2	37.9	Minimum Ratio	20.5	50.7
Maximum Ratio	121.3	131.0	Maximum Ratio	808.0	201.3
Minimum Sale Price	9,000	32,500	Minimum Sale Price	3,000	14,000
Maximum Sale Price	289,500	225,000	Maximum Sale Price	485,000	1,275,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	94.9	94.4	Median Ratio	95.8	99.2
Lower Median Confidence Interval	92.7	39.6	Lower Median Confidence Interval	93.8	81.0
Upper Median Confidence Interval	100.9	105.4	Upper Median Confidence Interval	97.8	113.0
Broadened Median Ratio	95.6	90.2	Broadened Median Ratio	95.7	98.4
Coefficient of Dispersion (COD)	10.8	24.1	Coefficient of Dispersion (COD)	12.9	16.6
Lower COD Confidence Interval	7.9	11.5	Lower COD Confidence Interval	11.6	9.5
Upper COD Confidence Interval	15.3	69.7	Upper COD Confidence Interval	14.4	34.5
Value Weighted COD	8.7	25.7	Value Weighted COD	11.1	16.1
Coefficient of Concentration @10%	59.3	33.3	Coefficient of Concentration @10%	45.9	40.0
Coefficient of Concentration @15%	66.7	44.4	Coefficient of Concentration @15%	58.4	50.0
Coefficient of Concentration @20%	74.1	66.7	Coefficient of Concentration @20%	71.8	60.0
Coefficient of Concentration @50%	100.0	77.8	Coefficient of Concentration @50%	92.2	90.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	98.0	90.0
Coefficient of Interquartile Deviation	8.0	24.1	Coefficient of Interquartile Deviation	11.5	17.6
Median Percent Deviation	7.6	17.6	Median Percent Deviation	11.6	14.9
Lower Quartile (25 th Percentile)	88.5	57.6	Lower Quartile (25 th Percentile)	85.4	80.5
Upper Quartile (75 th Percentile)	103.6	103.0	Upper Quartile (75 th Percentile)	107.4	115.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	RejectK
Relative Skewness	-0.19	-0.35	Relative Skewness	0.23	-0.58
Relative Kurtosis	2.77	2.23	Relative Kurtosis	3.13	2.65
Arithmetic Mean Ratio	96.8	84.5	Arithmetic Mean Ratio	95.4	92.6
Weighted Mean Ratio	96.9	77.2	Weighted Mean Ratio	95.5	108.5
Geometric Mean Ratio	95.8	78.5	Geometric Mean Ratio	94.1	89.9
Harmonic Mean Ratio	94.8	71.7	Harmonic Mean Ratio	92.7	86.9
Standard Deviation	13.7	30.5	Standard Deviation	15.8	21.9
Coefficient of Variation (COV)	14.2	36.1	Coefficient of Variation (COV)	16.6	23.6
Price-Related Differential (PRD)	1.00	1.09	Price-Related Differential (PRD)	1.00	0.85
Lower PRD Confidence Interval	0.97	0.99	Lower PRD Confidence Interval	0.98	0.74
Upper PRD Confidence interval	1.03	1.38	Upper PRD Confidence interval	1.01	1.01
Coef. of Price-Related Bias (PRB)	0.03	-0.11	Coef. of Price-Related Bias (PRB)	-0.08	0.05
Lower PRB Confidence Interval	-0.03	-0.49	Lower PRB Confidence Interval	-0.13	-0.09
Upper PRB Confidence Interval	0.09	0.26	Upper PRB Confidence Interval	-0.02	0.19
Average Sale Price	125,660	111,778	Average Sale Price	137,259	298,500
Average Appraised Value	121,721	86,314	Average Appraised Value	131,140	323,983

Detailed Sample Statistics for the Residential and Commercial Subclasses

057 : MARION			058 : MARSHALL		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	127	18	Original Number of Sales	130	7
Trimmed Outliers	18	2	Trimmed Outliers	12	0
Number of Ratios: Outliers Removed	109	16	Number of Ratios: Outliers Removed	118	7
Minimum Ratio	32.0	10.8	Minimum Ratio	31.0	34.4
Maximum Ratio	4073.8	438.0	Maximum Ratio	376.0	107.4
Minimum Sale Price	1,000	6,500	Minimum Sale Price	3,000	20,000
Maximum Sale Price	434,000	350,000	Maximum Sale Price	440,000	300,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	95.1	123.4	Median Ratio	99.4	75.5
Lower Median Confidence Interval	92.2	96.5	Lower Median Confidence Interval	97.0	53.7
Upper Median Confidence Interval	99.5	163.2	Upper Median Confidence Interval	103.6	101.4
Broadened Median Ratio	95.4	119.0	Broadened Median Ratio	99.3	73.6
Coefficient of Dispersion (COD)	16.9	39.9	Coefficient of Dispersion (COD)	12.2	25.5
Lower COD Confidence Interval	14.3	26.7	Lower COD Confidence Interval	10.5	13.9
Upper COD Confidence Interval	20.1	66.8	Upper COD Confidence Interval	14.2	57.9
Value Weighted COD	14.7	33.1	Value Weighted COD	12.3	36.3
Coefficient of Concentration @10%	36.2	22.2	Coefficient of Concentration @10%	46.2	28.6
Coefficient of Concentration @15%	52.0	22.2	Coefficient of Concentration @15%	61.5	42.9
Coefficient of Concentration @20%	57.5	27.8	Coefficient of Concentration @20%	73.1	42.9
Coefficient of Concentration @50%	81.9	66.7	Coefficient of Concentration @50%	90.8	85.7
Coefficient of Concentration @100%	90.6	83.3	Coefficient of Concentration @100%	96.9	100.0
Coefficient of Interquartile Deviation	14.2	37.7	Coefficient of Interquartile Deviation	11.8	31.6
Median Percent Deviation	13.9	33.4	Median Percent Deviation	11.8	28.8
Lower Quartile (25 th Percentile)	81.8	92.0	Lower Quartile (25 th Percentile)	87.9	53.7
Upper Quartile (75 th Percentile)	108.8	185.0	Upper Quartile (75 th Percentile)	111.3	101.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.24	0.49	Relative Skewness	-0.07	-0.13
Relative Kurtosis	3.45	3.34	Relative Kurtosis	3.25	1.99
Arithmetic Mean Ratio	92.5	119.8	Arithmetic Mean Ratio	98.9	74.0
Weighted Mean Ratio	89.8	116.5	Weighted Mean Ratio	95.2	55.3
Geometric Mean Ratio	90.1	101.1	Geometric Mean Ratio	97.7	69.6
Harmonic Mean Ratio	87.5	69.2	Harmonic Mean Ratio	96.3	64.9
Standard Deviation	20.8	59.2	Standard Deviation	15.7	25.7
Coefficient of Variation (COV)	22.5	49.4	Coefficient of Variation (COV)	15.9	34.7
Price-Related Differential (PRD)	1.03	1.03	Price-Related Differential (PRD)	1.04	1.34
Lower PRD Confidence Interval	1.00	0.89	Lower PRD Confidence Interval	1.02	1.07
Upper PRD Confidence interval	1.06	1.31	Upper PRD Confidence interval	1.07	1.71
Coef. of Price-Related Bias (PRB)	-0.40	-0.02	Coef. of Price-Related Bias (PRB)	-0.16	-0.13
Lower PRB Confidence Interval	-0.95	-0.33	Lower PRB Confidence Interval	-0.21	-0.36
Upper PRB Confidence Interval	0.14	0.30	Upper PRB Confidence Interval	-0.11	0.09
Average Sale Price	101,659	79,142	Average Sale Price	99,757	101,429
Average Appraised Value	91,287	92,188	Average Appraised Value	95,018	56,073

Detailed Sample Statistics for the Residential and Commercial Subclasses

059 : MCPHERSON			060 : MEADE S-4		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	184	12	Original Number of Sales	39	5
Trimmed Outliers	14	0	Trimmed Outliers	4	0
Number of Ratios: Outliers Removed	170	12	Number of Ratios: Outliers Removed	35	5
Minimum Ratio	29.6	43.4	Minimum Ratio	32.0	36.3
Maximum Ratio	358.8	107.5	Maximum Ratio	818.0	151.4
Minimum Sale Price	10,000	20,500	Minimum Sale Price	2,000	18,000
Maximum Sale Price	455,000	1,500,000	Maximum Sale Price	235,000	115,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	98.3	88.5	Median Ratio	91.6	72.3
Lower Median Confidence Interval	97.2	58.1	Lower Median Confidence Interval	84.7	36.7
Upper Median Confidence Interval	99.7	98.7	Upper Median Confidence Interval	95.1	142.7
Broadened Median Ratio	98.4	87.7	Broadened Median Ratio	90.8	63.4
Coefficient of Dispersion (COD)	7.5	20.7	Coefficient of Dispersion (COD)	18.5	42.5
Lower COD Confidence Interval	6.6	11.3	Lower COD Confidence Interval	12.9	12.2
Upper COD Confidence Interval	8.4	38.5	Upper COD Confidence Interval	26.5	79.5
Value Weighted COD	7.2	34.9	Value Weighted COD	12.8	40.1
Coefficient of Concentration @10%	68.5	41.7	Coefficient of Concentration @10%	46.2	40.0
Coefficient of Concentration @15%	82.6	58.3	Coefficient of Concentration @15%	56.4	40.0
Coefficient of Concentration @20%	88.6	58.3	Coefficient of Concentration @20%	59.0	40.0
Coefficient of Concentration @50%	96.2	91.7	Coefficient of Concentration @50%	79.5	80.0
Coefficient of Concentration @100%	98.9	100.0	Coefficient of Concentration @100%	94.9	80.0
Coefficient of Interquartile Deviation	7.1	24.3	Coefficient of Interquartile Deviation	17.7	53.2
Median Percent Deviation	7.2	13.8	Median Percent Deviation	11.5	45.3
Lower Quartile (25 th Percentile)	90.7	56.6	Lower Quartile (25 th Percentile)	81.1	37.9
Upper Quartile (75 th Percentile)	104.7	99.6	Upper Quartile (75 th Percentile)	113.6	114.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.13	-0.53	Relative Skewness	0.92	0.92
Relative Kurtosis	3.18	1.76	Relative Kurtosis	3.90	2.51
Arithmetic Mean Ratio	97.6	79.9	Arithmetic Mean Ratio	94.0	75.6
Weighted Mean Ratio	97.4	59.8	Weighted Mean Ratio	87.9	54.8
Geometric Mean Ratio	97.2	76.5	Geometric Mean Ratio	91.1	65.7
Harmonic Mean Ratio	96.7	72.6	Harmonic Mean Ratio	88.2	58.1
Standard Deviation	9.3	22.9	Standard Deviation	24.5	46.4
Coefficient of Variation (COV)	9.6	28.6	Coefficient of Variation (COV)	26.0	61.4
Price-Related Differential (PRD)	1.00	1.34	Price-Related Differential (PRD)	1.07	1.38
Lower PRD Confidence Interval	1.00	1.19	Lower PRD Confidence Interval	1.03	1.06
Upper PRD Confidence interval	1.01	1.58	Upper PRD Confidence interval	1.13	1.62
Coef. of Price-Related Bias (PRB)	-0.11	-0.11	Coef. of Price-Related Bias (PRB)	-0.54	-0.38
Lower PRB Confidence Interval	-0.16	-0.18	Lower PRB Confidence Interval	-0.90	-1.33
Upper PRB Confidence Interval	-0.06	-0.04	Upper PRB Confidence Interval	-0.19	0.57
Average Sale Price	164,659	407,982	Average Sale Price	81,708	62,850
Average Appraised Value	160,301	243,868	Average Appraised Value	71,789	34,444

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	186	8	Original Number of Sales	72	5
Trimmed Outliers	19	0	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	167	8	Number of Ratios: Outliers Removed	66	5
Minimum Ratio	43.0	70.3	Minimum Ratio	47.5	18.1
Maximum Ratio	484.6	128.1	Maximum Ratio	298.0	107.1
Minimum Sale Price	9,000	65,000	Minimum Sale Price	4,500	12,250
Maximum Sale Price	675,000	384,000	Maximum Sale Price	310,000	65,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	90.9	93.1	Median Ratio	93.5	69.9
Lower Median Confidence Interval	89.0	77.0	Lower Median Confidence Interval	90.0	22.7
Upper Median Confidence Interval	92.3	116.4	Upper Median Confidence Interval	100.0	105.9
Broadened Median Ratio	90.8	93.8	Broadened Median Ratio	93.5	74.3
Coefficient of Dispersion (COD)	9.7	16.0	Coefficient of Dispersion (COD)	20.3	37.2
Lower COD Confidence Interval	8.5	10.4	Lower COD Confidence Interval	16.3	9.9
Upper COD Confidence Interval	11.1	26.6	Upper COD Confidence Interval	25.0	86.9
Value Weighted COD	9.2	15.6	Value Weighted COD	16.5	40.4
Coefficient of Concentration @10%	53.2	37.5	Coefficient of Concentration @10%	33.3	20.0
Coefficient of Concentration @15%	72.0	50.0	Coefficient of Concentration @15%	48.6	20.0
Coefficient of Concentration @20%	78.0	62.5	Coefficient of Concentration @20%	56.9	40.0
Coefficient of Concentration @50%	93.5	100.0	Coefficient of Concentration @50%	87.5	60.0
Coefficient of Concentration @100%	98.4	100.0	Coefficient of Concentration @100%	97.2	100.0
Coefficient of Interquartile Deviation	8.8	17.8	Coefficient of Interquartile Deviation	15.4	46.5
Median Percent Deviation	9.0	13.7	Median Percent Deviation	15.5	38.6
Lower Quartile (25 th Percentile)	82.4	79.8	Lower Quartile (25 th Percentile)	79.3	37.1
Upper Quartile (75 th Percentile)	98.4	112.9	Upper Quartile (75 th Percentile)	108.2	102.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptW
Relative Skewness	0.03	0.35	Relative Skewness	0.35	-0.42
Relative Kurtosis	3.64	2.10	Relative Kurtosis	2.79	1.93
Arithmetic Mean Ratio	89.4	96.1	Arithmetic Mean Ratio	92.2	69.6
Weighted Mean Ratio	90.1	98.7	Weighted Mean Ratio	86.0	64.1
Geometric Mean Ratio	88.6	94.4	Geometric Mean Ratio	88.8	59.3
Harmonic Mean Ratio	87.8	92.8	Harmonic Mean Ratio	85.3	46.7
Standard Deviation	11.7	19.3	Standard Deviation	24.9	35.3
Coefficient of Variation (COV)	13.0	20.1	Coefficient of Variation (COV)	27.1	50.7
Price-Related Differential (PRD)	0.99	0.97	Price-Related Differential (PRD)	1.07	1.09
Lower PRD Confidence Interval	0.98	0.95	Lower PRD Confidence Interval	1.03	0.92
Upper PRD Confidence interval	1.00	1.01	Upper PRD Confidence interval	1.13	1.45
Coef. of Price-Related Bias (PRB)	-0.11	0.11	Coef. of Price-Related Bias (PRB)	-0.07	-0.01
Lower PRB Confidence Interval	-0.18	-0.10	Lower PRB Confidence Interval	-0.15	-0.93
Upper PRB Confidence Interval	-0.05	0.31	Upper PRB Confidence Interval	0.01	0.91
Average Sale Price	251,537	166,000	Average Sale Price	102,395	39,350
Average Appraised Value	226,670	163,836	Average Appraised Value	88,073	25,236

Detailed Sample Statistics for the Residential and Commercial Subclasses

063 : MONTGOMERY			064 : MORRIS		
			<i>S-6</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	214	14	Original Number of Sales	54	9
Trimmed Outliers	25	0	Trimmed Outliers	8	0
Number of Ratios: Outliers Removed	189	14	Number of Ratios: Outliers Removed	46	9
Minimum Ratio	55.0	34.9	Minimum Ratio	27.7	40.2
Maximum Ratio	580.0	134.1	Maximum Ratio	495.2	168.3
Minimum Sale Price	4,000	13,000	Minimum Sale Price	5,000	2,000
Maximum Sale Price	413,000	418,000	Maximum Sale Price	335,000	238,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	95.0	91.1	Median Ratio	96.2	99.8
Lower Median Confidence Interval	90.5	64.8	Lower Median Confidence Interval	90.5	73.1
Upper Median Confidence Interval	98.2	113.7	Upper Median Confidence Interval	98.4	155.0
Broadened Median Ratio	95.1	88.4	Broadened Median Ratio	96.0	99.5
Coefficient of Dispersion (COD)	15.3	29.4	Coefficient of Dispersion (COD)	9.5	25.6
Lower COD Confidence Interval	13.6	19.6	Lower COD Confidence Interval	7.2	11.8
Upper COD Confidence Interval	17.4	46.1	Upper COD Confidence Interval	12.6	48.4
Value Weighted COD	12.0	31.1	Value Weighted COD	9.2	12.7
Coefficient of Concentration @10%	40.2	14.3	Coefficient of Concentration @10%	57.4	44.4
Coefficient of Concentration @15%	56.5	21.4	Coefficient of Concentration @15%	63.0	55.6
Coefficient of Concentration @20%	60.7	28.6	Coefficient of Concentration @20%	70.4	55.6
Coefficient of Concentration @50%	86.0	92.9	Coefficient of Concentration @50%	92.6	66.7
Coefficient of Concentration @100%	93.9	100.0	Coefficient of Concentration @100%	98.1	100.0
Coefficient of Interquartile Deviation	13.6	30.1	Coefficient of Interquartile Deviation	7.6	25.1
Median Percent Deviation	12.7	26.9	Median Percent Deviation	7.9	10.9
Lower Quartile (25 th Percentile)	83.1	63.4	Lower Quartile (25 th Percentile)	86.1	82.8
Upper Quartile (75 th Percentile)	109.0	118.2	Upper Quartile (75 th Percentile)	100.7	132.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptK
Relative Skewness	0.69	-0.02	Relative Skewness	-0.36	0.22
Relative Kurtosis	3.60	1.84	Relative Kurtosis	3.11	2.58
Arithmetic Mean Ratio	93.3	89.6	Arithmetic Mean Ratio	93.6	104.2
Weighted Mean Ratio	90.0	76.1	Weighted Mean Ratio	95.1	98.8
Geometric Mean Ratio	91.5	83.7	Geometric Mean Ratio	92.8	97.2
Harmonic Mean Ratio	89.8	77.4	Harmonic Mean Ratio	91.9	89.1
Standard Deviation	18.4	31.9	Standard Deviation	12.3	38.7
Coefficient of Variation (COV)	19.7	35.6	Coefficient of Variation (COV)	13.1	37.2
Price-Related Differential (PRD)	1.04	1.18	Price-Related Differential (PRD)	0.98	1.06
Lower PRD Confidence Interval	1.02	0.98	Lower PRD Confidence Interval	0.96	0.94
Upper PRD Confidence interval	1.06	1.64	Upper PRD Confidence interval	1.01	1.27
Coef. of Price-Related Bias (PRB)	-0.20	-0.08	Coef. of Price-Related Bias (PRB)	-0.05	0.00
Lower PRB Confidence Interval	-0.26	-0.23	Lower PRB Confidence Interval	-0.16	-0.17
Upper PRB Confidence Interval	-0.15	0.07	Upper PRB Confidence Interval	0.07	0.17
Average Sale Price	93,155	105,964	Average Sale Price	142,309	71,778
Average Appraised Value	83,842	80,639	Average Appraised Value	135,384	70,896

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	25	4	Original Number of Sales	93	6
Trimmed Outliers	3	0	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	22	4	Number of Ratios: Outliers Removed	88	6
Minimum Ratio	73.7	74.8	Minimum Ratio	36.7	76.8
Maximum Ratio	375.3	113.2	Maximum Ratio	517.5	121.6
Minimum Sale Price	10,000	23,000	Minimum Sale Price	3,000	25,000
Maximum Sale Price	221,500	89,280	Maximum Sale Price	400,000	1,050,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	103.9	101.2	Median Ratio	95.7	106.8
Lower Median Confidence Interval	96.2	76.0	Lower Median Confidence Interval	93.6	82.7
Upper Median Confidence Interval	123.3	112.7	Upper Median Confidence Interval	99.9	114.5
Broadened Median Ratio	103.3	98.8	Broadened Median Ratio	95.8	103.8
Coefficient of Dispersion (COD)	18.9	10.4	Coefficient of Dispersion (COD)	16.7	10.0
Lower COD Confidence Interval	13.7	2.3	Lower COD Confidence Interval	13.9	3.1
Upper COD Confidence Interval	29.9	18.1	Upper COD Confidence Interval	20.0	19.5
Value Weighted COD	17.0	11.0	Value Weighted COD	14.5	20.6
Coefficient of Concentration @10%	40.0	50.0	Coefficient of Concentration @10%	40.9	50.0
Coefficient of Concentration @15%	44.0	75.0	Coefficient of Concentration @15%	52.7	66.7
Coefficient of Concentration @20%	52.0	75.0	Coefficient of Concentration @20%	60.2	83.3
Coefficient of Concentration @50%	84.0	100.0	Coefficient of Concentration @50%	93.5	100.0
Coefficient of Concentration @100%	92.0	100.0	Coefficient of Concentration @100%	97.8	100.0
Coefficient of Interquartile Deviation	18.2	14.7	Coefficient of Interquartile Deviation	14.6	11.9
Median Percent Deviation	18.8	6.8	Median Percent Deviation	14.8	7.2
Lower Quartile (25 th Percentile)	93.8	80.9	Lower Quartile (25 th Percentile)	81.5	85.6
Upper Quartile (75 th Percentile)	131.7	110.7	Upper Quartile (75 th Percentile)	109.4	111.0
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	1.17	-0.70	Relative Skewness	0.06	-0.43
Relative Kurtosis	4.62	2.09	Relative Kurtosis	2.86	2.08
Arithmetic Mean Ratio	105.9	97.6	Arithmetic Mean Ratio	96.0	101.3
Weighted Mean Ratio	103.9	102.5	Weighted Mean Ratio	91.0	90.7
Geometric Mean Ratio	103.2	96.5	Geometric Mean Ratio	93.5	100.2
Harmonic Mean Ratio	100.7	95.3	Harmonic Mean Ratio	90.9	99.0
Standard Deviation	26.2	16.3	Standard Deviation	21.3	16.0
Coefficient of Variation (COV)	24.8	16.7	Coefficient of Variation (COV)	22.2	15.8
Price-Related Differential (PRD)	1.02	0.95	Price-Related Differential (PRD)	1.05	1.12
Lower PRD Confidence Interval	0.97	0.93	Lower PRD Confidence Interval	1.03	0.94
Upper PRD Confidence interval	1.10	1.00	Upper PRD Confidence interval	1.08	1.24
Coef. of Price-Related Bias (PRB)	-0.14	0.00	Coef. of Price-Related Bias (PRB)	-0.21	-0.02
Lower PRB Confidence Interval	-0.35	0.00	Lower PRB Confidence Interval	-0.30	-0.12
Upper PRB Confidence Interval	0.07	0.00	Upper PRB Confidence Interval	-0.12	0.07
Average Sale Price	88,462	46,195	Average Sale Price	120,398	290,417
Average Appraised Value	91,915	47,355	Average Appraised Value	109,562	263,432

Detailed Sample Statistics for the Residential and Commercial Subclasses

067 : NEOSHO			068 : NESS		
<i>S-10</i>			<i>S-7</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	87	13	Original Number of Sales	29	8
Trimmed Outliers	9	1	Trimmed Outliers	5	1
Number of Ratios: Outliers Removed	78	12	Number of Ratios: Outliers Removed	24	7
Minimum Ratio	35.0	8.5	Minimum Ratio	72.9	19.0
Maximum Ratio	337.9	325.4	Maximum Ratio	151.2	848.0
Minimum Sale Price	5,000	5,000	Minimum Sale Price	7,000	500
Maximum Sale Price	258,400	316,000	Maximum Sale Price	710,000	1,078,009
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	96.6	103.2	Median Ratio	99.2	69.7
Lower Median Confidence Interval	93.8	61.6	Lower Median Confidence Interval	95.1	58.2
Upper Median Confidence Interval	100.4	130.7	Upper Median Confidence Interval	102.6	100.6
Broadened Median Ratio	96.6	101.9	Broadened Median Ratio	98.4	69.8
Coefficient of Dispersion (COD)	14.8	35.4	Coefficient of Dispersion (COD)	6.5	25.4
Lower COD Confidence Interval	12.2	20.9	Lower COD Confidence Interval	4.8	12.7
Upper COD Confidence Interval	18.1	71.5	Upper COD Confidence Interval	9.8	144.1
Value Weighted COD	13.2	36.0	Value Weighted COD	6.3	17.6
Coefficient of Concentration @10%	40.2	15.4	Coefficient of Concentration @10%	65.5	25.0
Coefficient of Concentration @15%	49.4	23.1	Coefficient of Concentration @15%	75.9	25.0
Coefficient of Concentration @20%	67.8	30.8	Coefficient of Concentration @20%	79.3	62.5
Coefficient of Concentration @50%	89.7	76.9	Coefficient of Concentration @50%	96.6	75.0
Coefficient of Concentration @100%	95.4	92.3	Coefficient of Concentration @100%	100.0	87.5
Coefficient of Interquartile Deviation	14.1	38.2	Coefficient of Interquartile Deviation	5.7	26.8
Median Percent Deviation	15.8	40.0	Median Percent Deviation	5.4	16.5
Lower Quartile (25 th Percentile)	85.5	58.8	Lower Quartile (25 th Percentile)	93.0	58.4
Upper Quartile (75 th Percentile)	112.7	137.6	Upper Quartile (75 th Percentile)	104.3	95.7
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.26	-0.35	Relative Skewness	0.53	-0.59
Relative Kurtosis	3.31	2.22	Relative Kurtosis	4.06	3.03
Arithmetic Mean Ratio	97.2	92.7	Arithmetic Mean Ratio	98.2	65.3
Weighted Mean Ratio	91.8	80.1	Weighted Mean Ratio	97.8	63.5
Geometric Mean Ratio	95.2	76.8	Geometric Mean Ratio	97.8	59.3
Harmonic Mean Ratio	93.2	49.2	Harmonic Mean Ratio	97.5	50.8
Standard Deviation	19.3	43.7	Standard Deviation	8.5	25.1
Coefficient of Variation (COV)	19.8	47.1	Coefficient of Variation (COV)	8.6	38.5
Price-Related Differential (PRD)	1.06	1.16	Price-Related Differential (PRD)	1.00	1.03
Lower PRD Confidence Interval	1.03	0.98	Lower PRD Confidence Interval	0.99	0.86
Upper PRD Confidence interval	1.10	1.42	Upper PRD Confidence interval	1.02	1.29
Coef. of Price-Related Bias (PRB)	-0.19	-0.17	Coef. of Price-Related Bias (PRB)	-0.04	-0.97
Lower PRB Confidence Interval	-0.27	-0.48	Lower PRB Confidence Interval	-0.09	-2.16
Upper PRB Confidence Interval	-0.11	0.15	Upper PRB Confidence Interval	0.02	0.22
Average Sale Price	82,054	80,375	Average Sale Price	62,578	240,296
Average Appraised Value	75,302	64,384	Average Appraised Value	61,177	152,599

Detailed Sample Statistics for the Residential and Commercial Subclasses

069 : NORTON			070 : OSAGE		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	52	5	Original Number of Sales	207	16
Trimmed Outliers	2	0	Trimmed Outliers	22	0
Number of Ratios: Outliers Removed	50	5	Number of Ratios: Outliers Removed	185	16
Minimum Ratio	37.1	34.4	Minimum Ratio	20.7	44.9
Maximum Ratio	184.1	225.6	Maximum Ratio	701.6	215.7
Minimum Sale Price	5,000	5,000	Minimum Sale Price	4,200	15,000
Maximum Sale Price	500,000	850,000	Maximum Sale Price	544,000	1,623,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	99.3	83.4	Median Ratio	93.6	72.5
Lower Median Confidence Interval	92.1	35.8	Lower Median Confidence Interval	89.8	60.5
Upper Median Confidence Interval	103.4	213.0	Upper Median Confidence Interval	97.6	130.7
Broadened Median Ratio	99.1	83.1	Broadened Median Ratio	93.7	82.5
Coefficient of Dispersion (COD)	19.2	63.7	Coefficient of Dispersion (COD)	20.1	58.3
Lower COD Confidence Interval	14.8	18.5	Lower COD Confidence Interval	17.8	45.2
Upper COD Confidence Interval	24.6	120.7	Upper COD Confidence Interval	23.0	102.1
Value Weighted COD	19.4	51.9	Value Weighted COD	16.9	35.6
Coefficient of Concentration @10%	40.4	20.0	Coefficient of Concentration @10%	34.8	25.0
Coefficient of Concentration @15%	46.2	20.0	Coefficient of Concentration @15%	44.9	25.0
Coefficient of Concentration @20%	59.6	20.0	Coefficient of Concentration @20%	54.6	37.5
Coefficient of Concentration @50%	88.5	60.0	Coefficient of Concentration @50%	84.5	56.3
Coefficient of Concentration @100%	100.0	80.0	Coefficient of Concentration @100%	93.2	75.0
Coefficient of Interquartile Deviation	15.4	79.6	Coefficient of Interquartile Deviation	19.6	60.0
Median Percent Deviation	17.0	44.9	Median Percent Deviation	17.0	37.4
Lower Quartile (25 th Percentile)	81.0	40.1	Lower Quartile (25 th Percentile)	81.4	58.9
Upper Quartile (75 th Percentile)	111.5	172.9	Upper Quartile (75 th Percentile)	118.0	145.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	0.00	0.87	Relative Skewness	0.67	0.80
Relative Kurtosis	3.01	2.36	Relative Kurtosis	3.66	2.45
Arithmetic Mean Ratio	97.5	101.9	Arithmetic Mean Ratio	95.3	99.7
Weighted Mean Ratio	87.2	54.8	Weighted Mean Ratio	89.6	68.4
Geometric Mean Ratio	94.0	81.4	Geometric Mean Ratio	92.2	87.6
Harmonic Mean Ratio	89.8	66.1	Harmonic Mean Ratio	89.1	77.9
Standard Deviation	25.3	76.9	Standard Deviation	24.6	53.7
Coefficient of Variation (COV)	26.0	75.5	Coefficient of Variation (COV)	25.8	53.9
Price-Related Differential (PRD)	1.12	1.86	Price-Related Differential (PRD)	1.06	1.46
Lower PRD Confidence Interval	1.05	0.98	Lower PRD Confidence Interval	1.03	1.13
Upper PRD Confidence interval	1.22	3.02	Upper PRD Confidence interval	1.09	1.89
Coef. of Price-Related Bias (PRB)	-0.10	-0.32	Coef. of Price-Related Bias (PRB)	-0.29	-0.05
Lower PRB Confidence Interval	-0.15	-0.74	Lower PRB Confidence Interval	-0.37	-0.32
Upper PRB Confidence Interval	-0.05	0.10	Upper PRB Confidence Interval	-0.20	0.22
Average Sale Price	104,365	270,400	Average Sale Price	115,133	224,563
Average Appraised Value	91,058	148,110	Average Appraised Value	103,160	153,524

Detailed Sample Statistics for the Residential and Commercial Subclasses

071 : OSBORNE			072 : OTTAWA		
<i>S-2</i>			<i>S-4</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	30	4	Original Number of Sales	64	6
Trimmed Outliers	1	0	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	29	4	Number of Ratios: Outliers Removed	59	6
Minimum Ratio	41.6	54.2	Minimum Ratio	62.4	66.5
Maximum Ratio	161.3	209.1	Maximum Ratio	162.9	129.3
Minimum Sale Price	1,800	12,000	Minimum Sale Price	1,375	1,500
Maximum Sale Price	326,500	48,500	Maximum Sale Price	304,000	135,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	88.6	123.6	Median Ratio	98.3	97.5
Lower Median Confidence Interval	73.9	55.7	Lower Median Confidence Interval	92.0	79.1
Upper Median Confidence Interval	99.4	206.8	Upper Median Confidence Interval	100.9	114.4
Broadened Median Ratio	88.9	126.3	Broadened Median Ratio	98.4	96.9
Coefficient of Dispersion (COD)	22.1	47.6	Coefficient of Dispersion (COD)	11.6	12.2
Lower COD Confidence Interval	16.9	12.1	Lower COD Confidence Interval	9.3	2.9
Upper COD Confidence Interval	31.6	60.7	Upper COD Confidence Interval	14.2	31.8
Value Weighted COD	21.1	44.7	Value Weighted COD	11.2	15.0
Coefficient of Concentration @10%	26.7	0.0	Coefficient of Concentration @10%	43.8	66.7
Coefficient of Concentration @15%	33.3	0.0	Coefficient of Concentration @15%	59.4	66.7
Coefficient of Concentration @20%	50.0	0.0	Coefficient of Concentration @20%	78.1	66.7
Coefficient of Concentration @50%	86.7	50.0	Coefficient of Concentration @50%	96.9	100.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	20.8	55.1	Coefficient of Interquartile Deviation	10.0	11.1
Median Percent Deviation	20.4	44.4	Median Percent Deviation	11.7	4.0
Lower Quartile (25 th Percentile)	69.2	61.5	Lower Quartile (25 th Percentile)	86.4	85.3
Upper Quartile (75 th Percentile)	106.0	197.8	Upper Quartile (75 th Percentile)	106.1	106.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	AcceptW
Relative Skewness	0.15	0.11	Relative Skewness	0.14	0.15
Relative Kurtosis	2.80	1.34	Relative Kurtosis	2.98	2.90
Arithmetic Mean Ratio	86.8	127.6	Arithmetic Mean Ratio	95.3	97.0
Weighted Mean Ratio	83.1	105.7	Weighted Mean Ratio	92.0	83.9
Geometric Mean Ratio	83.3	111.5	Geometric Mean Ratio	94.3	95.2
Harmonic Mean Ratio	79.7	96.8	Harmonic Mean Ratio	93.2	93.4
Standard Deviation	24.1	71.4	Standard Deviation	14.2	20.0
Coefficient of Variation (COV)	27.7	56.0	Coefficient of Variation (COV)	14.9	20.7
Price-Related Differential (PRD)	1.04	1.21	Price-Related Differential (PRD)	1.04	1.16
Lower PRD Confidence Interval	0.96	1.03	Lower PRD Confidence Interval	1.02	1.05
Upper PRD Confidence interval	1.15	1.41	Upper PRD Confidence interval	1.06	1.50
Coef. of Price-Related Bias (PRB)	0.01	0.00	Coef. of Price-Related Bias (PRB)	-0.08	-0.09
Lower PRB Confidence Interval	-0.06	0.00	Lower PRB Confidence Interval	-0.11	-0.15
Upper PRB Confidence Interval	0.08	0.00	Upper PRB Confidence Interval	-0.04	-0.03
Average Sale Price	65,661	32,625	Average Sale Price	121,709	52,083
Average Appraised Value	54,557	34,470	Average Appraised Value	111,982	43,695

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	68	4	Original Number of Sales	39	8
Trimmed Outliers	9	0	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	59	4	Number of Ratios: Outliers Removed	38	8
Minimum Ratio	35.5	38.5	Minimum Ratio	55.4	29.7
Maximum Ratio	248.5	98.9	Maximum Ratio	256.9	100.2
Minimum Sale Price	8,000	67,000	Minimum Sale Price	15,000	22,500
Maximum Sale Price	225,000	275,000	Maximum Sale Price	239,000	700,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	99.9	76.7	Median Ratio	85.1	45.1
Lower Median Confidence Interval	96.0	39.5	Lower Median Confidence Interval	80.6	36.5
Upper Median Confidence Interval	102.4	98.7	Upper Median Confidence Interval	98.9	81.5
Broadened Median Ratio	100.0	74.0	Broadened Median Ratio	85.1	47.1
Coefficient of Dispersion (COD)	11.7	31.7	Coefficient of Dispersion (COD)	18.8	39.4
Lower COD Confidence Interval	9.1	8.5	Lower COD Confidence Interval	14.7	26.4
Upper COD Confidence Interval	15.2	42.4	Upper COD Confidence Interval	24.7	72.8
Value Weighted COD	10.6	30.8	Value Weighted COD	15.4	17.8
Coefficient of Concentration @10%	47.1	0.0	Coefficient of Concentration @10%	38.5	25.0
Coefficient of Concentration @15%	63.2	0.0	Coefficient of Concentration @15%	38.5	37.5
Coefficient of Concentration @20%	72.1	0.0	Coefficient of Concentration @20%	59.0	50.0
Coefficient of Concentration @50%	88.2	100.0	Coefficient of Concentration @50%	94.9	75.0
Coefficient of Concentration @100%	97.1	100.0	Coefficient of Concentration @100%	97.4	87.5
Coefficient of Interquartile Deviation	11.5	35.5	Coefficient of Interquartile Deviation	18.8	43.5
Median Percent Deviation	11.5	26.5	Median Percent Deviation	17.3	26.5
Lower Quartile (25 th Percentile)	88.5	43.5	Lower Quartile (25 th Percentile)	71.3	37.4
Upper Quartile (75 th Percentile)	111.4	98.0	Upper Quartile (75 th Percentile)	103.3	76.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	RejectK
Relative Skewness	-0.34	-0.21	Relative Skewness	0.63	0.86
Relative Kurtosis	4.13	1.30	Relative Kurtosis	3.29	2.38
Arithmetic Mean Ratio	98.4	72.7	Arithmetic Mean Ratio	88.0	55.0
Weighted Mean Ratio	98.8	63.5	Weighted Mean Ratio	85.9	47.3
Geometric Mean Ratio	96.9	67.8	Geometric Mean Ratio	85.7	50.8
Harmonic Mean Ratio	95.3	62.7	Harmonic Mean Ratio	83.5	47.4
Standard Deviation	16.5	29.2	Standard Deviation	20.9	24.5
Coefficient of Variation (COV)	16.8	40.2	Coefficient of Variation (COV)	23.8	44.6
Price-Related Differential (PRD)	1.00	1.15	Price-Related Differential (PRD)	1.02	1.16
Lower PRD Confidence Interval	0.97	1.00	Lower PRD Confidence Interval	0.98	0.99
Upper PRD Confidence interval	1.02	1.17	Upper PRD Confidence interval	1.08	1.49
Coef. of Price-Related Bias (PRB)	0.02	0.00	Coef. of Price-Related Bias (PRB)	-0.07	0.00
Lower PRB Confidence Interval	-0.06	0.00	Lower PRB Confidence Interval	-0.21	-0.36
Upper PRB Confidence Interval	0.11	0.00	Upper PRB Confidence Interval	0.07	0.37
Average Sale Price	74,422	136,125	Average Sale Price	84,841	129,813
Average Appraised Value	73,521	86,413	Average Appraised Value	72,914	61,350

Detailed Sample Statistics for the Residential and Commercial Subclasses

075 : POTTAWATOMIE			076 : PRATT S-3		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	373	10	Original Number of Sales	117	5
Trimmed Outliers	47	1	Trimmed Outliers	13	0
Number of Ratios: Outliers Removed	326	9	Number of Ratios: Outliers Removed	104	5
Minimum Ratio	7.7	45.0	Minimum Ratio	26.1	79.5
Maximum Ratio	442.9	489.4	Maximum Ratio	610.0	216.8
Minimum Sale Price	5,000	3,500	Minimum Sale Price	2,000	25,000
Maximum Sale Price	559,000	3,300,000	Maximum Sale Price	415,000	135,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	94.9	74.6	Median Ratio	99.4	86.0
Lower Median Confidence Interval	93.8	52.9	Lower Median Confidence Interval	97.5	79.9
Upper Median Confidence Interval	96.0	91.2	Upper Median Confidence Interval	102.8	201.5
Broadened Median Ratio	94.9	72.7	Broadened Median Ratio	99.4	86.0
Coefficient of Dispersion (COD)	8.0	24.0	Coefficient of Dispersion (COD)	10.3	33.3
Lower COD Confidence Interval	7.3	16.9	Lower COD Confidence Interval	8.7	2.1
Upper COD Confidence Interval	8.9	39.7	Upper COD Confidence Interval	12.4	63.0
Value Weighted COD	7.8	21.5	Value Weighted COD	9.6	13.1
Coefficient of Concentration @10%	61.4	0.0	Coefficient of Concentration @10%	54.7	80.0
Coefficient of Concentration @15%	74.0	40.0	Coefficient of Concentration @15%	68.4	80.0
Coefficient of Concentration @20%	80.4	40.0	Coefficient of Concentration @20%	73.5	80.0
Coefficient of Concentration @50%	93.3	90.0	Coefficient of Concentration @50%	92.3	80.0
Coefficient of Concentration @100%	98.9	90.0	Coefficient of Concentration @100%	94.9	80.0
Coefficient of Interquartile Deviation	7.5	24.1	Coefficient of Interquartile Deviation	9.2	41.7
Median Percent Deviation	7.4	27.5	Median Percent Deviation	9.0	3.6
Lower Quartile (25 th Percentile)	86.4	52.7	Lower Quartile (25 th Percentile)	90.2	81.2
Upper Quartile (75 th Percentile)	100.7	88.6	Upper Quartile (75 th Percentile)	108.5	153.0
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK	Normality Test	AcceptK	RejectW
Relative Skewness	-0.24	0.23	Relative Skewness	0.01	1.49
Relative Kurtosis	3.45	1.67	Relative Kurtosis	3.54	3.23
Arithmetic Mean Ratio	94.3	69.1	Arithmetic Mean Ratio	97.6	110.9
Weighted Mean Ratio	93.6	61.8	Weighted Mean Ratio	96.6	94.3
Geometric Mean Ratio	93.7	66.8	Geometric Mean Ratio	96.6	101.8
Harmonic Mean Ratio	93.1	64.6	Harmonic Mean Ratio	95.6	96.0
Standard Deviation	10.1	19.0	Standard Deviation	13.7	59.3
Coefficient of Variation (COV)	10.7	27.4	Coefficient of Variation (COV)	14.1	53.5
Price-Related Differential (PRD)	1.01	1.12	Price-Related Differential (PRD)	1.01	1.18
Lower PRD Confidence Interval	1.00	0.94	Lower PRD Confidence Interval	0.99	0.99
Upper PRD Confidence interval	1.01	1.38	Upper PRD Confidence interval	1.04	1.32
Coef. of Price-Related Bias (PRB)	-0.08	-0.58	Coef. of Price-Related Bias (PRB)	-0.22	-0.41
Lower PRB Confidence Interval	-0.12	-1.11	Lower PRB Confidence Interval	-0.33	-1.97
Upper PRB Confidence Interval	-0.04	-0.05	Upper PRB Confidence Interval	-0.11	1.14
Average Sale Price	231,249	613,778	Average Sale Price	102,336	71,400
Average Appraised Value	216,429	379,148	Average Appraised Value	98,844	67,360

Detailed Sample Statistics for the Residential and Commercial Subclasses

077 : RAWLIN			078 : RENO		
<i>S-4</i>					
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	10	4	Original Number of Sales	414	23
Trimmed Outliers	0	0	Trimmed Outliers	28	0
Number of Ratios: Outliers Removed	10	4	Number of Ratios: Outliers Removed	386	23
Minimum Ratio	50.3	59.4	Minimum Ratio	33.6	40.0
Maximum Ratio	118.8	103.6	Maximum Ratio	764.0	157.3
Minimum Sale Price	10,000	11,000	Minimum Sale Price	5,000	3,000
Maximum Sale Price	210,000	205,000	Maximum Sale Price	720,000	1,400,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	97.3	64.4	Median Ratio	93.0	103.3
Lower Median Confidence Interval	61.7	59.5	Lower Median Confidence Interval	91.5	74.5
Upper Median Confidence Interval	111.3	101.8	Upper Median Confidence Interval	94.5	114.0
Broadened Median Ratio	93.5	70.1	Broadened Median Ratio	93.1	103.4
Coefficient of Dispersion (COD)	22.5	18.7	Coefficient of Dispersion (COD)	10.6	27.5
Lower COD Confidence Interval	12.1	1.5	Lower COD Confidence Interval	9.8	19.9
Upper COD Confidence Interval	37.8	24.8	Upper COD Confidence Interval	11.6	43.2
Value Weighted COD	24.4	8.2	Value Weighted COD	10.7	28.7
Coefficient of Concentration @10%	30.0	75.0	Coefficient of Concentration @10%	53.4	26.1
Coefficient of Concentration @15%	40.0	75.0	Coefficient of Concentration @15%	68.6	39.1
Coefficient of Concentration @20%	40.0	75.0	Coefficient of Concentration @20%	79.0	39.1
Coefficient of Concentration @50%	100.0	75.0	Coefficient of Concentration @50%	95.9	87.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	99.3	100.0
Coefficient of Interquartile Deviation	25.5	26.5	Coefficient of Interquartile Deviation	9.6	32.1
Median Percent Deviation	21.1	5.4	Median Percent Deviation	9.2	31.0
Lower Quartile (25 th Percentile)	61.2	60.1	Lower Quartile (25 th Percentile)	82.4	71.2
Upper Quartile (75 th Percentile)	110.8	94.3	Upper Quartile (75 th Percentile)	100.3	137.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	Reject4	RejectW	Normality Test	RejectK	AcceptK
Relative Skewness	-0.27	1.09	Relative Skewness	-0.20	-0.05
Relative Kurtosis	1.42	2.28	Relative Kurtosis	3.11	1.94
Arithmetic Mean Ratio	88.1	73.0	Arithmetic Mean Ratio	91.9	100.5
Weighted Mean Ratio	79.8	62.5	Weighted Mean Ratio	90.8	91.9
Geometric Mean Ratio	84.2	71.1	Geometric Mean Ratio	91.0	94.0
Harmonic Mean Ratio	80.2	69.5	Harmonic Mean Ratio	90.0	86.9
Standard Deviation	26.3	20.7	Standard Deviation	12.7	34.9
Coefficient of Variation (COV)	29.8	28.3	Coefficient of Variation (COV)	13.8	34.8
Price-Related Differential (PRD)	1.10	1.17	Price-Related Differential (PRD)	1.01	1.09
Lower PRD Confidence Interval	1.01	1.01	Lower PRD Confidence Interval	1.00	0.90
Upper PRD Confidence interval	1.33	1.30	Upper PRD Confidence interval	1.03	1.28
Coef. of Price-Related Bias (PRB)	-0.11	0.00	Coef. of Price-Related Bias (PRB)	-0.06	0.02
Lower PRB Confidence Interval	-0.24	0.00	Lower PRB Confidence Interval	-0.10	-0.06
Upper PRB Confidence Interval	0.02	0.00	Upper PRB Confidence Interval	-0.02	0.10
Average Sale Price	101,150	78,875	Average Sale Price	143,060	181,648
Average Appraised Value	80,764	49,288	Average Appraised Value	129,829	166,907

Detailed Sample Statistics for the Residential and Commercial Subclasses

079 : REPUBLIC			080 : RICE		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	45	4	Original Number of Sales	115	6
Trimmed Outliers	3	0	Trimmed Outliers	12	1
Number of Ratios: Outliers Removed	42	4	Number of Ratios: Outliers Removed	103	5
Minimum Ratio	34.2	47.7	Minimum Ratio	19.9	43.7
Maximum Ratio	606.0	161.7	Maximum Ratio	755.2	332.5
Minimum Sale Price	1,000	2,500	Minimum Sale Price	1,000	10,500
Maximum Sale Price	395,000	36,500	Maximum Sale Price	395,000	555,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	97.6	80.0	Median Ratio	94.9	98.1
Lower Median Confidence Interval	85.5	48.3	Lower Median Confidence Interval	89.4	63.8
Upper Median Confidence Interval	103.0	158.5	Upper Median Confidence Interval	99.0	218.9
Broadened Median Ratio	97.4	88.2	Broadened Median Ratio	95.2	96.9
Coefficient of Dispersion (COD)	21.7	47.6	Coefficient of Dispersion (COD)	17.2	17.9
Lower COD Confidence Interval	16.7	9.7	Lower COD Confidence Interval	14.3	3.9
Upper COD Confidence Interval	28.9	56.4	Upper COD Confidence Interval	20.5	36.8
Value Weighted COD	18.4	54.3	Value Weighted COD	16.4	10.9
Coefficient of Concentration @10%	26.7	0.0	Coefficient of Concentration @10%	39.1	50.0
Coefficient of Concentration @15%	40.0	0.0	Coefficient of Concentration @15%	51.3	66.7
Coefficient of Concentration @20%	51.1	0.0	Coefficient of Concentration @20%	60.0	66.7
Coefficient of Concentration @50%	86.7	75.0	Coefficient of Concentration @50%	87.8	66.7
Coefficient of Concentration @100%	93.3	75.0	Coefficient of Concentration @100%	95.7	83.3
Coefficient of Interquartile Deviation	20.5	59.5	Coefficient of Interquartile Deviation	14.3	45.0
Median Percent Deviation	18.7	32.2	Median Percent Deviation	14.3	10.9
Lower Quartile (25 th Percentile)	74.1	51.0	Lower Quartile (25 th Percentile)	80.3	73.9
Upper Quartile (75 th Percentile)	114.1	146.0	Upper Quartile (75 th Percentile)	107.4	162.1
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW	Normality Test	RejectK	Reject3
Relative Skewness	0.35	0.62	Relative Skewness	0.05	-1.06
Relative Kurtosis	3.35	1.83	Relative Kurtosis	3.05	2.65
Arithmetic Mean Ratio	93.6	92.3	Arithmetic Mean Ratio	92.5	85.8
Weighted Mean Ratio	86.1	81.4	Weighted Mean Ratio	86.7	95.3
Geometric Mean Ratio	89.7	82.6	Geometric Mean Ratio	89.9	82.0
Harmonic Mean Ratio	85.4	74.5	Harmonic Mean Ratio	87.1	77.2
Standard Deviation	26.8	51.1	Standard Deviation	21.2	25.2
Coefficient of Variation (COV)	28.6	55.4	Coefficient of Variation (COV)	22.9	29.3
Price-Related Differential (PRD)	1.09	1.13	Price-Related Differential (PRD)	1.07	0.90
Lower PRD Confidence Interval	1.02	0.76	Lower PRD Confidence Interval	1.03	0.80
Upper PRD Confidence interval	1.18	1.32	Upper PRD Confidence interval	1.11	1.09
Coef. of Price-Related Bias (PRB)	-0.23	0.00	Coef. of Price-Related Bias (PRB)	-0.10	-0.17
Lower PRB Confidence Interval	-0.37	0.00	Lower PRB Confidence Interval	-0.21	-0.82
Upper PRB Confidence Interval	-0.08	0.00	Upper PRB Confidence Interval	0.01	0.48
Average Sale Price	70,985	14,625	Average Sale Price	91,960	236,000
Average Appraised Value	61,120	11,908	Average Appraised Value	79,705	224,988

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	494	9	Original Number of Sales	60	5
Trimmed Outliers	54	0	Trimmed Outliers	5	0
Number of Ratios: Outliers Removed	440	9	Number of Ratios: Outliers Removed	55	5
Minimum Ratio	2.1	35.0	Minimum Ratio	54.8	41.6
Maximum Ratio	211.8	135.6	Maximum Ratio	632.3	316.1
Minimum Sale Price	46,000	18,000	Minimum Sale Price	2,000	7,000
Maximum Sale Price	676,500	1,100,000	Maximum Sale Price	225,000	50,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	95.3	97.9	Median Ratio	94.9	223.0
Lower Median Confidence Interval	94.5	70.3	Lower Median Confidence Interval	86.3	60.5
Upper Median Confidence Interval	96.8	122.6	Upper Median Confidence Interval	105.3	305.9
Broadened Median Ratio	95.4	96.6	Broadened Median Ratio	95.6	217.9
Coefficient of Dispersion (COD)	6.9	21.8	Coefficient of Dispersion (COD)	25.0	27.5
Lower COD Confidence Interval	6.5	12.4	Lower COD Confidence Interval	20.6	5.0
Upper COD Confidence Interval	7.5	52.0	Upper COD Confidence Interval	32.2	151.8
Value Weighted COD	7.0	14.6	Value Weighted COD	18.2	30.9
Coefficient of Concentration @10%	66.4	33.3	Coefficient of Concentration @10%	25.0	40.0
Coefficient of Concentration @15%	80.8	55.6	Coefficient of Concentration @15%	35.0	60.0
Coefficient of Concentration @20%	85.6	55.6	Coefficient of Concentration @20%	40.0	60.0
Coefficient of Concentration @50%	96.8	88.9	Coefficient of Concentration @50%	85.0	80.0
Coefficient of Concentration @100%	99.8	100.0	Coefficient of Concentration @100%	91.7	100.0
Coefficient of Interquartile Deviation	6.3	19.6	Coefficient of Interquartile Deviation	26.8	34.4
Median Percent Deviation	6.2	13.4	Median Percent Deviation	22.3	10.6
Lower Quartile (25 th Percentile)	90.0	78.5	Lower Quartile (25 th Percentile)	74.9	120.5
Upper Quartile (75 th Percentile)	101.9	116.8	Upper Quartile (75 th Percentile)	125.7	273.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.18	-0.66	Relative Skewness	0.98	-0.74
Relative Kurtosis	3.00	2.97	Relative Kurtosis	3.51	2.60
Arithmetic Mean Ratio	95.7	94.6	Arithmetic Mean Ratio	98.2	202.3
Weighted Mean Ratio	95.3	87.2	Weighted Mean Ratio	88.9	177.1
Geometric Mean Ratio	95.4	89.1	Geometric Mean Ratio	94.2	168.3
Harmonic Mean Ratio	95.0	81.8	Harmonic Mean Ratio	90.6	121.8
Standard Deviation	8.4	29.7	Standard Deviation	29.8	100.1
Coefficient of Variation (COV)	8.8	31.4	Coefficient of Variation (COV)	30.4	49.5
Price-Related Differential (PRD)	1.01	1.09	Price-Related Differential (PRD)	1.11	1.14
Lower PRD Confidence Interval	1.00	0.93	Lower PRD Confidence Interval	1.05	0.99
Upper PRD Confidence interval	1.01	1.27	Upper PRD Confidence interval	1.18	1.35
Coef. of Price-Related Bias (PRB)	-0.05	-0.05	Coef. of Price-Related Bias (PRB)	-0.28	-0.07
Lower PRB Confidence Interval	-0.08	-0.19	Lower PRB Confidence Interval	-0.45	-0.83
Upper PRB Confidence Interval	-0.02	0.08	Upper PRB Confidence Interval	-0.12	0.70
Average Sale Price	218,786	456,278	Average Sale Price	75,087	29,400
Average Appraised Value	208,414	397,698	Average Appraised Value	66,717	52,066

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	40	6	Original Number of Sales	104	8
Trimmed Outliers	6	0	Trimmed Outliers	10	1
Number of Ratios: Outliers Removed	34	6	Number of Ratios: Outliers Removed	94	7
Minimum Ratio	21.8	63.2	Minimum Ratio	17.3	44.2
Maximum Ratio	332.0	570.0	Maximum Ratio	562.8	243.4
Minimum Sale Price	5,000	500	Minimum Sale Price	2,500	10,000
Maximum Sale Price	170,000	64,000	Maximum Sale Price	457,000	900,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	86.3	146.8	Median Ratio	87.6	80.3
Lower Median Confidence Interval	80.7	66.7	Lower Median Confidence Interval	82.6	44.4
Upper Median Confidence Interval	98.2	417.6	Upper Median Confidence Interval	92.3	123.5
Broadened Median Ratio	86.6	153.7	Broadened Median Ratio	87.3	82.6
Coefficient of Dispersion (COD)	18.6	90.3	Coefficient of Dispersion (COD)	17.8	43.9
Lower COD Confidence Interval	13.7	44.1	Lower COD Confidence Interval	14.9	27.2
Upper COD Confidence Interval	25.5	241.1	Upper COD Confidence Interval	21.7	75.4
Value Weighted COD	15.7	51.7	Value Weighted COD	14.4	33.0
Coefficient of Concentration @10%	30.0	0.0	Coefficient of Concentration @10%	36.5	0.0
Coefficient of Concentration @15%	42.5	0.0	Coefficient of Concentration @15%	48.1	0.0
Coefficient of Concentration @20%	52.5	0.0	Coefficient of Concentration @20%	62.5	0.0
Coefficient of Concentration @50%	77.5	33.3	Coefficient of Concentration @50%	86.5	75.0
Coefficient of Concentration @100%	90.0	83.3	Coefficient of Concentration @100%	94.2	87.5
Coefficient of Interquartile Deviation	19.4	93.0	Coefficient of Interquartile Deviation	15.5	46.9
Median Percent Deviation	18.9	54.6	Median Percent Deviation	15.7	44.8
Lower Quartile (25 th Percentile)	72.4	68.4	Lower Quartile (25 th Percentile)	72.0	47.1
Upper Quartile (75 th Percentile)	105.9	341.4	Upper Quartile (75 th Percentile)	99.1	122.3
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	AcceptK	RejectW	Normality Test	RejectK	Reject4
Relative Skewness	0.10	1.20	Relative Skewness	-0.47	0.33
Relative Kurtosis	3.43	3.07	Relative Kurtosis	2.97	1.40
Arithmetic Mean Ratio	85.6	210.3	Arithmetic Mean Ratio	83.3	78.1
Weighted Mean Ratio	83.9	93.7	Weighted Mean Ratio	84.0	61.0
Geometric Mean Ratio	82.7	153.3	Geometric Mean Ratio	80.6	71.8
Harmonic Mean Ratio	79.1	118.2	Harmonic Mean Ratio	77.5	66.2
Standard Deviation	21.8	192.9	Standard Deviation	19.6	34.4
Coefficient of Variation (COV)	25.5	91.7	Coefficient of Variation (COV)	23.5	44.0
Price-Related Differential (PRD)	1.02	2.24	Price-Related Differential (PRD)	0.99	1.28
Lower PRD Confidence Interval	0.97	1.34	Lower PRD Confidence Interval	0.96	1.05
Upper PRD Confidence interval	1.08	4.70	Upper PRD Confidence interval	1.04	1.65
Coef. of Price-Related Bias (PRB)	-0.21	-0.67	Coef. of Price-Related Bias (PRB)	-0.09	-0.37
Lower PRB Confidence Interval	-0.37	-0.95	Lower PRB Confidence Interval	-0.18	-0.72
Upper PRB Confidence Interval	-0.04	-0.40	Upper PRB Confidence Interval	0.00	-0.02
Average Sale Price	58,982	25,348	Average Sale Price	100,757	284,325
Average Appraised Value	49,497	23,748	Average Appraised Value	84,599	173,491

Detailed Sample Statistics for the Residential and Commercial Subclasses

085 : SALINE			086 : SCOTT		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	222	17	Original Number of Sales	52	7
Trimmed Outliers	22	0	Trimmed Outliers	3	0
Number of Ratios: Outliers Removed	200	17	Number of Ratios: Outliers Removed	49	7
Minimum Ratio	17.5	55.5	Minimum Ratio	23.1	31.2
Maximum Ratio	626.7	165.7	Maximum Ratio	161.6	76.5
Minimum Sale Price	11,000	18,000	Minimum Sale Price	13,000	14,000
Maximum Sale Price	670,000	1,850,000	Maximum Sale Price	472,500	148,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	93.8	106.7	Median Ratio	84.0	49.4
Lower Median Confidence Interval	91.9	84.4	Lower Median Confidence Interval	78.9	40.6
Upper Median Confidence Interval	95.9	130.3	Upper Median Confidence Interval	94.6	63.6
Broadened Median Ratio	94.0	104.4	Broadened Median Ratio	84.1	51.2
Coefficient of Dispersion (COD)	8.6	23.0	Coefficient of Dispersion (COD)	17.8	23.2
Lower COD Confidence Interval	7.8	16.0	Lower COD Confidence Interval	14.6	15.3
Upper COD Confidence Interval	9.8	34.4	Upper COD Confidence Interval	22.6	49.8
Value Weighted COD	8.2	27.6	Value Weighted COD	16.2	24.1
Coefficient of Concentration @10%	60.8	23.5	Coefficient of Concentration @10%	30.8	28.6
Coefficient of Concentration @15%	76.6	35.3	Coefficient of Concentration @15%	38.5	28.6
Coefficient of Concentration @20%	82.4	41.2	Coefficient of Concentration @20%	59.6	57.1
Coefficient of Concentration @50%	95.0	94.1	Coefficient of Concentration @50%	90.4	85.7
Coefficient of Concentration @100%	99.5	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	7.6	22.4	Coefficient of Interquartile Deviation	17.4	23.3
Median Percent Deviation	7.4	22.1	Median Percent Deviation	18.5	17.9
Lower Quartile (25 th Percentile)	87.7	82.9	Lower Quartile (25 th Percentile)	70.9	40.6
Upper Quartile (75 th Percentile)	102.0	130.8	Upper Quartile (75 th Percentile)	100.1	63.6
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	RejectK	AcceptW
Relative Skewness	0.29	0.17	Relative Skewness	0.18	0.25
Relative Kurtosis	3.24	2.31	Relative Kurtosis	2.96	2.14
Arithmetic Mean Ratio	93.8	105.7	Arithmetic Mean Ratio	85.6	52.2
Weighted Mean Ratio	93.1	93.9	Weighted Mean Ratio	81.6	50.1
Geometric Mean Ratio	93.3	101.4	Geometric Mean Ratio	83.4	50.3
Harmonic Mean Ratio	92.7	97.0	Harmonic Mean Ratio	81.2	48.4
Standard Deviation	10.3	30.3	Standard Deviation	19.0	15.1
Coefficient of Variation (COV)	10.9	28.7	Coefficient of Variation (COV)	22.2	29.0
Price-Related Differential (PRD)	1.01	1.13	Price-Related Differential (PRD)	1.05	1.04
Lower PRD Confidence Interval	1.00	0.93	Lower PRD Confidence Interval	1.01	0.94
Upper PRD Confidence interval	1.02	1.28	Upper PRD Confidence interval	1.11	1.21
Coef. of Price-Related Bias (PRB)	-0.13	0.00	Coef. of Price-Related Bias (PRB)	-0.04	0.03
Lower PRB Confidence Interval	-0.20	-0.09	Lower PRB Confidence Interval	-0.11	-0.27
Upper PRB Confidence Interval	-0.06	0.09	Upper PRB Confidence Interval	0.04	0.32
Average Sale Price	165,745	285,794	Average Sale Price	150,870	72,714
Average Appraised Value	154,294	268,238	Average Appraised Value	123,108	36,400

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	346	115	Original Number of Sales	173	17
Trimmed Outliers	28	7	Trimmed Outliers	18	0
Number of Ratios: Outliers Removed	318	108	Number of Ratios: Outliers Removed	155	17
Minimum Ratio	11.6	21.0	Minimum Ratio	13.1	26.1
Maximum Ratio	229.7	176.9	Maximum Ratio	1183.8	149.3
Minimum Sale Price	9,740	18,700	Minimum Sale Price	5,000	45,000
Maximum Sale Price	4,065,395	6,140,300	Maximum Sale Price	800,000	2,800,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	91.8	85.0	Median Ratio	97.3	77.0
Lower Median Confidence Interval	90.0	79.2	Lower Median Confidence Interval	96.1	52.3
Upper Median Confidence Interval	93.4	91.2	Upper Median Confidence Interval	99.0	94.1
Broadened Median Ratio	91.8	85.1	Broadened Median Ratio	97.3	75.9
Coefficient of Dispersion (COD)	9.9	19.1	Coefficient of Dispersion (COD)	11.0	32.2
Lower COD Confidence Interval	9.1	16.6	Lower COD Confidence Interval	9.5	21.9
Upper COD Confidence Interval	10.9	22.6	Upper COD Confidence Interval	12.7	53.3
Value Weighted COD	9.4	16.9	Value Weighted COD	9.7	31.0
Coefficient of Concentration @10%	56.1	25.2	Coefficient of Concentration @10%	52.6	23.5
Coefficient of Concentration @15%	72.3	40.0	Coefficient of Concentration @15%	65.9	29.4
Coefficient of Concentration @20%	79.5	62.6	Coefficient of Concentration @20%	74.0	35.3
Coefficient of Concentration @50%	94.2	88.7	Coefficient of Concentration @50%	91.9	76.5
Coefficient of Concentration @100%	98.6	98.3	Coefficient of Concentration @100%	97.7	100.0
Coefficient of Interquartile Deviation	8.8	16.4	Coefficient of Interquartile Deviation	9.4	32.5
Median Percent Deviation	8.8	16.2	Median Percent Deviation	9.2	32.1
Lower Quartile (25 th Percentile)	83.6	71.4	Lower Quartile (25 th Percentile)	90.2	49.7
Upper Quartile (75 th Percentile)	99.7	99.3	Upper Quartile (75 th Percentile)	108.6	99.8
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	RejectK	RejectK
Relative Skewness	-0.04	0.28	Relative Skewness	0.40	0.42
Relative Kurtosis	3.23	3.37	Relative Kurtosis	3.40	2.72
Arithmetic Mean Ratio	91.2	85.0	Arithmetic Mean Ratio	98.1	77.9
Weighted Mean Ratio	91.8	83.2	Weighted Mean Ratio	98.1	63.0
Geometric Mean Ratio	90.4	82.6	Geometric Mean Ratio	97.0	71.5
Harmonic Mean Ratio	89.6	79.9	Harmonic Mean Ratio	96.0	64.6
Standard Deviation	11.8	20.0	Standard Deviation	14.5	31.9
Coefficient of Variation (COV)	12.9	23.6	Coefficient of Variation (COV)	14.8	40.9
Price-Related Differential (PRD)	0.99	1.02	Price-Related Differential (PRD)	1.00	1.24
Lower PRD Confidence Interval	0.97	0.99	Lower PRD Confidence Interval	0.99	1.05
Upper PRD Confidence interval	1.01	1.06	Upper PRD Confidence interval	1.01	1.54
Coef. of Price-Related Bias (PRB)	-0.01	-0.02	Coef. of Price-Related Bias (PRB)	-0.28	-0.12
Lower PRB Confidence Interval	-0.04	-0.06	Lower PRB Confidence Interval	-0.45	-0.26
Upper PRB Confidence Interval	0.02	0.02	Upper PRB Confidence Interval	-0.12	0.02
Average Sale Price	188,509	598,557	Average Sale Price	138,381	503,576
Average Appraised Value	173,078	497,751	Average Appraised Value	135,734	317,115

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	290	55	Original Number of Sales	20	3
Trimmed Outliers	26	5	Trimmed Outliers	0	0
Number of Ratios: Outliers Removed	264	50	Number of Ratios: Outliers Removed	20	3
Minimum Ratio	32.1	15.9	Minimum Ratio	56.3	66.6
Maximum Ratio	432.5	522.9	Maximum Ratio	136.6	139.1
Minimum Sale Price	7,750	9,000	Minimum Sale Price	25,000	20,000
Maximum Sale Price	530,000	10,625,000	Maximum Sale Price	260,000	107,500
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	92.4	97.5	Median Ratio	95.2	76.2
Lower Median Confidence Interval	90.7	88.8	Lower Median Confidence Interval	81.8	67.2
Upper Median Confidence Interval	93.9	104.1	Upper Median Confidence Interval	107.4	134.9
Broadened Median Ratio	92.4	97.6	Broadened Median Ratio	95.1	93.9
Coefficient of Dispersion (COD)	9.8	19.9	Coefficient of Dispersion (COD)	16.7	31.7
Lower COD Confidence Interval	8.9	16.0	Lower COD Confidence Interval	12.2	4.2
Upper COD Confidence Interval	10.9	25.3	Upper COD Confidence Interval	24.4	31.7
Value Weighted COD	9.2	20.6	Value Weighted COD	16.4	20.1
Coefficient of Concentration @10%	53.8	27.3	Coefficient of Concentration @10%	35.0	33.3
Coefficient of Concentration @15%	72.4	43.6	Coefficient of Concentration @15%	40.0	66.7
Coefficient of Concentration @20%	80.0	50.9	Coefficient of Concentration @20%	65.0	66.7
Coefficient of Concentration @50%	94.5	85.5	Coefficient of Concentration @50%	100.0	66.7
Coefficient of Concentration @100%	97.9	98.2	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	9.0	17.9	Coefficient of Interquartile Deviation	16.9	47.6
Median Percent Deviation	9.1	17.2	Median Percent Deviation	16.4	12.6
Lower Quartile (25 th Percentile)	83.9	82.7	Lower Quartile (25 th Percentile)	78.8	66.6
Upper Quartile (75 th Percentile)	100.5	117.7	Upper Quartile (75 th Percentile)	111.0	139.1
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	AcceptW
Relative Skewness	0.25	0.20	Relative Skewness	0.00	0.66
Relative Kurtosis	3.34	2.91	Relative Kurtosis	2.58	1.50
Arithmetic Mean Ratio	91.8	98.0	Arithmetic Mean Ratio	94.2	93.9
Weighted Mean Ratio	91.3	86.8	Weighted Mean Ratio	92.7	77.7
Geometric Mean Ratio	91.0	94.7	Geometric Mean Ratio	92.1	89.0
Harmonic Mean Ratio	90.3	91.3	Harmonic Mean Ratio	89.9	84.9
Standard Deviation	11.6	25.0	Standard Deviation	20.0	39.4
Coefficient of Variation (COV)	12.7	25.5	Coefficient of Variation (COV)	21.2	41.9
Price-Related Differential (PRD)	1.00	1.13	Price-Related Differential (PRD)	1.02	1.21
Lower PRD Confidence Interval	0.99	1.00	Lower PRD Confidence Interval	0.97	1.01
Upper PRD Confidence interval	1.01	1.39	Upper PRD Confidence interval	1.10	1.25
Coef. of Price-Related Bias (PRB)	-0.13	0.04	Coef. of Price-Related Bias (PRB)	-0.03	0.00
Lower PRB Confidence Interval	-0.17	-0.05	Lower PRB Confidence Interval	-0.16	0.00
Upper PRB Confidence Interval	-0.09	0.13	Upper PRB Confidence Interval	0.10	0.00
Average Sale Price	158,840	898,019	Average Sale Price	114,801	49,833
Average Appraised Value	145,037	779,120	Average Appraised Value	106,399	38,707

Detailed Sample Statistics for the Residential and Commercial Subclasses

091 : SHERMAN			092 : SMITH		
<i>S-5</i>			<i>S-5</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	107	7	Original Number of Sales	29	8
Trimmed Outliers	10	0	Trimmed Outliers	2	0
Number of Ratios: Outliers Removed	97	7	Number of Ratios: Outliers Removed	27	8
Minimum Ratio	27.4	66.6	Minimum Ratio	14.4	39.0
Maximum Ratio	257.0	207.0	Maximum Ratio	133.3	211.6
Minimum Sale Price	9,500	30,000	Minimum Sale Price	5,000	1,765
Maximum Sale Price	280,000	1,750,000	Maximum Sale Price	191,000	45,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	88.3	90.7	Median Ratio	90.3	95.0
Lower Median Confidence Interval	83.4	67.0	Lower Median Confidence Interval	77.7	39.8
Upper Median Confidence Interval	92.5	141.7	Upper Median Confidence Interval	99.8	200.9
Broadened Median Ratio	88.2	94.6	Broadened Median Ratio	90.7	95.1
Coefficient of Dispersion (COD)	15.9	36.3	Coefficient of Dispersion (COD)	20.5	49.8
Lower COD Confidence Interval	13.4	19.6	Lower COD Confidence Interval	14.6	28.3
Upper COD Confidence Interval	19.2	89.7	Upper COD Confidence Interval	32.5	123.7
Value Weighted COD	14.4	31.4	Value Weighted COD	18.0	57.8
Coefficient of Concentration @10%	41.1	28.6	Coefficient of Concentration @10%	27.6	25.0
Coefficient of Concentration @15%	55.1	28.6	Coefficient of Concentration @15%	44.8	25.0
Coefficient of Concentration @20%	62.6	42.9	Coefficient of Concentration @20%	51.7	37.5
Coefficient of Concentration @50%	90.7	71.4	Coefficient of Concentration @50%	86.2	50.0
Coefficient of Concentration @100%	96.3	85.7	Coefficient of Concentration @100%	100.0	75.0
Coefficient of Interquartile Deviation	13.5	41.2	Coefficient of Interquartile Deviation	18.5	68.5
Median Percent Deviation	12.9	26.1	Median Percent Deviation	16.6	39.1
Lower Quartile (25 th Percentile)	74.8	67.0	Lower Quartile (25 th Percentile)	70.1	49.0
Upper Quartile (75 th Percentile)	98.7	141.7	Upper Quartile (75 th Percentile)	103.5	179.1
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	Reject3	Normality Test	RejectK	RejectK
Relative Skewness	-0.36	1.14	Relative Skewness	-0.72	0.62
Relative Kurtosis	2.79	3.07	Relative Kurtosis	3.76	2.03
Arithmetic Mean Ratio	84.3	109.5	Arithmetic Mean Ratio	88.3	109.0
Weighted Mean Ratio	83.8	86.3	Weighted Mean Ratio	87.2	116.8
Geometric Mean Ratio	82.3	101.4	Geometric Mean Ratio	83.1	92.1
Harmonic Mean Ratio	80.1	95.0	Harmonic Mean Ratio	75.1	77.4
Standard Deviation	17.5	50.0	Standard Deviation	25.8	65.6
Coefficient of Variation (COV)	20.8	45.7	Coefficient of Variation (COV)	29.2	60.2
Price-Related Differential (PRD)	1.01	1.27	Price-Related Differential (PRD)	1.01	0.93
Lower PRD Confidence Interval	0.99	0.95	Lower PRD Confidence Interval	0.92	0.77
Upper PRD Confidence interval	1.03	2.01	Upper PRD Confidence interval	1.12	1.11
Coef. of Price-Related Bias (PRB)	-0.12	-0.06	Coef. of Price-Related Bias (PRB)	0.06	0.19
Lower PRB Confidence Interval	-0.20	-0.37	Lower PRB Confidence Interval	-0.02	-0.15
Upper PRB Confidence Interval	-0.03	0.26	Upper PRB Confidence Interval	0.15	0.53
Average Sale Price	113,330	374,857	Average Sale Price	53,371	26,533
Average Appraised Value	94,986	323,347	Average Appraised Value	46,527	30,999

Detailed Sample Statistics for the Residential and Commercial Subclasses

093 : STAFFORD			094 : STANTON		
<i>S-5</i>			<i>S-5</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	41	6	Original Number of Sales	13	6
Trimmed Outliers	8	1	Trimmed Outliers	0	0
Number of Ratios: Outliers Removed	33	5	Number of Ratios: Outliers Removed	13	6
Minimum Ratio	40.9	91.4	Minimum Ratio	70.1	67.9
Maximum Ratio	297.5	166.9	Maximum Ratio	176.8	115.6
Minimum Sale Price	2,000	4,000	Minimum Sale Price	4,000	60,000
Maximum Sale Price	235,000	60,000	Maximum Sale Price	270,000	1,900,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	98.0	101.2	Median Ratio	94.8	100.9
Lower Median Confidence Interval	89.9	95.8	Lower Median Confidence Interval	82.9	76.4
Upper Median Confidence Interval	100.0	135.4	Upper Median Confidence Interval	100.6	113.1
Broadened Median Ratio	96.9	101.5	Broadened Median Ratio	93.4	99.8
Coefficient of Dispersion (COD)	8.1	2.7	Coefficient of Dispersion (COD)	22.8	14.5
Lower COD Confidence Interval	6.0	0.4	Lower COD Confidence Interval	10.9	8.3
Upper COD Confidence Interval	11.3	4.7	Upper COD Confidence Interval	38.4	26.0
Value Weighted COD	7.3	2.5	Value Weighted COD	11.3	15.4
Coefficient of Concentration @10%	58.5	83.3	Coefficient of Concentration @10%	46.2	50.0
Coefficient of Concentration @15%	68.3	83.3	Coefficient of Concentration @15%	61.5	66.7
Coefficient of Concentration @20%	70.7	83.3	Coefficient of Concentration @20%	69.2	83.3
Coefficient of Concentration @50%	85.4	83.3	Coefficient of Concentration @50%	76.9	100.0
Coefficient of Concentration @100%	95.1	100.0	Coefficient of Concentration @100%	100.0	100.0
Coefficient of Interquartile Deviation	8.0	10.7	Coefficient of Interquartile Deviation	20.6	15.5
Median Percent Deviation	8.2	1.8	Median Percent Deviation	12.6	12.1
Lower Quartile (25 th Percentile)	86.2	98.0	Lower Quartile (25 th Percentile)	82.6	80.6
Upper Quartile (75 th Percentile)	102.0	119.7	Upper Quartile (75 th Percentile)	121.7	111.9
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectA	Normality Test	RejectK	AcceptW
Relative Skewness	-0.90	-1.17	Relative Skewness	1.19	-0.55
Relative Kurtosis	2.90	2.90	Relative Kurtosis	3.02	1.95
Arithmetic Mean Ratio	93.1	99.6	Arithmetic Mean Ratio	104.5	96.8
Weighted Mean Ratio	93.9	100.5	Weighted Mean Ratio	92.5	87.5
Geometric Mean Ratio	92.6	99.5	Geometric Mean Ratio	100.4	95.2
Harmonic Mean Ratio	92.0	99.4	Harmonic Mean Ratio	97.0	93.5
Standard Deviation	9.9	4.8	Standard Deviation	33.3	18.2
Coefficient of Variation (COV)	10.6	4.8	Coefficient of Variation (COV)	31.9	18.8
Price-Related Differential (PRD)	0.99	0.99	Price-Related Differential (PRD)	1.13	1.11
Lower PRD Confidence Interval	0.96	0.98	Lower PRD Confidence Interval	1.02	1.00
Upper PRD Confidence interval	1.02	1.02	Upper PRD Confidence interval	1.30	1.23
Coef. of Price-Related Bias (PRB)	-0.13	-0.04	Coef. of Price-Related Bias (PRB)	-0.07	-0.03
Lower PRB Confidence Interval	-0.21	-0.29	Lower PRB Confidence Interval	-0.19	-0.16
Upper PRB Confidence Interval	-0.04	0.21	Upper PRB Confidence Interval	0.04	0.10
Average Sale Price	66,891	29,400	Average Sale Price	103,250	389,867
Average Appraised Value	62,780	29,550	Average Appraised Value	95,478	341,252

Detailed Sample Statistics for the Residential and Commercial Subclasses

095 : STEVENS			096 : SUMNER		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	111	8	Original Number of Sales	210	9
Trimmed Outliers	10	0	Trimmed Outliers	23	0
Number of Ratios: Outliers Removed	101	8	Number of Ratios: Outliers Removed	187	9
Minimum Ratio	42.7	49.6	Minimum Ratio	3.9	43.9
Maximum Ratio	173.1	124.6	Maximum Ratio	367.3	139.9
Minimum Sale Price	13,000	26,000	Minimum Sale Price	3,300	15,550
Maximum Sale Price	470,000	900,000	Maximum Sale Price	525,000	135,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	96.8	66.5	Median Ratio	93.5	86.0
Lower Median Confidence Interval	95.0	56.3	Lower Median Confidence Interval	90.1	55.7
Upper Median Confidence Interval	99.1	89.6	Upper Median Confidence Interval	96.4	117.8
Broadened Median Ratio	96.8	68.3	Broadened Median Ratio	93.4	90.2
Coefficient of Dispersion (COD)	8.3	25.2	Coefficient of Dispersion (COD)	15.8	26.3
Lower COD Confidence Interval	7.1	15.3	Lower COD Confidence Interval	14.1	17.0
Upper COD Confidence Interval	9.7	48.8	Upper COD Confidence Interval	18.1	58.5
Value Weighted COD	8.8	25.6	Value Weighted COD	13.9	28.4
Coefficient of Concentration @10%	59.5	37.5	Coefficient of Concentration @10%	41.0	22.2
Coefficient of Concentration @15%	76.6	37.5	Coefficient of Concentration @15%	51.0	22.2
Coefficient of Concentration @20%	84.7	50.0	Coefficient of Concentration @20%	61.0	55.6
Coefficient of Concentration @50%	96.4	87.5	Coefficient of Concentration @50%	86.7	88.9
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	91.4	100.0
Coefficient of Interquartile Deviation	7.5	22.5	Coefficient of Interquartile Deviation	14.9	26.5
Median Percent Deviation	7.7	19.1	Median Percent Deviation	14.5	18.5
Lower Quartile (25 th Percentile)	88.8	57.7	Lower Quartile (25 th Percentile)	79.2	64.3
Upper Quartile (75 th Percentile)	103.3	87.6	Upper Quartile (75 th Percentile)	107.0	109.9
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	AcceptK
Relative Skewness	0.07	1.14	Relative Skewness	0.01	0.11
Relative Kurtosis	3.17	3.35	Relative Kurtosis	3.25	2.26
Arithmetic Mean Ratio	96.0	74.6	Arithmetic Mean Ratio	91.1	89.2
Weighted Mean Ratio	94.6	72.0	Weighted Mean Ratio	89.6	93.5
Geometric Mean Ratio	95.4	71.7	Geometric Mean Ratio	89.0	84.4
Harmonic Mean Ratio	94.8	69.2	Harmonic Mean Ratio	86.8	79.4
Standard Deviation	10.3	24.0	Standard Deviation	18.7	29.9
Coefficient of Variation (COV)	10.8	32.2	Coefficient of Variation (COV)	20.6	33.5
Price-Related Differential (PRD)	1.01	1.04	Price-Related Differential (PRD)	1.02	0.95
Lower PRD Confidence Interval	1.00	0.89	Lower PRD Confidence Interval	1.00	0.83
Upper PRD Confidence interval	1.03	1.36	Upper PRD Confidence interval	1.04	1.14
Coef. of Price-Related Bias (PRB)	-0.09	-0.06	Coef. of Price-Related Bias (PRB)	-0.23	0.11
Lower PRB Confidence Interval	-0.13	-0.25	Lower PRB Confidence Interval	-0.29	-0.12
Upper PRB Confidence Interval	-0.04	0.13	Upper PRB Confidence Interval	-0.17	0.34
Average Sale Price	132,943	259,500	Average Sale Price	111,431	51,117
Average Appraised Value	125,778	186,823	Average Appraised Value	99,790	47,817

Detailed Sample Statistics for the Residential and Commercial Subclasses

097 : THOMAS			098 : TREGO		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	111	8	Original Number of Sales	46	4
Trimmed Outliers	10	0	Trimmed Outliers	6	0
Number of Ratios: Outliers Removed	101	8	Number of Ratios: Outliers Removed	40	4
Minimum Ratio	42.7	49.6	Minimum Ratio	50.1	49.6
Maximum Ratio	173.1	124.6	Maximum Ratio	427.6	86.1
Minimum Sale Price	13,000	26,000	Minimum Sale Price	5,000	20,000
Maximum Sale Price	470,000	900,000	Maximum Sale Price	245,000	2,700,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	96.8	66.5	Median Ratio	97.9	72.4
Lower Median Confidence Interval	95.0	56.3	Lower Median Confidence Interval	94.8	50.4
Upper Median Confidence Interval	99.1	89.6	Upper Median Confidence Interval	100.4	85.8
Broadened Median Ratio	96.8	68.3	Broadened Median Ratio	98.0	70.9
Coefficient of Dispersion (COD)	8.3	25.2	Coefficient of Dispersion (COD)	8.0	18.4
Lower COD Confidence Interval	7.0	15.2	Lower COD Confidence Interval	6.0	5.2
Upper COD Confidence Interval	9.7	48.8	Upper COD Confidence Interval	10.9	23.9
Value Weighted COD	8.8	25.6	Value Weighted COD	7.8	13.7
Coefficient of Concentration @10%	59.5	37.5	Coefficient of Concentration @10%	63.0	0.0
Coefficient of Concentration @15%	76.6	37.5	Coefficient of Concentration @15%	71.7	50.0
Coefficient of Concentration @20%	84.7	50.0	Coefficient of Concentration @20%	78.3	75.0
Coefficient of Concentration @50%	96.4	87.5	Coefficient of Concentration @50%	93.5	100.0
Coefficient of Concentration @100%	100.0	100.0	Coefficient of Concentration @100%	95.7	100.0
Coefficient of Interquartile Deviation	7.5	22.5	Coefficient of Interquartile Deviation	8.5	21.8
Median Percent Deviation	7.7	19.1	Median Percent Deviation	7.4	15.3
Lower Quartile (25 th Percentile)	88.8	57.7	Lower Quartile (25 th Percentile)	88.6	53.2
Upper Quartile (75 th Percentile)	103.3	87.6	Upper Quartile (75 th Percentile)	105.1	84.8
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	AcceptK	AcceptW
Relative Skewness	0.07	1.14	Relative Skewness	-0.06	-0.30
Relative Kurtosis	3.17	3.35	Relative Kurtosis	3.81	1.49
Arithmetic Mean Ratio	96.0	74.6	Arithmetic Mean Ratio	97.2	70.1
Weighted Mean Ratio	94.6	72.0	Weighted Mean Ratio	96.8	62.8
Geometric Mean Ratio	95.4	71.7	Geometric Mean Ratio	96.6	68.6
Harmonic Mean Ratio	94.8	69.2	Harmonic Mean Ratio	96.0	66.9
Standard Deviation	10.3	24.0	Standard Deviation	10.9	16.6
Coefficient of Variation (COV)	10.8	32.2	Coefficient of Variation (COV)	11.2	23.7
Price-Related Differential (PRD)	1.01	1.04	Price-Related Differential (PRD)	1.00	1.12
Lower PRD Confidence Interval	1.00	0.89	Lower PRD Confidence Interval	0.98	0.99
Upper PRD Confidence interval	1.03	1.35	Upper PRD Confidence interval	1.02	1.32
Coef. of Price-Related Bias (PRB)	-0.09	-0.06	Coef. of Price-Related Bias (PRB)	-0.25	0.00
Lower PRB Confidence Interval	-0.13	-0.25	Lower PRB Confidence Interval	-0.40	0.00
Upper PRB Confidence Interval	-0.04	0.13	Upper PRB Confidence Interval	-0.09	0.00
Average Sale Price	132,943	259,500	Average Sale Price	98,563	764,000
Average Appraised Value	125,778	186,823	Average Appraised Value	95,437	480,070

Detailed Sample Statistics for the Residential and Commercial Subclasses

099 : WABAUNSEE			100 : WALLACE		
<i>S-6</i>			<i>S-3</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	63	8	Original Number of Sales	8	3
Trimmed Outliers	5	0	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	58	8	Number of Ratios: Outliers Removed	7	3
Minimum Ratio	62.3	54.6	Minimum Ratio	69.9	67.8
Maximum Ratio	248.8	131.0	Maximum Ratio	327.4	92.2
Minimum Sale Price	7,000	10,000	Minimum Sale Price	5,000	15,500
Maximum Sale Price	530,000	90,000	Maximum Sale Price	130,000	85,000
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	92.0	92.5	Median Ratio	89.9	74.9
Lower Median Confidence Interval	84.3	74.9	Lower Median Confidence Interval	74.2	68.3
Upper Median Confidence Interval	95.0	108.2	Upper Median Confidence Interval	119.2	91.0
Broadened Median Ratio	91.6	94.0	Broadened Median Ratio	92.2	78.3
Coefficient of Dispersion (COD)	12.3	17.1	Coefficient of Dispersion (COD)	13.6	10.8
Lower COD Confidence Interval	10.1	9.0	Lower COD Confidence Interval	7.5	3.1
Upper COD Confidence Interval	15.2	34.7	Upper COD Confidence Interval	24.0	10.9
Value Weighted COD	11.5	17.3	Value Weighted COD	14.4	10.4
Coefficient of Concentration @10%	42.9	37.5	Coefficient of Concentration @10%	37.5	66.7
Coefficient of Concentration @15%	65.1	50.0	Coefficient of Concentration @15%	37.5	66.7
Coefficient of Concentration @20%	76.2	75.0	Coefficient of Concentration @20%	62.5	66.7
Coefficient of Concentration @50%	93.7	100.0	Coefficient of Concentration @50%	87.5	100.0
Coefficient of Concentration @100%	98.4	100.0	Coefficient of Concentration @100%	87.5	100.0
Coefficient of Interquartile Deviation	10.5	15.6	Coefficient of Interquartile Deviation	21.1	16.3
Median Percent Deviation	11.5	15.0	Median Percent Deviation	17.3	9.4
Lower Quartile (25 th Percentile)	81.0	78.5	Lower Quartile (25 th Percentile)	77.7	67.8
Upper Quartile (75 th Percentile)	100.4	107.3	Upper Quartile (75 th Percentile)	115.7	92.2
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	AcceptK	Normality Test	AcceptW	AcceptW
Relative Skewness	0.20	-0.10	Relative Skewness	0.42	0.46
Relative Kurtosis	2.91	2.71	Relative Kurtosis	2.20	1.50
Arithmetic Mean Ratio	88.9	93.4	Arithmetic Mean Ratio	90.9	78.3
Weighted Mean Ratio	87.9	92.8	Weighted Mean Ratio	90.7	81.3
Geometric Mean Ratio	87.8	90.8	Geometric Mean Ratio	89.6	77.6
Harmonic Mean Ratio	86.8	88.0	Harmonic Mean Ratio	88.3	77.0
Standard Deviation	13.9	22.8	Standard Deviation	17.0	12.5
Coefficient of Variation (COV)	15.6	24.4	Coefficient of Variation (COV)	18.8	16.0
Price-Related Differential (PRD)	1.01	1.01	Price-Related Differential (PRD)	1.00	0.96
Lower PRD Confidence Interval	0.99	0.95	Lower PRD Confidence Interval	0.98	0.94
Upper PRD Confidence interval	1.04	1.10	Upper PRD Confidence interval	1.07	1.01
Coef. of Price-Related Bias (PRB)	-0.11	0.04	Coef. of Price-Related Bias (PRB)	-0.68	0.00
Lower PRB Confidence Interval	-0.17	-0.20	Lower PRB Confidence Interval	-1.11	0.00
Upper PRB Confidence Interval	-0.04	0.27	Upper PRB Confidence Interval	-0.25	0.00
Average Sale Price	166,604	40,875	Average Sale Price	91,857	56,833
Average Appraised Value	146,391	37,919	Average Appraised Value	83,339	46,217

Detailed Sample Statistics for the Residential and Commercial Subclasses

101 : WASHINGTON S-4			102 : WICHITA S-5		
GENERAL STATISTICS	Residential	Comm./Ind	GENERAL STATISTICS	Residential	Comm./Ind
Original Number of Sales	31	8	Original Number of Sales	28	6
Trimmed Outliers	4	0	Trimmed Outliers	1	0
Number of Ratios: Outliers Removed	27	8	Number of Ratios: Outliers Removed	27	6
Minimum Ratio	48.7	58.2	Minimum Ratio	47.9	30.0
Maximum Ratio	134.6	204.4	Maximum Ratio	198.9	136.6
Minimum Sale Price	8,000	4,000	Minimum Sale Price	4,000	10,000
Maximum Sale Price	180,000	65,000	Maximum Sale Price	240,000	87,000
DISTRIBUTION FREE STATISTICS			DISTRIBUTION FREE STATISTICS		
Median Ratio	92.6	86.3	Median Ratio	81.9	101.4
Lower Median Confidence Interval	88.8	75.3	Lower Median Confidence Interval	74.9	60.2
Upper Median Confidence Interval	100.8	196.0	Upper Median Confidence Interval	86.1	130.4
Broadened Median Ratio	93.6	85.2	Broadened Median Ratio	81.6	103.4
Coefficient of Dispersion (COD)	10.8	40.2	Coefficient of Dispersion (COD)	15.2	25.6
Lower COD Confidence Interval	8.4	10.2	Lower COD Confidence Interval	10.9	11.5
Upper COD Confidence Interval	15.7	66.4	Upper COD Confidence Interval	21.3	111.7
Value Weighted COD	9.8	32.6	Value Weighted COD	14.1	30.4
Coefficient of Concentration @10%	51.6	50.0	Coefficient of Concentration @10%	46.4	33.3
Coefficient of Concentration @15%	64.5	62.5	Coefficient of Concentration @15%	53.6	50.0
Coefficient of Concentration @20%	77.4	62.5	Coefficient of Concentration @20%	67.9	50.0
Coefficient of Concentration @50%	100.0	75.0	Coefficient of Concentration @50%	96.4	83.3
Coefficient of Concentration @100%	100.0	75.0	Coefficient of Concentration @100%	96.4	100.0
Coefficient of Interquartile Deviation	9.3	53.8	Coefficient of Interquartile Deviation	14.1	25.6
Median Percent Deviation	8.8	11.0	Median Percent Deviation	11.7	16.6
Lower Quartile (25 th Percentile)	88.2	76.0	Lower Quartile (25 th Percentile)	71.9	75.4
Upper Quartile (75 th Percentile)	105.5	168.9	Upper Quartile (75 th Percentile)	95.0	127.2
PARAMETRIC STATISTICS			PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK	Normality Test	RejectK	AcceptW
Relative Skewness	0.27	1.06	Relative Skewness	0.36	-0.94
Relative Kurtosis	3.29	2.30	Relative Kurtosis	3.06	2.88
Arithmetic Mean Ratio	95.5	109.1	Arithmetic Mean Ratio	81.6	97.3
Weighted Mean Ratio	94.6	92.7	Weighted Mean Ratio	78.3	78.6
Geometric Mean Ratio	94.6	98.7	Geometric Mean Ratio	79.9	88.2
Harmonic Mean Ratio	93.8	91.1	Harmonic Mean Ratio	78.3	75.3
Standard Deviation	12.9	57.1	Standard Deviation	16.7	37.4
Coefficient of Variation (COV)	13.5	52.3	Coefficient of Variation (COV)	20.4	38.4
Price-Related Differential (PRD)	1.01	1.18	Price-Related Differential (PRD)	1.04	1.24
Lower PRD Confidence Interval	0.99	1.01	Lower PRD Confidence Interval	1.00	1.05
Upper PRD Confidence interval	1.03	1.51	Upper PRD Confidence interval	1.10	1.83
Coef. of Price-Related Bias (PRB)	0.03	0.04	Coef. of Price-Related Bias (PRB)	-0.07	-0.27
Lower PRB Confidence Interval	-0.03	-0.39	Lower PRB Confidence Interval	-0.16	-0.64
Upper PRB Confidence Interval	0.09	0.47	Upper PRB Confidence Interval	0.02	0.11
Average Sale Price	73,281	26,264	Average Sale Price	86,741	42,833
Average Appraised Value	69,337	24,359	Average Appraised Value	67,902	33,668

Detailed Sample Statistics for the Residential and Commercial Subclasses

103 : WILSON			104 : WOODSON		
			<i>S-5</i>		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind	<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	69	7	Original Number of Sales	24	7
Trimmed Outliers	6	1	Trimmed Outliers	1	1
Number of Ratios: Outliers Removed	63	6	Number of Ratios: Outliers Removed	23	6
Minimum Ratio	30.7	75.8	Minimum Ratio	64.4	40.8
Maximum Ratio	2565.0	940.0	Maximum Ratio	244.6	286.5
Minimum Sale Price	800	200	Minimum Sale Price	8,500	825
Maximum Sale Price	297,000	65,000	Maximum Sale Price	180,000	678,857
<i>DISTRIBUTION FREE STATISTICS</i>			<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	94.3	83.0	Median Ratio	99.1	91.7
Lower Median Confidence Interval	86.3	75.8	Lower Median Confidence Interval	87.9	67.2
Upper Median Confidence Interval	112.1	193.3	Upper Median Confidence Interval	110.9	112.4
Broadened Median Ratio	94.7	98.7	Broadened Median Ratio	98.5	91.1
Coefficient of Dispersion (COD)	31.6	34.5	Coefficient of Dispersion (COD)	16.3	27.0
Lower COD Confidence Interval	25.2	14.4	Lower COD Confidence Interval	11.7	16.0
Upper COD Confidence Interval	38.9	51.7	Upper COD Confidence Interval	23.3	57.1
Value Weighted COD	22.9	14.9	Value Weighted COD	15.7	19.5
Coefficient of Concentration @10%	18.8	57.1	Coefficient of Concentration @10%	33.3	14.3
Coefficient of Concentration @15%	33.3	57.1	Coefficient of Concentration @15%	50.0	14.3
Coefficient of Concentration @20%	40.6	57.1	Coefficient of Concentration @20%	66.7	28.6
Coefficient of Concentration @50%	75.4	57.1	Coefficient of Concentration @50%	91.7	71.4
Coefficient of Concentration @100%	87.0	71.4	Coefficient of Concentration @100%	95.8	85.7
Coefficient of Interquartile Deviation	32.0	70.8	Coefficient of Interquartile Deviation	15.5	24.7
Median Percent Deviation	27.0	8.7	Median Percent Deviation	15.3	22.7
Lower Quartile (25 th Percentile)	78.4	75.8	Lower Quartile (25 th Percentile)	83.7	67.2
Upper Quartile (75 th Percentile)	138.7	193.3	Upper Quartile (75 th Percentile)	114.4	112.4
<i>PARAMETRIC STATISTICS</i>			<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectW	Normality Test	RejectK	AcceptW
Relative Skewness	0.84	1.20	Relative Skewness	0.53	-0.30
Relative Kurtosis	3.54	2.86	Relative Kurtosis	3.40	1.85
Arithmetic Mean Ratio	101.8	106.8	Arithmetic Mean Ratio	97.8	82.3
Weighted Mean Ratio	93.2	88.8	Weighted Mean Ratio	94.7	68.9
Geometric Mean Ratio	94.7	99.9	Geometric Mean Ratio	95.6	77.9
Harmonic Mean Ratio	87.6	94.7	Harmonic Mean Ratio	93.5	73.0
Standard Deviation	39.2	47.1	Standard Deviation	21.2	27.4
Coefficient of Variation (COV)	38.5	44.1	Coefficient of Variation (COV)	21.7	33.3
Price-Related Differential (PRD)	1.09	1.20	Price-Related Differential (PRD)	1.03	1.19
Lower PRD Confidence Interval	1.03	1.01	Lower PRD Confidence Interval	1.00	1.01
Upper PRD Confidence interval	1.17	1.60	Upper PRD Confidence interval	1.08	1.69
Coef. of Price-Related Bias (PRB)	-0.58	-1.57	Coef. of Price-Related Bias (PRB)	-0.16	-0.03
Lower PRB Confidence Interval	-1.10	-2.39	Lower PRB Confidence Interval	-0.32	-0.39
Upper PRB Confidence Interval	-0.06	-0.74	Upper PRB Confidence Interval	0.00	0.34
Average Sale Price	73,063	47,167	Average Sale Price	63,185	132,447
Average Appraised Value	68,122	41,863	Average Appraised Value	59,840	91,287

Detailed Sample Statistics for the Residential and Commercial Subclasses

105 : WYANDOTTE		
<i>GENERAL STATISTICS</i>	Residential	Comm./Ind
Original Number of Sales	268	64
Trimmed Outliers	27	4
Number of Ratios: Outliers Removed	241	60
Minimum Ratio	36.7	7.8
Maximum Ratio	215.0	250.4
Minimum Sale Price	3,100	7,000
Maximum Sale Price	9,450,000	3,600,000
<i>DISTRIBUTION FREE STATISTICS</i>		
Median Ratio	91.4	92.8
Lower Median Confidence Interval	88.2	83.9
Upper Median Confidence Interval	94.1	104.0
Broadened Median Ratio	91.3	92.6
Coefficient of Dispersion (COD)	15.2	30.8
Lower COD Confidence Interval	13.6	24.5
Upper COD Confidence Interval	17.0	39.2
Value Weighted COD	11.0	38.1
Coefficient of Concentration @10%	42.9	23.4
Coefficient of Concentration @15%	53.4	32.8
Coefficient of Concentration @20%	65.7	42.2
Coefficient of Concentration @50%	88.4	76.6
Coefficient of Concentration @100%	97.8	93.8
Coefficient of Interquartile Deviation	13.2	29.9
Median Percent Deviation	13.9	28.8
Lower Quartile (25 th Percentile)	78.5	66.0
Upper Quartile (75 th Percentile)	102.6	121.5
<i>PARAMETRIC STATISTICS</i>		
Normality Test	RejectK	RejectK
Relative Skewness	-0.05	0.07
Relative Kurtosis	3.39	3.10
Arithmetic Mean Ratio	88.8	89.7
Weighted Mean Ratio	89.3	75.9
Geometric Mean Ratio	86.9	79.4
Harmonic Mean Ratio	84.8	61.4
Standard Deviation	17.8	36.8
Coefficient of Variation (COV)	20.0	41.0
Price-Related Differential (PRD)	0.99	1.18
Lower PRD Confidence Interval	0.98	1.01
Upper PRD Confidence interval	1.01	1.44
Coef. of Price-Related Bias (PRB)	-0.07	-0.02
Lower PRB Confidence Interval	-0.10	-0.09
Upper PRB Confidence Interval	-0.04	0.06
Average Sale Price	191,559	616,501
Average Appraised Value	170,988	468,118

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

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

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

INSTRUCTIONS FOR COMPLETING THE SALES VALIDATION QUESTIONNAIRE
One Part Form

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

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

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

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

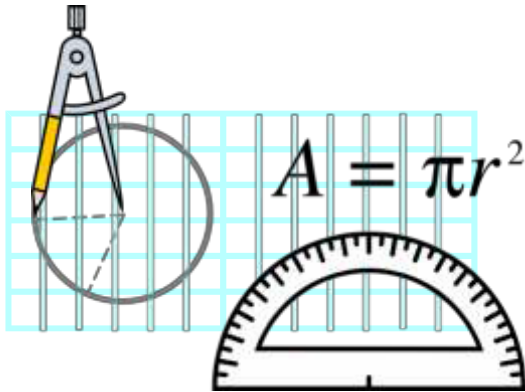
If you have any questions or need assistance completing this form, please call the county appraiser's office.

Section III

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 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 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

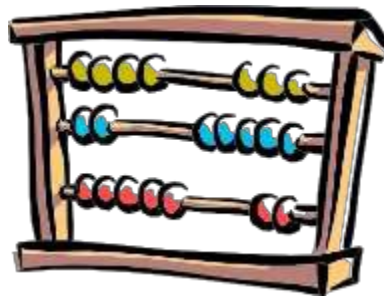
Example of odd numbered data set: 70.0 80.0, 90.0, 100.0, 120.0, 135.0, 143.0

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
Sum of Deviations			35.0

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

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

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.

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%**

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

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

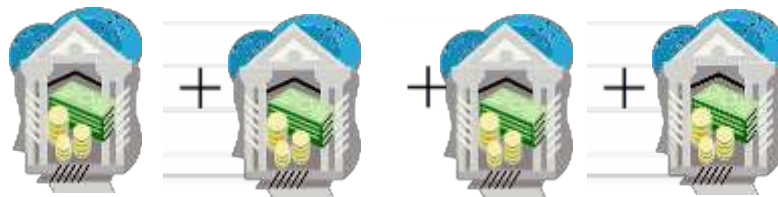
The value weighted mean ratio is the average of a sample of ratios where proportional weights have been assigned to the sales prices. The weighted mean ratio gives weight to each dollar of value in the sample whereas the median and mean give equal weight to each ratio. The weighted mean ratio is often 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*

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

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



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 n^{th} root of the result, where n equals the number of ratios in the sample*
2. *Find the n^{th} root of the product*

<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

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

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

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

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.

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



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 damage is greater when the sample sizes are small. One anomalous ratio can exert a controlling influence over a ratio study outcome and produce misleading information. Although extra steps have been taken in the sale verification and screening process to identify suspect sales; some suspect ratios may slip through. Uniform trimming procedures have been used to remove the influence of outlier ratios prior to calculating the following statistics and performance measures.

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

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

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

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

Determining Minimum Sample Size from Tolerance Limits

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

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

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

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

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

References:

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

Residential Sampling Counties

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

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

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

<i>Residential Sampling Counties 2020</i>					
<i>County</i>	<i>Sample Size</i>	<i>County</i>	<i>Sample Size</i>	<i>County</i>	<i>Sample Size</i>
<i>Butler</i>	<i>250</i>	<i>Lyon</i>	<i>200</i>	<i>Shawnee</i>	<i>300</i>
<i>Crawford</i>	<i>200</i>	<i>Miami</i>	<i>200</i>	<i>Wyandotte</i>	<i>300</i>
<i>Douglas</i>	<i>200</i>	<i>Reno</i>	<i>200</i>		
<i>Harvey</i>	<i>200</i>	<i>Riley</i>	<i>250</i>		
<i>Johnson</i>	<i>350</i>	<i>Saline</i>	<i>250</i>		
<i>Leavenworth</i>	<i>200</i>	<i>Sedgwick</i>	<i>350</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.

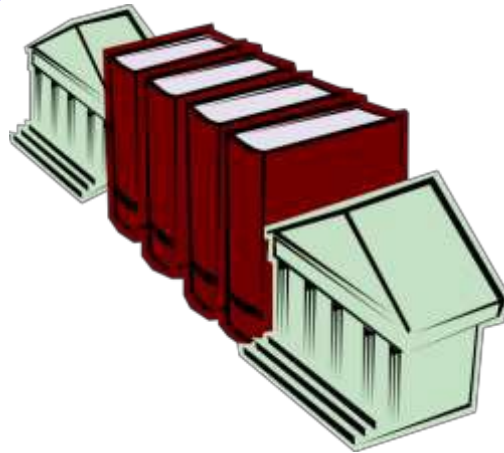
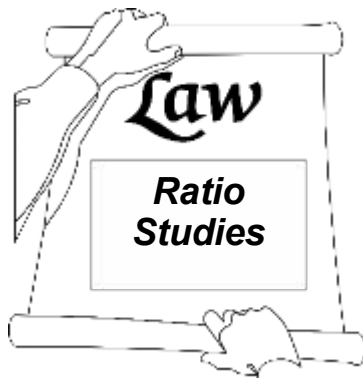
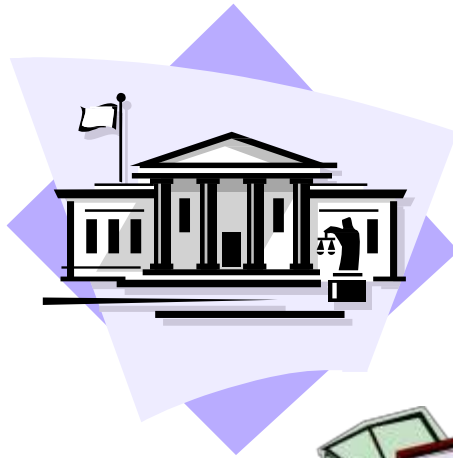
Supplemental Commercial/Industrial Sales

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, 2015 through December 31, 2018*) pursuant to K.S.A. 79-1488. Forty-six Kansas counties required supplemental sales for the commercial/industrial subclass for the year 2020. A total of 195 supplemental commercial sales have been included in the statistical analysis for the year 2020 ratio studies.

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

Section IV

Statutes, Directives and Administrative Regulations Pertaining to the Ratio Study



Kansas Statutes

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

79-1437g. Same; penalty for violations.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

79-1488 Same; authorities and duties of director.

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

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

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

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

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

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

79-1490 Same; publishing of study, when.

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

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

79-1491 Same; rules and regulations.

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

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

79-1492 Same; application of act.

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

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

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

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

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

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

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

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



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DIRECTIVE #14-046

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

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

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

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

Criteria and Standards

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

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

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

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

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

The Compliance Scorecard along with the points possible follows:

Compliance Scorecard - Example of total points possible

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

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

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

1. STATISTICAL MEASURES COMPLIANCE REVIEW (50 points)

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

The following is an example of the weighting procedure:

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

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

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

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

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

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

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

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

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

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

b. Appraisal Uniformity

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

For example:

COD: 18.0 95% Confidence interval: 13.0 to 22.0

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

COD: 30.0 95% Confidence interval: 22.0 to 38.0

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

COD: 22.0 95% Confidence interval: 17.0 to 26.0

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

c. Sample Size

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

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

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

d. Land Valuation Model Calibration (4 points)

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

e. Construction Cost Multiplier Analysis (4 points)

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

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

f. Depreciation Analysis (4 points)

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

g. Income Approach (4 points)

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

h. Comparable Sales Approach (4 points)

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

i. Final Review Process (4 points)

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

3. AGRICULTURAL USE VALUATION (2 points)

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

4. CADASTRAL MAPPING (2 points)

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

5. STATUTORY COMPLIANCE (10 points)

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

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

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

Approved: June 3, 2014

David N Harper

David N. Harper
Director of Property Valuation

APPENDIX A. Scoring Example

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

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

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

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

Compliance Scorecard

Example

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

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

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

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Mark A. Burghart, Secretary

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.

David N. Harper

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

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

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

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

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

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

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

- (a) On or after January 1 of the current appraisal year and before the creation of working files for the next appraisal year, enter the sales information on the parent parcel record in the county's computer-assisted mass appraisal system; or

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

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

(a) Not later than the 10th day of each month, the county appraiser shall assemble and enter into the county's computer-assisted mass appraisal system the sales data pertaining to property transfers that were recorded on or before the last day of the preceding month, as obtained from the real estate sales validation questionnaires received from the register of deeds.

(b) The county appraiser shall meet the following requirements:

(1) Account for all real estate sales validation questionnaires by entering sales information from all questionnaires into the database fields in the county's computer-assisted mass appraisal system;

(2) maintain in a void file those questionnaires that cannot be matched with a parcel of real estate, those that contain information that cannot be entered in the county's computer-assisted mass appraisal system, and those that were not required by K.S.A. 79-1437e and amendments thereto;

(3) electronically upload the recorded monthly sales data from the county's computer-assisted mass appraisal system to the current year's ratio study database at the division of property valuation, not later than the 15th day of the following month; and

(4) perform one of the following, not later than the 15th day of the following month:

(A) Submit the complete set of sales validation questionnaire documents recorded in the previous month to the director of property valuation or the director's agents; or

(B) electronically upload the complete set of recorded monthly sales as digital image files that meet specified file-naming conventions, resolution, and format standards to the sales validation questionnaire database at the division of property valuation. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1487 and 79-1488; effective June 26, 1998; amended Oct. 3, 2014.)

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

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

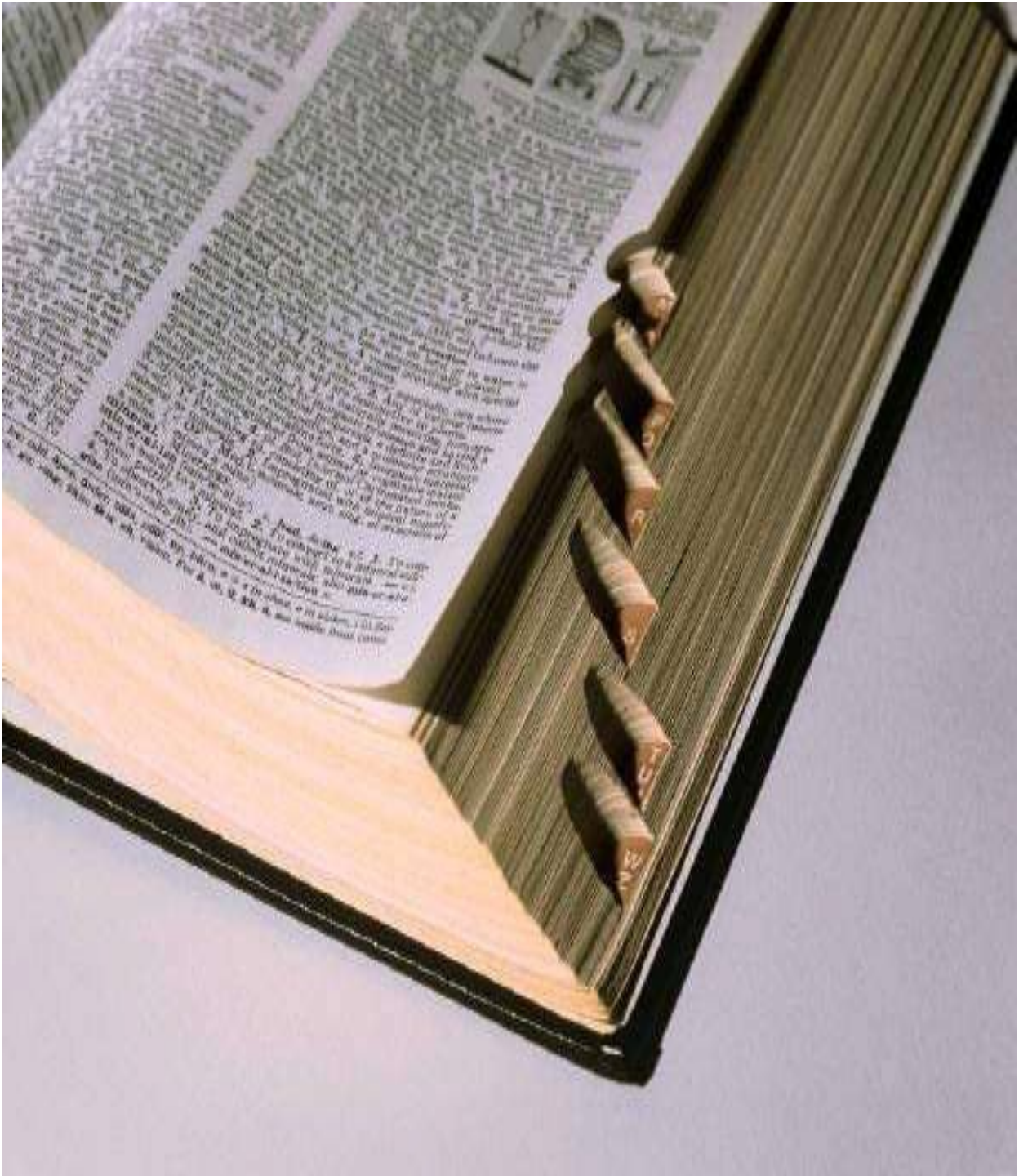
- (b) The county appraiser shall prepare and transmit the electronic assessment administration file of all appraised values to the director not later than three business days after the mailing of the annual valuation notices pursuant to K.S.A. 79-1460, and amendments thereto. (Authorized by K.S.A. 79-1491;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

93-4-6. Performance standards.

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

Section V

Glossary of Terms



Glossary*

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

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

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

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

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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