Division of Property Valuation

2015

Kansas Real Estate Ratio Study

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ABBREVIATIONS

Ag.	Agricultural
BMed.	Broadened Median Ratio
C/I	Commercial/Industrial
COD	Coefficient of Dispersion
Comm.	Commercial
COTA	Court of Tax Appeals
Ex.	Exempt
IAAO	International Association of Assessing Officers
Impr.	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 2015 Kansas Appraisal/Sales Ratio Study that is based upon real estate transfers occurring from January 1, 2015, through December 31, 2015. This study is conducted annually by the Kansas Department of Revenue, Division of Property Valuation for all 105 Kansas Counties.

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

Section 1

Year 2015

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 2015 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 L. 1992, ch. 249, §1. A copy of the Kansas Statutes and Directives is located in Section IV of this publication.

The study includes sales that are *valid* arm's-length transactions. Supplemental sales from the four prior years have been included for the commercial/industrial subclass if less than six valid commercial sales were available in the year 2015. In addition, the sales were trimmed of outliers prior to the computation of some statistical measures. A further explanation of the validation and trimming procedures are discussed in Section III of this publication.

In 1994, changes in statute permitted the use of a sampling process for the residential subclass of property in counties with a total parcel count in excess of 15,000 parcels. These counties must also have experienced at least 200 valid residential sales based on previous studies to be considered for sampling. The 2015 ratio study has used a representative sampling for those counties meeting the aforementioned 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, 2015, the date of appraisal, where inflation or deflationary market trends were identifiable and documented by the county.

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 statistical measures can be misleading because the ratios for agricultural land are combined with the ratios of all 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 shown in this effort. 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.

2015 Ratio Study Technical Advisory Committee		
Dr. John Boyer Prof. of Statistics 101 Dickens Hall Kansas State University Manhattan, KS 66506	Dr. Ronald L. Wasserstein Executive Director American Statistical Assn. 732 N Washington St. Alexandria, Virginia 22314-3402	Dr. Paul Byrne Assoc. Prof. of Economics Washburn University School of Business Henderson 310-P 1700 SW College Ave. Topeka, KS 66621

2015 County Appraiser's Ratio Study Committee		
Chairman:	Jerry Denny Gray County Appraiser	
Members:	Barry Porter Republic-Cloud County Appraiser	Truette McQueen Ottawa County Appraiser
	Judy Wallis Bourbon County Appraiser	

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

001 : ALLEN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.0	97.2 to 105.3	17.9	14.4 to 21.3	1.05	1.02 to 1.09	110	16
Comm./Ind.	75.3	62.5 to 100.0	20.3	10.0 to 24.3	1.03	0.93 to 1.13	10	0
Vacant Lot	132.1	N/A	74.3	N/A	1.90	N/A	10	0
Farm & Home	17.9	N/A	57.8	N/A	1.07	N/A	8	0
Ag. Land Only	7.4	N/A	26.5	N/A	0.96	N/A	14	1
Ag. (Impr.+ Land)	7.4	N/A	28.9	N/A	1.00	N/A	16	2
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	96.8	N/A	34.5	N/A	1.46	N/A	154	13
Total Market	100.0	N/A	19.8	N/A	1.07	N/A	130	18

002 : ANDERSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	105.2	102.2 to 111.2	19.7	14.4 to 25.0	1.10	1.06 to 1.17	73	7
Comm./Ind.	61.9	50.4 to 127.5	41.8	6.3 to 62.3	1.07	0.96 to 1.20	6	0
Vacant Lot	113.2	N/A	23.1	N/A	1.19	N/A	8	1
Farm & Home	60.3	N/A	33.5	N/A	1.04	N/A	10	1
Ag. Land Only	4.1	N/A	40.7	N/A	0.92	N/A	10	1
Ag. (Impr.+ Land)	4.5	N/A	62.2	N/A	0.98	N/A	11	0
Other/Ex/Ut/NP/M	171.0	N/A	39.5	N/A	1.44	N/A	2	0
Total w/Ag.&F&H	102.1	N/A	23.1	N/A	1.18	N/A	110	22
Total Market	105.0	N/A	15.5	N/A	1.06	N/A	89	17

003 : ATCHISON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	104.4	101.4 to 107.2	18.3	15.1 to 21.4	1.08	1.06 to 1.12	152	15
Comm./Ind.	99.1	78.0 to 117.2	14.2	5.9 to 22.1	1.14	1.03 to 1.32	10	1
Vacant Lot	213.3	N/A	39.2	N/A	1.18	N/A	3	0
Farm & Home	66.0	N/A	32.9	N/A	1.18	N/A	12	0
Ag. Land Only	5.5	N/A	47.3	N/A	0.87	N/A	6	0
Ag. (Impr.+ Land)	5.0	N/A	22.4	N/A	0.87	N/A	7	1
Other/Ex/Ut/NP/M	72.9	N/A	31.3	N/A	1.20	N/A	2	0
Total w/Ag.&F&H	101.7	N/A	17.3	N/A	1.11	N/A	186	31
Total Market	103.9	N/A	18.3	N/A	1.11	N/A	167	18

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales *T – Time Trended*

Median Ratio = 90.0 to 110.0 COD = 20.0 or Less PRD = .98 to 1.03

004 : BARBER COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	92.2	84.6 to 99.3	18.3	11.8 to 24.8	1.01	0.97 to 1.06	32	1
Comm./Ind. *S-5*	85.4	56.2 to 113.5	33.7	13.9 to 50.0	1.24	1.06 to 1.59	10	0
Vacant Lot							0	
Farm & Home	76.2	N/A	39.5	N/A	1.15	N/A	2	0
Ag. Land Only	3.0	N/A	100.5	N/A	0.84	N/A	4	0
Ag. (Impr.+ Land)	3.0	N/A	100.5	N/A	0.84	N/A	4	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	90.2	N/A	28.6	N/A	1.25	N/A	48	1
Total Market	92.2	N/A	21.5	N/A	1.05	N/A	42	1

005 : BARTON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.1	93.7 to 97.4	13.4	12.1 to 14.7	1.04	1.02 to 1.06	323	33
Comm./Ind.	82.9	72.6 to 93.1	27.0	14.8 to 37.9	1.06	0.94 to 1.24	19	1
Vacant Lot	104.5	N/A	30.0	N/A	1.18	N/A	10	1
Farm & Home	64.6	N/A	47.5	N/A	1.12	N/A	7	0
Ag. Land Only	11.0	N/A	23.8	N/A	0.94	N/A	7	1
Ag. (Impr.+ Land)	11.0	N/A	41.9	N/A	1.21	N/A	9	1
Other/Ex/Ut/NP/M	74.5	N/A	37.9	N/A	0.85	N/A	3	0
Total w/Ag.&F&H	94.4	N/A	14.8	N/A	1.04	N/A	371	47
Total Market	94.6	N/A	14.5	N/A	1.04	N/A	355	37

006 : BOURBON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.0	96.1 to 103.1	20.0	16.7 to 23.4	1.05	1.02 to 1.09	123	9
Comm./Ind.	93.4	82.1 to 195.2	37.5	8.3 to 59.2	1.05	0.95 to 1.24	9	0
Vacant Lot	66.3	N/A	76.3	N/A	1.71	N/A	24	4
Farm & Home	40.4	N/A	58.1	N/A	1.24	N/A	17	1
Ag. Land Only	2.7	N/A	69.7	N/A	1.01	N/A	21	0
Ag. (Impr.+ Land)	2.9	N/A	63.6	N/A	1.00	N/A	26	1
Other/Ex/Ut/NP/M	70.9	N/A	53.9	N/A	1.79	N/A	2	0
Total w/Ag.&F&H	91.6	N/A	41.2	N/A	1.33	N/A	201	14
Total Market	98.6	N/A	23.3	N/A	1.07	N/A	158	20

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

007 : BROWN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	107.7	100.8 to 116.8	32.7	25.6 to 39.6	1.22	1.15 to 1.32	111	12
Comm./Ind.	113.7	97.0 to 129.0	13.0	5.3 to 20.9	0.95	0.87 to 1.19	10	1
Vacant Lot	105.2	N/A	24.4	N/A	2.01	N/A	3	0
Farm & Home	68.1	N/A	61.5	N/A	1.20	N/A	9	1
Ag. Land Only	8.4	N/A	34.2	N/A	0.92	N/A	13	0
Ag. (Impr.+ Land)	8.8	N/A	37.8	N/A	0.99	N/A	16	0
Other/Ex/Ut/NP/M	117.7	N/A	365.8	N/A	4.44	N/A	5	0
Total w/Ag.&F&H	100.9	N/A	39.5	N/A	1.69	N/A	154	15
Total Market	108.6	N/A	28.6	N/A	1.16	N/A	129	15

008 : BUTLER COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.1	94.9 to 98.5	10.2	9.0 to 11.4	1.00	0.97 to 1.03	251	30
Comm./Ind.	110.7	89.7 to 128.2	24.0	14.8 to 33.1	1.14	1.04 to 1.32	20	0
Vacant Lot	55.0	N/A	72.7	N/A	1.03	N/A	84	2
Farm & Home	64.5	N/A	32.0	N/A	1.08	N/A	41	4
Ag. Land Only	1.6	N/A	54.7	N/A	0.91	N/A	28	3
Ag. (Impr.+ Land)	1.6	N/A	55.3	N/A	0.90	N/A	32	4
Other/Ex/Ut/NP/M	144.5	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	91.8	N/A	31.2	N/A	1.05	N/A	429	30
Total Market	94.7	N/A	14.1	N/A	1.00	N/A	356	70

009 : CHASE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.9	86.2 to 101.5	16.4	9.9 to 22.1	1.06	1.00 to 1.15	24	3
Comm./Ind. *S-6*	95.9	66.4 to 127.4	21.3	8.8 to 31.8	0.96	0.84 to 1.06	8	1
Vacant Lot	75.0	N/A	.	N/A	1.00	N/A	2	0
Farm & Home	92.8	N/A		N/A		N/A	1	0
Ag. Land Only	6.2	N/A		N/A		N/A	1	0
Ag. (Impr.+ Land)	6.2	N/A		N/A		N/A	1	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	91.9	N/A	17.1	N/A	1.03	N/A	36	5
Total Market	92.7	N/A	17.6	N/A	1.03	N/A	34	4

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

010 : CHAUTAUQUA COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.7	86.3 to 113.7	25.4	17.6 to 33.3	1.10	1.00 to 1.24	28	0
Comm./Ind. *S-10*	96.6	86.9 to 128.0	21.8	10.3 to 31.0	1.03	0.94 to 1.21	11	1
Vacant Lot	102.2	N/A	21.6	N/A	0.84	N/A	3	0
Farm & Home	33.2	N/A	71.1	N/A	1.49	N/A	11	0
Ag. Land Only	2.4	N/A	33.4	N/A	1.11	N/A	5	0
Ag. (Impr.+ Land)	2.7	N/A	43.6	N/A	1.10	N/A	7	0
Other/Ex/Ut/NP/M	124.6	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	87.0	N/A	42.1	N/A	2.06	N/A	61	1
Total Market	98.9	N/A	22.9	N/A	1.04	N/A	43	2

011 : CHEROKEE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	106.1	100.6 to 109.7	20.0	16.0 to 23.7	1.05	1.02 to 1.09	112	14
Comm./Ind. *S-6*	82.0	66.7 to 124.0	33.7	15.5 to 48.5	0.69	0.61 to 1.15	11	0
Vacant Lot	59.0	N/A	116.0	N/A	11.63	N/A	10	1
Farm & Home	52.2	N/A	52.6	N/A	1.06	N/A	14	1
Ag. Land Only	7.9	N/A	38.3	N/A	0.77	N/A	10	0
Ag. (Impr.+ Land)	7.8	N/A	38.3	N/A	0.81	N/A	13	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	99.1	N/A	35.1	N/A	1.08	N/A	160	15
Total Market	101.9	N/A	24.4	N/A	0.97	N/A	133	16

012 : CHEYENNE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.2	93.5 to 104.8	13.6	8.7 to 18.6	0.99	0.94 to 1.05	39	7
Comm./Ind. *S-6*	80.8	50.8 to 103.3	29.9	11.7 to 47.8	2.00	1.02 to 2.62	8	0
Vacant Lot	37.8	N/A		N/A		N/A	1	0
Farm & Home							0	
Ag. Land Only	4.7	N/A	20.9	N/A	0.93	N/A	6	0
Ag. (Impr.+ Land)	4.7	N/A	20.9	N/A	0.93	N/A	6	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	93.6	N/A	29.9	N/A	1.77	N/A	54	4
Total Market	94.2	N/A	16.1	N/A	0.98	N/A	48	8

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

013 : CLARK COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	93.5	81.9 to 107.1	19.1	11.5 to 25.4	1.01	0.95 to 1.11	19	1
Comm./Ind. *S-7*	93.9	58.7 to 117.8	26.4	9.6 to 43.9	1.24	1.04 to 1.56	8	0
Vacant Lot	48.6	N/A	12.0	N/A	1.01	N/A	2	0
Farm & Home	74.0	N/A	9.6	N/A	1.04	N/A	2	0
Ag. Land Only	6.6	N/A	32.6	N/A	0.89	N/A	6	0
Ag. (Impr.+ Land)	6.9	N/A	32.6	N/A	0.89	N/A	7	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	82.3	N/A	36.4	N/A	1.39	N/A	38	1
Total Market	89.3	N/A	23.9	N/A	1.01	N/A	29	1

014 : CLAY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.5	92.7 to 104.3	13.4	10.2 to 16.7	1.02	1.00 to 1.04	64	7
Comm./Ind. *S-3*	90.0	67.5 to 142.2	32.7	10.0 to 50.8	1.02	0.90 to 1.14	7	0
Vacant Lot	26.6	N/A		N/A		N/A	1	0
Farm & Home	30.0	N/A	41.3	N/A	1.35	N/A	2	0
Ag. Land Only	8.0	N/A	31.7	N/A	0.85	N/A	7	0
Ag. (Impr.+ Land)	8.0	N/A	31.7	N/A	0.85	N/A	7	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	93.0	N/A	16.3	N/A	1.01	N/A	81	16
Total Market	97.0	N/A	14.7	N/A	1.01	N/A	72	9

015 : CLOUD COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	90.7	86.0 to 96.0	18.2	14.6 to 21.6	1.05	1.01 to 1.10	106	13
Comm./Ind.	85.4	60.9 to 136.7	30.5	12.8 to 47.4	1.26	1.05 to 1.71	9	0
Vacant Lot	100.3	N/A	44.3	N/A	1.60	N/A	6	0
Farm & Home	74.9	N/A	12.6	N/A	0.97	N/A	4	0
Ag. Land Only	7.0	N/A	18.9	N/A	1.05	N/A	6	0
Ag. (Impr.+ Land)	6.6	N/A	26.7	N/A	0.98	N/A	8	0
Other/Ex/Ut/NP/M	199.6	N/A	59.8	N/A	1.69	N/A	2	0
Total w/Ag.&F&H	88.0	N/A	19.2	N/A	1.08	N/A	135	25
Total Market	90.5	N/A	19.0	N/A	1.08	N/A	123	17

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

016 : COFFEY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	94.8	90.7 to 98.7	12.6	10.1 to 14.9	1.00	0.98 to 1.03	89	10
Comm./Ind. *S-5*	71.7	51.2 to 112.1	39.5	15.7 to 54.6	0.87	0.76 to 1.04	9	0
Vacant Lot	52.2	N/A	39.7	N/A	1.08	N/A	10	0
Farm & Home	31.0	N/A	77.6	N/A	0.83	N/A	4	0
Ag. Land Only	5.4	N/A	51.5	N/A	1.12	N/A	13	0
Ag. (Impr.+ Land)	5.3	N/A	50.7	N/A	1.10	N/A	14	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	89.4	N/A	30.4	N/A	1.16	N/A	126	6
Total Market	92.4	N/A	14.6	N/A	0.98	N/A	108	16

017 : COMANCHE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	89.8	76.2 to 103.0	30.7	21.2 to 39.4	1.15	1.05 to 1.31	32	1
Comm./Ind. *S-5*	89.0	55.2 to 100.4	19.9	5.7 to 37.8	1.29	0.93 to 1.57	8	0
Vacant Lot	159.4	N/A	80.8	N/A	2.01	N/A	4	0
Farm & Home	40.1	N/A	84.2	N/A	2.93	N/A	2	0
Ag. Land Only	2.0	N/A	132.6	N/A	0.82	N/A	6	0
Ag. (Impr.+ Land)	4.1	N/A	84.1	N/A	1.04	N/A	8	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	77.9	N/A	44.2	N/A	1.94	N/A	54	3
Total Market	93.6	N/A	29.8	N/A	1.15	N/A	44	3

018 : COWLEY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	99.0	96.1 to 101.4	15.1	13.5 to 16.8	1.03	1.02 to 1.05	299	39
Comm./Ind.	114.2	109.5 to 131.3	13.3	5.7 to 20.2	1.06	1.01 to 1.16	14	2
Vacant Lot	82.6	N/A	41.8	N/A	1.08	N/A	15	2
Farm & Home	66.3	N/A	85.1	N/A	1.06	N/A	6	0
Ag. Land Only	2.2	N/A	84.4	N/A	1.36	N/A	8	0
Ag. (Impr.+ Land)	2.4	N/A	69.4	N/A	1.33	N/A	9	0
Other/Ex/Ut/NP/M	105.8	N/A	28.5	N/A	0.84	N/A	2	0
Total w/Ag.&F&H	98.8	N/A	16.9	N/A	1.04	N/A	345	53
Total Market	99.5	N/A	16.7	N/A	1.04	N/A	330	41

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

019 : CRAWFORD COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.5	95.2 to 100.0	13.2	11.3 to 15.0	1.03	1.01 to 1.05	209	35
Comm./Ind.	97.4	77.5 to 123.2	26.0	18.9 to 34.7	0.97	0.88 to 1.08	27	3
Vacant Lot	80.2	N/A	30.8	N/A	1.05	N/A	20	1
Farm & Home	68.4	N/A	28.8	N/A	1.01	N/A	16	0
Ag. Land Only	5.6	N/A	59.1	N/A	0.80	N/A	27	1
Ag. (Impr.+ Land)	5.6	N/A	54.5	N/A	0.79	N/A	31	2
Other/Ex/Ut/NP/M	100.8	N/A	109.2	N/A	1.79	N/A	4	0
Total w/Ag.&F&H	93.8	N/A	18.9	N/A	1.02	N/A	307	60
Total Market	97.4	N/A	15.2	N/A	1.01	N/A	260	41

020 : DECATUR COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.3	88.8 to 110.3	20.7	14.7 to 26.0	1.02	0.96 to 1.09	40	4
Comm./Ind. *S-7*	73.6	61.7 to 121.8	34.7	12.1 to 43.1	1.22	1.08 to 1.47	9	0
Vacant Lot							0	
Farm & Home	35.5	N/A		N/A		N/A	1	0
Ag. Land Only	6.5	N/A	857.6	N/A	5.35	N/A	4	0
Ag. (Impr.+ Land)	6.5	N/A	719.8	N/A	4.14	N/A	6	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	93.0	N/A	23.8	N/A	1.06	N/A	56	9
Total Market	99.2	N/A	22.8	N/A	1.04	N/A	49	4

021 : DICKINSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.4	95.6 to 102.1	16.2	14.2 to 18.1	1.03	1.02 to 1.05	220	25
Comm./Ind.	89.4	66.6 to 97.0	18.5	9.4 to 27.8	1.11	0.98 to 1.31	12	0
Vacant Lot	71.9	N/A	266.2	N/A	3.87	N/A	9	1
Farm & Home	71.4	N/A	24.5	N/A	1.08	N/A	34	3
Ag. Land Only	5.8	N/A	61.3	N/A	0.81	N/A	13	1
Ag. (Impr.+ Land)	6.4	N/A	50.4	N/A	0.96	N/A	16	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	94.1	N/A	18.7	N/A	1.06	N/A	291	47
Total Market	97.3	N/A	16.7	N/A	1.05	N/A	241	29

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

022 : DONIPHAN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	104.5	94.0 to 124.2	28.9	21.4 to 35.9	1.11	1.05 to 1.18	44	2
Comm./Ind. *S-6*	139.0	109.6 to 222.7	36.2	12.3 to 57.7	1.17	1.01 to 1.52	9	0
Vacant Lot	12.5	N/A	247.5	N/A	0.79	N/A	3	0
Farm & Home	51.6	N/A	58.7	N/A	0.91	N/A	4	0
Ag. Land Only	2.7	N/A	175.3	N/A	0.68	N/A	7	0
Ag. (Impr.+ Land)	7.8	N/A	69.0	N/A	0.74	N/A	9	0
Other/Ex/Ut/NP/M	121.6	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	100.9	N/A	44.0	N/A	1.71	N/A	70	2
Total Market	105.8	N/A	28.8	N/A	1.09	N/A	57	5

023 : DOUGLAS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.2	95.8 to 98.7	7.4	6.7 to 8.1	1.01	1.01 to 1.02	288	22
Comm./Ind.	93.2	86.3 to 100.9	20.7	14.6 to 27.0	1.48	0.98 to 2.07	39	2
Vacant Lot	92.2	N/A	15.5	N/A	1.03	N/A	94	15
Farm & Home	71.2	N/A	28.6	N/A	1.01	N/A	16	0
Ag. Land Only	1.6	N/A	51.7	N/A	0.91	N/A	31	5
Ag. (Impr.+ Land)	1.6	N/A	69.3	N/A	0.79	N/A	37	6
Other/Ex/Ut/NP/M	136.4	N/A	73.3	N/A	0.89	N/A	6	0
Total w/Ag.&F&H	94.8	N/A	10.0	N/A	1.02	N/A	480	86
Total Market	96.1	N/A	9.0	N/A	1.01	N/A	427	54

024 : EDWARDS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.9	91.2 to 118.5	27.7	18.6 to 36.8	1.12	1.03 to 1.24	36	4
Comm./Ind. *S-5*	104.8	86.1 to 130.2	28.6	13.6 to 42.4	1.16	1.01 to 1.42	12	0
Vacant Lot	28.3	N/A	282.2	N/A	5.27	N/A	5	0
Farm & Home	31.3	N/A		N/A		N/A	1	0
Ag. Land Only	3.5	N/A	56.9	N/A	0.84	N/A	12	0
Ag. (Impr.+ Land)	4.2	N/A	46.7	N/A	0.84	N/A	13	0
Other/Ex/Ut/NP/M	62.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	91.8	N/A	54.2	N/A	3.14	N/A	68	2
Total Market	97.9	N/A	34.2	N/A	1.11	N/A	54	5

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

025 : ELK COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.6	68.2 to 107.2	31.0	20.3 to 43.1	1.10	1.02 to 1.24	24	2
Comm./Ind. *S-6*	83.2	65.3 to 138.1	32.8	8.0 to 37.4	0.98	0.82 to 1.18	6	0
Vacant Lot							0	
Farm & Home	46.7	N/A	72.3	N/A	2.25	N/A	4	0
Ag. Land Only	2.5	N/A	6.3	N/A	0.95	N/A	2	0
Ag. (Impr.+ Land)	2.5	N/A	12.9	N/A	0.99	N/A	4	0
Other/Ex/Ut/NP/M	148.7	N/A	211.6	N/A	3.64	N/A	3	0
Total w/Ag.&F&H	83.6	N/A	48.2	N/A	1.92	N/A	41	3
Total Market	94.3	N/A	33.4	N/A	1.08	N/A	33	3

026 : ELLIS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.5	97.2 to 100.4	7.3	6.4 to 8.3	1.01	1.00 to 1.02	205	26
Comm./Ind.	92.0	77.3 to 102.2	23.6	14.6 to 33.7	1.16	1.03 to 1.32	19	0
Vacant Lot	69.7	N/A	30.4	N/A	1.07	N/A	21	1
Farm & Home	70.4	N/A		N/A		N/A	1	0
Ag. Land Only	4.2	N/A	40.2	N/A	0.95	N/A	14	0
Ag. (Impr.+ Land)	4.3	N/A	38.0	N/A	0.96	N/A	15	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	97.0	N/A	9.3	N/A	1.02	N/A	261	47
Total Market	97.7	N/A	8.5	N/A	1.01	N/A	245	38

027 : ELLSWORTH COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	93.9	85.0 to 96.8	16.5	13.0 to 19.7	1.03	1.00 to 1.06	70	6
Comm./Ind. *S-10*	77.1	51.2 to 93.1	31.3	14.9 to 56.7	1.09	0.94 to 1.37	12	0
Vacant Lot	57.6	N/A	10.0	N/A	0.96	N/A	2	0
Farm & Home	37.5	N/A	65.0	N/A	1.33	N/A	4	0
Ag. Land Only	3.6	N/A	22.2	N/A	0.99	N/A	8	1
Ag. (Impr.+ Land)	3.6	N/A	27.2	N/A	0.94	N/A	12	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	84.0	N/A	22.0	N/A	1.09	N/A	100	18
Total Market	88.3	N/A	19.2	N/A	1.03	N/A	84	7

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

028 : FINNEY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	93.6	91.6 to 95.3	8.6	7.5 to 9.7	1.00	0.99 to 1.02	186	22
Comm./Ind.	78.5	69.2 to 103.2	26.0	14.8 to 33.9	1.09	1.00 to 1.25	16	0
Vacant Lot	66.0	N/A	22.6	N/A	1.17	N/A	34	1
Farm & Home	81.7	N/A	11.5	N/A	0.98	N/A	3	0
Ag. Land Only	9.6	N/A	47.1	N/A	0.72	N/A	4	0
Ag. (Impr.+ Land)	9.6	N/A	47.1	N/A	0.72	N/A	4	0
Other/Ex/Ut/NP/M	102.8	N/A	27.6	N/A	1.01	N/A	2	0
Total w/Ag.&F&H	91.0	N/A	13.0	N/A	0.99	N/A	245	25
Total Market	91.4	N/A	12.9	N/A	0.99	N/A	238	21

029 : FORD COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.8	95.2 to 98.4	9.4	8.0 to 10.7	1.00	0.99 to 1.01	180	26
Comm./Ind.	77.6	68.7 to 99.0	26.7	14.7 to 35.9	0.97	0.84 to 1.16	16	0
Vacant Lot	85.7	N/A	41.9	N/A	1.25	N/A	17	1
Farm & Home	43.2	N/A	56.9	N/A	1.15	N/A	6	0
Ag. Land Only	4.8	N/A	53.6	N/A	0.83	N/A	16	0
Ag. (Impr.+ Land)	4.9	N/A	51.1	N/A	0.85	N/A	17	0
Other/Ex/Ut/NP/M	588.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	94.6	N/A	14.8	N/A	1.01	N/A	237	35
Total Market	95.7	N/A	12.3	N/A	1.00	N/A	214	27

030 : FRANKLIN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	99.7	98.4 to 100.4	12.7	11.2 to 14.3	1.03	1.02 to 1.04	278	37
Comm./Ind.	100.8	76.0 to 110.0	23.4	12.7 to 37.8	1.34	1.01 to 1.72	17	1
Vacant Lot	118.4	N/A	37.2	N/A	1.10	N/A	28	3
Farm & Home	61.1	N/A	38.0	N/A	1.04	N/A	47	0
Ag. Land Only	3.0	N/A	73.1	N/A	0.76	N/A	39	1
Ag. (Impr.+ Land)	3.5	N/A	82.3	N/A	0.92	N/A	47	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	95.7	N/A	20.6	N/A	1.10	N/A	417	80
Total Market	100.0	N/A	14.7	N/A	1.05	N/A	323	43

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

031 : GEARY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	99.8	98.0 to 101.5	8.8	8.0 to 9.7	1.01	1.00 to 1.02	333	41
Comm./Ind.	94.8	71.4 to 125.9	24.5	12.0 to 37.6	1.22	1.05 to 1.64	11	1
Vacant Lot	178.0	N/A	86.4	N/A	2.50	N/A	7	1
Farm & Home	54.6	N/A	2.0	N/A	1.01	N/A	2	0
Ag. Land Only	8.5	N/A	23.7	N/A	0.78	N/A	3	0
Ag. (Impr.+ Land)	5.5	N/A	63.8	N/A	0.65	N/A	4	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	99.6	N/A	9.8	N/A	1.02	N/A	357	49
Total Market	100.0	N/A	10.0	N/A	1.02	N/A	351	41

032 : GOVE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	82.8	74.2 to 99.0	21.7	14.1 to 30.4	1.06	0.99 to 1.17	24	2
Comm./Ind. *S-6*	80.1	47.3 to 115.9	33.7	16.4 to 56.3	1.22	1.00 to 1.74	9	0
Vacant Lot	266.0	N/A		N/A		N/A	1	0
Farm & Home	5.1	N/A		N/A		N/A	1	0
Ag. Land Only	6.4	N/A	36.3	N/A	0.84	N/A	9	0
Ag. (Impr.+ Land)	6.4	N/A	39.8	N/A	0.87	N/A	11	0
Other/Ex/Ut/NP/M	22.6	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	70.0	N/A	56.5	N/A	2.10	N/A	47	1
Total Market	82.3	N/A	26.9	N/A	1.10	N/A	35	3

033 : GRAHAM COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.3	88.0 to 100.3	13.4	8.9 to 17.3	1.01	0.97 to 1.05	23	1
Comm./Ind. *S-3*	71.0	60.7 to 100.5	24.9	7.7 to 34.6	1.07	1.00 to 1.18	8	0
Vacant Lot	48.7	N/A	62.3	N/A	1.00	N/A	2	0
Farm & Home	128.5	N/A	25.1	N/A	1.03	N/A	2	0
Ag. Land Only	2.0	N/A	244.4	N/A	0.72	N/A	3	0
Ag. (Impr.+ Land)	2.0	N/A	244.4	N/A	0.72	N/A	3	0
Other/Ex/Ut/NP/M	82.1	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	88.0	N/A	17.9	N/A	0.99	N/A	39	5
Total Market	90.3	N/A	17.1	N/A	1.00	N/A	34	2

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

034 : GRANT COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.7	94.9 to 101.9	9.9	7.9 to 11.7	1.02	1.00 to 1.04	75	7
Comm./Ind.	104.1	56.8 to 190.9	43.4	11.9 to 81.9	2.07	1.12 to 3.28	6	0
Vacant Lot	18.3	N/A	154.3	N/A	1.20	N/A	5	0
Farm & Home	71.4	N/A	14.5	N/A	0.99	N/A	2	0
Ag. Land Only	7.3	N/A	86.5	N/A	0.88	N/A	9	0
Ag. (Impr.+ Land)	7.3	N/A	86.5	N/A	0.88	N/A	9	0
Other/Ex/Ut/NP/M	106.5	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	95.7	N/A	12.9	N/A	1.12	N/A	98	19
Total Market	97.7	N/A	9.9	N/A	1.02	N/A	87	15

035 : GRAY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.8	87.7 to 105.1	14.8	11.5 to 17.9	1.03	1.00 to 1.06	48	4
Comm./Ind. *S-11*	76.2	63.1 to 91.5	22.9	10.6 to 37.4	0.94	0.84 to 1.19	12	1
Vacant Lot	98.2	N/A	8.9	N/A	1.01	N/A	3	0
Farm & Home	101.1	N/A		N/A		N/A	1	0
Ag. Land Only	11.5	N/A	45.3	N/A	0.89	N/A	6	0
Ag. (Impr.+ Land)	9.2	N/A	48.5	N/A	0.89	N/A	7	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	88.3	N/A	18.9	N/A	1.01	N/A	71	10
Total Market	92.6	N/A	17.0	N/A	1.01	N/A	63	5

036 : GREELEY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	85.5	70.2 to 109.6	17.5	7.1 to 26.9	1.16	1.05 to 1.32	10	1
Comm./Ind. *S-1*	98.5	86.5 to 144.1	20.3	3.8 to 23.1	0.85	0.77 to 1.12	5	0
Vacant Lot	24.5	N/A		N/A		N/A	1	0
Farm & Home	42.4	N/A	72.2	N/A	1.39	N/A	2	0
Ag. Land Only	4.8	N/A	11.2	N/A	1.00	N/A	9	0
Ag. (Impr.+ Land)	4.8	N/A	11.3	N/A	0.99	N/A	11	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	58.6	N/A	75.2	N/A	1.04	N/A	29	0
Total Market	90.9	N/A	26.5	N/A	0.87	N/A	16	0

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales *T – Time Trended*

Median Ratio = 90.0 to 110.0 COD = 20.0 or Less PRD = .98 to 1.03

037 : GREENWOOD COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	102.3	92.0 to 110.3	25.8	18.8 to 33.8	1.05	0.98 to 1.13	43	3
Comm./Ind. *S-6*	84.8	44.0 to 104.0	33.6	13.4 to 72.5	0.88	0.71 to 1.10	9	0
Vacant Lot	1000.0	N/A		N/A		N/A	1	0
Farm & Home	63.4	N/A	17.5	N/A	0.96	N/A	5	0
Ag. Land Only	2.8	N/A	73.3	N/A	1.23	N/A	11	1
Ag. (Impr.+ Land)	2.8	N/A	73.3	N/A	1.23	N/A	11	1
Other/Ex/Ut/NP/M	108.8	N/A		N/A		N/A	2	1
Total w/Ag.&F&H	91.5	N/A	41.4	N/A	1.44	N/A	71	5
Total Market	102.3	N/A	27.0	N/A	1.02	N/A	55	5

038 : HAMILTON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	86.5	79.7 to 95.3	18.2	12.4 to 23.4	1.04	0.98 to 1.13	28	0
Comm./Ind. *S-4*	83.9	56.4 to 117.0	26.2	11.5 to 36.0	1.14	0.93 to 1.45	9	1
Vacant Lot	14.0	N/A		N/A		N/A	1	0
Farm & Home	39.8	N/A	2.7	N/A	0.99	N/A	2	0
Ag. Land Only	6.3	N/A	10.2	N/A	1.01	N/A	6	0
Ag. (Impr.+ Land)	6.3	N/A	18.6	N/A	1.05	N/A	8	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	79.7	N/A	37.8	N/A	1.12	N/A	48	1
Total Market	84.9	N/A	19.9	N/A	1.07	N/A	38	2

039 : HARPER COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	105.8	96.5 to 114.9	23.4	17.2 to 30.2	1.14	1.06 to 1.25	43	2
Comm./Ind. *S-7*	102.2	96.5 to 117.7	10.2	4.9 to 15.1	0.94	0.87 to 1.03	11	1
Vacant Lot	412.4	N/A	892.5	N/A	19.73	N/A	6	0
Farm & Home	49.2	N/A	16.2	N/A	1.04	N/A	5	0
Ag. Land Only	6.2	N/A	70.4	N/A	1.44	N/A	5	0
Ag. (Impr.+ Land)	3.4	N/A	71.7	N/A	1.03	N/A	9	1
Other/Ex/Ut/NP/M	270.2	N/A	31.8	N/A	1.31	N/A	2	0
Total w/Ag.&F&H	101.1	N/A	36.8	N/A	1.45	N/A	76	7
Total Market	108.1	N/A	23.8	N/A	1.10	N/A	62	7

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

040 : HARVEY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.7	96.8 to 100.5	12.7	11.1 to 14.2	1.03	1.01 to 1.05	212	23
Comm./Ind.	100.0	77.4 to 119.7	30.9	15.7 to 49.5	1.03	0.80 to 1.40	15	2
Vacant Lot	96.8	N/A	29.9	N/A	1.22	N/A	16	1
Farm & Home	64.3	N/A	43.0	N/A	1.09	N/A	14	0
Ag. Land Only	5.5	N/A	63.1	N/A	1.05	N/A	25	1
Ag. (Impr.+ Land)	2.7	N/A	129.6	N/A	0.89	N/A	33	1
Other/Ex/Ut/NP/M	271.1	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	95.5	N/A	16.6	N/A	1.06	N/A	291	54
Total Market	98.8	N/A	13.3	N/A	1.03	N/A	244	31

041 : HASKELL COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.4	90.4 to 100.0	13.6	8.7 to 19.4	0.99	0.97 to 1.02	35	3
Comm./Ind. *S-7*	87.3	78.2 to 106.2	17.8	6.8 to 26.8	1.02	0.95 to 1.14	8	0
Vacant Lot	53.3	N/A	30.1	N/A	1.08	N/A	3	0
Farm & Home	45.9	N/A		N/A		N/A	1	0
Ag. Land Only	5.7	N/A	1.9	N/A	1.01	N/A	3	0
Ag. (Impr.+ Land)	5.6	N/A	6.9	N/A	0.96	N/A	4	0
Other/Ex/Ut/NP/M	112.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	94.1	N/A	18.5	N/A	1.03	N/A	52	6
Total Market	96.2	N/A	15.4	N/A	0.98	N/A	47	4

042 : HODGEMAN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	91.2	70.0 to 105.7	25.0	13.9 to 37.2	1.00	0.92 to 1.10	15	1
Comm./Ind. *S-7*	62.8	50.8 to 121.2	35.9	6.5 to 51.2	1.35	1.16 to 1.80	8	1
Vacant Lot	54.9	N/A		N/A		N/A	1	0
Farm & Home							0	
Ag. Land Only	6.6	N/A	29.7	N/A	0.95	N/A	14	1
Ag. (Impr.+ Land)	6.5	N/A	30.5	N/A	1.04	N/A	19	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	49.3	N/A	82.0	N/A	2.51	N/A	43	1
Total Market	80.3	N/A	34.8	N/A	1.04	N/A	24	1

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

043 : JACKSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.8	96.5 to 101.5	13.5	10.8 to 16.2	1.04	1.02 to 1.06	93	10
Comm./Ind. *S-7*	77.8	65.7 to 97.9	21.8	8.9 to 37.3	1.05	0.92 to 1.27	12	1
Vacant Lot	276.4	N/A	47.6	N/A	1.80	N/A	2	0
Farm & Home	81.4	N/A	11.3	N/A	1.01	N/A	24	3
Ag. Land Only	3.9	N/A	91.3	N/A	0.92	N/A	18	0
Ag. (Impr.+ Land)	4.9	N/A	66.7	N/A	0.92	N/A	22	1
Other/Ex/Ut/NP/M	68.4	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	90.9	N/A	19.2	N/A	1.08	N/A	154	30
Total Market	97.5	N/A	16.0	N/A	1.04	N/A	108	11

044 : JEFFERSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.9	93.0 to 97.6	13.6	11.7 to 15.4	1.03	1.01 to 1.04	182	22
Comm./Ind.	99.7	82.3 to 126.1	13.4	4.2 to 20.2	1.10	1.03 to 1.25	7	1
Vacant Lot	157.1	N/A	90.5	N/A	2.40	N/A	13	0
Farm & Home	65.2	N/A	23.1	N/A	1.03	N/A	45	2
Ag. Land Only	2.9	N/A	120.6	N/A	0.96	N/A	19	1
Ag. (Impr.+ Land)	4.1	N/A	89.0	N/A	0.99	N/A	27	4
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	90.2	N/A	20.9	N/A	1.06	N/A	274	47
Total Market	96.6	N/A	13.8	N/A	1.03	N/A	202	32

045 : JEWELL COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	105.4	88.2 to 116.0	20.7	13.8 to 29.3	0.99	0.93 to 1.06	28	3
Comm./Ind. *S-8*	101.8	42.7 to 130.5	37.2	15.0 to 87.3	1.30	0.97 to 1.75	8	0
Vacant Lot	117.5	N/A	87.7	N/A	6.01	N/A	7	0
Farm & Home	83.7	N/A	34.6	N/A	1.24	N/A	6	0
Ag. Land Only	5.2	N/A	96.7	N/A	0.83	N/A	10	0
Ag. (Impr.+ Land)	5.3	N/A	86.9	N/A	0.90	N/A	11	0
Other/Ex/Ut/NP/M	18.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	92.0	N/A	51.1	N/A	2.43	N/A	61	4
Total Market	104.1	N/A	29.8	N/A	0.99	N/A	44	5

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

046 : JOHNSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	93.5	92.0 to 95.5	8.2	7.4 to 8.9	1.01	1.00 to 1.02	355	32
Comm./Ind.	86.1	81.2 to 93.6	22.6	19.9 to 25.3	1.17	1.09 to 1.25	169	6
Vacant Lot	59.9	N/A	37.9	N/A	1.12	N/A	515	24
Farm & Home	57.5	N/A	36.6	N/A	1.10	N/A	27	0
Ag. Land Only	0.7	N/A	3854.2	N/A	1.37	N/A	299	2
Ag. (Impr.+ Land)	0.7	N/A	3634.3	N/A	1.62	N/A	304	2
Other/Ex/Ut/NP/M	90.4	N/A	53.7	N/A	1.23	N/A	10	0
Total w/Ag.&F&H	68.0	N/A	43.2	N/A	0.91	N/A	1380	22
Total Market	80.8	N/A	29.5	N/A	0.99	N/A	1049	28

047 : KEARNY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	83.1	78.8 to 92.3	15.5	11.0 to 19.1	1.07	1.04 to 1.11	31	1
Comm./Ind. *S-8*	79.5	61.9 to 96.3	18.3	8.0 to 28.5	0.88	0.81 to 0.97	10	1
Vacant Lot	67.7	N/A	15.8	N/A	1.05	N/A	2	0
Farm & Home	41.1	N/A		N/A		N/A	1	0
Ag. Land Only	5.7	N/A	30.8	N/A	1.05	N/A	12	1
Ag. (Impr.+ Land)	5.7	N/A	30.8	N/A	1.05	N/A	12	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	77.7	N/A	35.1	N/A	1.34	N/A	56	2
Total Market	82.0	N/A	16.3	N/A	1.02	N/A	43	2

048 : KINGMAN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	101.4	92.1 to 112.8	21.6	16.6 to 26.5	1.11	1.07 to 1.17	47	2
Comm./Ind. *S-6*	115.3	87.0 to 174.0	27.7	11.6 to 40.1	0.91	0.81 to 1.10	10	1
Vacant Lot	69.4	N/A	50.1	N/A	1.21	N/A	2	0
Farm & Home	33.4	N/A	86.6	N/A	1.22	N/A	5	0
Ag. Land Only	3.7	N/A	47.7	N/A	1.05	N/A	3	0
Ag. (Impr.+ Land)	2.3	N/A	52.9	N/A	1.14	N/A	6	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	97.0	N/A	34.3	N/A	1.05	N/A	70	3
Total Market	102.8	N/A	23.1	N/A	0.96	N/A	59	3

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

049 : KIOWA COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.4	84.0 to 109.7	14.1	7.1 to 21.1	1.04	1.00 to 1.10	15	1
Comm./Ind. *S-3*	90.1	66.5 to 124.9	17.8	6.6 to 27.5	0.92	0.85 to 0.99	4	0
Vacant Lot	145.7	N/A	32.7	N/A	1.10	N/A	3	0
Farm & Home	47.7	N/A		N/A		N/A	1	0
Ag. Land Only	5.7	N/A	120.9	N/A	1.79	N/A	4	0
Ag. (Impr.+ Land)	5.7	N/A	120.9	N/A	1.79	N/A	4	0
Other/Ex/Ut/NP/M	50.4	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	93.7	N/A	31.5	N/A	1.41	N/A	28	2
Total Market	96.4	N/A	18.0	N/A	1.02	N/A	23	2

050 : LABETTE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.4	98.4 to 104.1	15.2	13.2 to 17.1	1.06	1.04 to 1.08	195	30
Comm./Ind.	88.9	42.2 to 173.3	57.4	19.6 to 95.6	1.33	1.06 to 2.41	9	0
Vacant Lot	122.2	N/A	57.0	N/A	1.78	N/A	10	0
Farm & Home	43.9	N/A	42.8	N/A	1.12	N/A	19	0
Ag. Land Only	3.8	N/A	74.1	N/A	1.02	N/A	15	1
Ag. (Impr.+ Land)	4.5	N/A	54.8	N/A	1.06	N/A	22	2
Other/Ex/Ut/NP/M	73.8	N/A	126.1	N/A	1.38	N/A	3	0
Total w/Ag.&F&H	96.0	N/A	23.4	N/A	1.14	N/A	258	48
Total Market	100.4	N/A	18.4	N/A	1.06	N/A	217	32

051 : LANE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	93.3	85.0 to 128.0	32.0	20.6 to 44.4	1.27	1.13 to 1.48	23	2
Comm./Ind. *S-6*	97.2	56.1 to 220.6	57.0	9.0 to 110.3	1.87	1.18 to 4.52	6	0
Vacant Lot	100.8	N/A	18.9	N/A	1.01	N/A	3	0
Farm & Home							0	
Ag. Land Only	4.8	N/A	38.3	N/A	1.04	N/A	4	0
Ag. (Impr.+ Land)	4.8	N/A	38.3	N/A	1.04	N/A	4	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	93.2	N/A	40.2	N/A	1.70	N/A	36	3
Total Market	95.5	N/A	29.7	N/A	1.30	N/A	32	3

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

052 : LEAVENWORTH COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.0	96.4 to 99.3	7.9	6.9 to 8.8	1.01	1.00 to 1.02	217	23
Comm./Ind.	98.9	87.1 to 102.5	11.5	7.5 to 15.7	1.15	1.01 to 1.32	25	1
Vacant Lot	100.0	N/A	15.7	N/A	1.04	N/A	66	8
Farm & Home	60.9	N/A	27.7	N/A	1.02	N/A	58	2
Ag. Land Only	0.8	N/A	101.7	N/A	0.55	N/A	47	6
Ag. (Impr.+ Land)	0.7	N/A	118.8	N/A	0.54	N/A	61	7
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	93.9	N/A	17.2	N/A	1.08	N/A	427	72
Total Market	99.0	N/A	8.6	N/A	1.02	N/A	308	43

053 : LINCOLN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.3	90.9 to 104.9	11.8	6.4 to 16.6	1.04	0.99 to 1.10	20	3
Comm./Ind. *S-8*	97.6	89.5 to 115.3	7.9	1.5 to 15.6	1.02	0.97 to 1.10	10	2
Vacant Lot	69.0	N/A	44.9	N/A	1.48	N/A	2	0
Farm & Home	50.9	N/A	30.1	N/A	1.14	N/A	3	0
Ag. Land Only	6.0	N/A	42.6	N/A	1.13	N/A	7	1
Ag. (Impr.+ Land)	7.6	N/A	43.8	N/A	1.07	N/A	8	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	92.6	N/A	31.7	N/A	1.55	N/A	43	2
Total Market	97.6	N/A	10.2	N/A	1.03	N/A	32	6

054 : LINN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	99.6	93.8 to 105.3	20.4	16.2 to 25.0	1.08	1.04 to 1.13	96	12
Comm./Ind. *S-4*	80.9	62.9 to 125.8	23.3	9.7 to 33.9	0.94	0.83 to 1.08	9	0
Vacant Lot	80.0	N/A	52.9	N/A	1.10	N/A	155	21
Farm & Home	51.3	N/A	44.2	N/A	1.05	N/A	21	0
Ag. Land Only	2.8	N/A	68.2	N/A	0.93	N/A	24	1
Ag. (Impr.+ Land)	2.9	N/A	92.6	N/A	0.95	N/A	28	0
Other/Ex/Ut/NP/M	74.9	N/A	56.4	N/A	1.36	N/A	35	3
Total w/Ag.&F&H	84.0	N/A	44.9	N/A	1.33	N/A	344	38
Total Market	90.0	N/A	41.1	N/A	0.99	N/A	295	31

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

055 : LOGAN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	94.7	87.0 to 98.8	16.8	12.5 to 21.8	1.03	0.99 to 1.08	46	2
Comm./Ind. *S-7*	92.0	63.6 to 138.0	32.5	14.8 to 49.6	0.97	0.83 to 1.18	10	1
Vacant Lot	49.6	N/A	17.4	N/A	0.91	N/A	4	0
Farm & Home							0	
Ag. Land Only	5.8	N/A	12.9	N/A	1.10	N/A	9	0
Ag. (Impr.+ Land)	5.8	N/A	12.9	N/A	1.10	N/A	9	0
Other/Ex/Ut/NP/M	1615.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	87.1	N/A	32.7	N/A	1.74	N/A	70	4
Total Market	93.5	N/A	21.4	N/A	0.98	N/A	61	5

056 : LYON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.1	98.5 to 101.7	12.1	11.0 to 13.2	1.02	1.01 to 1.03	383	37
Comm./Ind.	97.6	82.5 to 118.8	23.1	15.0 to 31.8	1.48	1.04 to 1.78	22	2
Vacant Lot	115.4	N/A	24.6	N/A	1.12	N/A	12	2
Farm & Home	72.8	N/A	26.3	N/A	0.93	N/A	23	1
Ag. Land Only	4.8	N/A	47.6	N/A	0.91	N/A	26	2
Ag. (Impr.+ Land)	5.0	N/A	48.7	N/A	0.85	N/A	31	2
Other/Ex/Ut/NP/M	243.3	N/A	36.4	N/A	1.70	N/A	4	1
Total w/Ag.&F&H	98.3	N/A	14.4	N/A	1.11	N/A	475	71
Total Market	100.2	N/A	13.1	N/A	1.11	N/A	421	44

057 : MARION COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.0	95.1 to 102.1	14.5	12.3 to 16.8	1.02	0.99 to 1.06	139	13
Comm./Ind. *S-5*	109.3	78.8 to 221.2	58.0	16.6 to 85.1	1.32	1.01 to 1.93	10	1
Vacant Lot	102.3	N/A	18.4	N/A	1.16	N/A	3	0
Farm & Home	53.9	N/A	35.1	N/A	1.26	N/A	15	0
Ag. Land Only	7.3	N/A	40.9	N/A	1.41	N/A	12	1
Ag. (Impr.+ Land)	5.9	N/A	60.9	N/A	1.33	N/A	14	1
Other/Ex/Ut/NP/M	830.3	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	95.2	N/A	17.4	N/A	1.06	N/A	182	29
Total Market	97.5	N/A	15.5	N/A	1.03	N/A	153	16

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

058 : MARSHALL COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.6	94.0 to 99.4	12.0	9.7 to 14.5	1.02	1.00 to 1.05	105	13
Comm./Ind.	66.0	50.9 to 144.8	53.1	17.7 to 68.2	1.00	0.86 to 1.32	8	0
Vacant Lot	60.8	N/A	189.7	N/A	2.15	N/A	7	0
Farm & Home	24.9	N/A	52.4	N/A	1.18	N/A	2	0
Ag. Land Only	3.5	N/A	77.4	N/A	0.58	N/A	8	0
Ag. (Impr.+ Land)	3.3	N/A	72.7	N/A	0.61	N/A	9	0
Other/Ex/Ut/NP/M	113.9	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	95.9	N/A	17.6	N/A	1.03	N/A	132	22
Total Market	97.4	N/A	16.2	N/A	1.03	N/A	121	14

059 : MCPHERSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.9	92.5 to 97.7	11.4	10.1 to 12.8	1.00	0.99 to 1.01	203	15
Comm./Ind.	91.2	67.9 to 108.3	26.5	15.4 to 36.8	1.03	0.91 to 1.20	16	0
Vacant Lot	94.6	N/A	21.2	N/A	1.09	N/A	17	2
Farm & Home	98.3	N/A	20.3	N/A	1.10	N/A	22	1
Ag. Land Only	8.2	N/A	32.4	N/A	1.02	N/A	26	0
Ag. (Impr.+ Land)	7.8	N/A	34.2	N/A	1.01	N/A	30	0
Other/Ex/Ut/NP/M	174.4	N/A	21.3	N/A	1.00	N/A	2	0
Total w/Ag.&F&H	93.4	N/A	13.2	N/A	1.00	N/A	290	51
Total Market	95.8	N/A	12.5	N/A	1.00	N/A	238	21

060 : MEADE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	88.3	80.6 to 94.7	12.5	8.5 to 16.4	1.04	1.01 to 1.09	36	5
Comm./Ind. *S-7*	65.3	53.6 to 96.4	40.5	16.7 to 55.6	1.20	0.84 to 2.62	11	0
Vacant Lot	69.0	N/A	64.1	N/A	1.93	N/A	2	0
Farm & Home	40.3	N/A	29.3	N/A	0.96	N/A	6	0
Ag. Land Only	6.0	N/A	63.0	N/A	1.23	N/A	6	0
Ag. (Impr.+ Land)	6.6	N/A	85.6	N/A	1.23	N/A	7	0
Other/Ex/Ut/NP/M	106.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	77.8	N/A	37.4	N/A	1.50	N/A	63	1
Total Market	88.3	N/A	20.7	N/A	0.99	N/A	50	3

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

061 : MIAMI COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	94.9	93.9 to 96.2	8.4	7.8 to 9.1	1.01	1.01 to 1.02	449	42
Comm./Ind.	98.3	81.2 to 123.7	22.5	12.1 to 29.9	1.13	1.02 to 1.30	12	0
Vacant Lot	96.8	N/A	24.3	N/A	1.10	N/A	49	4
Farm & Home	65.4	N/A	21.5	N/A	1.01	N/A	50	4
Ag. Land Only	2.0	N/A	78.3	N/A	0.81	N/A	39	4
Ag. (Impr.+ Land)	2.0	N/A	60.7	N/A	0.96	N/A	52	6
Other/Ex/Ut/NP/M	79.5	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	92.4	N/A	11.0	N/A	1.03	N/A	613	115
Total Market	95.1	N/A	9.2	N/A	1.01	N/A	511	58

062 : MITCHELL COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.2	89.1 to 103.9	16.0	12.6 to 19.2	1.05	1.02 to 1.09	67	8
Comm./Ind. *S-7*	82.6	71.6 to 135.1	29.1	12.6 to 38.5	1.15	0.98 to 1.54	9	0
Vacant Lot	86.6	N/A	154.7	N/A	2.81	N/A	5	0
Farm & Home	129.3	N/A		N/A		N/A	1	0
Ag. Land Only	7.2	N/A	60.2	N/A	1.13	N/A	9	0
Ag. (Impr.+ Land)	7.2	N/A	60.2	N/A	1.13	N/A	9	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	91.5	N/A	20.4	N/A	1.07	N/A	91	17
Total Market	96.0	N/A	19.2	N/A	1.06	N/A	81	9

063 : MONTGOMERY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	104.4	101.5 to 107.6	23.0	19.2 to 27.1	1.11	1.07 to 1.15	203	29
Comm./Ind.	102.8	84.7 to 113.2	17.6	10.6 to 26.3	1.12	0.99 to 1.30	25	4
Vacant Lot	133.1	N/A	103.3	N/A	3.76	N/A	9	0
Farm & Home	63.5	N/A	34.1	N/A	1.15	N/A	31	0
Ag. Land Only	3.3	N/A	80.6	N/A	1.15	N/A	7	0
Ag. (Impr.+ Land)	4.1	N/A	94.2	N/A	1.22	N/A	12	0
Other/Ex/Ut/NP/M	105.1	N/A	20.7	N/A	1.20	N/A	3	0
Total w/Ag.&F&H	100.3	N/A	25.4	N/A	1.17	N/A	283	50
Total Market	104.4	N/A	23.8	N/A	1.11	N/A	240	35

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

064 : MORRIS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.2	94.6 to 110.7	20.5	15.0 to 25.7	1.08	1.02 to 1.15	48	4
Comm./Ind. *S-6*	82.8	69.5 to 98.7	12.6	5.5 to 17.1	0.95	0.92 to 1.01	9	1
Vacant Lot	65.0	N/A	141.6	N/A	5.21	N/A	3	0
Farm & Home	45.8	N/A		N/A		N/A	1	0
Ag. Land Only	4.8	N/A	51.1	N/A	0.97	N/A	7	0
Ag. (Impr.+ Land)	4.8	N/A	51.1	N/A	0.97	N/A	7	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	94.5	N/A	32.3	N/A	1.18	N/A	68	4
Total Market	97.0	N/A	23.8	N/A	1.06	N/A	60	4

065 : MORTON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.8	93.4 to 124.1	28.7	16.4 to 41.8	1.19	1.08 to 1.39	29	3
Comm./Ind. *S-6*	91.5	78.3 to 144.9	35.9	13.4 to 49.5	1.08	0.99 to 1.18	8	0
Vacant Lot	39.0	N/A	12.7	N/A	1.00	N/A	2	0
Farm & Home							0	
Ag. Land Only	7.3	N/A	15.1	N/A	0.97	N/A	3	0
Ag. (Impr.+ Land)	7.3	N/A	15.1	N/A	0.97	N/A	3	0
Other/Ex/Ut/NP/M	208.7	N/A	45.8	N/A	1.34	N/A	3	0
Total w/Ag.&F&H	98.3	N/A	37.7	N/A	1.11	N/A	45	5
Total Market	100.4	N/A	37.2	N/A	1.14	N/A	42	3

066 : NEMAHA COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	92.1	85.6 to 95.0	19.0	15.9 to 22.1	1.05	1.02 to 1.09	112	9
Comm./Ind.	125.6	97.5 to 164.2	25.0	12.6 to 31.5	1.27	1.11 to 1.50	10	0
Vacant Lot	71.4	N/A	32.8	N/A	1.17	N/A	3	0
Farm & Home	56.2	N/A	21.4	N/A	1.08	N/A	5	0
Ag. Land Only	3.1	N/A	121.8	N/A	0.52	N/A	14	1
Ag. (Impr.+ Land)	3.5	N/A	103.4	N/A	0.59	N/A	20	1
Other/Ex/Ut/NP/M	189.2	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	86.8	N/A	34.6	N/A	1.30	N/A	151	8
Total Market	92.9	N/A	20.3	N/A	1.06	N/A	126	11

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

067 : NEOSHO COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	106.5	100.4 to 110.5	16.8	14.1 to 19.4	1.06	1.03 to 1.08	131	13
Comm./Ind.	95.0	83.1 to 142.8	21.4	5.7 to 31.0	1.05	0.86 to 1.25	8	1
Vacant Lot	110.2	N/A	53.4	N/A	1.41	N/A	7	0
Farm & Home	58.5	N/A	31.6	N/A	0.88	N/A	7	0
Ag. Land Only	3.0	N/A	85.6	N/A	0.87	N/A	6	0
Ag. (Impr.+ Land)	3.0	N/A	85.6	N/A	0.87	N/A	6	0
Other/Ex/Ut/NP/M	113.7	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	102.9	N/A	19.3	N/A	1.07	N/A	160	20
Total Market	106.5	N/A	18.0	N/A	1.06	N/A	147	14

068 : NESS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	101.6	97.7 to 121.1	20.6	9.1 to 35.4	1.12	1.02 to 1.36	24	4
Comm./Ind. *S-7*	82.3	77.4 to 99.5	14.5	4.1 to 20.7	0.89	0.79 to 1.02	7	0
Vacant Lot							0	
Farm & Home							0	
Ag. Land Only	10.7	N/A	15.0	N/A	0.91	N/A	3	0
Ag. (Impr.+ Land)	10.7	N/A	15.0	N/A	0.91	N/A	3	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	99.5	N/A	20.2	N/A	1.11	N/A	34	6
Total Market	99.6	N/A	14.9	N/A	1.00	N/A	31	5

069 : NORTON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	89.3	83.5 to 97.8	16.6	13.0 to 20.0	1.06	1.01 to 1.14	67	11
Comm./Ind.	76.6	29.7 to 126.9	29.2	10.1 to 66.4	0.90	0.77 to 1.05	9	1
Vacant Lot	53.7	N/A	99.1	N/A	28.56	N/A	2	0
Farm & Home	23.1	N/A		N/A		N/A	1	0
Ag. Land Only	7.5	N/A	17.2	N/A	1.04	N/A	9	1
Ag. (Impr.+ Land)	7.5	N/A	17.2	N/A	1.04	N/A	9	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	84.3	N/A	32.6	N/A	1.38	N/A	88	8
Total Market	87.0	N/A	21.3	N/A	1.06	N/A	78	10

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

070 : OSAGE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	102.4	99.0 to 106.1	17.9	15.0 to 20.8	1.07	1.04 to 1.10	159	16
Comm./Ind.	96.1	86.5 to 208.4	43.4	9.0 to 64.1	1.22	1.01 to 1.58	10	1
Vacant Lot	80.4	N/A	21.5	N/A	1.05	N/A	9	1
Farm & Home	83.0	N/A	20.2	N/A	1.02	N/A	20	0
Ag. Land Only	3.5	N/A	62.1	N/A	0.93	N/A	25	1
Ag. (Impr.+ Land)	3.7	N/A	62.8	N/A	0.94	N/A	30	3
Other/Ex/Ut/NP/M	219.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	97.7	N/A	21.2	N/A	1.12	N/A	229	44
Total Market	100.2	N/A	18.8	N/A	1.06	N/A	179	20

071 : OSBORNE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	109.0	81.9 to 143.0	41.3	27.2 to 58.6	1.36	1.20 to 1.60	26	2
Comm./Ind. *S-7*	102.5	44.4 to 147.5	37.0	13.3 to 96.5	0.92	0.71 to 1.09	7	0
Vacant Lot	49.0	N/A	101.4	N/A	1.56	N/A	3	0
Farm & Home	158.8	N/A		N/A		N/A	1	0
Ag. Land Only	8.4	N/A	46.9	N/A	0.93	N/A	5	0
Ag. (Impr.+ Land)	8.4	N/A	46.9	N/A	0.93	N/A	5	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	99.8	N/A	53.1	N/A	1.98	N/A	42	2
Total Market	106.7	N/A	43.3	N/A	1.23	N/A	36	2

072 : OTTAWA COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.7	94.9 to 103.4	8.9	6.3 to 11.3	1.01	0.99 to 1.04	43	5
Comm./Ind. *S-8*	101.1	80.1 to 111.0	10.5	4.0 to 18.0	1.02	0.98 to 1.11	10	1
Vacant Lot	92.2	N/A	55.5	N/A	0.99	N/A	3	0
Farm & Home	55.3	N/A	26.3	N/A	0.91	N/A	4	0
Ag. Land Only	5.4	N/A	41.4	N/A	0.86	N/A	9	0
Ag. (Impr.+ Land)	5.4	N/A	48.6	N/A	0.96	N/A	11	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	94.9	N/A	16.4	N/A	1.01	N/A	71	14
Total Market	100.4	N/A	8.7	N/A	1.02	N/A	56	9

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

073 : PAWNEE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.3	90.0 to 99.3	12.2	9.8 to 14.7	1.03	1.00 to 1.06	83	11
Comm./Ind. *S-13*	98.3	90.6 to 114.4	15.0	7.6 to 23.1	1.59	1.02 to 1.84	16	2
Vacant Lot	198.7	N/A		N/A		N/A	1	0
Farm & Home	93.4	N/A	57.4	N/A	1.40	N/A	5	0
Ag. Land Only	11.7	N/A	19.8	N/A	1.05	N/A	5	0
Ag. (Impr.+ Land)	10.7	N/A	21.2	N/A	1.05	N/A	6	0
Other/Ex/Ut/NP/M	204.5	N/A	68.9	N/A	1.49	N/A	2	0
Total w/Ag.&F&H	96.0	N/A	14.4	N/A	1.14	N/A	113	20
Total Market	97.1	N/A	13.0	N/A	1.15	N/A	102	15

074 : PHILLIPS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	87.1	77.6 to 92.2	21.5	16.7 to 26.9	1.05	1.00 to 1.13	61	5
Comm./Ind. *S-3*	83.0	46.2 to 113.7	35.7	15.5 to 64.1	1.05	0.92 to 1.32	9	0
Vacant Lot	53.6	N/A	119.0	N/A	2.40	N/A	4	0
Farm & Home	25.9	N/A		N/A		N/A	1	0
Ag. Land Only	5.7	N/A	8.9	N/A	1.03	N/A	6	0
Ag. (Impr.+ Land)	5.7	N/A	8.9	N/A	1.03	N/A	6	0
Other/Ex/Ut/NP/M	99.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	85.0	N/A	33.5	N/A	1.38	N/A	82	3
Total Market	87.1	N/A	26.9	N/A	1.04	N/A	75	3

075 : POTTAWATOMIE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.5	96.3 to 98.2	7.7	6.8 to 8.5	1.00	0.99 to 1.01	290	36
Comm./Ind.	88.6	61.3 to 110.7	28.1	15.4 to 38.9	1.41	1.10 to 1.80	15	1
Vacant Lot	72.9	N/A	36.3	N/A	1.19	N/A	72	1
Farm & Home	51.7	N/A	42.3	N/A	1.05	N/A	14	0
Ag. Land Only	2.1	N/A	90.5	N/A	0.78	N/A	12	1
Ag. (Impr.+ Land)	2.2	N/A	92.3	N/A	0.74	N/A	18	2
Other/Ex/Ut/NP/M	91.5	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	94.5	N/A	14.5	N/A	1.06	N/A	410	48
Total Market	96.1	N/A	11.6	N/A	1.07	N/A	378	47

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

076 : PRATT COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	99.2	94.4 to 102.2	12.9	10.6 to 15.3	1.02	1.00 to 1.05	100	12
Comm./Ind. *S-6*	96.6	45.4 to 115.4	32.0	10.8 to 64.4	1.86	1.41 to 3.66	9	1
Vacant Lot							0	
Farm & Home	56.2	N/A	34.5	N/A	1.03	N/A	2	0
Ag. Land Only	7.2	N/A	15.1	N/A	0.99	N/A	6	0
Ag. (Impr.+ Land)	7.0	N/A	23.5	N/A	1.09	N/A	7	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	97.6	N/A	15.3	N/A	1.16	N/A	118	18
Total Market	99.2	N/A	13.5	N/A	1.08	N/A	109	14

077 : RAWLINS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.5	87.3 to 107.2	17.7	12.1 to 22.4	1.08	1.03 to 1.15	32	3
Comm./Ind. *S-6*	80.5	56.9 to 117.3	27.8	10.7 to 41.8	0.93	0.83 to 1.09	7	0
Vacant Lot	92.5	N/A		N/A		N/A	1	0
Farm & Home							0	
Ag. Land Only	4.0	N/A	14.2	N/A	1.00	N/A	4	0
Ag. (Impr.+ Land)	3.9	N/A	15.8	N/A	1.00	N/A	5	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	92.5	N/A	22.0	N/A	1.05	N/A	45	6
Total Market	94.3	N/A	20.5	N/A	1.06	N/A	40	2

078 : RENO COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.0	92.6 to 98.4	12.8	11.3 to 14.3	1.02	1.00 to 1.04	224	28
Comm./Ind.	95.8	89.0 to 101.2	14.9	10.2 to 19.8	1.29	0.99 to 1.59	34	4
Vacant Lot	76.6	N/A	44.6	N/A	0.91	N/A	39	2
Farm & Home	52.9	N/A	20.3	N/A	1.02	N/A	14	2
Ag. Land Only	5.1	N/A	85.2	N/A	0.82	N/A	41	2
Ag. (Impr.+ Land)	5.6	N/A	84.7	N/A	0.83	N/A	43	3
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	90.8	N/A	19.9	N/A	1.11	N/A	354	67
Total Market	94.1	N/A	15.0	N/A	1.06	N/A	297	42

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

079 : REPUBLIC COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	101.8	94.0 to 107.8	14.9	11.0 to 18.9	1.04	1.01 to 1.08	44	6
Comm./Ind. *S-7*	68.5	39.9 to 98.5	38.7	18.1 to 66.8	1.18	1.02 to 1.47	11	1
Vacant Lot	90.9	N/A	20.5	N/A	1.07	N/A	2	0
Farm & Home	88.2	N/A		N/A		N/A	1	0
Ag. Land Only	6.9	N/A	8.4	N/A	1.01	N/A	9	0
Ag. (Impr.+ Land)	6.9	N/A	9.7	N/A	1.07	N/A	10	0
Other/Ex/Ut/NP/M	105.6	N/A	82.2	N/A	3.25	N/A	2	0
Total w/Ag.&F&H	93.0	N/A	34.6	N/A	2.19	N/A	70	7
Total Market	98.6	N/A	22.0	N/A	1.08	N/A	59	7

080 : RICE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.0	92.2 to 100.0	18.3	15.6 to 21.0	1.05	1.02 to 1.09	151	17
Comm./Ind.	96.1	84.2 to 102.2	15.0	8.3 to 22.7	0.99	0.93 to 1.08	20	1
Vacant Lot	186.0	N/A	93.0	N/A	0.87	N/A	4	0
Farm & Home	70.6	N/A	31.1	N/A	1.07	N/A	12	0
Ag. Land Only	9.1	N/A	26.9	N/A	0.99	N/A	15	2
Ag. (Impr.+ Land)	8.8	N/A	30.1	N/A	0.95	N/A	19	2
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	92.9	N/A	19.7	N/A	1.06	N/A	206	37
Total Market	95.8	N/A	17.4	N/A	1.03	N/A	175	23

081 : RILEY COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.7	95.4 to 98.0	6.6	5.9 to 7.4	1.00	1.00 to 1.01	253	24
Comm./Ind.	81.1	77.3 to 97.7	12.1	6.5 to 16.2	0.91	0.85 to 1.08	17	0
Vacant Lot	38.3	N/A	44.6	N/A	1.01	N/A	67	2
Farm & Home	77.8	N/A	27.7	N/A	1.13	N/A	10	0
Ag. Land Only	4.6	N/A	68.6	N/A	1.59	N/A	6	0
Ag. (Impr.+ Land)	4.6	N/A	73.5	N/A	1.65	N/A	8	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	93.8	N/A	11.4	N/A	0.99	N/A	355	57
Total Market	94.1	N/A	9.4	N/A	1.00	N/A	337	60

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

082 : ROOKS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	88.1	75.5 to 97.2	25.0	19.3 to 31.0	1.12	1.07 to 1.19	61	7
Comm./Ind. *S-8*	74.9	46.2 to 103.5	37.2	16.2 to 57.7	1.33	1.15 to 1.63	11	0
Vacant Lot	35.7	N/A		N/A		N/A	1	0
Farm & Home	54.9	N/A		N/A		N/A	1	0
Ag. Land Only	3.7	N/A	66.1	N/A	0.93	N/A	7	0
Ag. (Impr.+ Land)	3.7	N/A	66.1	N/A	0.93	N/A	7	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	83.4	N/A	36.6	N/A	1.43	N/A	81	7
Total Market	86.9	N/A	25.8	N/A	1.13	N/A	73	8

083 : RUSH COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	105.4	100.0 to 120.6	21.1	15.1 to 27.0	1.04	0.99 to 1.11	40	3
Comm./Ind. *S-10*	95.1	61.9 to 115.1	29.5	15.7 to 46.8	1.33	1.05 to 1.68	12	0
Vacant Lot	244.0	N/A		N/A		N/A	1	0
Farm & Home							0	
Ag. Land Only	6.9	N/A	28.2	N/A	0.94	N/A	5	0
Ag. (Impr.+ Land)	6.8	N/A	24.4	N/A	0.95	N/A	6	0
Other/Ex/Ut/NP/M	729.8	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	104.2	N/A	31.7	N/A	1.33	N/A	60	5
Total Market	105.4	N/A	22.8	N/A	1.11	N/A	54	5

084 : RUSSELL COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	91.0	87.9 to 95.2	16.2	12.8 to 19.5	1.04	1.02 to 1.07	89	11
Comm./Ind.	90.0	48.7 to 123.2	36.9	13.5 to 48.8	1.12	0.92 to 1.52	9	1
Vacant Lot	79.3	N/A	198.3	N/A	3.50	N/A	4	0
Farm & Home	51.2	N/A	20.2	N/A	0.99	N/A	2	0
Ag. Land Only	7.3	N/A		N/A		N/A	1	0
Ag. (Impr.+ Land)	7.3	N/A		N/A		N/A	1	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	90.0	N/A	19.5	N/A	1.05	N/A	105	13
Total Market	90.8	N/A	18.4	N/A	1.03	N/A	102	13

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

085 : SALINE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.1	96.5 to 99.9	8.7	7.7 to 9.7	1.01	1.00 to 1.02	260	34
Comm./Ind.	92.8	87.4 to 103.0	19.4	13.4 to 25.4	1.09	0.98 to 1.18	38	4
Vacant Lot	149.4	N/A	33.8	N/A	2.44	N/A	8	1
Farm & Home	83.5	N/A	13.3	N/A	1.05	N/A	13	2
Ag. Land Only	0.3	N/A	549.3	N/A	0.39	N/A	39	1
Ag. (Impr.+ Land)	0.4	N/A	634.8	N/A	0.44	N/A	49	2
Other/Ex/Ut/NP/M	118.1	N/A	8.2	N/A	1.01	N/A	3	0
Total w/Ag.&F&H	95.7	N/A	13.3	N/A	1.08	N/A	371	73
Total Market	98.3	N/A	10.4	N/A	1.08	N/A	309	41

086 : SCOTT COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	88.1	83.2 to 94.9	16.2	12.9 to 19.0	1.01	0.98 to 1.04	66	1
Comm./Ind.	73.2	19.1 to 100.0	38.5	13.4 to 135.5	0.86	0.66 to 0.97	9	0
Vacant Lot	69.3	N/A	11.5	N/A	1.06	N/A	3	0
Farm & Home	73.3	N/A	13.9	N/A	1.02	N/A	2	0
Ag. Land Only	7.3	N/A	41.9	N/A	1.05	N/A	4	0
Ag. (Impr.+ Land)	8.4	N/A	28.9	N/A	1.04	N/A	5	0
Other/Ex/Ut/NP/M	109.5	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	84.9	N/A	17.4	N/A	0.99	N/A	86	7
Total Market	87.8	N/A	16.7	N/A	1.00	N/A	79	3

087 : SEDGWICK COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	93.0	91.1 to 95.0	11.5	10.4 to 12.6	1.02	1.01 to 1.03	362	46
Comm./Ind.	91.3	85.5 to 96.5	21.9	19.0 to 24.8	1.07	1.00 to 1.20	166	11
Vacant Lot	64.1	N/A	66.5	N/A	1.15	N/A	412	22
Farm & Home	76.6	N/A	14.0	N/A	0.98	N/A	46	6
Ag. Land Only	0.2	N/A	506.5	N/A	1.11	N/A	92	8
Ag. (Impr.+ Land)	0.3	N/A	574.9	N/A	0.94	N/A	97	10
Other/Ex/Ut/NP/M	108.2	N/A	27.6	N/A	1.39	N/A	13	1
Total w/Ag.&F&H	84.4	N/A	40.2	N/A	0.94	N/A	1096	49
Total Market	88.2	N/A	29.6	N/A	0.98	N/A	953	94

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

088 : SEWARD COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	95.3	92.8 to 97.3	9.4	8.2 to 10.6	1.00	0.99 to 1.01	196	25
Comm./Ind.	74.4	60.6 to 100.3	30.6	16.2 to 45.1	1.43	0.99 to 1.92	16	1
Vacant Lot	55.8	N/A	48.8	N/A	1.36	N/A	7	0
Farm & Home	41.9	N/A	41.9	N/A	0.74	N/A	5	0
Ag. Land Only	5.5	N/A	61.0	N/A	0.56	N/A	7	0
Ag. (Impr.+ Land)	5.5	N/A	61.0	N/A	0.56	N/A	7	0
Other/Ex/Ut/NP/M	98.8	N/A	11.4	N/A	0.98	N/A	2	0
Total w/Ag.&F&H	93.6	N/A	11.7	N/A	0.99	N/A	233	35
Total Market	94.5	N/A	10.9	N/A	0.99	N/A	221	28

089 : SHAWNEE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.2	97.4 to 99.8	9.7	8.6 to 10.8	1.01	0.99 to 1.03	320	42
Comm./Ind.	96.5	92.5 to 111.4	24.3	19.7 to 28.7	1.28	1.15 to 1.48	73	2
Vacant Lot	89.2	N/A	37.8	N/A	1.18	N/A	103	9
Farm & Home	79.0	N/A	26.9	N/A	1.16	N/A	26	0
Ag. Land Only	2.6	N/A	157.3	N/A	0.65	N/A	25	1
Ag. (Impr.+ Land)	3.4	N/A	161.9	N/A	0.70	N/A	29	2
Other/Ex/Ut/NP/M	140.2	N/A	32.8	N/A	1.34	N/A	6	1
Total w/Ag.&F&H	96.5	N/A	15.4	N/A	1.13	N/A	557	103
Total Market	97.5	N/A	14.9	N/A	1.13	N/A	502	72

090 : SHERIDAN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	90.3	85.9 to 96.3	11.4	6.7 to 16.4	1.01	0.99 to 1.03	21	1
Comm./Ind. *S-9*	82.2	55.4 to 102.4	26.2	11.5 to 42.7	0.96	0.82 to 1.20	11	1
Vacant Lot	18.4	N/A		N/A		N/A	1	0
Farm & Home	122.9	N/A		N/A		N/A	1	0
Ag. Land Only	5.6	N/A	16.4	N/A	0.99	N/A	6	0
Ag. (Impr.+ Land)	5.6	N/A	16.4	N/A	0.99	N/A	6	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	86.2	N/A	32.5	N/A	1.26	N/A	40	1
Total Market	89.8	N/A	16.0	N/A	1.00	N/A	33	3

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

091 : SHERMAN COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	100.4	98.1 to 106.7	13.0	10.4 to 15.6	1.05	1.03 to 1.09	78	9
Comm./Ind. *S-5*	97.8	82.0 to 143.1	22.9	5.5 to 44.9	1.26	1.06 to 1.72	10	1
Vacant Lot	141.6	N/A	18.7	N/A	1.10	N/A	2	0
Farm & Home	80.3	N/A		N/A		N/A	1	0
Ag. Land Only	7.0	N/A	28.0	N/A	1.00	N/A	8	1
Ag. (Impr.+ Land)	7.0	N/A	47.4	N/A	1.13	N/A	10	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	98.4	N/A	14.8	N/A	1.10	N/A	101	19
Total Market	99.2	N/A	12.7	N/A	1.08	N/A	90	13

092 : SMITH COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	103.9	94.4 to 127.9	22.5	16.7 to 26.8	1.06	1.00 to 1.14	38	3
Comm./Ind. *S-12*	83.9	63.1 to 115.9	34.5	17.3 to 50.6	1.09	0.94 to 1.40	14	1
Vacant Lot	28.0	N/A	98.2	N/A	1.90	N/A	3	0
Farm & Home	30.8	N/A	61.4	N/A	1.16	N/A	2	0
Ag. Land Only	6.3	N/A	21.0	N/A	0.91	N/A	5	0
Ag. (Impr.+ Land)	6.3	N/A	21.0	N/A	0.91	N/A	5	0
Other/Ex/Ut/NP/M	11.0	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	92.5	N/A	39.3	N/A	1.78	N/A	63	4
Total Market	101.8	N/A	29.4	N/A	1.03	N/A	56	4

093 : STAFFORD COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	103.1	94.3 to 115.1	14.8	10.7 to 19.0	1.05	1.02 to 1.12	42	7
Comm./Ind. *S-6*	94.5	81.0 to 200.0	37.6	6.1 to 51.1	1.14	0.98 to 1.33	9	1
Vacant Lot	127.5	N/A	9.8	N/A	1.04	N/A	2	0
Farm & Home	112.6	N/A	30.0	N/A	1.04	N/A	4	0
Ag. Land Only	5.6	N/A	42.6	N/A	0.95	N/A	8	0
Ag. (Impr.+ Land)	5.6	N/A	42.6	N/A	0.95	N/A	8	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	99.1	N/A	31.8	N/A	1.94	N/A	65	7
Total Market	103.3	N/A	18.5	N/A	1.04	N/A	53	8

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

094 : STANTON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	90.2	76.9 to 100.7	14.8	7.6 to 21.1	1.01	0.96 to 1.09	14	1
Comm./Ind. *S-3*	80.0	40.1 to 122.9	31.5	10.1 to 60.1	1.45	1.16 to 2.13	5	0
Vacant Lot							0	
Farm & Home							0	
Ag. Land Only	8.5	N/A	19.6	N/A	1.02	N/A	5	0
Ag. (Impr.+ Land)	9.6	N/A	30.1	N/A	1.12	N/A	7	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	80.0	N/A	40.7	N/A	1.15	N/A	26	1
Total Market	81.9	N/A	21.5	N/A	1.08	N/A	19	1

095 : STEVENS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	89.3	85.1 to 96.2	14.4	11.2 to 17.2	0.97	0.94 to 1.00	69	7
Comm./Ind.	74.3	66.1 to 125.8	31.7	6.9 to 39.0	1.13	0.94 to 1.32	7	1
Vacant Lot	71.3	N/A	15.8	N/A	1.09	N/A	3	0
Farm & Home	74.2	N/A	18.7	N/A	1.09	N/A	3	0
Ag. Land Only	4.0	N/A	56.4	N/A	1.12	N/A	5	0
Ag. (Impr.+ Land)	4.0	N/A	56.4	N/A	1.12	N/A	5	0
Other/Ex/Ut/NP/M	50.6	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	86.4	N/A	19.2	N/A	1.00	N/A	88	9
Total Market	88.2	N/A	18.1	N/A	0.99	N/A	80	6

096 : SUMNER COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	99.9	97.2 to 103.6	17.1	14.8 to 19.4	1.02	1.00 to 1.05	215	29
Comm./Ind.	64.4	52.3 to 90.7	23.8	7.7 to 39.3	0.89	0.80 to 1.01	7	1
Vacant Lot	116.7	N/A	60.9	N/A	1.34	N/A	9	1
Farm & Home	59.8	N/A	58.4	N/A	1.14	N/A	16	1
Ag. Land Only	6.9	N/A	29.0	N/A	0.98	N/A	36	3
Ag. (Impr.+ Land)	6.9	N/A	21.5	N/A	1.02	N/A	39	6
Other/Ex/Ut/NP/M	228.6	N/A		N/A		N/A	1	0
Total w/Ag.&F&H	94.5	N/A	30.8	N/A	1.22	N/A	287	40
Total Market	99.7	N/A	18.1	N/A	1.01	N/A	232	34

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

097 : THOMAS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	92.6	89.8 to 96.2	11.9	9.9 to 13.9	1.01	0.99 to 1.03	93	3
Comm./Ind. *S-5*	95.8	70.2 to 107.2	23.8	11.7 to 37.5	1.03	0.91 to 1.20	11	0
Vacant Lot	16.0	N/A	60.3	N/A	3.47	N/A	8	1
Farm & Home	32.0	N/A		N/A		N/A	1	0
Ag. Land Only	4.8	N/A	43.2	N/A	0.96	N/A	9	1
Ag. (Impr.+ Land)	5.0	N/A	38.1	N/A	0.99	N/A	12	1
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	89.8	N/A	13.5	N/A	1.02	N/A	125	23
Total Market	92.3	N/A	12.7	N/A	1.02	N/A	112	12

098 : TREGO COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	84.8	81.0 to 91.9	12.2	8.5 to 15.5	1.02	1.00 to 1.06	33	2
Comm./Ind. *S-5*	97.9	62.3 to 188.9	31.1	10.7 to 50.9	1.02	0.69 to 1.28	9	1
Vacant Lot	54.3	N/A	.	N/A	1.00	N/A	2	0
Farm & Home	31.7	N/A	37.2	N/A	0.88	N/A	3	0
Ag. Land Only	6.5	N/A	19.6	N/A	1.06	N/A	2	0
Ag. (Impr.+ Land)	6.5	N/A	19.6	N/A	1.06	N/A	2	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	83.9	N/A	17.1	N/A	1.05	N/A	49	6
Total Market	84.8	N/A	15.7	N/A	1.02	N/A	44	3

099 : WABAUNSEE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.9	94.8 to 101.7	11.9	9.2 to 14.7	1.01	0.99 to 1.03	61	6
Comm./Ind. *S-10*	100.8	86.5 to 123.9	24.3	12.4 to 34.8	1.02	0.96 to 1.14	11	0
Vacant Lot	79.8	N/A	25.4	N/A	1.04	N/A	2	0
Farm & Home	68.2	N/A	40.8	N/A	1.19	N/A	9	1
Ag. Land Only	3.1	N/A	86.4	N/A	1.25	N/A	9	0
Ag. (Impr.+ Land)	3.1	N/A	59.3	N/A	1.33	N/A	11	1
Other/Ex/Ut/NP/M	55.1	N/A	55.7	N/A	2.21	N/A	2	0
Total w/Ag.&F&H	94.4	N/A	17.4	N/A	1.06	N/A	96	19
Total Market	97.7	N/A	13.5	N/A	1.00	N/A	76	8

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

100 : WALLACE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval		COD	Confidence Interval		PRD	Confidence Interval		Valid Sales	Trim Sales
Residential	98.8	80.7 to	107.6	15.4	8.0 to	22.4	1.01	0.95 to	1.08	14	1
Comm./Ind.	52.5	N/A			N/A			N/A		1	0
Vacant Lot	405.0	N/A			N/A			N/A		1	0
Farm & Home										0	
Ag. Land Only										0	
Ag. (Impr.+ Land)										0	
Other/Ex/Ut/NP/M										0	
Total w/Ag.&F&H	98.8	N/A		20.3	N/A		1.02	N/A		16	1
Total Market	98.8	N/A		20.3	N/A		1.02	N/A		16	1

101 : WASHINGTON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval		COD	Confidence Interval		PRD	Confidence Interval		Valid Sales	Trim Sales
Residential	103.6	94.6 to	110.3	14.1	10.0 to	18.4	1.07	1.03 to	1.13	38	6
Comm./Ind. *S-10*	86.1	67.4 to	96.8	26.3	12.7 to	36.5	1.07	0.97 to	1.22	15	2
Vacant Lot	301.6	N/A		65.8	N/A		2.47	N/A		2	0
Farm & Home	106.6	N/A			N/A			N/A		1	0
Ag. Land Only	6.2	N/A		35.1	N/A		0.93	N/A		4	0
Ag. (Impr.+ Land)	7.9	N/A		27.4	N/A		1.03	N/A		6	0
Other/Ex/Ut/NP/M										0	
Total w/Ag.&F&H	98.0	N/A		25.1	N/A		1.32	N/A		62	10
Total Market	100.0	N/A		19.1	N/A		1.08	N/A		55	8

102 : WICHITA COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval		COD	Confidence Interval		PRD	Confidence Interval		Valid Sales	Trim Sales
Residential	94.4	77.5 to	102.5	19.9	11.5 to	30.3	1.01	0.94 to	1.09	18	1
Comm./Ind. *S-8*	97.1	65.3 to	120.9	26.1	12.5 to	40.3	0.97	0.88 to	1.13	10	0
Vacant Lot										0	
Farm & Home	83.8	N/A		27.8	N/A		1.02	N/A		3	1
Ag. Land Only	7.1	N/A		25.2	N/A		1.09	N/A		6	0
Ag. (Impr.+ Land)	7.2	N/A		25.2	N/A		1.09	N/A		7	1
Other/Ex/Ut/NP/M	83.2	N/A			N/A			N/A		1	0
Total w/Ag.&F&H	83.2	N/A		38.5	N/A		1.39	N/A		39	2
Total Market	94.2	N/A		20.4	N/A		1.01	N/A		29	2

(Confidence Intervals have been calculated only on the Residential and Commercial Subclass)

S – Supplemental Sales | *T – Time Trended*

Median Ratio = 90.0 to 110.0 | COD = 20.0 or Less | PRD = .98 to 1.03

103 : WILSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	102.4	97.0 to 120.6	30.5	22.9 to 38.4	1.15	1.08 to 1.25	67	8
Comm./Ind.	106.2	61.2 to 151.9	33.8	13.0 to 60.9	1.56	1.32 to 2.05	7	0
Vacant Lot	72.5	N/A	76.7	N/A	1.83	N/A	11	1
Farm & Home	41.1	N/A	48.3	N/A	1.30	N/A	4	0
Ag. Land Only	4.7	N/A	22.9	N/A	0.84	N/A	5	0
Ag. (Impr.+ Land)	4.9	N/A	19.9	N/A	0.88	N/A	6	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	98.2	N/A	41.4	N/A	1.51	N/A	95	10
Total Market	101.0	N/A	34.0	N/A	1.15	N/A	85	10

104 : WOODSON COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	98.8	85.1 to 109.9	35.8	21.3 to 48.1	1.24	1.11 to 1.43	28	2
Comm./Ind. *S-9*	111.9	83.2 to 181.2	43.2	13.6 to 77.0	1.33	0.95 to 2.39	12	1
Vacant Lot	89.3	N/A	19.4	N/A	0.98	N/A	2	0
Farm & Home	62.4	N/A	35.4	N/A	1.06	N/A	7	0
Ag. Land Only	6.2	N/A	26.9	N/A	0.97	N/A	5	0
Ag. (Impr.+ Land)	6.4	N/A	41.6	N/A	1.01	N/A	6	0
Other/Ex/Ut/NP/M							0	
Total w/Ag.&F&H	87.4	N/A	38.0	N/A	1.60	N/A	55	8
Total Market	106.3	N/A	28.2	N/A	1.22	N/A	42	6

105 : WYANDOTTE COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	97.4	95.6 to 101.4	20.0	17.8 to 22.2	1.05	1.03 to 1.07	307	37
Comm./Ind.	73.4	63.8 to 87.0	30.7	24.4 to 37.8	1.02	0.93 to 1.13	62	4
Vacant Lot	57.5	N/A	42.3	N/A	0.83	N/A	68	7
Farm & Home	65.1	N/A	30.3	N/A	2.46	N/A	14	0
Ag. Land Only	0.6	N/A	62.9	N/A	0.82	N/A	12	1
Ag. (Impr.+ Land)	0.3	N/A	417.7	N/A	0.60	N/A	24	3
Other/Ex/Ut/NP/M	158.9	N/A	239.8	N/A	2.71	N/A	14	2
Total w/Ag.&F&H	91.7	N/A	32.2	N/A	1.19	N/A	489	44
Total Market	94.7	N/A	27.4	N/A	1.16	N/A	451	45

STATE TOTALS COUNTY

PROPERTY CLASS	Median Ratio	Confidence Interval	COD	Confidence Interval	PRD	Confidence Interval	Valid Sales	Trim Sales
Residential	96.2	N/A	12.4	N/A	1.03	N/A	11996	1323
Comm./Ind.	90.2	N/A	25.4	N/A	1.13	N/A	1649	89
Vacant Lot	71.8	N/A	47.4	N/A	1.18	N/A	2241	193
Farm & Home	64.9	N/A	35.3	N/A	1.10	N/A	948	30
Ag. Land Only	4.3	N/A	101.0	N/A	0.82	N/A	1545	171
Ag. (Impr.+ Land)	4.3	N/A	97.8	N/A	0.85	N/A	1794	193
Other/Ex/Ut/NP/M	108.0	N/A	50.1	N/A	1.15	N/A	170	19
Total Market	96.0	N/A	16.1	N/A	1.07	N/A	16051	2288

Confidence Intervals have not been computed for statewide totals.

*Subclass measures weighted by parcel count.

**Approximately 330 supplemental sales included in the commercial subclass.

Time trending

One county applied for a time trend for the commercial/industrial subclass of properties for 2015.

Charts & Graphs

Charts and Graphs

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 confidence intervals. This study also uses trended sales prices and supplemental sales where needed. Additional sales validation documentation has been reviewed and outliers have been trimmed for the uniformity measurement *(COD).*

The information provided by this 2015 Final Ratio Study, *pages 15-49*, indicates that a large portion of the residential and commercial/industrial subclasses of property meet the important mass appraisal standards.

GRAPHICS:

The following pie charts depict an overall appraisal performance for residential and commercial properties based on accepted standards. Weighting calculations are based on the 2015 certified assessed values. These numbers are weighted by county abstract assessed valuation.

1. ***Exhibit I*** depicts the residential and commercial *median ratios.* The residential and commercial charts indicate that greater than 99 percent of the residential and commercial value statewide falls within a range of 90.0 percent to 110.0 percent which is the recognized standard according to IAAO *(International Association of Assessing Officers).*
2. ***Exhibit II*** presents the residential and commercial *coefficient of dispersion (COD).* The acceptable standard for Kansas is a range of 0 to 20.0 for the COD. This chart indicates that 99.3 percent of the residential property value and 91.7 percent of the commercial/industrial property values fall within counties with a COD of 20.0 or less.
3. ***Exhibit III*** is a display of residential and commercial appraisal bias. The *price-related differential* provides only an indication, not proof, of appraisal bias. When sample sizes are small, a price-related differential outside the acceptable range may occur simply

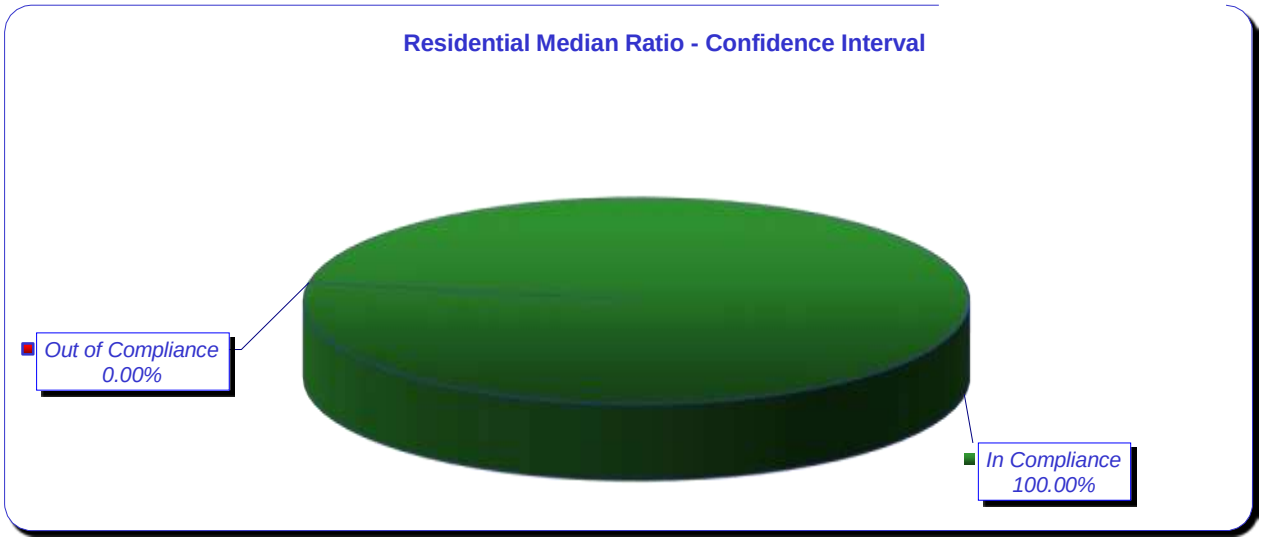
because of random sampling error[1]. The acceptable range for the PRD is between .98 and 1.03. This chart indicates that 95.6 percent of the commercial property value and greater than 97 percent of the residential property values fall within the acceptable range for the PRD.

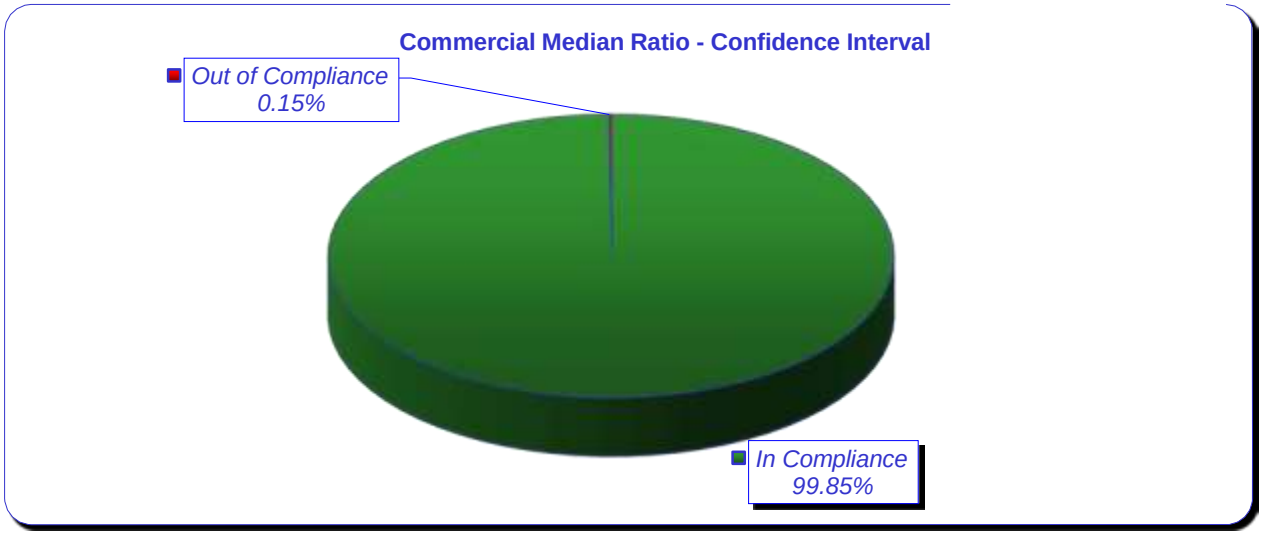
4. Residential and commercial bar charts have been prepared to show the confidence interval widths for the Median Ratio, Coefficient of Dispersion *(COD)* and the Price-Related Differential *(PRD)*. Confidence intervals provide a range of values that can be used to estimate performance measures for each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

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

Pie Charts Based on 2015 Total Assessed Valuation

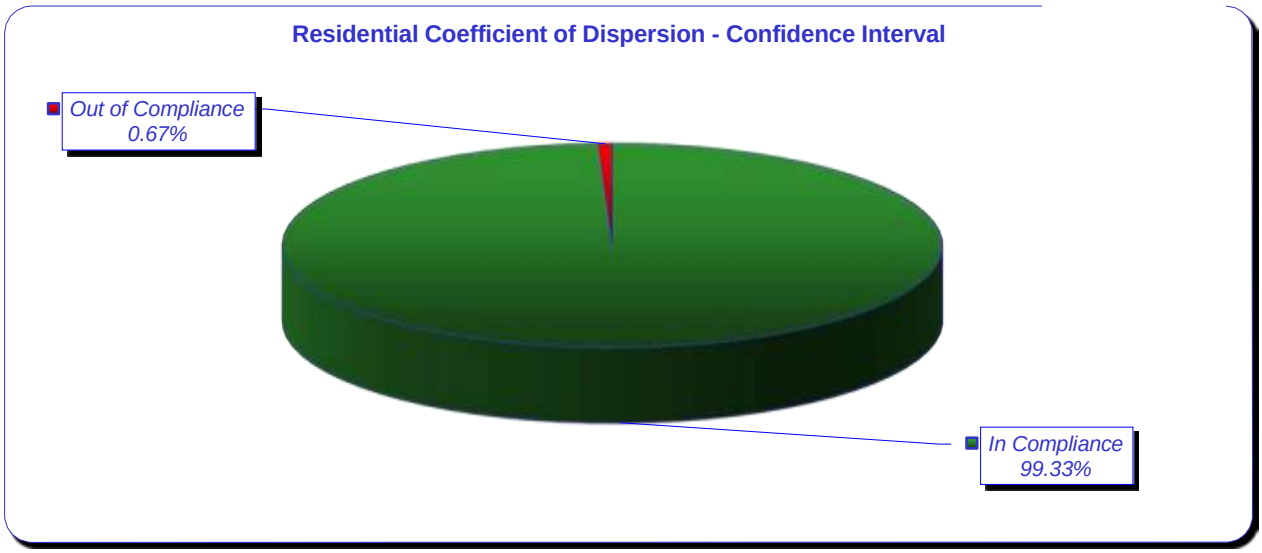
Exhibit I

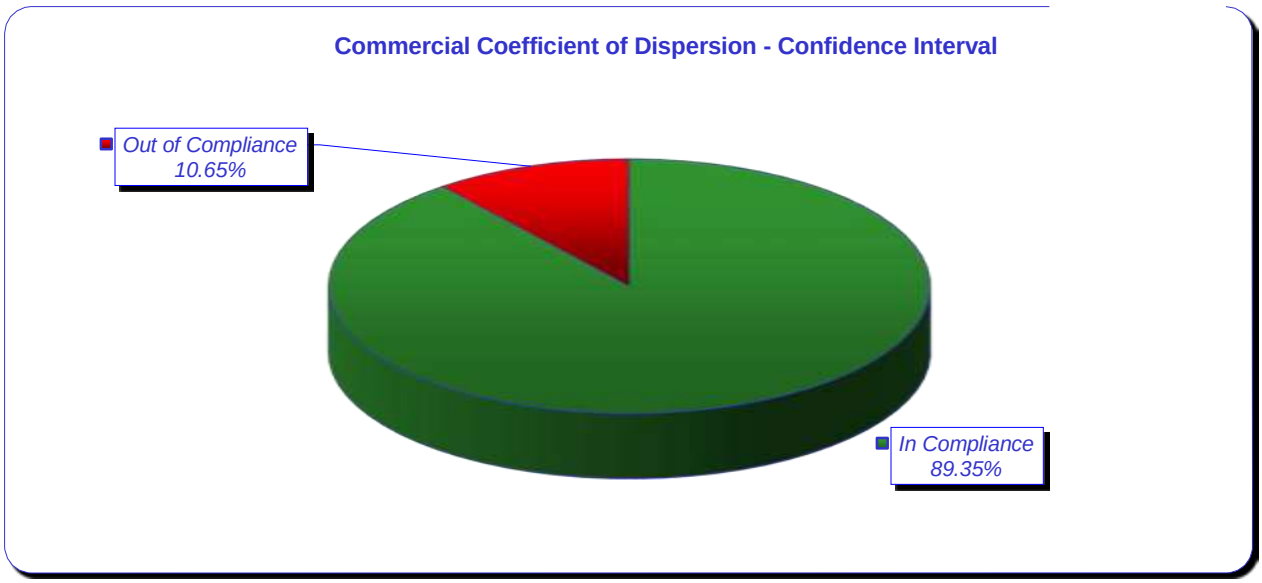




Pie Charts Based on 2015 Total Assessed Valuation

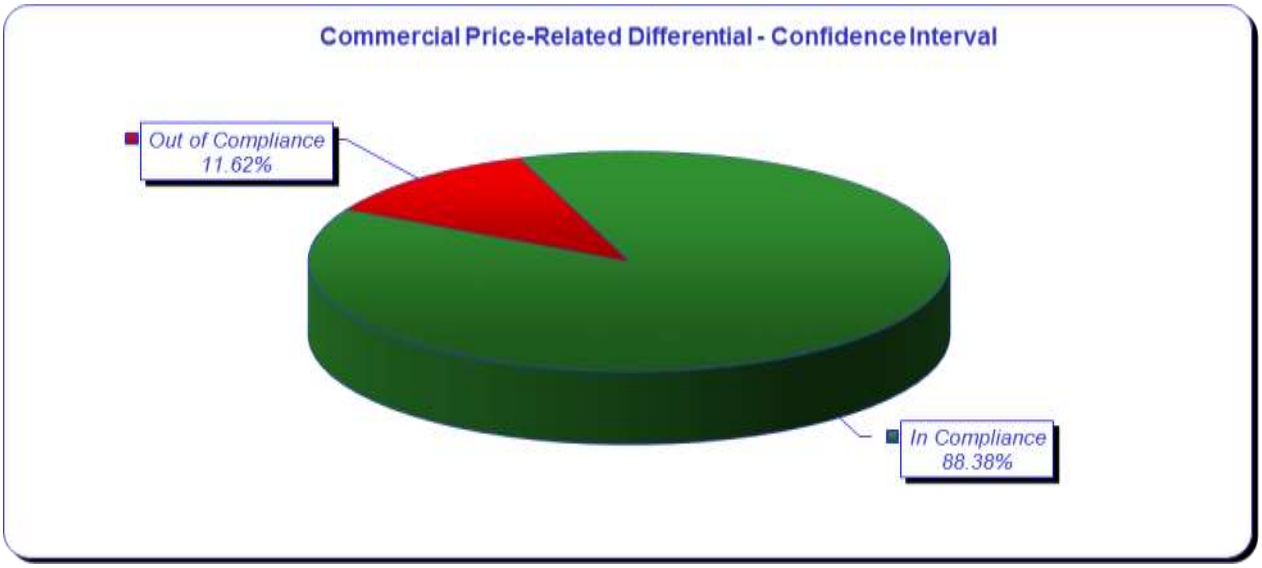
Exhibit II

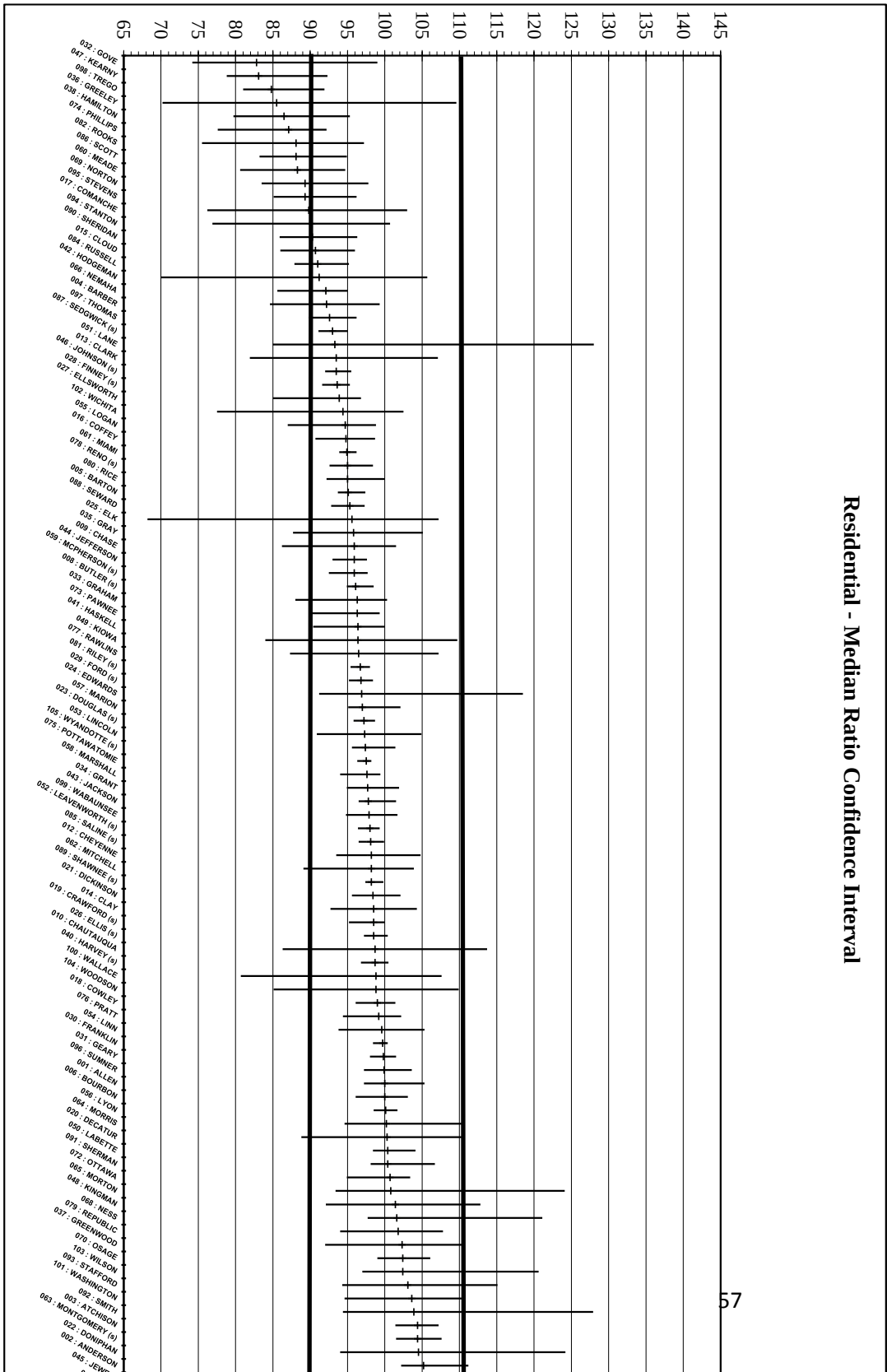


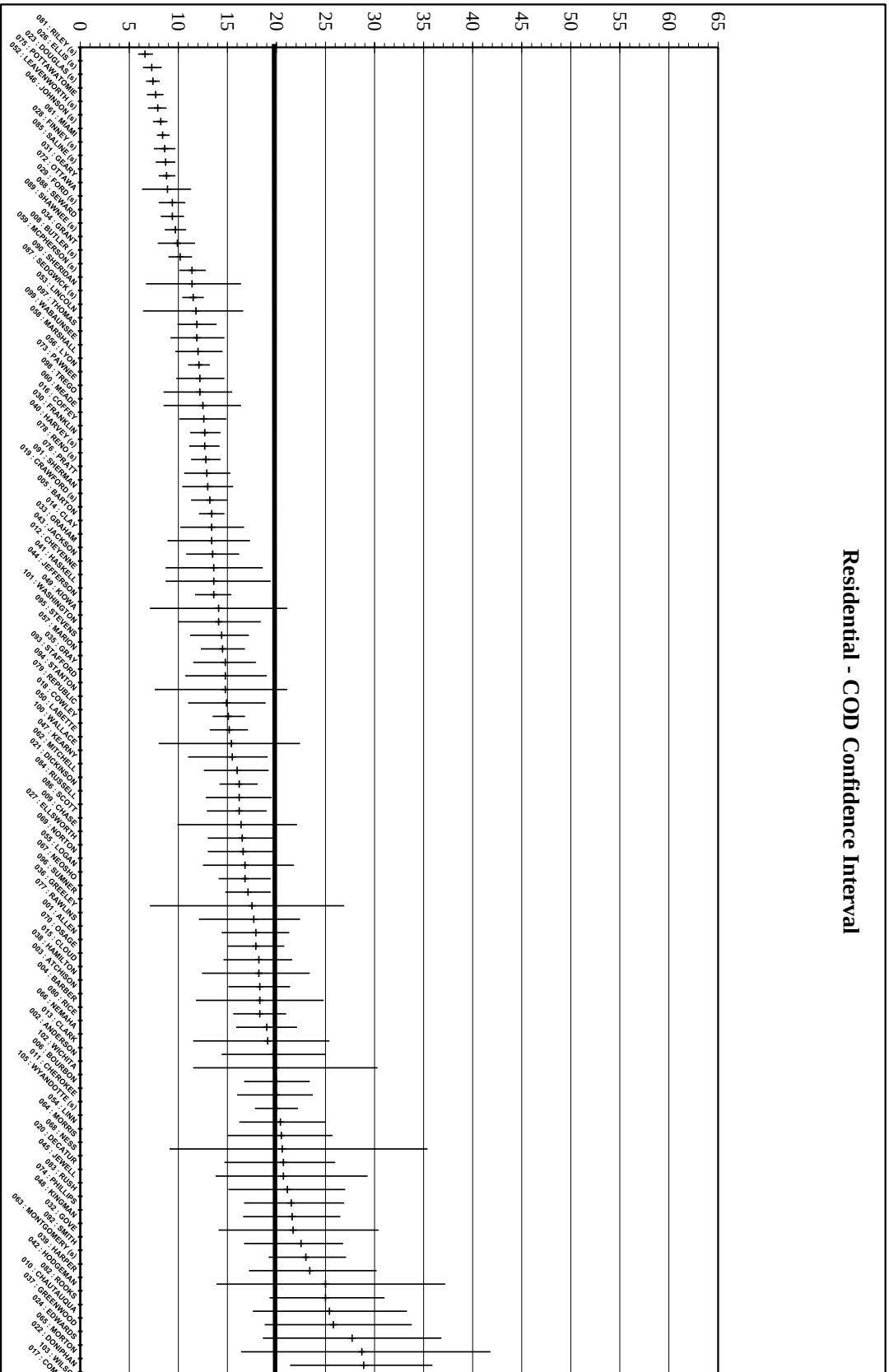


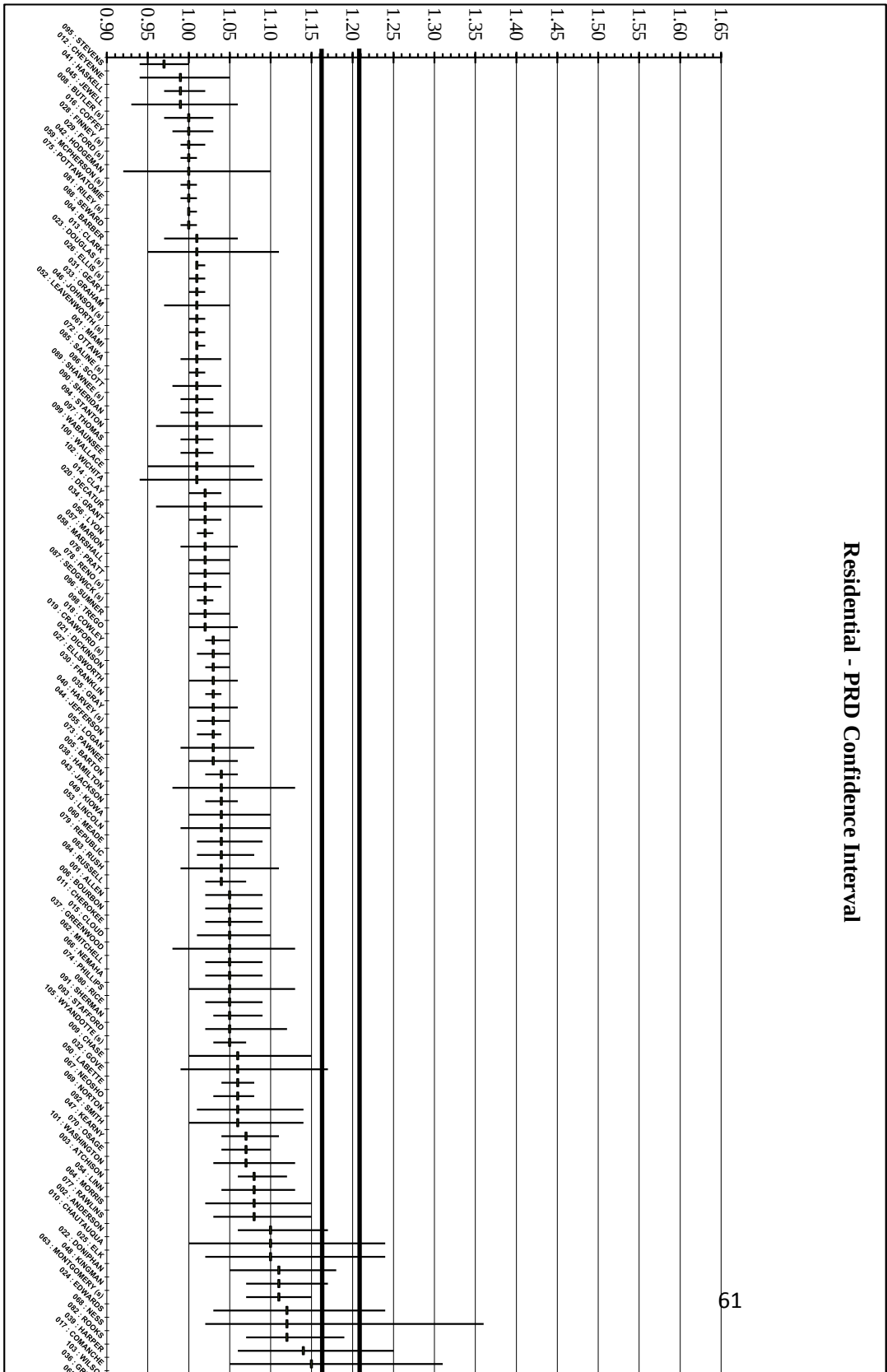
Pie Charts Based on 2015 Total Assessed Valuation

Exhibit III




Residential - Median Ratio Confidence Interval
145
140
135
130
125
120
115
110
105
100
95
90
85
80
75
70
65
032 : GOVE
047 : KEARNY
098 : TREGO
036 : GREELEY
038 : HAMILTON
074 : PHILLIPS
082 : ROOKS
086 : SCOTT
060 : MEADE
069 : NORTON
095 : STEVENS
017 : COMANCHE
094 : STANTON
090 : SHERIDAN
015 : CLOUD
084 : RUSSELL
042 : HODGEMAN
066 : NEMAHA
004 : BARBER
097 : THOMAS
087 : SEDGWICK (s)
051 : LANE
013 : CLARK
046 : JOHNSON (s)
028 : FINNEY (s)
027 : ELLSWORTH
102 : WICHITA
058 : LOGAN
016 : COFFEY
061 : MIAMI
078 : RENO (s)
080 : RICE
005 : BARTON
088 : SEWARD
025 : ELK
035 : GRAY
009 : CHASE
044 : JEFFERSON
059 : MCPHERSON (s)
008 : BUTLER (s)
033 : GRAHAM
073 : PAWNEE
041 : HASKELL
049 : KIOWA
077 : RAWLINS
081 : RILEY (s)
029 : FORD (s)
024 : EDWARDS
057 : MARION
023 : DOUGLAS (s)
053 : LINCOLN
105 : WYANDOTTE (s)
075 : POTTAWATOMIE
058 : MARSHALL
034 : GRANT
043 : JACKSON
099 : WABAUNSEE
052 : LEAVENWORTH (s)
085 : SALINE (s)
012 : CHEYENNE
062 : MITCHELL
089 : SHAWNEE (s)
021 : DICKINSON
014 : CLAY
019 : CRAWFORD (s)
026 : ELLIS (s)
010 : CHAUTAUQUA
040 : HARVEY (s)
100 : WALLACE
104 : WOODSON
018 : COWLEY
076 : PRATT
054 : LINN
030 : FRANKLIN
031 : GEARY
096 : SUMNER
001 : ALLEN
006 : BOURBON
056 : LYON
064 : MORRIS
020 : DECATUR
050 : LABETTE
091 : SHERMAN
072 : OTTAWA
065 : MORTON
048 : KINGMAN
068 : NESS
079 : REPUBLIC
037 : GREENWOOD
070 : OSAGE
103 : WILSON
093 : STAFFORD
101 : WASHINGTON
092 : SMITH
003 : ATCHISON
063 : MONTGOMERY (s)
022 : DONIPHAN
002 : ANDERSON
045 : JEW-


Residential - COD Confidence Interval
65
60
55
50
45
40
35
30
25
20
15
10
5
0
081 : RILEY (s)
029 : ELLIS (s)
025 : DOUGLAS (s)
023 : POTTAWATOMIE
032 : LEAVENWORTH (s)
045 : JOHNSON (s)
061 : MIAMI
028 : FINNEY (s)
085 : SALINE (s)
031 : GEARY
072 : OTTAWA
025 : FORD (s)
086 : SEWARD
089 : SHAWNEE (s)
034 : GRANT
066 : BUTLER (s)
059 : MCPHERSON (s)
080 : SHERIDAN
037 : SEDGWICK (s)
050 : LINCOLN
097 : THOMAS
099 : WABAUNSEE
048 : MARSHALL
056 : LYON
073 : PAWNEE
086 : TREGO
060 : MEADE
016 : COFFEY
030 : FRANKLIN
040 : HARVEY (s)
078 : RENO (s)
076 : PRATT
099 : SHERMAN
019 : CRAWFORD (s)
005 : BARTON
014 : CLAY
033 : GRAHAM
043 : JACKSON
012 : CHEYENNE
041 : HASKELL
044 : JEFFERSON
049 : KIOWA
101 : WASHINGTON
095 : STEVENS
057 : MORTON
093 : STANTON
035 : GRAY
094 : STAFFORD
079 : REPUBLIC
018 : COWLEY
050 : LABETTE
100 : WALLACE
047 : KEARNY
062 : MITCHELL
021 : DICKINSON
084 : RUSSELL
086 : SCOTT
069 : CHASE
027 : ELLSWORTH
068 : NORTON
055 : LOGAN
067 : NESSHO
096 : SUMNER
036 : GREELEY
077 : RAWLINS
001 : ALLEN
070 : OSAGE
015 : CLOUD
038 : HAMILTON
003 : ATCHISON
004 : BARBER
089 : RICE
069 : NEMAHA
011 : CLARK
002 : ANDERSON
102 : WICHITA
006 : BOURBON
011 : CHEROKEE
105 : WYANDOTTE (s)
054 : LINN
096 : MORRIS
069 : NESS
020 : DECATUR
045 : JEWELL
083 : RUSH
074 : PHILLIPS
048 : KINGMAN
032 : GOVE
063 : MONTGOMERY (s)
053 : HARPER
042 : HODGEMAN
010 : CHAUTAUQUA
037 : GREENWOOD
024 : EDWARDS
053 : MORTON
022 : JOHNSON
102 : WILSON
017 : COFFEY


Residential - PRD Confidence Interval
1.65
1.60
1.55
1.50
1.45
1.40
1.35
1.30
1.25
1.20
1.15
1.10
1.05
1.00
0.95
0.90
065 : STEVENS
072 : CHEYENNE
041 : HASKELL
045 : JEWELL
008 : BUTLER (s)
016 : COFFEY
028 : FINNEY (s)
029 : FORD (s)
042 : HODGEMAN
059 : MORRISON (s)
072 : POTTAWATOMIE
081 : RILEY (s)
088 : SEWARD
004 : BARBER
013 : CLARK
023 : DOUGLAS (s)
026 : ELLIS (s)
031 : GARY
033 : GRAHAM
046 : JOHNSON (s)
052 : LEAVENWORTH (s)
061 : MIAMI
072 : OTTAWA
085 : SALINE (s)
086 : SCOTT
089 : SHAWNEE (s)
090 : SHERIDAN
094 : STANTON
097 : THOMAS
099 : WABAUNSEE
100 : WALLACE
102 : WICHITA
014 : CLAY
020 : DECATUR
034 : GRANT
036 : HAYON
037 : MARION
038 : MARSHALL
076 : PRATT
078 : RENO (s)
087 : SEDGWICK (s)
096 : SUMNER
098 : REGO
018 : COWLEY
019 : CRAWFORD (s)
021 : DICKINSON
027 : ELLSWORTH
030 : FRANKLIN
040 : GRAY
044 : JEFFERSON
055 : LOGAN
073 : PAWNEE
005 : BARTON
038 : FAMILTON
043 : JACKSON
049 : KIOWA
053 : LINCOLN
060 : MEADE
079 : REPUBLIC
083 : RUSH
084 : RUSSELL
001 : ALLEN
006 : BOURBON
011 : CHEROKEE
015 : CLOUD
037 : GREENWOOD
062 : MITCHELL
068 : NEMAHA
074 : PHILLIPS
098 : RICE
091 : SHERMAN
093 : STAFFORD
103 : WYANDOTTE (s)
009 : CHASE
032 : GOVE
058 : LABETTE
067 : NEOSHO
089 : NORTON
092 : SMITH
047 : KEARNY
070 : OSAGE
101 : WASHINGTON
003 : ATCHISON
054 : LINN
064 : MORRIS
077 : RAWLINS
022 : ANDERSON
010 : CHAUTAUQUA
025 : ELK
022 : DONIPHAN
048 : KINGMAN
063 : MONTGOMERY (s)
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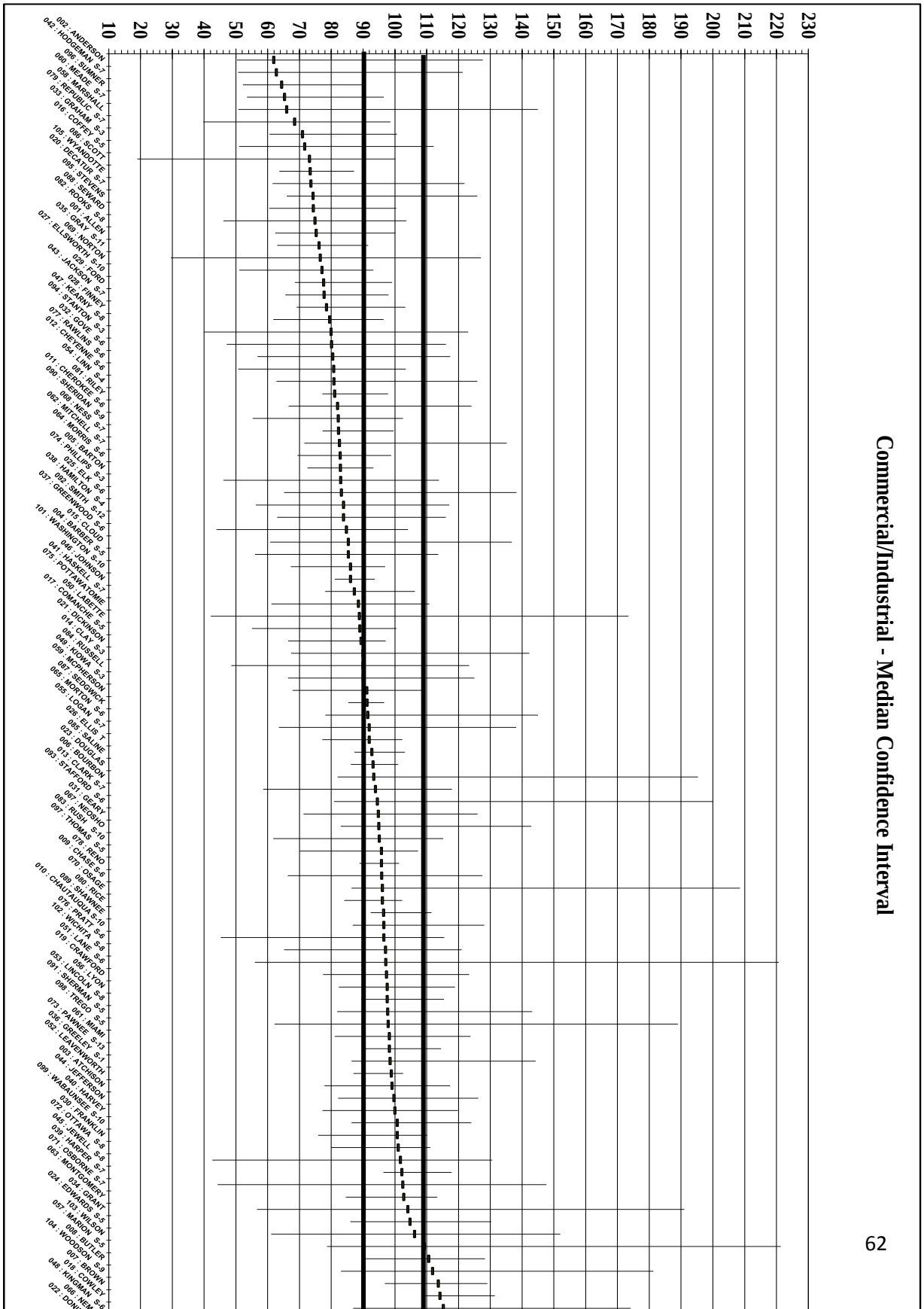
082 : ROOKS
029 : HARPER
017 : COMANCHE
104 : WILSON
036 : GREELEY


Commercial/Industrial - Median Confidence Interval
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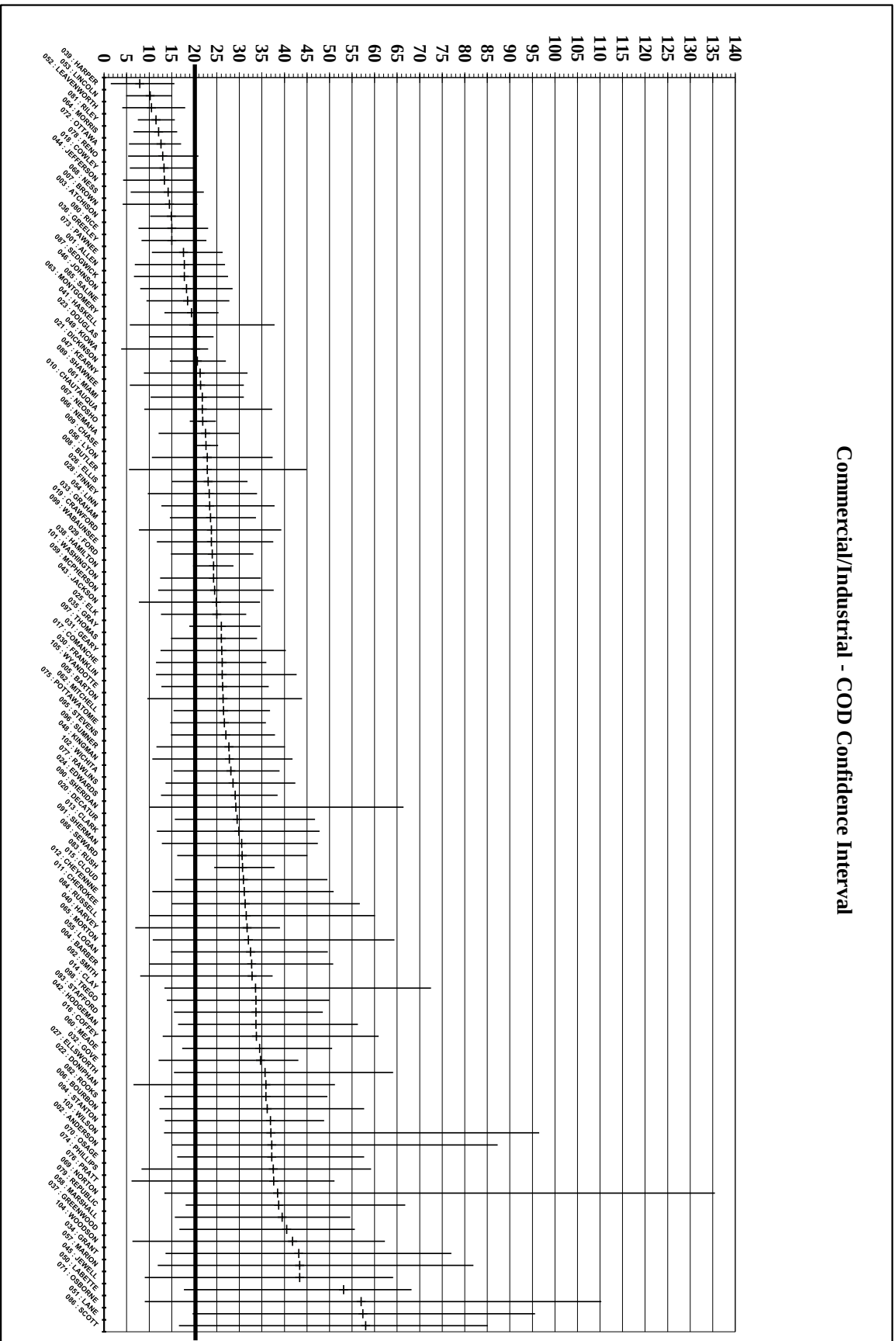
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
002 : ANDERSON S-7
042 : HODGEMAN S-7
096 : SUMNER S-6
080 : MEADE S-7
056 : MARSHALL
079 : REPUBLIC S-7
033 : GRAHAM S-3
016 : COFFEY S-5
086 : SCOTT S-5
105 : WYANDOTTE
020 : DECATUR S-7
095 : STEVENS S-9
088 : SEWARD S-8
092 : ROOKS S-9
001 : ALLEN S-11
035 : GRAY S-10
069 : NORTON S-7
027 : ELLSWORTH
029 : FORD S-7
043 : JACKSON S-6
023 : FINNEY S-8
047 : KEARNY S-6
094 : STANTON S-6
032 : ROVE S-6
077 : RAWLINS S-6
012 : CHEYENNE S-6
054 : LINN S-4
066 : RILEY S-6
011 : CHEROKEE S-6
090 : SHERIDAN S-9
068 : NESS S-7
062 : MITCHELL S-7
004 : MORRIS S-6
005 : BARTON S-5
074 : PHILLIPS S-3
025 : ELK S-6
038 : HAMILTON S-4
002 : SMITH S-12
037 : GREENWOOD S-6
015 : CLOUD S-5
004 : BARBER S-10
101 : WASHINGTON
046 : JOHNSON S-7
041 : HASKELL S-5
075 : POTTAWATOMIE
050 : LAFETTE S-5
017 : COMANCHE S-5
021 : DICKINSON
014 : CLAY S-3
084 : RUSSELL S-3
049 : KIOWA S-3
059 : MCPHERSON
085 : SEDGWICK S-6
065 : MORTON S-7
055 : LOGAN S-6
026 : ELLIS T
082 : SALINE S-7
053 : DOUGLAS
006 : BOURBON
013 : CLARK S-7
093 : STAFFORD S-6
037 : GEARY
067 : NEOSHO
057 : RUSH S-10
097 : THOMAS S-5
078 : RENO
009 : CHASE S-6
070 : OSAGE
080 : RICE
089 : SHAWNEE
010 : CHAUTAUQUA S-10
076 : PRATT S-6
102 : WICHITA S-6
031 : LANE S-6
019 : CRAWFORD
056 : LYON
053 : LINCOLN S-8
091 : SHERMAN S-5
098 : TREGO S-5
073 : PAWNEE S-5
061 : MIAMI
036 : GREELEY S-13
052 : LEAVENWORTH S-1
003 : ATCHISON
044 : JEFFERSON
098 : WABAUNSEE
040 : HARVEY
020 : FRANKLIN S-10
072 : OTTAWA
045 : JEWELL S-9
039 : HARPER S-8
071 : OSBORNE S-7
063 : MONTGOMERY
034 : GRANT
024 : EDWARDS S-5
103 : WILSON S-5
057 : MARION S-5
008 : BUTLER S-5
104 : WOODSON S-9
007 : BROWN
018 : COWLEY
048 : KINGMAN S-6
022 : DONIPHAN


Commercial/Industrial - COD Confidence Interval
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135
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120
115
110
105
100
95
90
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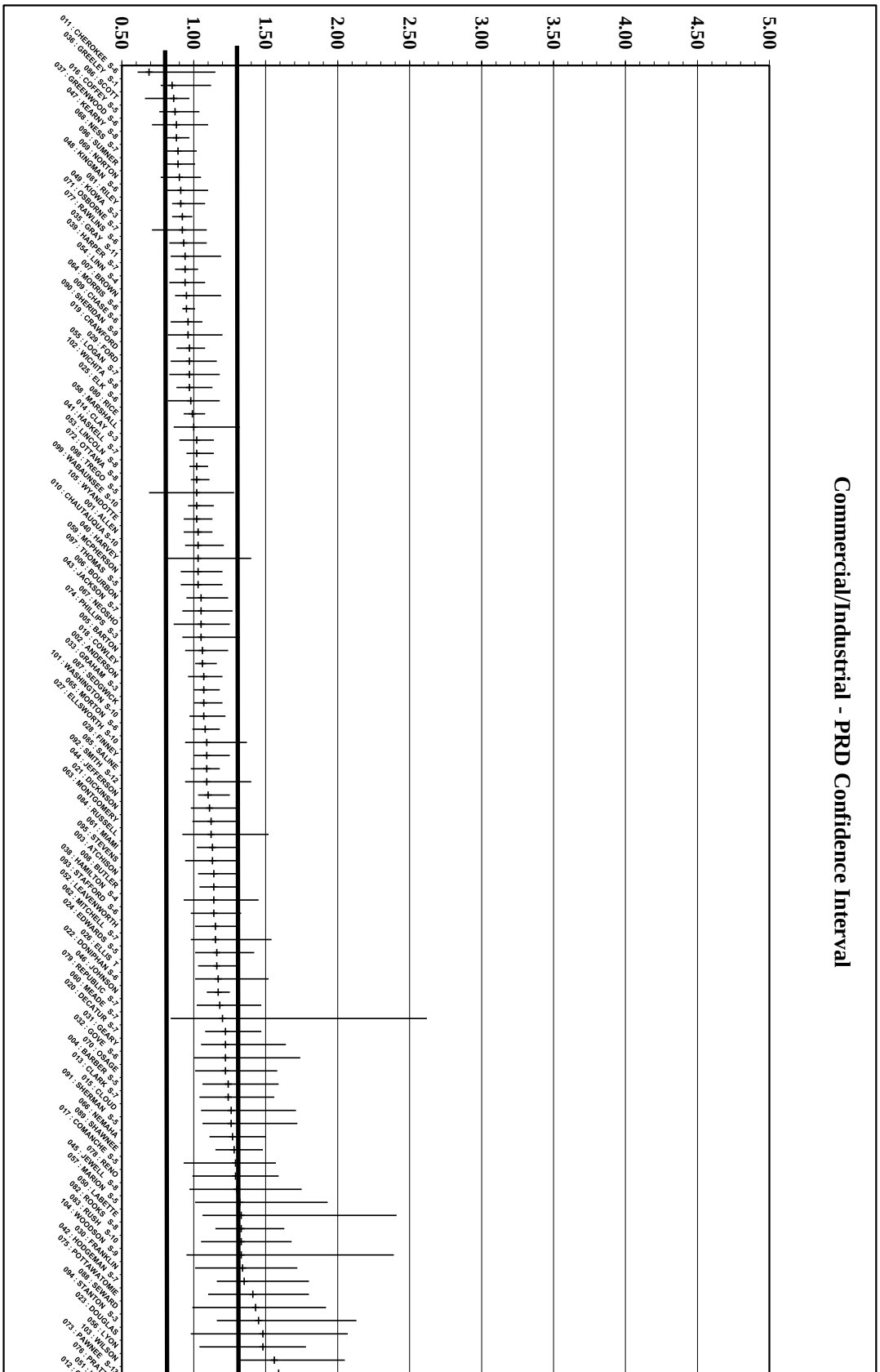
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
039 : HARPER
053 : LINCOLN
052 : LEAVENWORTH
087 : RILEY
064 : MORRIS
072 : OTTAWA
078 : RENO
079 : COWLEY
044 : JEFFERSON
069 : NESS
007 : BROWN
003 : ATCHISON
098 : WICHITA
036 : GREELEY
073 : FAYETTE
087 : SEDGWICK
001 : ALLEN
046 : JOHNSON
085 : SALINE
063 : MONTGOMERY
041 : HASKELL
022 : DOUGLAS
021 : DICKINSON
149 : KIOWA
047 : KEARNY
089 : SHAWNEE
010 : CHAUTAUQUA
067 : MIAMI
066 : NEOSHO
009 : CHASE
056 : LYON
008 : BUTLER
028 : ELLIS
029 : FINNEY
033 : GRAHAM
004 : ANN
019 : CRAWFORD
099 : WABAUNSEE
023 : FORD
107 : WASHINGTON
039 : HARVEY
043 : JACKSON
025 : ELK
035 : GRAY
097 : THOMAS
031 : GARFIELD
017 : COMANCHE
030 : FRANKLIN
105 : WYANDOTTE
062 : BARTON
065 : MITCHELL
075 : POTTAWATOMIE
095 : STEVENS
096 : SUMNER
048 : KINGMAN
102 : WICHITA
077 : RAWLINS
024 : EDWARDS
090 : SHERIDAN
020 : DECATUR
013 : CLARK
091 : SHERMAN
088 : SEWARD
047 : RUSH
015 : CLOUD
012 : CHEYENNE
011 : CHEROKEE
084 : RUSSELL
040 : HARPER
045 : MORTON
055 : LOGAN
004 : BARBER
092 : SMITH
014 : CLAY
098 : TREGO
093 : STAFFORD
042 : ROGERS
016 : COFFEY
080 : MEADE
027 : ELLSWORTH
022 : DONIPHAN
082 : ROOKS
086 : BOURBON
095 : STANTON
003 : ANDERSON
070 : OSAGE
074 : PHILLIPS
076 : PRATT
069 : NORTON
079 : REPUBLIC
038 : MARSHALL
037 : GREENWOOD
104 : WOODSON
034 : GRANT
057 : MARION
045 : JEWELL
050 : LABETTE
071 : OSBORNE
051 : LANE
096 : SCOTT


Commercial/Industrial - PRD Confidence Interval
5.00
4.50
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071 : CHEROKEE S-6
036 : GREELEY S-1
086 : SCOTT
016 : COFFEY S-5
037 : GREENWOOD S-6
047 : KEARNY S-8
068 : HESS S-7
069 : NORTON
046 : SUMNER S-6
048 : KINGMAN S-3
091 : RILEY
042 : KIOWA S-3
077 : OSBORNE S-7
035 : GRAY S-6
039 : HARPER S-11
054 : LINN S-7
007 : BROWN S-4
084 : MORRIS S-6
089 : SHERIDAN S-6
098 : SHERMAN S-9
018 : CRAWFORD
029 : LOGAN S-7
055 : WICHITA S-9
102 : RICE S-6
025 : ELK
080 : MARSHALL
059 : CLAY S-3
014 : HASKELL S-7
044 : LINCOLN S-9
053 : OTTAWA S-8
072 : TREGO S-5
099 : WABAUNSEE S-10
098 : WYANDOTTE
105 : ALLEN
010 : CHAUTAUQUA S-10
040 : HARVEY
059 : MCPHERSON
097 : THOMAS S-5
096 : BOURBON
043 : JACKSON S-7
097 : NEOSHO
074 : PHILLIPS S-3
065 : BARTON
016 : COFFEY
002 : ANDERSON
033 : GRAHAM S-3
098 : SEDGWICK
101 : WASHINGTON S-10
065 : MORTON S-6
027 : ELLSWORTH S-10
025 : FINEY
092 : SALINE
044 : JEFFERSON
021 : JACKSON
063 : MONTGOMERY
084 : RUSSELL
095 : STEVENS
093 : ATCHISON
098 : BUTLER
038 : HAMILTON S-4
093 : STAFFORD S-6
052 : LEAVENWORTH
024 : MITCHELL S-7
022 : EDWARDS S-6
026 : ELLIS S-7
046 : JOHNSON S-6
079 : REPUBLIC S-7
067 : MEADE S-7
020 : SECTUS S-7
031 : OGARY
032 : SOVE S-6
070 : OSAGE
004 : BARBER S-5
017 : CART S-7
015 : CLOUD
091 : SHERMAN S-5
066 : NEMAHA
089 : SHAWNEE
017 : COMANCHE S-5
078 : RENO
045 : JEWELL S-8
057 : MARION S-5
050 : LABETTE
082 : RIOKE S-10
104 : WOODSON S-9
070 : FRANKLIN
042 : HODGEMAN S-7
073 : POTTAWATOMIE
088 : SEWARD
094 : STANTON S-3
023 : DOUGLAS
056 : LYON
073 : PAWNEE S-13
076 : PRATT

Detailed Statistics

Residential and Commercial/Industrial

Subclass

001 : ALLEN		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	110	10
Number of Ratios: Outliers Removed	16	0
Number of Sales Trimmed	94	10
Minimum Ratio	28.9	61.1
Maximum Ratio	1134	108.3
Minimum Sale Price	500	15,000
Maximum Sale Price	235,000	300,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.0	75.3
Lower Median Confidence Interval	97.2	62.5
Upper Median Confidence Interval	105.3	100.0
Broadened Median Ratio (BMED)	100.5	76.8
Coefficient of Dispersion (COD)	17.9	20.3
Lower COD Confidence Interval	14.4	10.0
Upper COD Confidence Interval	21.3	24.3
Weighted Coefficient Of Dispersion	15.5	21.9
Coefficient of Concentration @ 10%	35.5	30.0
Coefficient of Concentration @ 15%	51.8	30.0
Coefficient of Concentration @ 20%	59.1	60.0
Coefficient of Concentration @ 50%	79.1	100.0
Coefficient of Concentration @ 100%	90.9	100.0
Coefficient of Interquartile Deviation	16.6	25.2
Median Percent Deviation	14.6	18.5
Lower Quartile (25th Percentile)	87.5	62.3
Upper Quartile (75th Percentile)	120.6	100.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	Reject4
Relative Skewness	0.27	0.34
Relative Kurtosis	3.58	1.54
Arithmetic Mean Ratio	98.3	80.5
Weighted Mean Ratio	93.7	78.2
Geometric Mean Ratio	95.3	78.7
Harmonic Mean Ratio	91.9	77
Standard Deviation	24.2	18.1
Coefficient of Variation	24.6	22.5
Price Related Differential (PRD)	1.05	1.03
Lower PRD Confidence Interval	1.02	0.93
Upper PRD Confidence Interval	1.09	1.13
Price Related Bias (PRB)	-0.344	0.034
Lower PRB Confidence Interval	-0.478	-0.120
Upper PRB Confidence Interval	-0.209	0.187
Average Sale Price	66,569	97,185
Average Market Value	62,357	76,015

002 : ANDERSON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	73	6
Number of Ratios: Outliers Removed	7	0
Number of Sales Trimmed	66	6
Minimum Ratio	50.3	40.4
Maximum Ratio	1340	155
Minimum Sale Price	500	16,500
Maximum Sale Price	475,000	42,500
DISTRIBUTION FREE STATISTICS		
Median Ratio	105.2	61.9
Lower Median Confidence Interval	102.2	50.4
Upper Median Confidence Interval	111.2	127.5
Broadened Median Ratio (BMED)	105.5	68.0
Coefficient of Dispersion (COD)	19.7	41.8
Lower COD Confidence Interval	14.4	6.3
Upper COD Confidence Interval	25.0	62.3
Weighted Coefficient Of Dispersion	13.5	28.8
Coefficient of Concentration @ 10%	45.2	50.0
Coefficient of Concentration @ 15%	57.5	50.0
Coefficient of Concentration @ 20%	67.1	50.0
Coefficient of Concentration @ 50%	75.3	66.7
Coefficient of Concentration @ 100%	90.4	83.3
Coefficient of Interquartile Deviation	20.8	47.1
Median Percent Deviation	13.8	18.5
Lower Quartile (25th Percentile)	95.6	55.4
Upper Quartile (75th Percentile)	139.3	113.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectA
Relative Skewness	1.18	1.07
Relative Kurtosis	3.79	2.8
Arithmetic Mean Ratio	112	79.9
Weighted Mean Ratio	101.5	74.7
Geometric Mean Ratio	108.3	72.5
Harmonic Mean Ratio	105.1	66.6
Standard Deviation	30.6	41.5
Coefficient of Variation	27.3	52
Price Related Differential (PRD)	1.10	1.07
Lower PRD Confidence Interval	1.06	0.96
Upper PRD Confidence Interval	1.17	1.20
Price Related Bias (PRB)	-0.381	0.332
Lower PRB Confidence Interval	-0.645	-1.197
Upper PRB Confidence Interval	-0.118	1.860
Average Sale Price	73,804	29,167
Average Market Value	74,909	21,793

003 : ATCHISON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	152	10
Number of Ratios: Outliers Removed	15	1
Number of Sales Trimmed	137	9
Minimum Ratio	6.1	68.7
Maximum Ratio	1821	260.3
Minimum Sale Price	1,500	7,000
Maximum Sale Price	400,000	875,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	104.4	99.1
Lower Median Confidence Interval	101.4	78.0
Upper Median Confidence Interval	107.2	117.2
Broadened Median Ratio (BMED)	104.4	98.9
Coefficient of Dispersion (COD)	18.3	14.2
Lower COD Confidence Interval	15.1	5.9
Upper COD Confidence Interval	21.4	22.1
Weighted Coefficient Of Dispersion	12.4	18.0
Coefficient of Concentration @ 10%	41.4	50.0
Coefficient of Concentration @ 15%	53.3	50.0
Coefficient of Concentration @ 20%	60.5	50.0
Coefficient of Concentration @ 50%	80.9	90.0
Coefficient of Concentration @ 100%	91.4	90.0
Coefficient of Interquartile Deviation	18.3	17.4
Median Percent Deviation	13.2	13.9
Lower Quartile (25th Percentile)	93.7	77.1
Upper Quartile (75th Percentile)	131.9	111.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	1.1	0.35
Relative Kurtosis	3.75	2.56
Arithmetic Mean Ratio	109.3	94.7
Weighted Mean Ratio	100.8	82.8
Geometric Mean Ratio	106.4	93
Harmonic Mean Ratio	103.7	91.4
Standard Deviation	27	19
Coefficient of Variation	24.7	20
Price Related Differential (PRD)	1.08	1.14
Lower PRD Confidence Interval	1.06	1.03
Upper PRD Confidence Interval	1.12	1.32
Price Related Bias (PRB)	-0.489	-0.228
Lower PRB Confidence Interval	-0.686	-0.436
Upper PRB Confidence Interval	-0.291	-0.020
Average Sale Price	97,479	175,621
Average Market Value	98,257	145,473

004 : BARBER		*S-5*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	32	10
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	31	10
Minimum Ratio	36	32.1
Maximum Ratio	220.8	134.6
Minimum Sale Price	2,500	16,500
Maximum Sale Price	125,000	135,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	92.2	85.4
Lower Median Confidence Interval	84.6	56.2
Upper Median Confidence Interval	99.3	113.5
Broadened Median Ratio (BMED)	92.8	87.0
Coefficient of Dispersion (COD)	18.3	33.7
Lower COD Confidence Interval	11.8	13.9
Upper COD Confidence Interval	24.8	50.0
Weighted Coefficient Of Dispersion	16.4	38.7
Coefficient of Concentration @ 10%	50.0	0.0
Coefficient of Concentration @ 15%	56.3	20.0
Coefficient of Concentration @ 20%	59.4	30.0
Coefficient of Concentration @ 50%	93.8	70.0
Coefficient of Concentration @ 100%	96.9	100.0
Coefficient of Interquartile Deviation	17.4	30.7
Median Percent Deviation	11.2	31.0
Lower Quartile (25th Percentile)	69.0	61.6
Upper Quartile (75th Percentile)	101.1	114.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.52	-0.2
Relative Kurtosis	2.53	1.83
Arithmetic Mean Ratio	86.2	85.8
Weighted Mean Ratio	85.7	69.2
Geometric Mean Ratio	83.1	78.6
Harmonic Mean Ratio	79.6	70.6
Standard Deviation	21.5	33.9
Coefficient of Variation	24.9	39.5
Price Related Differential (PRD)	1.01	1.24
Lower PRD Confidence Interval	0.97	1.06
Upper PRD Confidence Interval	1.06	1.59
Price Related Bias (PRB)	-0.105	-0.191
Lower PRB Confidence Interval	-0.206	-0.478
Upper PRB Confidence Interval	-0.004	0.096
Average Sale Price	63,169	56,250
Average Market Value	54,107	38,932

005 : BARTON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	323	19
Number of Ratios: Outliers Removed	33	1
Number of Sales Trimmed	290	18
Minimum Ratio	41.3	34.6
Maximum Ratio	3142.5	188.1
Minimum Sale Price	400	2,500
Maximum Sale Price	535,000	395,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.1	82.9
Lower Median Confidence Interval	93.7	72.6
Upper Median Confidence Interval	97.4	93.1
Broadened Median Ratio (BMED)	95.0	83.8
Coefficient of Dispersion (COD)	13.4	27.0
Lower COD Confidence Interval	12.1	14.8
Upper COD Confidence Interval	14.7	37.9
Weighted Coefficient Of Dispersion	12.0	23.1
Coefficient of Concentration @ 10%	43.3	26.3
Coefficient of Concentration @ 15%	59.4	47.4
Coefficient of Concentration @ 20%	67.8	57.9
Coefficient of Concentration @ 50%	90.4	73.7
Coefficient of Concentration @ 100%	95.0	94.7
Coefficient of Interquartile Deviation	12.1	26.5
Median Percent Deviation	12.0	17.0
Lower Quartile (25th Percentile)	85.9	68.8
Upper Quartile (75th Percentile)	108.9	112.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.36	0.82
Relative Kurtosis	3.08	3.43
Arithmetic Mean Ratio	95.8	88.4
Weighted Mean Ratio	92.3	83.7
Geometric Mean Ratio	94.4	83.4
Harmonic Mean Ratio	92.9	78.3
Standard Deviation	16.5	31.2
Coefficient of Variation	17.3	35.3
Price Related Differential (PRD)	1.04	1.06
Lower PRD Confidence Interval	1.02	0.94
Upper PRD Confidence Interval	1.06	1.24
Price Related Bias (PRB)	-0.432	0.009
Lower PRB Confidence Interval	-0.594	-0.129
Upper PRB Confidence Interval	-0.271	0.147
Average Sale Price	101,144	89,744
Average Market Value	93,371	75,121

006 : BOURBON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	123	9
Number of Ratios: Outliers Removed	9	0
Number of Sales Trimmed	114	9
Minimum Ratio	28.7	54.6
Maximum Ratio	457.5	227.7
Minimum Sale Price	1,000	34,125
Maximum Sale Price	305,000	276,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.0	93.4
Lower Median Confidence Interval	96.1	82.1
Upper Median Confidence Interval	103.1	195.2
Broadened Median Ratio (BMED)	99.9	96.1
Coefficient of Dispersion (COD)	20.0	37.5
Lower COD Confidence Interval	16.7	8.3
Upper COD Confidence Interval	23.4	59.2
Weighted Coefficient Of Dispersion	16.9	33.0
Coefficient of Concentration @ 10%	35.8	44.4
Coefficient of Concentration @ 15%	48.8	55.6
Coefficient of Concentration @ 20%	56.9	66.7
Coefficient of Concentration @ 50%	86.2	77.8
Coefficient of Concentration @ 100%	92.7	77.8
Coefficient of Interquartile Deviation	19.2	35.3
Median Percent Deviation	15.4	12.2
Lower Quartile (25th Percentile)	85.6	86.2
Upper Quartile (75th Percentile)	124.0	152.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.35	1.13
Relative Kurtosis	3.5	2.87
Arithmetic Mean Ratio	100.6	116.3
Weighted Mean Ratio	95.8	110.8
Geometric Mean Ratio	96.9	106.3
Harmonic Mean Ratio	92.7	98.3
Standard Deviation	26.8	56.6
Coefficient of Variation	26.6	48.6
Price Related Differential (PRD)	1.05	1.05
Lower PRD Confidence Interval	1.02	0.95
Upper PRD Confidence Interval	1.09	1.24
Price Related Bias (PRB)	-0.175	0.147
Lower PRB Confidence Interval	-0.249	-0.414
Upper PRB Confidence Interval	-0.102	0.709
Average Sale Price	72,726	127,881
Average Market Value	69,636	141,641

007 : BROWN		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	111	10
Number of Ratios: Outliers Removed	12	1
Number of Sales Trimmed	99	9
Minimum Ratio	49.1	68.8
Maximum Ratio	3050	209.9
Minimum Sale Price	200	7,000
Maximum Sale Price	275,000	330,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	107.7	113.7
Lower Median Confidence Interval	100.8	97.0
Upper Median Confidence Interval	116.8	129.0
Broadened Median Ratio (BMED)	108.3	111.7
Coefficient of Dispersion (COD)	32.7	13.0
Lower COD Confidence Interval	25.6	5.3
Upper COD Confidence Interval	39.6	20.9
Weighted Coefficient Of Dispersion	20.2	19.8
Coefficient of Concentration @ 10%	29.7	40.0
Coefficient of Concentration @ 15%	38.7	60.0
Coefficient of Concentration @ 20%	47.7	70.0
Coefficient of Concentration @ 50%	71.2	90.0
Coefficient of Concentration @ 100%	80.2	100.0
Coefficient of Interquartile Deviation	35.6	12.5
Median Percent Deviation	22.0	13.5
Lower Quartile (25th Percentile)	92.1	97.1
Upper Quartile (75th Percentile)	168.7	125.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	1.39	-0.28
Relative Kurtosis	4.37	3.01
Arithmetic Mean Ratio	120.4	107.3
Weighted Mean Ratio	98.5	113.3
Geometric Mean Ratio	111.9	105.5
Harmonic Mean Ratio	105	103.5
Standard Deviation	50.3	20.3
Coefficient of Variation	41.8	18.9
Price Related Differential (PRD)	1.22	0.95
Lower PRD Confidence Interval	1.15	0.87
Upper PRD Confidence Interval	1.32	1.19
Price Related Bias (PRB)	-0.741	-0.028
Lower PRB Confidence Interval	-1.044	-0.159
Upper PRB Confidence Interval	-0.438	0.103
Average Sale Price	75,132	110,667
Average Market Value	73,997	125,413

008 : BUTLER		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	251	20
Number of Ratios: Outliers Removed	30	0
Number of Sales Trimmed	221	20
Minimum Ratio	10.7	55.2
Maximum Ratio	1734.5	189.7
Minimum Sale Price	2,000	12,500
Maximum Sale Price	1,339,000	900,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.1	110.7
Lower Median Confidence Interval	94.9	89.7
Upper Median Confidence Interval	98.5	128.2
Broadened Median Ratio (BMED)	96.2	112.3
Coefficient of Dispersion (COD)	10.2	24.0
Lower COD Confidence Interval	9.0	14.8
Upper COD Confidence Interval	11.4	33.1
Weighted Coefficient Of Dispersion	10.3	18.5
Coefficient of Concentration @ 10%	51.4	25.0
Coefficient of Concentration @ 15%	64.5	35.0
Coefficient of Concentration @ 20%	74.9	50.0
Coefficient of Concentration @ 50%	89.6	85.0
Coefficient of Concentration @ 100%	92.4	100.0
Coefficient of Interquartile Deviation	9.6	22.9
Median Percent Deviation	9.5	20.6
Lower Quartile (25th Percentile)	88.0	78.6
Upper Quartile (75th Percentile)	106.5	129.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.15	0.51
Relative Kurtosis	3.52	2.87
Arithmetic Mean Ratio	95.3	112.7
Weighted Mean Ratio	94.9	99.2
Geometric Mean Ratio	94.4	107.7
Harmonic Mean Ratio	93.5	102.7
Standard Deviation	13	34.6
Coefficient of Variation	13.7	30.7
Price Related Differential (PRD)	1.00	1.14
Lower PRD Confidence Interval	0.97	1.04
Upper PRD Confidence Interval	1.03	1.32
Price Related Bias (PRB)	-0.472	-0.080
Lower PRB Confidence Interval	-0.609	-0.179
Upper PRB Confidence Interval	-0.336	0.018
Average Sale Price	147,744	198,920
Average Market Value	140,153	197,278

009 : CHASE		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	24	8
Number of Ratios: Outliers Removed	3	1
Number of Sales Trimmed	21	7
Minimum Ratio	63.9	59.2
Maximum Ratio	533.3	258.9
Minimum Sale Price	750	3,500
Maximum Sale Price	245,000	150,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.9	95.9
Lower Median Confidence Interval	86.2	66.4
Upper Median Confidence Interval	101.5	127.4
Broadened Median Ratio (BMED)	95.1	97.6
Coefficient of Dispersion (COD)	16.4	21.3
Lower COD Confidence Interval	9.9	8.8
Upper COD Confidence Interval	22.1	31.8
Weighted Coefficient Of Dispersion	16.4	14.0
Coefficient of Concentration @ 10%	45.8	25.0
Coefficient of Concentration @ 15%	54.2	37.5
Coefficient of Concentration @ 20%	54.2	37.5
Coefficient of Concentration @ 50%	87.5	87.5
Coefficient of Concentration @ 100%	87.5	87.5
Coefficient of Interquartile Deviation	15.0	28.2
Median Percent Deviation	11.4	26.7
Lower Quartile (25th Percentile)	75.5	70.9
Upper Quartile (75th Percentile)	104.2	125.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.64	0.05
Relative Kurtosis	3.25	1.77
Arithmetic Mean Ratio	91.3	92.4
Weighted Mean Ratio	86.2	96.6
Geometric Mean Ratio	89.3	89.4
Harmonic Mean Ratio	87.5	86.4
Standard Deviation	19.8	25.1
Coefficient of Variation	21.7	27.1
Price Related Differential (PRD)	1.06	0.96
Lower PRD Confidence Interval	1.00	0.84
Upper PRD Confidence Interval	1.15	1.06
Price Related Bias (PRB)	-0.283	-0.134
Lower PRB Confidence Interval	-0.522	-0.529
Upper PRB Confidence Interval	-0.045	0.262
Average Sale Price	89,461	42,750
Average Market Value	77,156	41,311

010 : CHAUTAUQUA		S-10
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	28	11
Number of Ratios: Outliers Removed	0	1
Number of Sales Trimmed	28	10
Minimum Ratio	51.9	57.7
Maximum Ratio	179.4	225.5
Minimum Sale Price	2,000	3,500
Maximum Sale Price	149,350	42,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.7	96.6
Lower Median Confidence Interval	86.3	86.9
Upper Median Confidence Interval	113.7	128.0
Broadened Median Ratio (BMED)	97.9	99.6
Coefficient of Dispersion (COD)	25.4	21.8
Lower COD Confidence Interval	17.6	10.3
Upper COD Confidence Interval	33.3	31.0
Weighted Coefficient Of Dispersion	21.5	21.2
Coefficient of Concentration @ 10%	25.0	27.3
Coefficient of Concentration @ 15%	42.9	45.5
Coefficient of Concentration @ 20%	53.6	54.5
Coefficient of Concentration @ 50%	89.3	81.8
Coefficient of Concentration @ 100%	100.0	90.9
Coefficient of Interquartile Deviation	20.7	21.3
Median Percent Deviation	19.9	18.3
Lower Quartile (25th Percentile)	80.3	86.9
Upper Quartile (75th Percentile)	121.1	128.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.61	0.17
Relative Kurtosis	2.89	2.32
Arithmetic Mean Ratio	102.1	98.6
Weighted Mean Ratio	93.1	95.7
Geometric Mean Ratio	97.2	95.1
Harmonic Mean Ratio	92.4	91.6
Standard Deviation	32.9	27.1
Coefficient of Variation	32.2	27.5
Price Related Differential (PRD)	1.10	1.03
Lower PRD Confidence Interval	1.00	0.94
Upper PRD Confidence Interval	1.24	1.21
Price Related Bias (PRB)	-0.079	0.034
Lower PRB Confidence Interval	-0.165	-0.246
Upper PRB Confidence Interval	0.008	0.315
Average Sale Price	38,848	23,550
Average Market Value	36,149	22,535

011 : CHEROKEE		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	112	11
Number of Ratios: Outliers Removed	14	0
Number of Sales Trimmed	98	11
Minimum Ratio	16.6	50.6
Maximum Ratio	395.6	175.1
Minimum Sale Price	1,000	29,000
Maximum Sale Price	400,000	1,200,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	106.1	82.0
Lower Median Confidence Interval	100.6	66.7
Upper Median Confidence Interval	109.7	124.0
Broadened Median Ratio (BMED)	105.5	83.3
Coefficient of Dispersion (COD)	20.0	33.7
Lower COD Confidence Interval	16.0	15.5
Upper COD Confidence Interval	23.7	48.5
Weighted Coefficient Of Dispersion	14.7	76.9
Coefficient of Concentration @ 10%	35.7	36.4
Coefficient of Concentration @ 15%	47.3	36.4
Coefficient of Concentration @ 20%	56.3	45.5
Coefficient of Concentration @ 50%	77.7	72.7
Coefficient of Concentration @ 100%	93.8	90.9
Coefficient of Interquartile Deviation	18.3	35.0
Median Percent Deviation	16.2	23.0
Lower Quartile (25th Percentile)	92.8	66.7
Upper Quartile (75th Percentile)	131.7	124.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.78	0.85
Relative Kurtosis	4.15	2.83
Arithmetic Mean Ratio	106	94
Weighted Mean Ratio	100.5	136.2
Geometric Mean Ratio	102.2	87.6
Harmonic Mean Ratio	98.3	81.8
Standard Deviation	28.7	38.4
Coefficient of Variation	27.1	40.9
Price Related Differential (PRD)	1.05	0.69
Lower PRD Confidence Interval	1.02	0.61
Upper PRD Confidence Interval	1.09	1.15
Price Related Bias (PRB)	-0.177	0.150
Lower PRB Confidence Interval	-0.253	-0.008
Upper PRB Confidence Interval	-0.101	0.309
Average Sale Price	80,806	195,773
Average Market Value	81,212	266,710

012 : CHEYENNE		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	39	8
Number of Ratios: Outliers Removed	7	0
Number of Sales Trimmed	32	8
Minimum Ratio	35.2	30.3
Maximum Ratio	460.5	119.4
Minimum Sale Price	1,800	3,000
Maximum Sale Price	185,000	1,425,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.2	80.8
Lower Median Confidence Interval	93.5	50.8
Upper Median Confidence Interval	104.8	103.3
Broadened Median Ratio (BMED)	97.5	79.5
Coefficient of Dispersion (COD)	13.6	29.9
Lower COD Confidence Interval	8.7	11.7
Upper COD Confidence Interval	18.6	47.8
Weighted Coefficient Of Dispersion	11.8	56.0
Coefficient of Concentration @ 10%	48.7	0.0
Coefficient of Concentration @ 15%	59.0	37.5
Coefficient of Concentration @ 20%	69.2	37.5
Coefficient of Concentration @ 50%	76.9	87.5
Coefficient of Concentration @ 100%	92.3	100.0
Coefficient of Interquartile Deviation	13.1	29.2
Median Percent Deviation	11.3	25.8
Lower Quartile (25th Percentile)	83.6	53.5
Upper Quartile (75th Percentile)	109.3	100.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-1.29	-0.18
Relative Kurtosis	4.33	1.98
Arithmetic Mean Ratio	91.5	77.4
Weighted Mean Ratio	92.3	38.7
Geometric Mean Ratio	89.2	71.7
Harmonic Mean Ratio	86.2	65.1
Standard Deviation	18.2	29.4
Coefficient of Variation	19.9	38
Price Related Differential (PRD)	0.99	2.00
Lower PRD Confidence Interval	0.94	1.02
Upper PRD Confidence Interval	1.05	2.62
Price Related Bias (PRB)	-0.195	-0.093
Lower PRB Confidence Interval	-0.351	-0.222
Upper PRB Confidence Interval	-0.039	0.037
Average Sale Price	68,766	211,938
Average Market Value	63,492	81,939

013 : CLARK		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	19	8
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	18	8
Minimum Ratio	61.1	37
Maximum Ratio	253.6	118.2
Minimum Sale Price	4,000	10,000
Maximum Sale Price	182,000	95,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	93.5	93.9
Lower Median Confidence Interval	81.9	58.7
Upper Median Confidence Interval	107.1	117.8
Broadened Median Ratio (BMED)	92.7	91.6
Coefficient of Dispersion (COD)	19.1	26.4
Lower COD Confidence Interval	11.5	9.6
Upper COD Confidence Interval	25.4	43.9
Weighted Coefficient Of Dispersion	13.6	34.4
Coefficient of Concentration @ 10%	31.6	25.0
Coefficient of Concentration @ 15%	52.6	25.0
Coefficient of Concentration @ 20%	68.4	37.5
Coefficient of Concentration @ 50%	89.5	87.5
Coefficient of Concentration @ 100%	94.7	100.0
Coefficient of Interquartile Deviation	15.3	30.1
Median Percent Deviation	14.5	25.6
Lower Quartile (25th Percentile)	80.9	59.6
Upper Quartile (75th Percentile)	109.6	116.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.82	-0.43
Relative Kurtosis	3.39	1.74
Arithmetic Mean Ratio	94.9	86.6
Weighted Mean Ratio	93.9	69.7
Geometric Mean Ratio	92.5	81
Harmonic Mean Ratio	90.3	74.5
Standard Deviation	22.8	30.6
Coefficient of Variation	24	35.3
Price Related Differential (PRD)	1.01	1.24
Lower PRD Confidence Interval	0.95	1.04
Upper PRD Confidence Interval	1.11	1.56
Price Related Bias (PRB)	-0.081	-0.179
Lower PRB Confidence Interval	-0.249	-0.428
Upper PRB Confidence Interval	0.087	0.070
Average Sale Price	61,494	41,625
Average Market Value	57,727	29,028

014 : CLAY		S-3
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	64	7
Number of Ratios: Outliers Removed	7	0
Number of Sales Trimmed	57	7
Minimum Ratio	54.4	61.9
Maximum Ratio	373.5	177.8
Minimum Sale Price	1,200	16,000
Maximum Sale Price	280,000	137,500
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.5	90.0
Lower Median Confidence Interval	92.7	67.5
Upper Median Confidence Interval	104.3	142.2
Broadened Median Ratio (BMED)	98.6	89.0
Coefficient of Dispersion (COD)	13.4	32.7
Lower COD Confidence Interval	10.2	10.0
Upper COD Confidence Interval	16.7	50.8
Weighted Coefficient Of Dispersion	11.0	30.9
Coefficient of Concentration @ 10%	48.4	28.6
Coefficient of Concentration @ 15%	62.5	42.9
Coefficient of Concentration @ 20%	71.9	42.9
Coefficient of Concentration @ 50%	87.5	71.4
Coefficient of Concentration @ 100%	95.3	100.0
Coefficient of Interquartile Deviation	13.9	41.5
Median Percent Deviation	10.5	24.9
Lower Quartile (25th Percentile)	89.6	67.5
Upper Quartile (75th Percentile)	116.9	142.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.41	0.88
Relative Kurtosis	4	2.37
Arithmetic Mean Ratio	98.9	102.3
Weighted Mean Ratio	97	100.7
Geometric Mean Ratio	97.3	95.8
Harmonic Mean Ratio	95.7	90.3
Standard Deviation	17.8	42.4
Coefficient of Variation	18	41.4
Price Related Differential (PRD)	1.02	1.02
Lower PRD Confidence Interval	1.00	0.90
Upper PRD Confidence Interval	1.04	1.14
Price Related Bias (PRB)	-0.145	0.140
Lower PRB Confidence Interval	-0.241	-0.248
Upper PRB Confidence Interval	-0.050	0.527
Average Sale Price	118,861	71,643
Average Market Value	115,345	72,176

015 : CLOUD		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	106	9
Number of Ratios: Outliers Removed	13	0
Number of Sales Trimmed	93	9
Minimum Ratio	42	53.1
Maximum Ratio	3217.8	165.3
Minimum Sale Price	225	17,500
Maximum Sale Price	290,000	909,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	90.7	85.4
Lower Median Confidence Interval	86.0	60.9
Upper Median Confidence Interval	96.0	136.7
Broadened Median Ratio (BMED)	90.7	84.0
Coefficient of Dispersion (COD)	18.2	30.5
Lower COD Confidence Interval	14.6	12.8
Upper COD Confidence Interval	21.6	47.4
Weighted Coefficient Of Dispersion	12.4	20.1
Coefficient of Concentration @ 10%	39.6	33.3
Coefficient of Concentration @ 15%	50.0	33.3
Coefficient of Concentration @ 20%	57.5	44.4
Coefficient of Concentration @ 50%	82.1	77.8
Coefficient of Concentration @ 100%	93.4	100.0
Coefficient of Interquartile Deviation	17.5	32.9
Median Percent Deviation	14.9	23.8
Lower Quartile (25th Percentile)	80.7	63.0
Upper Quartile (75th Percentile)	112.5	119.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.72	0.92
Relative Kurtosis	4.06	2.69
Arithmetic Mean Ratio	90.9	92.8
Weighted Mean Ratio	86.3	73.6
Geometric Mean Ratio	88.3	87
Harmonic Mean Ratio	85.7	82.1
Standard Deviation	22	36.9
Coefficient of Variation	24.2	39.8
Price Related Differential (PRD)	1.05	1.26
Lower PRD Confidence Interval	1.01	1.05
Upper PRD Confidence Interval	1.10	1.71
Price Related Bias (PRB)	-0.601	-0.062
Lower PRB Confidence Interval	-1.024	-0.256
Upper PRB Confidence Interval	-0.178	0.133
Average Sale Price	72,533	158,833
Average Market Value	62,581	116,904

016 : COFFEY		*S-5*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	89	9
Number of Ratios: Outliers Removed	10	0
Number of Sales Trimmed	79	9
Minimum Ratio	25.3	41.8
Maximum Ratio	572	144.3
Minimum Sale Price	600	10,000
Maximum Sale Price	335,000	220,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	94.8	71.7
Lower Median Confidence Interval	90.7	51.2
Upper Median Confidence Interval	98.7	112.1
Broadened Median Ratio (BMED)	94.8	79.3
Coefficient of Dispersion (COD)	12.6	39.5
Lower COD Confidence Interval	10.1	15.7
Upper COD Confidence Interval	14.9	54.6
Weighted Coefficient Of Dispersion	11.3	47.6
Coefficient of Concentration @ 10%	49.4	11.1
Coefficient of Concentration @ 15%	59.6	22.2
Coefficient of Concentration @ 20%	67.4	22.2
Coefficient of Concentration @ 50%	88.8	77.8
Coefficient of Concentration @ 100%	93.3	88.9
Coefficient of Interquartile Deviation	11.2	38.9
Median Percent Deviation	10.4	41.7
Lower Quartile (25th Percentile)	86.8	52.7
Upper Quartile (75th Percentile)	108.0	108.5
PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectK
Relative Skewness	-0.04	0.45
Relative Kurtosis	3.25	1.96
Arithmetic Mean Ratio	94	82.9
Weighted Mean Ratio	93.6	95.8
Geometric Mean Ratio	92.6	76.7
Harmonic Mean Ratio	91.2	70.9
Standard Deviation	15.5	34.6
Coefficient of Variation	16.5	41.8
Price Related Differential (PRD)	1.00	0.87
Lower PRD Confidence Interval	0.98	0.76
Upper PRD Confidence Interval	1.03	1.04
Price Related Bias (PRB)	-0.331	0.184
Lower PRB Confidence Interval	-0.440	-0.076
Upper PRB Confidence Interval	-0.222	0.443
Average Sale Price	103,035	53,083
Average Market Value	96,475	50,837

017 : COMANCHE		S-5
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	32	8
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	31	8
Minimum Ratio	45.3	37.4
Maximum Ratio	202	102.8
Minimum Sale Price	2,750	6,000
Maximum Sale Price	125,000	140,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	89.8	89.0
Lower Median Confidence Interval	76.2	55.2
Upper Median Confidence Interval	103.0	100.4
Broadened Median Ratio (BMED)	88.3	88.7
Coefficient of Dispersion (COD)	30.7	19.9
Lower COD Confidence Interval	21.2	5.7
Upper COD Confidence Interval	39.4	37.8
Weighted Coefficient Of Dispersion	25.3	35.3
Coefficient of Concentration @ 10%	12.5	25.0
Coefficient of Concentration @ 15%	31.3	62.5
Coefficient of Concentration @ 20%	40.6	75.0
Coefficient of Concentration @ 50%	84.4	87.5
Coefficient of Concentration @ 100%	93.8	100.0
Coefficient of Interquartile Deviation	27.6	22.2
Median Percent Deviation	26.4	13.2
Lower Quartile (25th Percentile)	66.2	60.6
Upper Quartile (75th Percentile)	115.7	100.1
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.84	-0.89
Relative Kurtosis	3.24	2.4
Arithmetic Mean Ratio	92.2	81.2
Weighted Mean Ratio	80.3	62.9
Geometric Mean Ratio	86.8	77.4
Harmonic Mean Ratio	81.7	72.6
Standard Deviation	33.6	23.7
Coefficient of Variation	36.5	29.2
Price Related Differential (PRD)	1.15	1.29
Lower PRD Confidence Interval	1.05	0.93
Upper PRD Confidence Interval	1.31	1.57
Price Related Bias (PRB)	-0.132	-0.053
Lower PRB Confidence Interval	-0.227	-0.251
Upper PRB Confidence Interval	-0.038	0.145
Average Sale Price	45,495	33,875
Average Market Value	36,517	21,293

018 : COWLEY		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	299	14
Number of Ratios: Outliers Removed	39	2
Number of Sales Trimmed	260	12
Minimum Ratio	29.6	61.1
Maximum Ratio	2300	207.6
Minimum Sale Price	500	18,000
Maximum Sale Price	350,000	300,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	99.0	114.2
Lower Median Confidence Interval	96.1	109.5
Upper Median Confidence Interval	101.4	131.3
Broadened Median Ratio (BMED)	98.9	115.9
Coefficient of Dispersion (COD)	15.1	13.3
Lower COD Confidence Interval	13.5	5.7
Upper COD Confidence Interval	16.8	20.2
Weighted Coefficient Of Dispersion	12.9	14.7
Coefficient of Concentration @ 10%	41.1	42.9
Coefficient of Concentration @ 15%	55.2	64.3
Coefficient of Concentration @ 20%	64.2	64.3
Coefficient of Concentration @ 50%	85.3	92.9
Coefficient of Concentration @ 100%	93.6	100.0
Coefficient of Interquartile Deviation	14.0	12.3
Median Percent Deviation	13.6	12.8
Lower Quartile (25th Percentile)	86.0	107.6
Upper Quartile (75th Percentile)	113.7	135.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.45	-0.26
Relative Kurtosis	3.64	3.4
Arithmetic Mean Ratio	97.8	118.2
Weighted Mean Ratio	94.7	111.5
Geometric Mean Ratio	95.8	116
Harmonic Mean Ratio	93.8	113.6
Standard Deviation	19.6	22.5
Coefficient of Variation	20	19.1
Price Related Differential (PRD)	1.03	1.06
Lower PRD Confidence Interval	1.02	1.01
Upper PRD Confidence Interval	1.05	1.16
Price Related Bias (PRB)	-0.396	-0.206
Lower PRB Confidence Interval	-0.525	-0.362
Upper PRB Confidence Interval	-0.268	-0.050
Average Sale Price	96,765	71,667
Average Market Value	91,620	79,933

019 : CRAWFORD		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	209	27
Number of Ratios: Outliers Removed	35	3
Number of Sales Trimmed	174	24
Minimum Ratio	36.5	53.1
Maximum Ratio	2785	640.6
Minimum Sale Price	200	5,000
Maximum Sale Price	495,000	470,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.5	97.4
Lower Median Confidence Interval	95.2	77.5
Upper Median Confidence Interval	100.0	123.2
Broadened Median Ratio (BMED)	98.6	97.9
Coefficient of Dispersion (COD)	13.2	26.0
Lower COD Confidence Interval	11.3	18.9
Upper COD Confidence Interval	15.0	34.7
Weighted Coefficient Of Dispersion	12.1	27.1
Coefficient of Concentration @ 10%	42.6	22.2
Coefficient of Concentration @ 15%	56.5	22.2
Coefficient of Concentration @ 20%	63.2	29.6
Coefficient of Concentration @ 50%	83.3	85.2
Coefficient of Concentration @ 100%	91.4	88.9
Coefficient of Interquartile Deviation	12.7	33.7
Median Percent Deviation	12.1	30.0
Lower Quartile (25th Percentile)	87.5	69.3
Upper Quartile (75th Percentile)	112.6	134.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.11	0.28
Relative Kurtosis	3.6	1.83
Arithmetic Mean Ratio	96	95.7
Weighted Mean Ratio	93.6	98.9
Geometric Mean Ratio	94.5	91.2
Harmonic Mean Ratio	92.8	86.9
Standard Deviation	17.1	29.7
Coefficient of Variation	17.8	31.1
Price Related Differential (PRD)	1.03	0.97
Lower PRD Confidence Interval	1.01	0.88
Upper PRD Confidence Interval	1.05	1.08
Price Related Bias (PRB)	-0.355	-0.008
Lower PRB Confidence Interval	-0.565	-0.416
Upper PRB Confidence Interval	-0.146	0.399
Average Sale Price	93,454	113,708
Average Market Value	87,477	112,406

020 : DECATUR		*S-7*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	40	9
Number of Ratios: Outliers Removed	4	0
Number of Sales Trimmed	36	9
Minimum Ratio	45	37.6
Maximum Ratio	522.8	125.1
Minimum Sale Price	1,250	6,000
Maximum Sale Price	175,000	100,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.3	73.6
Lower Median Confidence Interval	88.8	61.7
Upper Median Confidence Interval	110.3	121.8
Broadened Median Ratio (BMED)	99.5	85.3
Coefficient of Dispersion (COD)	20.7	34.7
Lower COD Confidence Interval	14.7	12.1
Upper COD Confidence Interval	26.0	43.1
Weighted Coefficient Of Dispersion	15.1	31.3
Coefficient of Concentration @ 10%	27.5	33.3
Coefficient of Concentration @ 15%	45.0	33.3
Coefficient of Concentration @ 20%	55.0	44.4
Coefficient of Concentration @ 50%	85.0	66.7
Coefficient of Concentration @ 100%	90.0	100.0
Coefficient of Interquartile Deviation	20.4	35.6
Median Percent Deviation	19.1	48.8
Lower Quartile (25th Percentile)	81.0	64.5
Upper Quartile (75th Percentile)	122.0	116.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.3	-0.09
Relative Kurtosis	3.13	1.65
Arithmetic Mean Ratio	97.8	86.8
Weighted Mean Ratio	95.7	70.9
Geometric Mean Ratio	94.4	81.3
Harmonic Mean Ratio	90.8	75.4
Standard Deviation	25.5	31
Coefficient of Variation	26.1	35.7
Price Related Differential (PRD)	1.02	1.22
Lower PRD Confidence Interval	0.96	1.08
Upper PRD Confidence Interval	1.09	1.47
Price Related Bias (PRB)	-0.324	-0.133
Lower PRB Confidence Interval	-0.545	-0.432
Upper PRB Confidence Interval	-0.103	0.166
Average Sale Price	43,352	34,278
Average Market Value	41,488	24,319

021 : DICKINSON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	220	12
Number of Ratios: Outliers Removed	25	0
Number of Sales Trimmed	195	12
Minimum Ratio	52.3	51.9
Maximum Ratio	3940	121.6
Minimum Sale Price	100	5,000
Maximum Sale Price	360,000	1,220,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.4	89.4
Lower Median Confidence Interval	95.6	66.6
Upper Median Confidence Interval	102.1	97.0
Broadened Median Ratio (BMED)	98.4	88.6
Coefficient of Dispersion (COD)	16.2	18.5
Lower COD Confidence Interval	14.2	9.4
Upper COD Confidence Interval	18.1	27.8
Weighted Coefficient Of Dispersion	14.1	17.4
Coefficient of Concentration @ 10%	38.2	41.7
Coefficient of Concentration @ 15%	50.9	50.0
Coefficient of Concentration @ 20%	59.5	58.3
Coefficient of Concentration @ 50%	86.4	100.0
Coefficient of Concentration @ 100%	93.2	100.0
Coefficient of Interquartile Deviation	15.7	18.3
Median Percent Deviation	14.7	14.4
Lower Quartile (25th Percentile)	87.5	64.4
Upper Quartile (75th Percentile)	118.3	97.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.5	-0.05
Relative Kurtosis	3.43	2.15
Arithmetic Mean Ratio	97.9	84.7
Weighted Mean Ratio	94.7	76.4
Geometric Mean Ratio	95.8	82.3
Harmonic Mean Ratio	93.7	79.7
Standard Deviation	20.4	20.7
Coefficient of Variation	20.8	24.5
Price Related Differential (PRD)	1.03	1.11
Lower PRD Confidence Interval	1.02	0.98
Upper PRD Confidence Interval	1.05	1.31
Price Related Bias (PRB)	-0.867	-0.032
Lower PRB Confidence Interval	-1.131	-0.104
Upper PRB Confidence Interval	-0.603	0.039
Average Sale Price	120,280	269,838
Average Market Value	113,910	206,117

022 : DONIPHAN		*S-6*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	44	9
Number of Ratios: Outliers Removed	2	0
Number of Sales Trimmed	42	9
Minimum Ratio	20	91.1
Maximum Ratio	262	326.8
Minimum Sale Price	12,000	15,000
Maximum Sale Price	305,000	145,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	104.5	139.0
Lower Median Confidence Interval	94.0	109.6
Upper Median Confidence Interval	124.2	222.7
Broadened Median Ratio (BMED)	103.8	136.3
Coefficient of Dispersion (COD)	28.9	36.2
Lower COD Confidence Interval	21.4	12.3
Upper COD Confidence Interval	35.9	57.7
Weighted Coefficient Of Dispersion	20.9	24.5
Coefficient of Concentration @ 10%	22.7	33.3
Coefficient of Concentration @ 15%	34.1	33.3
Coefficient of Concentration @ 20%	43.2	44.4
Coefficient of Concentration @ 50%	81.8	66.7
Coefficient of Concentration @ 100%	95.5	88.9
Coefficient of Interquartile Deviation	27.5	37.7
Median Percent Deviation	25.0	21.1
Lower Quartile (25th Percentile)	85.9	111.2
Upper Quartile (75th Percentile)	143.4	216.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.4	1.18
Relative Kurtosis	3.01	3.32
Arithmetic Mean Ratio	109.6	164.6
Weighted Mean Ratio	98.8	140.1
Geometric Mean Ratio	102.1	152
Harmonic Mean Ratio	92.1	142.1
Standard Deviation	38.9	75.2
Coefficient of Variation	35.5	45.7
Price Related Differential (PRD)	1.11	1.17
Lower PRD Confidence Interval	1.05	1.01
Upper PRD Confidence Interval	1.18	1.52
Price Related Bias (PRB)	-0.140	-0.112
Lower PRB Confidence Interval	-0.274	-0.517
Upper PRB Confidence Interval	-0.006	0.292
Average Sale Price	84,876	64,447
Average Market Value	83,882	90,279

023 : DOUGLAS		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	288	39
Number of Ratios: Outliers Removed	22	2
Number of Sales Trimmed	266	37
Minimum Ratio	62.4	32
Maximum Ratio	209.5	926.2
Minimum Sale Price	24,000	24,900
Maximum Sale Price	6,250,000	20,750,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.2	93.2
Lower Median Confidence Interval	95.8	86.3
Upper Median Confidence Interval	98.7	100.9
Broadened Median Ratio (BMED)	97.2	92.8
Coefficient of Dispersion (COD)	7.4	20.7
Lower COD Confidence Interval	6.7	14.6
Upper COD Confidence Interval	8.1	27.0
Weighted Coefficient Of Dispersion	7.4	40.6
Coefficient of Concentration @ 10%	64.2	41.0
Coefficient of Concentration @ 15%	80.6	48.7
Coefficient of Concentration @ 20%	88.5	59.0
Coefficient of Concentration @ 50%	97.9	87.2
Coefficient of Concentration @ 100%	99.3	97.4
Coefficient of Interquartile Deviation	6.2	17.7
Median Percent Deviation	6.1	16.4
Lower Quartile (25th Percentile)	90.9	77.9
Upper Quartile (75th Percentile)	103.0	111.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.14	0.03
Relative Kurtosis	2.91	3.03
Arithmetic Mean Ratio	96.7	92.2
Weighted Mean Ratio	95.5	62.3
Geometric Mean Ratio	96.3	88.1
Harmonic Mean Ratio	95.8	83.4
Standard Deviation	9.1	26
Coefficient of Variation	9.5	28.3
Price Related Differential (PRD)	1.01	1.48
Lower PRD Confidence Interval	1.01	0.98
Upper PRD Confidence Interval	1.02	2.07
Price Related Bias (PRB)	-0.020	0.097
Lower PRB Confidence Interval	-0.048	-0.177
Upper PRB Confidence Interval	0.007	0.371
Average Sale Price	191,840	1,140,765
Average Market Value	183,254	710,767

024 : EDWARDS		*S-5*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	36	12
Number of Ratios: Outliers Removed	4	0
Number of Sales Trimmed	32	12
Minimum Ratio	50.6	51
Maximum Ratio	318	200.2
Minimum Sale Price	1,000	4,000
Maximum Sale Price	115,000	65,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.9	104.8
Lower Median Confidence Interval	91.2	86.1
Upper Median Confidence Interval	118.5	130.2
Broadened Median Ratio (BMED)	97.3	104.5
Coefficient of Dispersion (COD)	27.7	28.6
Lower COD Confidence Interval	18.6	13.6
Upper COD Confidence Interval	36.8	42.4
Weighted Coefficient Of Dispersion	18.4	21.5
Coefficient of Concentration @ 10%	33.3	33.3
Coefficient of Concentration @ 15%	38.9	41.7
Coefficient of Concentration @ 20%	38.9	50.0
Coefficient of Concentration @ 50%	77.8	75.0
Coefficient of Concentration @ 100%	86.1	100.0
Coefficient of Interquartile Deviation	26.9	23.2
Median Percent Deviation	26.4	20.9
Lower Quartile (25th Percentile)	76.5	83.9
Upper Quartile (75th Percentile)	128.7	132.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	1.05	0.8
Relative Kurtosis	3.98	2.91
Arithmetic Mean Ratio	100.3	113.3
Weighted Mean Ratio	89.8	97.5
Geometric Mean Ratio	94.4	106.3
Harmonic Mean Ratio	89	99.7
Standard Deviation	36.8	42.9
Coefficient of Variation	36.7	37.9
Price Related Differential (PRD)	1.12	1.16
Lower PRD Confidence Interval	1.03	1.01
Upper PRD Confidence Interval	1.24	1.42
Price Related Bias (PRB)	-0.159	-0.180
Lower PRB Confidence Interval	-0.296	-0.363
Upper PRB Confidence Interval	-0.022	0.004
Average Sale Price	43,766	26,917
Average Market Value	39,295	26,242

025 : ELK		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	24	6
Number of Ratios: Outliers Removed	2	0
Number of Sales Trimmed	22	6
Minimum Ratio	39.3	57.5
Maximum Ratio	318.8	139.5
Minimum Sale Price	2,500	7,000
Maximum Sale Price	97,000	45,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.6	83.2
Lower Median Confidence Interval	68.2	65.3
Upper Median Confidence Interval	107.2	138.1
Broadened Median Ratio (BMED)	94.2	90.4
Coefficient of Dispersion (COD)	31.0	32.8
Lower COD Confidence Interval	20.3	8.0
Upper COD Confidence Interval	43.1	37.4
Weighted Coefficient Of Dispersion	27.5	33.3
Coefficient of Concentration @ 10%	20.8	0.0
Coefficient of Concentration @ 15%	33.3	50.0
Coefficient of Concentration @ 20%	33.3	50.0
Coefficient of Concentration @ 50%	75.0	66.7
Coefficient of Concentration @ 100%	91.7	100.0
Coefficient of Interquartile Deviation	31.2	40.9
Median Percent Deviation	31.1	21.5
Lower Quartile (25th Percentile)	65.4	69.2
Upper Quartile (75th Percentile)	125.0	137.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.58	0.41
Relative Kurtosis	2.61	1.5
Arithmetic Mean Ratio	92.2	95.5
Weighted Mean Ratio	83.6	97.7
Geometric Mean Ratio	85.9	90.5
Harmonic Mean Ratio	79.9	85.8
Standard Deviation	35.2	34.8
Coefficient of Variation	38.2	36.4
Price Related Differential (PRD)	1.10	0.98
Lower PRD Confidence Interval	1.02	0.82
Upper PRD Confidence Interval	1.24	1.18
Price Related Bias (PRB)	-0.284	0.106
Lower PRB Confidence Interval	-0.525	-0.352
Upper PRB Confidence Interval	-0.044	0.564
Average Sale Price	36,541	19,250
Average Market Value	30,530	18,807

026 : ELLIS		T
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	205	19
Number of Ratios: Outliers Removed	26	0
Number of Sales Trimmed	179	19
Minimum Ratio	30.7	27.3
Maximum Ratio	276.3	143.9
Minimum Sale Price	10,000	24,180
Maximum Sale Price	595,000	1,857,330
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.5	92.0
Lower Median Confidence Interval	97.2	77.3
Upper Median Confidence Interval	100.4	102.2
Broadened Median Ratio (BMED)	98.5	89.7
Coefficient of Dispersion (COD)	7.3	23.6
Lower COD Confidence Interval	6.4	14.6
Upper COD Confidence Interval	8.3	33.7
Weighted Coefficient Of Dispersion	7.4	25.5
Coefficient of Concentration @ 10%	63.4	21.1
Coefficient of Concentration @ 15%	73.2	47.4
Coefficient of Concentration @ 20%	82.9	52.6
Coefficient of Concentration @ 50%	95.6	84.2
Coefficient of Concentration @ 100%	98.5	100.0
Coefficient of Interquartile Deviation	6.5	19.8
Median Percent Deviation	6.3	16.0
Lower Quartile (25th Percentile)	92.3	69.0
Upper Quartile (75th Percentile)	105.2	105.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.05	-0.04
Relative Kurtosis	3.35	3
Arithmetic Mean Ratio	97.6	90.1
Weighted Mean Ratio	96.9	77.9
Geometric Mean Ratio	97.2	85
Harmonic Mean Ratio	96.7	78.5
Standard Deviation	9.5	28.4
Coefficient of Variation	9.8	31.5
Price Related Differential (PRD)	1.01	1.16
Lower PRD Confidence Interval	1.00	1.03
Upper PRD Confidence Interval	1.02	1.32
Price Related Bias (PRB)	-0.098	-0.039
Lower PRB Confidence Interval	-0.146	-0.143
Upper PRB Confidence Interval	-0.049	0.065
Average Sale Price	166,947	313,281
Average Market Value	161,701	244,130

027 : ELLSWORTH		*S-10*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	70	12
Number of Ratios: Outliers Removed	6	0
Number of Sales Trimmed	64	12
Minimum Ratio	41.7	15.6
Maximum Ratio	300	144.3
Minimum Sale Price	3,000	8,000
Maximum Sale Price	249,000	235,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	93.9	77.1
Lower Median Confidence Interval	85.0	51.2
Upper Median Confidence Interval	96.8	93.1
Broadened Median Ratio (BMED)	93.7	76.9
Coefficient of Dispersion (COD)	16.5	31.3
Lower COD Confidence Interval	13.0	14.9
Upper COD Confidence Interval	19.7	56.7
Weighted Coefficient Of Dispersion	15.5	31.9
Coefficient of Concentration @ 10%	32.9	41.7
Coefficient of Concentration @ 15%	51.4	41.7
Coefficient of Concentration @ 20%	60.0	41.7
Coefficient of Concentration @ 50%	90.0	75.0
Coefficient of Concentration @ 100%	94.3	100.0
Coefficient of Interquartile Deviation	14.4	33.2
Median Percent Deviation	14.0	25.9
Lower Quartile (25th Percentile)	81.0	46.1
Upper Quartile (75th Percentile)	107.9	97.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.14	0.18
Relative Kurtosis	3.03	2.94
Arithmetic Mean Ratio	90.6	74.4
Weighted Mean Ratio	88.1	67.9
Geometric Mean Ratio	88.5	65.2
Harmonic Mean Ratio	86.4	53.5
Standard Deviation	19	34.2
Coefficient of Variation	20.9	46.1
Price Related Differential (PRD)	1.03	1.09
Lower PRD Confidence Interval	1.00	0.94
Upper PRD Confidence Interval	1.06	1.37
Price Related Bias (PRB)	-0.107	-0.060
Lower PRB Confidence Interval	-0.193	-0.293
Upper PRB Confidence Interval	-0.022	0.174
Average Sale Price	87,339	83,333
Average Market Value	76,904	56,608

028 : FINNEY		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	186	16
Number of Ratios: Outliers Removed	22	0
Number of Sales Trimmed	164	16
Minimum Ratio	4.6	57.6
Maximum Ratio	319	147.8
Minimum Sale Price	2,000	25,000
Maximum Sale Price	2,050,000	725,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	93.6	78.5
Lower Median Confidence Interval	91.6	69.2
Upper Median Confidence Interval	95.3	103.2
Broadened Median Ratio (BMED)	93.5	80.4
Coefficient of Dispersion (COD)	8.6	26.0
Lower COD Confidence Interval	7.5	14.8
Upper COD Confidence Interval	9.7	33.9
Weighted Coefficient Of Dispersion	7.6	19.7
Coefficient of Concentration @ 10%	60.2	25.0
Coefficient of Concentration @ 15%	72.6	43.8
Coefficient of Concentration @ 20%	79.6	50.0
Coefficient of Concentration @ 50%	93.5	87.5
Coefficient of Concentration @ 100%	98.4	100.0
Coefficient of Interquartile Deviation	7.5	25.1
Median Percent Deviation	7.9	19.4
Lower Quartile (25th Percentile)	87.6	67.4
Upper Quartile (75th Percentile)	101.6	106.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.23	0.93
Relative Kurtosis	3.29	2.91
Arithmetic Mean Ratio	93.8	87.9
Weighted Mean Ratio	93.3	80.9
Geometric Mean Ratio	93.2	84.4
Harmonic Mean Ratio	92.6	81.4
Standard Deviation	10.4	26.8
Coefficient of Variation	11.1	30.5
Price Related Differential (PRD)	1.00	1.09
Lower PRD Confidence Interval	0.99	1.00
Upper PRD Confidence Interval	1.02	1.25
Price Related Bias (PRB)	0.012	-0.086
Lower PRB Confidence Interval	-0.026	-0.248
Upper PRB Confidence Interval	0.051	0.075
Average Sale Price	159,988	277,449
Average Market Value	149,342	224,453

029 : FORD		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	180	16
Number of Ratios: Outliers Removed	26	0
Number of Sales Trimmed	154	16
Minimum Ratio	23.9	52.7
Maximum Ratio	275	150.3
Minimum Sale Price	10,000	9,943
Maximum Sale Price	305,000	1,837,500
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.8	77.6
Lower Median Confidence Interval	95.2	68.7
Upper Median Confidence Interval	98.4	99.0
Broadened Median Ratio (BMED)	96.8	78.1
Coefficient of Dispersion (COD)	9.4	26.7
Lower COD Confidence Interval	8.0	14.7
Upper COD Confidence Interval	10.7	35.9
Weighted Coefficient Of Dispersion	7.7	26.5
Coefficient of Concentration @ 10%	55.6	31.3
Coefficient of Concentration @ 15%	65.6	50.0
Coefficient of Concentration @ 20%	71.7	50.0
Coefficient of Concentration @ 50%	95.0	81.3
Coefficient of Concentration @ 100%	97.8	100.0
Coefficient of Interquartile Deviation	7.9	24.9
Median Percent Deviation	7.6	18.3
Lower Quartile (25th Percentile)	88.3	68.6
Upper Quartile (75th Percentile)	103.6	107.3
PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectK
Relative Skewness	0.01	0.9
Relative Kurtosis	3.28	2.81
Arithmetic Mean Ratio	95.7	86.6
Weighted Mean Ratio	95.5	89.2
Geometric Mean Ratio	94.9	82.8
Harmonic Mean Ratio	94.1	79.4
Standard Deviation	12.2	28.1
Coefficient of Variation	12.8	32.4
Price Related Differential (PRD)	1.00	0.97
Lower PRD Confidence Interval	0.99	0.84
Upper PRD Confidence Interval	1.01	1.16
Price Related Bias (PRB)	-0.046	-0.025
Lower PRB Confidence Interval	-0.097	-0.142
Upper PRB Confidence Interval	0.004	0.092
Average Sale Price	110,838	311,309
Average Market Value	105,896	277,746

030 : FRANKLIN		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	278	17
Number of Ratios: Outliers Removed	37	1
Number of Sales Trimmed	241	16
Minimum Ratio	43	36.2
Maximum Ratio	1772.9	193.5
Minimum Sale Price	2,400	47,500
Maximum Sale Price	1,107,220	1,875,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	99.7	100.8
Lower Median Confidence Interval	98.4	76.0
Upper Median Confidence Interval	100.4	110.0
Broadened Median Ratio (BMED)	99.7	101.2
Coefficient of Dispersion (COD)	12.7	23.4
Lower COD Confidence Interval	11.2	12.7
Upper COD Confidence Interval	14.3	37.8
Weighted Coefficient Of Dispersion	10.6	35.5
Coefficient of Concentration @ 10%	44.6	47.1
Coefficient of Concentration @ 15%	59.7	47.1
Coefficient of Concentration @ 20%	68.3	47.1
Coefficient of Concentration @ 50%	84.9	76.5
Coefficient of Concentration @ 100%	94.2	100.0
Coefficient of Interquartile Deviation	13.7	21.6
Median Percent Deviation	12.0	24.5
Lower Quartile (25th Percentile)	89.6	74.3
Upper Quartile (75th Percentile)	117.0	117.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.6	-0.08
Relative Kurtosis	4.36	2.84
Arithmetic Mean Ratio	98.7	95.8
Weighted Mean Ratio	96	71.3
Geometric Mean Ratio	97.2	89.3
Harmonic Mean Ratio	95.7	81.5
Standard Deviation	17.4	33.4
Coefficient of Variation	17.6	34.9
Price Related Differential (PRD)	1.03	1.34
Lower PRD Confidence Interval	1.02	1.01
Upper PRD Confidence Interval	1.04	1.72
Price Related Bias (PRB)	-0.379	-0.083
Lower PRB Confidence Interval	-0.509	-0.238
Upper PRB Confidence Interval	-0.249	0.073
Average Sale Price	131,371	297,906
Average Market Value	126,053	212,260

031 : GEARY		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	333	11
Number of Ratios: Outliers Removed	41	1
Number of Sales Trimmed	292	10
Minimum Ratio	5.9	49.2
Maximum Ratio	576.7	341.7
Minimum Sale Price	9,000	35,000
Maximum Sale Price	735,000	1,221,268
DISTRIBUTION FREE STATISTICS		
Median Ratio	99.8	94.8
Lower Median Confidence Interval	98.0	71.4
Upper Median Confidence Interval	101.5	125.9
Broadened Median Ratio (BMED)	99.8	95.8
Coefficient of Dispersion (COD)	8.8	24.5
Lower COD Confidence Interval	8.0	12.0
Upper COD Confidence Interval	9.7	37.6
Weighted Coefficient Of Dispersion	8.8	24.9
Coefficient of Concentration @ 10%	58.3	27.3
Coefficient of Concentration @ 15%	71.5	36.4
Coefficient of Concentration @ 20%	79.9	36.4
Coefficient of Concentration @ 50%	91.9	81.8
Coefficient of Concentration @ 100%	95.5	90.9
Coefficient of Interquartile Deviation	8.6	28.8
Median Percent Deviation	8.0	24.7
Lower Quartile (25th Percentile)	92.7	71.4
Upper Quartile (75th Percentile)	109.8	125.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.26	0.55
Relative Kurtosis	3.48	2.81
Arithmetic Mean Ratio	99.5	96.1
Weighted Mean Ratio	98.4	78.7
Geometric Mean Ratio	98.8	91.5
Harmonic Mean Ratio	98.2	86.9
Standard Deviation	11.3	31.5
Coefficient of Variation	11.4	32.8
Price Related Differential (PRD)	1.01	1.22
Lower PRD Confidence Interval	1.00	1.05
Upper PRD Confidence Interval	1.02	1.64
Price Related Bias (PRB)	-0.246	-0.342
Lower PRB Confidence Interval	-0.302	-0.737
Upper PRB Confidence Interval	-0.190	0.053
Average Sale Price	168,956	378,291
Average Market Value	166,262	297,746

032 : GOVE		*S-6*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	24	9
Number of Ratios: Outliers Removed	2	0
Number of Sales Trimmed	22	9
Minimum Ratio	31.5	38.9
Maximum Ratio	196.6	145
Minimum Sale Price	8,500	5,000
Maximum Sale Price	180,000	120,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	82.8	80.1
Lower Median Confidence Interval	74.2	47.3
Upper Median Confidence Interval	99.0	115.9
Broadened Median Ratio (BMED)	83.7	79.8
Coefficient of Dispersion (COD)	21.7	33.7
Lower COD Confidence Interval	14.1	16.4
Upper COD Confidence Interval	30.4	56.3
Weighted Coefficient Of Dispersion	20.5	32.1
Coefficient of Concentration @ 10%	25.0	11.1
Coefficient of Concentration @ 15%	33.3	33.3
Coefficient of Concentration @ 20%	41.7	33.3
Coefficient of Concentration @ 50%	87.5	77.8
Coefficient of Concentration @ 100%	91.7	100.0
Coefficient of Interquartile Deviation	25.1	36.8
Median Percent Deviation	24.0	34.7
Lower Quartile (25th Percentile)	61.2	49.8
Upper Quartile (75th Percentile)	102.7	108.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.48	0.44
Relative Kurtosis	2.15	2.21
Arithmetic Mean Ratio	78.8	82.2
Weighted Mean Ratio	74.1	67.6
Geometric Mean Ratio	75.2	75.7
Harmonic Mean Ratio	71.1	69.6
Standard Deviation	22.2	34.7
Coefficient of Variation	28.1	42.2
Price Related Differential (PRD)	1.06	1.22
Lower PRD Confidence Interval	0.99	1.00
Upper PRD Confidence Interval	1.17	1.74
Price Related Bias (PRB)	0.055	-0.134
Lower PRB Confidence Interval	-0.117	-0.414
Upper PRB Confidence Interval	0.227	0.146
Average Sale Price	65,886	38,422
Average Market Value	48,838	25,961

033 : GRAHAM		*S-3*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	23	8
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	22	8
Minimum Ratio	40.8	60.5
Maximum Ratio	129	127.9
Minimum Sale Price	3,500	10,000
Maximum Sale Price	170,000	128,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.3	71.0
Lower Median Confidence Interval	88.0	60.7
Upper Median Confidence Interval	100.3	100.5
Broadened Median Ratio (BMED)	95.9	71.8
Coefficient of Dispersion (COD)	13.4	24.9
Lower COD Confidence Interval	8.9	7.7
Upper COD Confidence Interval	17.3	34.6
Weighted Coefficient Of Dispersion	12.4	18.6
Coefficient of Concentration @ 10%	43.5	25.0
Coefficient of Concentration @ 15%	56.5	62.5
Coefficient of Concentration @ 20%	69.6	62.5
Coefficient of Concentration @ 50%	95.7	87.5
Coefficient of Concentration @ 100%	100.0	100.0
Coefficient of Interquartile Deviation	14.8	25.4
Median Percent Deviation	11.8	14.7
Lower Quartile (25th Percentile)	85.0	60.8
Upper Quartile (75th Percentile)	113.5	96.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.27	1.06
Relative Kurtosis	2.23	2.89
Arithmetic Mean Ratio	99.1	79.8
Weighted Mean Ratio	98.4	74.5
Geometric Mean Ratio	97.7	77
Harmonic Mean Ratio	96.4	74.7
Standard Deviation	16.7	24.1
Coefficient of Variation	16.8	30.2
Price Related Differential (PRD)	1.01	1.07
Lower PRD Confidence Interval	0.97	1.00
Upper PRD Confidence Interval	1.05	1.18
Price Related Bias (PRB)	0.029	-0.001
Lower PRB Confidence Interval	-0.046	-0.305
Upper PRB Confidence Interval	0.104	0.303
Average Sale Price	72,995	48,250
Average Market Value	71,832	35,926

034 : GRANT		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	75	6
Number of Ratios: Outliers Removed	7	0
Number of Sales Trimmed	68	6
Minimum Ratio	24.5	35.9
Maximum Ratio	390.4	231.3
Minimum Sale Price	10,000	50,000
Maximum Sale Price	350,000	1,853,477
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.7	104.1
Lower Median Confidence Interval	94.9	56.8
Upper Median Confidence Interval	101.9	190.9
Broadened Median Ratio (BMED)	98.0	107.4
Coefficient of Dispersion (COD)	9.9	43.4
Lower COD Confidence Interval	7.9	11.9
Upper COD Confidence Interval	11.7	81.9
Weighted Coefficient Of Dispersion	9.7	54.9
Coefficient of Concentration @ 10%	54.7	33.3
Coefficient of Concentration @ 15%	69.3	33.3
Coefficient of Concentration @ 20%	77.3	33.3
Coefficient of Concentration @ 50%	93.3	66.7
Coefficient of Concentration @ 100%	97.3	83.3
Coefficient of Interquartile Deviation	9.3	49.7
Median Percent Deviation	7.9	34.9
Lower Quartile (25th Percentile)	90.4	67.2
Upper Quartile (75th Percentile)	108.7	170.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	-0.1	0.66
Relative Kurtosis	2.88	2.54
Arithmetic Mean Ratio	98	117.3
Weighted Mean Ratio	96	56.7
Geometric Mean Ratio	97.2	100.8
Harmonic Mean Ratio	96.3	84.6
Standard Deviation	12.4	67.3
Coefficient of Variation	12.7	57.4
Price Related Differential (PRD)	1.02	2.07
Lower PRD Confidence Interval	1.00	1.12
Upper PRD Confidence Interval	1.04	3.28
Price Related Bias (PRB)	-0.103	-0.319
Lower PRB Confidence Interval	-0.210	-0.765
Upper PRB Confidence Interval	0.004	0.128
Average Sale Price	127,669	414,330
Average Market Value	122,599	234,763

035 : GRAY		S-11
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	48	12
Number of Ratios: Outliers Removed	4	1
Number of Sales Trimmed	44	11
Minimum Ratio	28.5	19.6
Maximum Ratio	285.1	208.3
Minimum Sale Price	24,500	3,500
Maximum Sale Price	249,000	275,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.8	76.2
Lower Median Confidence Interval	87.7	63.1
Upper Median Confidence Interval	105.1	91.5
Broadened Median Ratio (BMED)	96.2	75.8
Coefficient of Dispersion (COD)	14.8	22.9
Lower COD Confidence Interval	11.5	10.6
Upper COD Confidence Interval	17.9	37.4
Weighted Coefficient Of Dispersion	13.2	30.4
Coefficient of Concentration @ 10%	31.3	25.0
Coefficient of Concentration @ 15%	54.2	50.0
Coefficient of Concentration @ 20%	70.8	58.3
Coefficient of Concentration @ 50%	91.7	83.3
Coefficient of Concentration @ 100%	97.9	91.7
Coefficient of Interquartile Deviation	13.6	21.5
Median Percent Deviation	13.7	17.2
Lower Quartile (25th Percentile)	83.0	62.2
Upper Quartile (75th Percentile)	109.0	94.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.46	-0.81
Relative Kurtosis	2.78	3.25
Arithmetic Mean Ratio	95.8	70.8
Weighted Mean Ratio	93.1	75.7
Geometric Mean Ratio	94.3	65.7
Harmonic Mean Ratio	92.8	58.1
Standard Deviation	17.4	23.2
Coefficient of Variation	18.2	32.8
Price Related Differential (PRD)	1.03	0.94
Lower PRD Confidence Interval	1.00	0.84
Upper PRD Confidence Interval	1.06	1.19
Price Related Bias (PRB)	-0.122	-0.143
Lower PRB Confidence Interval	-0.244	-0.402
Upper PRB Confidence Interval	0.000	0.116
Average Sale Price	109,664	81,373
Average Market Value	102,125	61,565

036 : GREELEY		S-1
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	10	5
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	9	5
Minimum Ratio	57.9	85.5
Maximum Ratio	154.2	145.6
Minimum Sale Price	15,000	7,500
Maximum Sale Price	303,750	1,185,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	85.5	98.5
Lower Median Confidence Interval	70.2	86.5
Upper Median Confidence Interval	109.6	144.1
Broadened Median Ratio (BMED)	86.4	108.4
Coefficient of Dispersion (COD)	17.5	20.3
Lower COD Confidence Interval	7.1	3.8
Upper COD Confidence Interval	26.9	23.1
Weighted Coefficient Of Dispersion	19.4	33.2
Coefficient of Concentration @ 10%	40.0	40.0
Coefficient of Concentration @ 15%	60.0	60.0
Coefficient of Concentration @ 20%	60.0	60.0
Coefficient of Concentration @ 50%	90.0	100.0
Coefficient of Concentration @ 100%	100.0	100.0
Coefficient of Interquartile Deviation	18.7	25.4
Median Percent Deviation	13.0	13.2
Lower Quartile (25th Percentile)	72.7	89.5
Upper Quartile (75th Percentile)	104.7	139.4
PARAMETRIC STATISTICS		
Normality Test	AcceptK	AcceptW
Relative Skewness	0.41	0.4
Relative Kurtosis	2.8	1.39
Arithmetic Mean Ratio	84.9	111.3
Weighted Mean Ratio	73.5	130.5
Geometric Mean Ratio	82.7	108.8
Harmonic Mean Ratio	80.6	106.6
Standard Deviation	20.4	26.5
Coefficient of Variation	24	23.8
Price Related Differential (PRD)	1.16	0.85
Lower PRD Confidence Interval	1.05	0.77
Upper PRD Confidence Interval	1.32	1.12
Price Related Bias (PRB)	-0.139	0.028
Lower PRB Confidence Interval	-0.337	-0.128
Upper PRB Confidence Interval	0.060	0.185
Average Sale Price	96,861	257,300
Average Market Value	71,168	335,826

037 : GREENWOOD		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	43	9
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	40	9
Minimum Ratio	30	23.3
Maximum Ratio	380.5	160.1
Minimum Sale Price	1,900	2,769
Maximum Sale Price	135,000	210,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	102.3	84.8
Lower Median Confidence Interval	92.0	44.0
Upper Median Confidence Interval	110.3	104.0
Broadened Median Ratio (BMED)	102.2	85.3
Coefficient of Dispersion (COD)	25.8	33.6
Lower COD Confidence Interval	18.8	13.4
Upper COD Confidence Interval	33.8	72.5
Weighted Coefficient Of Dispersion	20.8	26.5
Coefficient of Concentration @ 10%	30.2	33.3
Coefficient of Concentration @ 15%	41.9	33.3
Coefficient of Concentration @ 20%	46.5	33.3
Coefficient of Concentration @ 50%	76.7	77.8
Coefficient of Concentration @ 100%	95.3	100.0
Coefficient of Interquartile Deviation	22.0	33.6
Median Percent Deviation	20.8	22.6
Lower Quartile (25th Percentile)	81.7	46.5
Upper Quartile (75th Percentile)	126.7	103.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.5	0.4
Relative Kurtosis	3.18	2.78
Arithmetic Mean Ratio	101.2	82.1
Weighted Mean Ratio	96.4	93.6
Geometric Mean Ratio	94.9	72.2
Harmonic Mean Ratio	88	61.3
Standard Deviation	35.4	40.4
Coefficient of Variation	34.9	49.2
Price Related Differential (PRD)	1.05	0.88
Lower PRD Confidence Interval	0.98	0.71
Upper PRD Confidence Interval	1.13	1.10
Price Related Bias (PRB)	-0.070	0.076
Lower PRB Confidence Interval	-0.182	-0.124
Upper PRB Confidence Interval	0.043	0.276
Average Sale Price	48,445	55,197
Average Market Value	46,710	51,651

038 : HAMILTON		S-4
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	28	9
Number of Ratios: Outliers Removed	0	1
Number of Sales Trimmed	28	8
Minimum Ratio	44.2	49.3
Maximum Ratio	133.9	443.6
Minimum Sale Price	4,000	4,500
Maximum Sale Price	325,000	505,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	86.5	83.9
Lower Median Confidence Interval	79.7	56.4
Upper Median Confidence Interval	95.3	117.0
Broadened Median Ratio (BMED)	86.9	85.4
Coefficient of Dispersion (COD)	18.2	26.2
Lower COD Confidence Interval	12.4	11.5
Upper COD Confidence Interval	23.4	36.0
Weighted Coefficient Of Dispersion	16.8	30.9
Coefficient of Concentration @ 10%	35.7	11.1
Coefficient of Concentration @ 15%	53.6	22.2
Coefficient of Concentration @ 20%	64.3	33.3
Coefficient of Concentration @ 50%	96.4	88.9
Coefficient of Concentration @ 100%	100.0	88.9
Coefficient of Interquartile Deviation	14.2	31.5
Median Percent Deviation	13.5	29.9
Lower Quartile (25th Percentile)	75.1	57.6
Upper Quartile (75th Percentile)	99.8	110.3
PARAMETRIC STATISTICS		
Normality Test	AcceptK	AcceptK
Relative Skewness	0.11	0.17
Relative Kurtosis	2.9	1.61
Arithmetic Mean Ratio	87.6	80.1
Weighted Mean Ratio	84.1	70.4
Geometric Mean Ratio	85.2	76.8
Harmonic Mean Ratio	82.6	73.5
Standard Deviation	20.5	24.7
Coefficient of Variation	23.4	30.9
Price Related Differential (PRD)	1.04	1.14
Lower PRD Confidence Interval	0.98	0.93
Upper PRD Confidence Interval	1.13	1.45
Price Related Bias (PRB)	0.027	-0.538
Lower PRB Confidence Interval	-0.033	-1.241
Upper PRB Confidence Interval	0.088	0.164
Average Sale Price	92,907	139,000
Average Market Value	78,143	97,801

039 : HARPER		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	43	11
Number of Ratios: Outliers Removed	2	1
Number of Sales Trimmed	41	10
Minimum Ratio	35.6	75
Maximum Ratio	1354	152.3
Minimum Sale Price	500	6,000
Maximum Sale Price	249,900	350,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	105.8	102.2
Lower Median Confidence Interval	96.5	96.5
Upper Median Confidence Interval	114.9	117.7
Broadened Median Ratio (BMED)	105.6	104.8
Coefficient of Dispersion (COD)	23.4	10.2
Lower COD Confidence Interval	17.2	4.9
Upper COD Confidence Interval	30.2	15.1
Weighted Coefficient Of Dispersion	22.0	10.8
Coefficient of Concentration @ 10%	32.6	45.5
Coefficient of Concentration @ 15%	48.8	54.5
Coefficient of Concentration @ 20%	53.5	81.8
Coefficient of Concentration @ 50%	81.4	100.0
Coefficient of Concentration @ 100%	95.3	100.0
Coefficient of Interquartile Deviation	19.0	10.4
Median Percent Deviation	15.8	10.9
Lower Quartile (25th Percentile)	91.8	96.5
Upper Quartile (75th Percentile)	131.9	117.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.29	-0.57
Relative Kurtosis	3.05	2.51
Arithmetic Mean Ratio	108.1	102.3
Weighted Mean Ratio	95.2	108.6
Geometric Mean Ratio	102.7	101.4
Harmonic Mean Ratio	96.4	100.4
Standard Deviation	33.4	14.1
Coefficient of Variation	30.9	13.8
Price Related Differential (PRD)	1.14	0.94
Lower PRD Confidence Interval	1.06	0.87
Upper PRD Confidence Interval	1.25	1.03
Price Related Bias (PRB)	-0.771	0.001
Lower PRB Confidence Interval	-1.169	-0.064
Upper PRB Confidence Interval	-0.372	0.067
Average Sale Price	65,429	114,974
Average Market Value	62,321	124,888

040 : HARVEY		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	212	15
Number of Ratios: Outliers Removed	23	2
Number of Sales Trimmed	189	13
Minimum Ratio	32	64.7
Maximum Ratio	448	2265.9
Minimum Sale Price	2,500	1,553
Maximum Sale Price	590,000	1,850,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.7	100.0
Lower Median Confidence Interval	96.8	77.4
Upper Median Confidence Interval	100.5	119.7
Broadened Median Ratio (BMED)	98.8	102.6
Coefficient of Dispersion (COD)	12.7	30.9
Lower COD Confidence Interval	11.1	15.7
Upper COD Confidence Interval	14.2	49.5
Weighted Coefficient Of Dispersion	12.0	24.7
Coefficient of Concentration @ 10%	46.7	13.3
Coefficient of Concentration @ 15%	62.3	20.0
Coefficient of Concentration @ 20%	73.1	40.0
Coefficient of Concentration @ 50%	90.6	73.3
Coefficient of Concentration @ 100%	96.2	80.0
Coefficient of Interquartile Deviation	10.9	43.9
Median Percent Deviation	10.6	27.9
Lower Quartile (25th Percentile)	88.6	72.1
Upper Quartile (75th Percentile)	110.1	159.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.22	1.46
Relative Kurtosis	3.52	4.53
Arithmetic Mean Ratio	97.9	104.6
Weighted Mean Ratio	95.3	101.9
Geometric Mean Ratio	96.5	97.8
Harmonic Mean Ratio	95	92.5
Standard Deviation	16.5	44
Coefficient of Variation	16.8	42
Price Related Differential (PRD)	1.03	1.03
Lower PRD Confidence Interval	1.01	0.80
Upper PRD Confidence Interval	1.05	1.40
Price Related Bias (PRB)	-0.214	-0.966
Lower PRB Confidence Interval	-0.281	-2.678
Upper PRB Confidence Interval	-0.147	0.746
Average Sale Price	122,851	275,839
Average Market Value	117,088	281,009

041 : HASKELL		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	35	8
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	32	8
Minimum Ratio	51.5	57.5
Maximum Ratio	326	130.1
Minimum Sale Price	2,000	17,500
Maximum Sale Price	234,000	95,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.4	87.3
Lower Median Confidence Interval	90.4	78.2
Upper Median Confidence Interval	100.0	106.2
Broadened Median Ratio (BMED)	97.3	87.4
Coefficient of Dispersion (COD)	13.6	17.8
Lower COD Confidence Interval	8.7	6.8
Upper COD Confidence Interval	19.4	26.8
Weighted Coefficient Of Dispersion	12.6	20.6
Coefficient of Concentration @ 10%	54.3	50.0
Coefficient of Concentration @ 15%	57.1	62.5
Coefficient of Concentration @ 20%	62.9	62.5
Coefficient of Concentration @ 50%	91.4	100.0
Coefficient of Concentration @ 100%	97.1	100.0
Coefficient of Interquartile Deviation	14.0	14.4
Median Percent Deviation	6.8	10.2
Lower Quartile (25th Percentile)	75.1	78.5
Upper Quartile (75th Percentile)	102.1	103.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.7	0.44
Relative Kurtosis	2.4	2.85
Arithmetic Mean Ratio	89.2	90.2
Weighted Mean Ratio	90.1	88.8
Geometric Mean Ratio	87.3	88
Harmonic Mean Ratio	85.2	85.8
Standard Deviation	17.6	21.6
Coefficient of Variation	19.7	23.9
Price Related Differential (PRD)	0.99	1.02
Lower PRD Confidence Interval	0.97	0.95
Upper PRD Confidence Interval	1.02	1.14
Price Related Bias (PRB)	-0.281	0.011
Lower PRB Confidence Interval	-0.393	-0.245
Upper PRB Confidence Interval	-0.169	0.266
Average Sale Price	127,914	58,000
Average Market Value	115,203	51,475

042 : HODGEMAN		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	15	8
Number of Ratios: Outliers Removed	1	1
Number of Sales Trimmed	14	7
Minimum Ratio	40.3	49.3
Maximum Ratio	190.4	476.5
Minimum Sale Price	15,000	2,000
Maximum Sale Price	184,000	114,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	91.2	62.8
Lower Median Confidence Interval	70.0	50.8
Upper Median Confidence Interval	105.7	121.2
Broadened Median Ratio (BMED)	88.7	71.4
Coefficient of Dispersion (COD)	25.0	35.9
Lower COD Confidence Interval	13.9	6.5
Upper COD Confidence Interval	37.2	51.2
Weighted Coefficient Of Dispersion	20.0	18.6
Coefficient of Concentration @ 10%	20.0	25.0
Coefficient of Concentration @ 15%	40.0	37.5
Coefficient of Concentration @ 20%	46.7	50.0
Coefficient of Concentration @ 50%	80.0	62.5
Coefficient of Concentration @ 100%	93.3	87.5
Coefficient of Interquartile Deviation	25.7	54.9
Median Percent Deviation	23.3	20.4
Lower Quartile (25th Percentile)	58.9	52.2
Upper Quartile (75th Percentile)	105.7	121.1
PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectW
Relative Skewness	-0.15	0.85
Relative Kurtosis	1.93	1.86
Arithmetic Mean Ratio	83.1	74.9
Weighted Mean Ratio	83.2	55.4
Geometric Mean Ratio	78.8	69.9
Harmonic Mean Ratio	74.2	66
Standard Deviation	26.2	32
Coefficient of Variation	31.6	42.8
Price Related Differential (PRD)	1.00	1.35
Lower PRD Confidence Interval	0.92	1.16
Upper PRD Confidence Interval	1.10	1.80
Price Related Bias (PRB)	0.059	-0.729
Lower PRB Confidence Interval	-0.167	-2.362
Upper PRB Confidence Interval	0.286	0.904
Average Sale Price	64,429	28,014
Average Market Value	53,586	15,530

043 : JACKSON		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	93	12
Number of Ratios: Outliers Removed	10	1
Number of Sales Trimmed	83	11
Minimum Ratio	33.1	55.6
Maximum Ratio	203.1	391.5
Minimum Sale Price	10,000	2,000
Maximum Sale Price	550,000	300,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.8	77.8
Lower Median Confidence Interval	96.5	65.7
Upper Median Confidence Interval	101.5	97.9
Broadened Median Ratio (BMED)	98.0	77.8
Coefficient of Dispersion (COD)	13.5	21.8
Lower COD Confidence Interval	10.8	8.9
Upper COD Confidence Interval	16.2	37.3
Weighted Coefficient Of Dispersion	12.2	18.0
Coefficient of Concentration @ 10%	48.4	41.7
Coefficient of Concentration @ 15%	58.1	41.7
Coefficient of Concentration @ 20%	65.6	41.7
Coefficient of Concentration @ 50%	89.2	83.3
Coefficient of Concentration @ 100%	98.9	91.7
Coefficient of Interquartile Deviation	11.8	23.1
Median Percent Deviation	11.3	23.8
Lower Quartile (25th Percentile)	89.2	62.7
Upper Quartile (75th Percentile)	112.3	98.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.46	1.59
Relative Kurtosis	3.38	5.08
Arithmetic Mean Ratio	98.3	82.2
Weighted Mean Ratio	94.5	78.5
Geometric Mean Ratio	96.7	78.9
Harmonic Mean Ratio	95.1	76.2
Standard Deviation	17.9	27.1
Coefficient of Variation	18.3	33
Price Related Differential (PRD)	1.04	1.05
Lower PRD Confidence Interval	1.02	0.92
Upper PRD Confidence Interval	1.06	1.27
Price Related Bias (PRB)	-0.165	-0.596
Lower PRB Confidence Interval	-0.229	-0.977
Upper PRB Confidence Interval	-0.102	-0.215
Average Sale Price	113,987	90,218
Average Market Value	107,715	70,777

044 : JEFFERSON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	182	7
Number of Ratios: Outliers Removed	22	1
Number of Sales Trimmed	160	6
Minimum Ratio	20.5	77.3
Maximum Ratio	1851	212.9
Minimum Sale Price	1,000	18,000
Maximum Sale Price	325,000	193,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.9	99.7
Lower Median Confidence Interval	93.0	82.3
Upper Median Confidence Interval	97.6	126.1
Broadened Median Ratio (BMED)	95.9	97.9
Coefficient of Dispersion (COD)	13.6	13.4
Lower COD Confidence Interval	11.7	4.2
Upper COD Confidence Interval	15.4	20.2
Weighted Coefficient Of Dispersion	13.0	12.9
Coefficient of Concentration @ 10%	44.5	42.9
Coefficient of Concentration @ 15%	58.2	42.9
Coefficient of Concentration @ 20%	67.0	57.1
Coefficient of Concentration @ 50%	87.9	85.7
Coefficient of Concentration @ 100%	94.5	85.7
Coefficient of Interquartile Deviation	11.3	22.0
Median Percent Deviation	11.5	17.5
Lower Quartile (25th Percentile)	84.8	82.3
Upper Quartile (75th Percentile)	106.5	126.1
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	-0.09	0.66
Relative Kurtosis	3.23	2.47
Arithmetic Mean Ratio	93.3	96.5
Weighted Mean Ratio	90.9	87.8
Geometric Mean Ratio	91.7	95.3
Harmonic Mean Ratio	89.9	94.1
Standard Deviation	16.9	17.4
Coefficient of Variation	18.2	18
Price Related Differential (PRD)	1.03	1.10
Lower PRD Confidence Interval	1.01	1.03
Upper PRD Confidence Interval	1.04	1.25
Price Related Bias (PRB)	-0.570	-0.113
Lower PRB Confidence Interval	-0.757	-0.655
Upper PRB Confidence Interval	-0.384	0.429
Average Sale Price	131,494	92,033
Average Market Value	119,508	80,763

045 : JEWELL		S-8
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	28	8
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	25	8
Minimum Ratio	12.5	25
Maximum Ratio	556	179.4
Minimum Sale Price	250	1,000
Maximum Sale Price	130,000	70,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	105.4	101.8
Lower Median Confidence Interval	88.2	42.7
Upper Median Confidence Interval	116.0	130.5
Broadened Median Ratio (BMED)	104.2	94.2
Coefficient of Dispersion (COD)	20.7	37.2
Lower COD Confidence Interval	13.8	15.0
Upper COD Confidence Interval	29.3	87.3
Weighted Coefficient Of Dispersion	15.6	44.5
Coefficient of Concentration @ 10%	28.6	37.5
Coefficient of Concentration @ 15%	42.9	37.5
Coefficient of Concentration @ 20%	53.6	37.5
Coefficient of Concentration @ 50%	82.1	50.0
Coefficient of Concentration @ 100%	92.9	100.0
Coefficient of Interquartile Deviation	21.0	39.7
Median Percent Deviation	19.6	40.1
Lower Quartile (25th Percentile)	79.5	44.2
Upper Quartile (75th Percentile)	123.7	125.1
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.38	0.24
Relative Kurtosis	2.85	2.13
Arithmetic Mean Ratio	99.4	92.4
Weighted Mean Ratio	100.1	70.9
Geometric Mean Ratio	94.7	78.1
Harmonic Mean Ratio	89	63.5
Standard Deviation	28.2	51.2
Coefficient of Variation	28.4	55.5
Price Related Differential (PRD)	0.99	1.30
Lower PRD Confidence Interval	0.93	0.97
Upper PRD Confidence Interval	1.06	1.75
Price Related Bias (PRB)	-0.201	-0.024
Lower PRB Confidence Interval	-0.385	-0.321
Upper PRB Confidence Interval	-0.017	0.274
Average Sale Price	46,080	18,519
Average Market Value	46,146	13,138

046 : JOHNSON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	355	169
Number of Ratios: Outliers Removed	32	6
Number of Sales Trimmed	323	163
Minimum Ratio	0.1	25.9
Maximum Ratio	189.4	281.1
Minimum Sale Price	41,150	30,000
Maximum Sale Price	915,000	62,254,453
DISTRIBUTION FREE STATISTICS		
Median Ratio	93.5	86.1
Lower Median Confidence Interval	92.0	81.2
Upper Median Confidence Interval	95.5	93.6
Broadened Median Ratio (BMED)	93.6	86.1
Coefficient of Dispersion (COD)	8.2	22.6
Lower COD Confidence Interval	7.4	19.9
Upper COD Confidence Interval	8.9	25.3
Weighted Coefficient Of Dispersion	8.3	22.4
Coefficient of Concentration @ 10%	65.4	24.3
Coefficient of Concentration @ 15%	76.1	37.9
Coefficient of Concentration @ 20%	83.4	49.1
Coefficient of Concentration @ 50%	96.6	89.3
Coefficient of Concentration @ 100%	99.7	96.4
Coefficient of Interquartile Deviation	7.5	21.4
Median Percent Deviation	6.9	20.6
Lower Quartile (25th Percentile)	85.8	70.0
Upper Quartile (75th Percentile)	99.8	106.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.34	0.44
Relative Kurtosis	3.41	3.08
Arithmetic Mean Ratio	92.8	88.3
Weighted Mean Ratio	92.1	75.6
Geometric Mean Ratio	92.3	85
Harmonic Mean Ratio	91.7	81.4
Standard Deviation	9.9	24
Coefficient of Variation	10.7	27.2
Price Related Differential (PRD)	1.01	1.17
Lower PRD Confidence Interval	1.00	1.09
Upper PRD Confidence Interval	1.02	1.25
Price Related Bias (PRB)	0.090	-0.021
Lower PRB Confidence Interval	0.063	-0.051
Upper PRB Confidence Interval	0.116	0.009
Average Sale Price	248,939	3,065,827
Average Market Value	229,325	2,317,439

047 : KEARNY		S-8
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	31	10
Number of Ratios: Outliers Removed	1	1
Number of Sales Trimmed	30	9
Minimum Ratio	54.5	46.8
Maximum Ratio	268.9	198.6
Minimum Sale Price	4,500	5,000
Maximum Sale Price	300,000	197,690
DISTRIBUTION FREE STATISTICS		
Median Ratio	83.1	79.5
Lower Median Confidence Interval	78.8	61.9
Upper Median Confidence Interval	92.3	96.3
Broadened Median Ratio (BMED)	84.6	80.3
Coefficient of Dispersion (COD)	15.5	18.3
Lower COD Confidence Interval	11.0	8.0
Upper COD Confidence Interval	19.1	28.5
Weighted Coefficient Of Dispersion	12.9	19.5
Coefficient of Concentration @ 10%	41.9	30.0
Coefficient of Concentration @ 15%	54.8	50.0
Coefficient of Concentration @ 20%	71.0	50.0
Coefficient of Concentration @ 50%	96.8	90.0
Coefficient of Concentration @ 100%	96.8	90.0
Coefficient of Interquartile Deviation	14.4	21.2
Median Percent Deviation	11.4	17.6
Lower Quartile (25th Percentile)	74.8	59.8
Upper Quartile (75th Percentile)	98.7	93.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.45	-0.14
Relative Kurtosis	2.71	2.06
Arithmetic Mean Ratio	86.7	75.5
Weighted Mean Ratio	81.3	85.3
Geometric Mean Ratio	85.2	73.3
Harmonic Mean Ratio	83.7	71
Standard Deviation	16.4	18.5
Coefficient of Variation	19	24.5
Price Related Differential (PRD)	1.07	0.88
Lower PRD Confidence Interval	1.04	0.81
Upper PRD Confidence Interval	1.11	0.97
Price Related Bias (PRB)	-0.172	0.168
Lower PRB Confidence Interval	-0.317	-0.047
Upper PRB Confidence Interval	-0.027	0.384
Average Sale Price	109,117	89,632
Average Market Value	88,679	76,479

048 : KINGMAN		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	47	10
Number of Ratios: Outliers Removed	2	1
Number of Sales Trimmed	45	9
Minimum Ratio	47.3	68.5
Maximum Ratio	324.2	332.1
Minimum Sale Price	6,000	19,500
Maximum Sale Price	310,000	2,000,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	101.4	115.3
Lower Median Confidence Interval	92.1	87.0
Upper Median Confidence Interval	112.8	174.0
Broadened Median Ratio (BMED)	101.1	115.0
Coefficient of Dispersion (COD)	21.6	27.7
Lower COD Confidence Interval	16.6	11.6
Upper COD Confidence Interval	26.5	40.1
Weighted Coefficient Of Dispersion	19.8	25.3
Coefficient of Concentration @ 10%	27.7	30.0
Coefficient of Concentration @ 15%	40.4	40.0
Coefficient of Concentration @ 20%	51.1	50.0
Coefficient of Concentration @ 50%	91.5	70.0
Coefficient of Concentration @ 100%	95.7	90.0
Coefficient of Interquartile Deviation	20.4	37.2
Median Percent Deviation	19.9	26.3
Lower Quartile (25th Percentile)	81.2	91.5
Upper Quartile (75th Percentile)	122.5	177.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.11	0.56
Relative Kurtosis	2.56	2.22
Arithmetic Mean Ratio	100.5	117.7
Weighted Mean Ratio	90.6	129.5
Geometric Mean Ratio	96.8	111.6
Harmonic Mean Ratio	93	106
Standard Deviation	26.6	40.9
Coefficient of Variation	26.5	34.7
Price Related Differential (PRD)	1.11	0.91
Lower PRD Confidence Interval	1.07	0.81
Upper PRD Confidence Interval	1.17	1.10
Price Related Bias (PRB)	-0.145	0.002
Lower PRB Confidence Interval	-0.243	-0.265
Upper PRB Confidence Interval	-0.047	0.270
Average Sale Price	99,324	341,611
Average Market Value	90,003	442,357

049 : KIOWA		S-3
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	15	4
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	14	4
Minimum Ratio	72.7	65.4
Maximum Ratio	210	126.7
Minimum Sale Price	2,000	14,000
Maximum Sale Price	205,000	65,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.4	90.1
Lower Median Confidence Interval	84.0	66.5
Upper Median Confidence Interval	109.7	124.9
Broadened Median Ratio (BMED)	96.5	92.1
Coefficient of Dispersion (COD)	14.1	17.8
Lower COD Confidence Interval	7.1	6.6
Upper COD Confidence Interval	21.1	27.5
Weighted Coefficient Of Dispersion	12.1	17.8
Coefficient of Concentration @ 10%	40.0	50.0
Coefficient of Concentration @ 15%	60.0	50.0
Coefficient of Concentration @ 20%	60.0	50.0
Coefficient of Concentration @ 50%	86.7	100.0
Coefficient of Concentration @ 100%	93.3	100.0
Coefficient of Interquartile Deviation	17.6	25.9
Median Percent Deviation	13.8	14.5
Lower Quartile (25th Percentile)	84.0	71.2
Upper Quartile (75th Percentile)	118.0	117.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.83	0.4
Relative Kurtosis	3.21	2.03
Arithmetic Mean Ratio	99	93
Weighted Mean Ratio	95.2	101.4
Geometric Mean Ratio	97.2	90.5
Harmonic Mean Ratio	95.6	88.1
Standard Deviation	19.8	25.3
Coefficient of Variation	20	27.2
Price Related Differential (PRD)	1.04	0.92
Lower PRD Confidence Interval	1.00	0.85
Upper PRD Confidence Interval	1.10	0.99
Price Related Bias (PRB)	-0.139	0.000
Lower PRB Confidence Interval	-0.245	0.000
Upper PRB Confidence Interval	-0.034	0.000
Average Sale Price	84,071	44,750
Average Market Value	80,000	45,390

050 : LABETTE		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	195	9
Number of Ratios: Outliers Removed	30	0
Number of Sales Trimmed	165	9
Minimum Ratio	17.4	10.5
Maximum Ratio	515.6	177.7
Minimum Sale Price	3,000	6,700
Maximum Sale Price	269,000	200,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.4	88.9
Lower Median Confidence Interval	98.4	42.2
Upper Median Confidence Interval	104.1	173.3
Broadened Median Ratio (BMED)	100.4	96.7
Coefficient of Dispersion (COD)	15.2	57.4
Lower COD Confidence Interval	13.2	19.6
Upper COD Confidence Interval	17.1	95.6
Weighted Coefficient Of Dispersion	12.9	51.1
Coefficient of Concentration @ 10%	35.4	11.1
Coefficient of Concentration @ 15%	53.3	11.1
Coefficient of Concentration @ 20%	59.5	22.2
Coefficient of Concentration @ 50%	83.6	44.4
Coefficient of Concentration @ 100%	93.8	100.0
Coefficient of Interquartile Deviation	14.2	66.4
Median Percent Deviation	13.5	52.5
Lower Quartile (25th Percentile)	87.6	52.6
Upper Quartile (75th Percentile)	116.1	170.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	Reject4
Relative Skewness	0.56	-0.02
Relative Kurtosis	3.24	1.6
Arithmetic Mean Ratio	100.6	102.7
Weighted Mean Ratio	94.9	77.2
Geometric Mean Ratio	98.7	79
Harmonic Mean Ratio	96.8	48.6
Standard Deviation	19.8	61.6
Coefficient of Variation	19.7	60
Price Related Differential (PRD)	1.06	1.33
Lower PRD Confidence Interval	1.04	1.06
Upper PRD Confidence Interval	1.08	2.41
Price Related Bias (PRB)	-0.165	-0.073
Lower PRB Confidence Interval	-0.225	-0.493
Upper PRB Confidence Interval	-0.105	0.348
Average Sale Price	74,435	57,167
Average Market Value	70,661	44,152

051 : LANE		*S-6*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	23	6
Number of Ratios: Outliers Removed	2	0
Number of Sales Trimmed	21	6
Minimum Ratio	34.1	31.5
Maximum Ratio	327.3	315.4
Minimum Sale Price	3,000	3,500
Maximum Sale Price	232,000	185,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	93.3	97.2
Lower Median Confidence Interval	85.0	56.1
Upper Median Confidence Interval	128.0	220.6
Broadened Median Ratio (BMED)	92.9	99.2
Coefficient of Dispersion (COD)	32.0	57.0
Lower COD Confidence Interval	20.6	9.0
Upper COD Confidence Interval	44.4	110.3
Weighted Coefficient Of Dispersion	29.3	38.4
Coefficient of Concentration @ 10%	30.4	33.3
Coefficient of Concentration @ 15%	34.8	33.3
Coefficient of Concentration @ 20%	39.1	50.0
Coefficient of Concentration @ 50%	69.6	66.7
Coefficient of Concentration @ 100%	91.3	83.3
Coefficient of Interquartile Deviation	41.1	53.9
Median Percent Deviation	28.5	23.2
Lower Quartile (25th Percentile)	70.0	68.3
Upper Quartile (75th Percentile)	146.8	173.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectW
Relative Skewness	0.61	1.38
Relative Kurtosis	2.59	3.58
Arithmetic Mean Ratio	98.9	124.6
Weighted Mean Ratio	77.9	66.6
Geometric Mean Ratio	91.3	99.2
Harmonic Mean Ratio	83.8	79.1
Standard Deviation	39.9	98.5
Coefficient of Variation	40.3	79.1
Price Related Differential (PRD)	1.27	1.87
Lower PRD Confidence Interval	1.13	1.18
Upper PRD Confidence Interval	1.48	4.52
Price Related Bias (PRB)	-0.190	-0.314
Lower PRB Confidence Interval	-0.445	-0.924
Upper PRB Confidence Interval	0.064	0.297
Average Sale Price	46,548	61,417
Average Market Value	36,243	40,878

052 : LEAVENWORTH		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	217	25
Number of Ratios: Outliers Removed	23	1
Number of Sales Trimmed	194	24
Minimum Ratio	12.6	36.4
Maximum Ratio	383.2	124.1
Minimum Sale Price	4,750	22,000
Maximum Sale Price	435,000	2,900,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.0	98.9
Lower Median Confidence Interval	96.4	87.1
Upper Median Confidence Interval	99.3	102.5
Broadened Median Ratio (BMED)	98.0	97.9
Coefficient of Dispersion (COD)	7.9	11.5
Lower COD Confidence Interval	6.9	7.5
Upper COD Confidence Interval	8.8	15.7
Weighted Coefficient Of Dispersion	7.7	17.7
Coefficient of Concentration @ 10%	59.4	52.0
Coefficient of Concentration @ 15%	74.7	60.0
Coefficient of Concentration @ 20%	84.8	76.0
Coefficient of Concentration @ 50%	94.0	96.0
Coefficient of Concentration @ 100%	97.2	100.0
Coefficient of Interquartile Deviation	6.8	10.6
Median Percent Deviation	6.7	8.2
Lower Quartile (25th Percentile)	90.9	82.8
Upper Quartile (75th Percentile)	104.2	103.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.11	-0.19
Relative Kurtosis	2.85	2.66
Arithmetic Mean Ratio	96.6	96.5
Weighted Mean Ratio	95.7	84.2
Geometric Mean Ratio	96.1	95.3
Harmonic Mean Ratio	95.6	94
Standard Deviation	9.9	15.1
Coefficient of Variation	10.2	15.6
Price Related Differential (PRD)	1.01	1.15
Lower PRD Confidence Interval	1.00	1.01
Upper PRD Confidence Interval	1.02	1.32
Price Related Bias (PRB)	-0.164	-0.033
Lower PRB Confidence Interval	-0.214	-0.078
Upper PRB Confidence Interval	-0.115	0.013
Average Sale Price	162,926	374,938
Average Market Value	155,900	315,664

053 : LINCOLN		S-8
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	20	10
Number of Ratios: Outliers Removed	3	2
Number of Sales Trimmed	17	8
Minimum Ratio	45.7	51
Maximum Ratio	331.3	342
Minimum Sale Price	1,500	1,000
Maximum Sale Price	275,000	315,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.3	97.6
Lower Median Confidence Interval	90.9	89.5
Upper Median Confidence Interval	104.9	115.3
Broadened Median Ratio (BMED)	97.1	97.7
Coefficient of Dispersion (COD)	11.8	7.9
Lower COD Confidence Interval	6.4	1.5
Upper COD Confidence Interval	16.6	15.6
Weighted Coefficient Of Dispersion	8.8	3.1
Coefficient of Concentration @ 10%	55.0	60.0
Coefficient of Concentration @ 15%	65.0	60.0
Coefficient of Concentration @ 20%	65.0	70.0
Coefficient of Concentration @ 50%	85.0	90.0
Coefficient of Concentration @ 100%	95.0	90.0
Coefficient of Interquartile Deviation	10.3	9.7
Median Percent Deviation	9.2	4.6
Lower Quartile (25th Percentile)	88.6	90.0
Upper Quartile (75th Percentile)	108.7	109.0
PARAMETRIC STATISTICS		
Normality Test	AcceptK	RejectK
Relative Skewness	-0.12	1.41
Relative Kurtosis	3.37	4.58
Arithmetic Mean Ratio	96.6	99.9
Weighted Mean Ratio	93.3	97.7
Geometric Mean Ratio	95.3	99.1
Harmonic Mean Ratio	94	98.4
Standard Deviation	15.8	14.1
Coefficient of Variation	16.4	14.1
Price Related Differential (PRD)	1.04	1.02
Lower PRD Confidence Interval	0.99	0.97
Upper PRD Confidence Interval	1.10	1.10
Price Related Bias (PRB)	-0.270	-0.305
Lower PRB Confidence Interval	-0.397	-0.526
Upper PRB Confidence Interval	-0.143	-0.085
Average Sale Price	85,671	103,750
Average Market Value	79,888	101,401

054 : LINN		S-4
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	96	9
Number of Ratios: Outliers Removed	12	0
Number of Sales Trimmed	84	9
Minimum Ratio	16	54.6
Maximum Ratio	2080	131.6
Minimum Sale Price	850	8,000
Maximum Sale Price	269,500	100,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	99.6	80.9
Lower Median Confidence Interval	93.8	62.9
Upper Median Confidence Interval	105.3	125.8
Broadened Median Ratio (BMED)	99.6	81.5
Coefficient of Dispersion (COD)	20.4	23.3
Lower COD Confidence Interval	16.2	9.7
Upper COD Confidence Interval	25.0	33.9
Weighted Coefficient Of Dispersion	15.5	28.3
Coefficient of Concentration @ 10%	32.3	33.3
Coefficient of Concentration @ 15%	47.9	44.4
Coefficient of Concentration @ 20%	59.4	44.4
Coefficient of Concentration @ 50%	76.0	77.8
Coefficient of Concentration @ 100%	91.7	100.0
Coefficient of Interquartile Deviation	19.1	27.8
Median Percent Deviation	15.7	21.9
Lower Quartile (25th Percentile)	86.9	67.3
Upper Quartile (75th Percentile)	124.9	112.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.87	0.61
Relative Kurtosis	4.06	2.16
Arithmetic Mean Ratio	102.7	87.7
Weighted Mean Ratio	94.9	93.2
Geometric Mean Ratio	98.9	84.4
Harmonic Mean Ratio	94.8	81.3
Standard Deviation	28.7	26.4
Coefficient of Variation	27.9	30.1
Price Related Differential (PRD)	1.08	0.94
Lower PRD Confidence Interval	1.04	0.83
Upper PRD Confidence Interval	1.13	1.08
Price Related Bias (PRB)	-0.383	0.103
Lower PRB Confidence Interval	-0.729	-0.094
Upper PRB Confidence Interval	-0.038	0.300
Average Sale Price	71,661	44,393
Average Market Value	68,002	41,366

055 : LOGAN		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	46	10
Number of Ratios: Outliers Removed	2	1
Number of Sales Trimmed	44	9
Minimum Ratio	43.4	48.8
Maximum Ratio	211.7	346.4
Minimum Sale Price	6,000	10,000
Maximum Sale Price	170,000	331,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	94.7	92.0
Lower Median Confidence Interval	87.0	63.6
Upper Median Confidence Interval	98.8	138.0
Broadened Median Ratio (BMED)	94.5	91.8
Coefficient of Dispersion (COD)	16.8	32.5
Lower COD Confidence Interval	12.5	14.8
Upper COD Confidence Interval	21.8	49.6
Weighted Coefficient Of Dispersion	16.0	22.5
Coefficient of Concentration @ 10%	37.0	20.0
Coefficient of Concentration @ 15%	52.2	20.0
Coefficient of Concentration @ 20%	69.6	40.0
Coefficient of Concentration @ 50%	89.1	80.0
Coefficient of Concentration @ 100%	97.8	90.0
Coefficient of Interquartile Deviation	14.0	37.0
Median Percent Deviation	13.9	28.9
Lower Quartile (25th Percentile)	80.2	65.8
Upper Quartile (75th Percentile)	106.7	134.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.36	0.76
Relative Kurtosis	3.2	2.8
Arithmetic Mean Ratio	90.9	92.1
Weighted Mean Ratio	88.4	94.9
Geometric Mean Ratio	88.2	85.9
Harmonic Mean Ratio	85.1	80.3
Standard Deviation	20.9	37.3
Coefficient of Variation	23	40.5
Price Related Differential (PRD)	1.03	0.97
Lower PRD Confidence Interval	0.99	0.83
Upper PRD Confidence Interval	1.08	1.18
Price Related Bias (PRB)	-0.042	-0.086
Lower PRB Confidence Interval	-0.125	-0.613
Upper PRB Confidence Interval	0.040	0.440
Average Sale Price	71,138	77,222
Average Market Value	62,860	73,290

056 : LYON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	383	22
Number of Ratios: Outliers Removed	37	2
Number of Sales Trimmed	346	20
Minimum Ratio	46.9	56.1
Maximum Ratio	1233.9	225.4
Minimum Sale Price	1,000	15,000
Maximum Sale Price	313,500	7,830,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.1	97.6
Lower Median Confidence Interval	98.5	82.5
Upper Median Confidence Interval	101.7	118.8
Broadened Median Ratio (BMED)	100.1	98.7
Coefficient of Dispersion (COD)	12.1	23.1
Lower COD Confidence Interval	11.0	15.0
Upper COD Confidence Interval	13.2	31.8
Weighted Coefficient Of Dispersion	10.6	35.6
Coefficient of Concentration @ 10%	48.6	27.3
Coefficient of Concentration @ 15%	61.4	27.3
Coefficient of Concentration @ 20%	73.6	31.8
Coefficient of Concentration @ 50%	90.9	86.4
Coefficient of Concentration @ 100%	96.3	90.9
Coefficient of Interquartile Deviation	11.2	25.2
Median Percent Deviation	10.4	23.4
Lower Quartile (25th Percentile)	91.1	75.4
Upper Quartile (75th Percentile)	113.5	124.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.51	0.78
Relative Kurtosis	3.61	3.58
Arithmetic Mean Ratio	99.9	97.8
Weighted Mean Ratio	97.8	66.2
Geometric Mean Ratio	98.7	93.9
Harmonic Mean Ratio	97.4	90.3
Standard Deviation	15.8	28.9
Coefficient of Variation	15.8	29.5
Price Related Differential (PRD)	1.02	1.48
Lower PRD Confidence Interval	1.01	1.04
Upper PRD Confidence Interval	1.03	1.78
Price Related Bias (PRB)	-0.170	-0.101
Lower PRB Confidence Interval	-0.231	-0.216
Upper PRB Confidence Interval	-0.110	0.014
Average Sale Price	97,984	540,178
Average Market Value	95,811	357,752

057 : MARION		S-5
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	139	10
Number of Ratios: Outliers Removed	13	1
Number of Sales Trimmed	126	9
Minimum Ratio	34.8	65.6
Maximum Ratio	601.2	490.9
Minimum Sale Price	1,000	3,000
Maximum Sale Price	419,000	190,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.0	109.3
Lower Median Confidence Interval	95.1	78.8
Upper Median Confidence Interval	102.1	221.2
Broadened Median Ratio (BMED)	97.1	111.2
Coefficient of Dispersion (COD)	14.5	58.0
Lower COD Confidence Interval	12.3	16.6
Upper COD Confidence Interval	16.8	85.1
Weighted Coefficient Of Dispersion	13.9	22.8
Coefficient of Concentration @ 10%	46.8	0.0
Coefficient of Concentration @ 15%	56.8	0.0
Coefficient of Concentration @ 20%	67.6	20.0
Coefficient of Concentration @ 50%	89.2	70.0
Coefficient of Concentration @ 100%	95.0	80.0
Coefficient of Interquartile Deviation	13.0	72.1
Median Percent Deviation	11.9	31.5
Lower Quartile (25th Percentile)	88.7	78.1
Upper Quartile (75th Percentile)	113.9	235.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.5	1.23
Relative Kurtosis	3.44	3.24
Arithmetic Mean Ratio	98.9	131.3
Weighted Mean Ratio	96.5	99.3
Geometric Mean Ratio	97.1	115.4
Harmonic Mean Ratio	95.3	104
Standard Deviation	19	78
Coefficient of Variation	19.2	59.4
Price Related Differential (PRD)	1.02	1.32
Lower PRD Confidence Interval	0.99	1.01
Upper PRD Confidence Interval	1.06	1.93
Price Related Bias (PRB)	-0.180	-0.504
Lower PRB Confidence Interval	-0.269	-1.000
Upper PRB Confidence Interval	-0.091	-0.008
Average Sale Price	90,481	84,222
Average Market Value	87,357	83,603

058 : MARSHALL		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	105	8
Number of Ratios: Outliers Removed	13	0
Number of Sales Trimmed	92	8
Minimum Ratio	22.4	31.6
Maximum Ratio	671.4	146.4
Minimum Sale Price	3,500	15,000
Maximum Sale Price	325,000	75,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.6	66.0
Lower Median Confidence Interval	94.0	50.9
Upper Median Confidence Interval	99.4	144.8
Broadened Median Ratio (BMED)	97.5	72.1
Coefficient of Dispersion (COD)	12.0	53.1
Lower COD Confidence Interval	9.7	17.7
Upper COD Confidence Interval	14.5	68.2
Weighted Coefficient Of Dispersion	11.2	62.1
Coefficient of Concentration @ 10%	44.8	25.0
Coefficient of Concentration @ 15%	59.0	25.0
Coefficient of Concentration @ 20%	68.6	37.5
Coefficient of Concentration @ 50%	89.5	50.0
Coefficient of Concentration @ 100%	97.1	75.0
Coefficient of Interquartile Deviation	11.4	65.1
Median Percent Deviation	11.7	37.5
Lower Quartile (25th Percentile)	83.3	51.5
Upper Quartile (75th Percentile)	105.4	137.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.32	0.45
Relative Kurtosis	3.62	1.6
Arithmetic Mean Ratio	93.9	84.3
Weighted Mean Ratio	91.7	84.6
Geometric Mean Ratio	92.5	74.1
Harmonic Mean Ratio	90.9	65.1
Standard Deviation	15.8	44.8
Coefficient of Variation	16.8	53.1
Price Related Differential (PRD)	1.02	1.00
Lower PRD Confidence Interval	1.00	0.86
Upper PRD Confidence Interval	1.05	1.32
Price Related Bias (PRB)	-0.148	0.284
Lower PRB Confidence Interval	-0.239	-0.338
Upper PRB Confidence Interval	-0.056	0.907
Average Sale Price	104,343	43,688
Average Market Value	95,667	36,978

059 : MCPHERSON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	203	16
Number of Ratios: Outliers Removed	15	0
Number of Sales Trimmed	188	16
Minimum Ratio	51.4	60
Maximum Ratio	394.4	166.1
Minimum Sale Price	6,000	17,500
Maximum Sale Price	385,000	820,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.9	91.2
Lower Median Confidence Interval	92.5	67.9
Upper Median Confidence Interval	97.7	108.3
Broadened Median Ratio (BMED)	95.8	92.1
Coefficient of Dispersion (COD)	11.4	26.5
Lower COD Confidence Interval	10.1	15.4
Upper COD Confidence Interval	12.8	36.8
Weighted Coefficient Of Dispersion	10.1	26.1
Coefficient of Concentration @ 10%	50.7	31.3
Coefficient of Concentration @ 15%	65.5	43.8
Coefficient of Concentration @ 20%	77.8	43.8
Coefficient of Concentration @ 50%	95.6	81.3
Coefficient of Concentration @ 100%	99.0	100.0
Coefficient of Interquartile Deviation	10.0	26.7
Median Percent Deviation	10.0	25.7
Lower Quartile (25th Percentile)	86.7	67.7
Upper Quartile (75th Percentile)	106.0	116.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.19	0.76
Relative Kurtosis	3.25	2.56
Arithmetic Mean Ratio	95.2	97.5
Weighted Mean Ratio	94.9	94.9
Geometric Mean Ratio	94.2	92.8
Harmonic Mean Ratio	93.1	88.6
Standard Deviation	14.1	32.5
Coefficient of Variation	14.8	33.3
Price Related Differential (PRD)	1.00	1.03
Lower PRD Confidence Interval	0.99	0.91
Upper PRD Confidence Interval	1.01	1.20
Price Related Bias (PRB)	-0.095	-0.046
Lower PRB Confidence Interval	-0.153	-0.193
Upper PRB Confidence Interval	-0.037	0.100
Average Sale Price	140,444	181,219
Average Market Value	133,268	172,059

060 : MEADE		*S-7*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	36	11
Number of Ratios: Outliers Removed	5	0
Number of Sales Trimmed	31	11
Minimum Ratio	27	16
Maximum Ratio	220.8	125.1
Minimum Sale Price	5,000	11,000
Maximum Sale Price	178,000	675,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	88.3	65.3
Lower Median Confidence Interval	80.6	53.6
Upper Median Confidence Interval	94.7	96.4
Broadened Median Ratio (BMED)	88.8	74.1
Coefficient of Dispersion (COD)	12.5	40.5
Lower COD Confidence Interval	8.5	16.7
Upper COD Confidence Interval	16.4	55.6
Weighted Coefficient Of Dispersion	13.3	57.6
Coefficient of Concentration @ 10%	44.4	27.3
Coefficient of Concentration @ 15%	58.3	27.3
Coefficient of Concentration @ 20%	69.4	36.4
Coefficient of Concentration @ 50%	86.1	72.7
Coefficient of Concentration @ 100%	97.2	100.0
Coefficient of Interquartile Deviation	13.7	32.8
Median Percent Deviation	11.8	45.7
Lower Quartile (25th Percentile)	72.5	53.6
Upper Quartile (75th Percentile)	96.6	96.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.74	-0.16
Relative Kurtosis	2.87	2.14
Arithmetic Mean Ratio	84.8	74.3
Weighted Mean Ratio	81.6	61.7
Geometric Mean Ratio	83.6	65.3
Harmonic Mean Ratio	82.2	53.6
Standard Deviation	13.9	33.1
Coefficient of Variation	16.4	44.6
Price Related Differential (PRD)	1.04	1.20
Lower PRD Confidence Interval	1.01	0.84
Upper PRD Confidence Interval	1.09	2.62
Price Related Bias (PRB)	-0.110	0.011
Lower PRB Confidence Interval	-0.208	-0.185
Upper PRB Confidence Interval	-0.012	0.206
Average Sale Price	86,208	153,652
Average Market Value	70,388	94,771

061 : MIAMI		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	449	12
Number of Ratios: Outliers Removed	42	0
Number of Sales Trimmed	407	12
Minimum Ratio	3.9	56.2
Maximum Ratio	3283	146.5
Minimum Sale Price	1,000	22,500
Maximum Sale Price	580,000	471,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	94.9	98.3
Lower Median Confidence Interval	93.9	81.2
Upper Median Confidence Interval	96.2	123.7
Broadened Median Ratio (BMED)	95.0	100.5
Coefficient of Dispersion (COD)	8.4	22.5
Lower COD Confidence Interval	7.8	12.1
Upper COD Confidence Interval	9.1	29.9
Weighted Coefficient Of Dispersion	7.9	24.8
Coefficient of Concentration @ 10%	61.7	25.0
Coefficient of Concentration @ 15%	76.4	33.3
Coefficient of Concentration @ 20%	84.6	33.3
Coefficient of Concentration @ 50%	93.1	100.0
Coefficient of Concentration @ 100%	96.4	100.0
Coefficient of Interquartile Deviation	8.0	23.5
Median Percent Deviation	7.8	21.5
Lower Quartile (25th Percentile)	87.9	79.4
Upper Quartile (75th Percentile)	103.1	125.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.27	-0.01
Relative Kurtosis	3.38	1.99
Arithmetic Mean Ratio	94.2	101.7
Weighted Mean Ratio	93.3	89.7
Geometric Mean Ratio	93.7	98.2
Harmonic Mean Ratio	93.1	94.5
Standard Deviation	10.2	27.2
Coefficient of Variation	10.8	26.7
Price Related Differential (PRD)	1.01	1.13
Lower PRD Confidence Interval	1.01	1.02
Upper PRD Confidence Interval	1.02	1.30
Price Related Bias (PRB)	-0.612	-0.073
Lower PRB Confidence Interval	-0.786	-0.247
Upper PRB Confidence Interval	-0.437	0.101
Average Sale Price	188,378	165,333
Average Market Value	175,732	148,276

062 : MITCHELL		*S-7*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	67	9
Number of Ratios: Outliers Removed	8	0
Number of Sales Trimmed	59	9
Minimum Ratio	36.6	50.7
Maximum Ratio	291.1	138.5
Minimum Sale Price	5,000	5,400
Maximum Sale Price	355,000	145,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.2	82.6
Lower Median Confidence Interval	89.1	71.6
Upper Median Confidence Interval	103.9	135.1
Broadened Median Ratio (BMED)	97.5	84.7
Coefficient of Dispersion (COD)	16.0	29.1
Lower COD Confidence Interval	12.6	12.6
Upper COD Confidence Interval	19.2	38.5
Weighted Coefficient Of Dispersion	15.9	26.8
Coefficient of Concentration @ 10%	31.3	22.2
Coefficient of Concentration @ 15%	52.2	44.4
Coefficient of Concentration @ 20%	65.7	55.6
Coefficient of Concentration @ 50%	86.6	77.8
Coefficient of Concentration @ 100%	95.5	100.0
Coefficient of Interquartile Deviation	13.9	32.3
Median Percent Deviation	14.9	16.9
Lower Quartile (25th Percentile)	83.6	71.9
Upper Quartile (75th Percentile)	111.0	125.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.12	0.36
Relative Kurtosis	3.17	1.83
Arithmetic Mean Ratio	95.1	93.1
Weighted Mean Ratio	90.7	81.2
Geometric Mean Ratio	93.2	88.6
Harmonic Mean Ratio	91.1	84.4
Standard Deviation	19.1	30.6
Coefficient of Variation	20.1	32.9
Price Related Differential (PRD)	1.05	1.15
Lower PRD Confidence Interval	1.02	0.98
Upper PRD Confidence Interval	1.09	1.54
Price Related Bias (PRB)	-0.156	-0.125
Lower PRB Confidence Interval	-0.235	-0.293
Upper PRB Confidence Interval	-0.077	0.043
Average Sale Price	97,538	62,433
Average Market Value	88,474	50,703

063 : MONTGOMERY		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	203	25
Number of Ratios: Outliers Removed	29	4
Number of Sales Trimmed	174	21
Minimum Ratio	5.3	45.8
Maximum Ratio	4790	426.7
Minimum Sale Price	100	6,700
Maximum Sale Price	342,300	300,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	104.4	102.8
Lower Median Confidence Interval	101.5	84.7
Upper Median Confidence Interval	107.6	113.2
Broadened Median Ratio (BMED)	104.4	103.2
Coefficient of Dispersion (COD)	23.0	17.6
Lower COD Confidence Interval	19.2	10.6
Upper COD Confidence Interval	27.1	26.3
Weighted Coefficient Of Dispersion	14.7	25.2
Coefficient of Concentration @ 10%	36.0	36.0
Coefficient of Concentration @ 15%	50.7	48.0
Coefficient of Concentration @ 20%	55.2	56.0
Coefficient of Concentration @ 50%	75.9	80.0
Coefficient of Concentration @ 100%	82.8	88.0
Coefficient of Interquartile Deviation	25.8	16.9
Median Percent Deviation	14.5	17.6
Lower Quartile (25th Percentile)	92.2	82.0
Upper Quartile (75th Percentile)	146.1	116.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	1.37	-0.48
Relative Kurtosis	5.23	2.47
Arithmetic Mean Ratio	108.7	93.3
Weighted Mean Ratio	98.2	83.4
Geometric Mean Ratio	103.5	90.1
Harmonic Mean Ratio	98.6	86.6
Standard Deviation	35.9	23.1
Coefficient of Variation	33	24.7
Price Related Differential (PRD)	1.11	1.12
Lower PRD Confidence Interval	1.07	0.99
Upper PRD Confidence Interval	1.15	1.30
Price Related Bias (PRB)	-1.023	0.281
Lower PRB Confidence Interval	-1.430	0.045
Upper PRB Confidence Interval	-0.617	0.516
Average Sale Price	77,480	64,737
Average Market Value	76,050	54,020

064 : MORRIS		*S-6*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	48	9
Number of Ratios: Outliers Removed	4	1
Number of Sales Trimmed	44	8
Minimum Ratio	53.3	60
Maximum Ratio	1660	140
Minimum Sale Price	1,000	25,000
Maximum Sale Price	225,000	300,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.2	82.8
Lower Median Confidence Interval	94.6	69.5
Upper Median Confidence Interval	110.7	98.7
Broadened Median Ratio (BMED)	99.7	81.5
Coefficient of Dispersion (COD)	20.5	12.6
Lower COD Confidence Interval	15.0	5.5
Upper COD Confidence Interval	25.7	17.1
Weighted Coefficient Of Dispersion	15.8	13.2
Coefficient of Concentration @ 10%	35.4	33.3
Coefficient of Concentration @ 15%	41.7	55.6
Coefficient of Concentration @ 20%	50.0	77.8
Coefficient of Concentration @ 50%	85.4	88.9
Coefficient of Concentration @ 100%	95.8	100.0
Coefficient of Interquartile Deviation	17.8	14.4
Median Percent Deviation	19.9	12.0
Lower Quartile (25th Percentile)	88.6	71.1
Upper Quartile (75th Percentile)	124.4	94.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.55	-0.01
Relative Kurtosis	3.32	2.1
Arithmetic Mean Ratio	101.1	79.6
Weighted Mean Ratio	93.9	83.8
Geometric Mean Ratio	97.6	78.7
Harmonic Mean Ratio	94.1	77.8
Standard Deviation	27.1	12.5
Coefficient of Variation	26.8	15.7
Price Related Differential (PRD)	1.08	0.95
Lower PRD Confidence Interval	1.02	0.92
Upper PRD Confidence Interval	1.15	1.01
Price Related Bias (PRB)	-0.501	-0.034
Lower PRB Confidence Interval	-0.922	-0.272
Upper PRB Confidence Interval	-0.081	0.204
Average Sale Price	85,984	112,688
Average Market Value	80,732	94,471

065 : MORTON		*S-6*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	29	8
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	26	8
Minimum Ratio	36.2	47.8
Maximum Ratio	1435.6	185.6
Minimum Sale Price	3,900	30,000
Maximum Sale Price	225,000	128,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.8	91.5
Lower Median Confidence Interval	93.4	78.3
Upper Median Confidence Interval	124.1	144.9
Broadened Median Ratio (BMED)	102.4	94.8
Coefficient of Dispersion (COD)	28.7	35.9
Lower COD Confidence Interval	16.4	13.4
Upper COD Confidence Interval	41.8	49.5
Weighted Coefficient Of Dispersion	19.7	26.9
Coefficient of Concentration @ 10%	41.4	25.0
Coefficient of Concentration @ 15%	44.8	50.0
Coefficient of Concentration @ 20%	48.3	50.0
Coefficient of Concentration @ 50%	72.4	75.0
Coefficient of Concentration @ 100%	82.8	87.5
Coefficient of Interquartile Deviation	29.7	33.4
Median Percent Deviation	22.6	24.8
Lower Quartile (25th Percentile)	89.6	78.4
Upper Quartile (75th Percentile)	149.6	139.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	1.28	0.63
Relative Kurtosis	4.22	2.45
Arithmetic Mean Ratio	110.7	105.2
Weighted Mean Ratio	93	97.8
Geometric Mean Ratio	103	97.5
Harmonic Mean Ratio	95.7	90.1
Standard Deviation	45.1	44
Coefficient of Variation	40.7	41.8
Price Related Differential (PRD)	1.19	1.08
Lower PRD Confidence Interval	1.08	0.99
Upper PRD Confidence Interval	1.39	1.18
Price Related Bias (PRB)	-0.671	0.075
Lower PRB Confidence Interval	-1.515	-0.544
Upper PRB Confidence Interval	0.173	0.694
Average Sale Price	84,769	63,750
Average Market Value	78,850	62,375

066 : NEMAHA		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	112	10
Number of Ratios: Outliers Removed	9	0
Number of Sales Trimmed	103	10
Minimum Ratio	13.5	82.7
Maximum Ratio	404.8	183.3
Minimum Sale Price	5,000	16,000
Maximum Sale Price	367,500	341,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	92.1	125.6
Lower Median Confidence Interval	85.6	97.5
Upper Median Confidence Interval	95.0	164.2
Broadened Median Ratio (BMED)	91.6	125.8
Coefficient of Dispersion (COD)	19.0	25.0
Lower COD Confidence Interval	15.9	12.6
Upper COD Confidence Interval	22.1	31.5
Weighted Coefficient Of Dispersion	16.8	26.8
Coefficient of Concentration @ 10%	32.1	20.0
Coefficient of Concentration @ 15%	45.5	20.0
Coefficient of Concentration @ 20%	58.9	50.0
Coefficient of Concentration @ 50%	91.1	100.0
Coefficient of Concentration @ 100%	95.5	100.0
Coefficient of Interquartile Deviation	16.7	25.8
Median Percent Deviation	17.4	22.9
Lower Quartile (25th Percentile)	75.7	99.2
Upper Quartile (75th Percentile)	106.5	163.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	Reject4
Relative Skewness	-0.05	0.21
Relative Kurtosis	2.58	1.58
Arithmetic Mean Ratio	89.7	130.1
Weighted Mean Ratio	85.4	102.2
Geometric Mean Ratio	86.9	125.5
Harmonic Mean Ratio	83.8	121.1
Standard Deviation	21.7	36.4
Coefficient of Variation	24.2	28
Price Related Differential (PRD)	1.05	1.27
Lower PRD Confidence Interval	1.02	1.11
Upper PRD Confidence Interval	1.09	1.50
Price Related Bias (PRB)	-0.039	-0.193
Lower PRB Confidence Interval	-0.116	-0.311
Upper PRB Confidence Interval	0.039	-0.074
Average Sale Price	98,993	75,650
Average Market Value	84,563	77,334

067 : NEOSHO		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	131	8
Number of Ratios: Outliers Removed	13	1
Number of Sales Trimmed	118	7
Minimum Ratio	35.7	66.9
Maximum Ratio	383.1	243.1
Minimum Sale Price	3,000	17,500
Maximum Sale Price	256,000	450,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	106.5	95.0
Lower Median Confidence Interval	100.4	83.1
Upper Median Confidence Interval	110.5	142.8
Broadened Median Ratio (BMED)	106.2	102.1
Coefficient of Dispersion (COD)	16.8	21.4
Lower COD Confidence Interval	14.1	5.7
Upper COD Confidence Interval	19.4	31.0
Weighted Coefficient Of Dispersion	14.3	19.5
Coefficient of Concentration @ 10%	42.0	37.5
Coefficient of Concentration @ 15%	52.7	50.0
Coefficient of Concentration @ 20%	58.8	50.0
Coefficient of Concentration @ 50%	87.8	75.0
Coefficient of Concentration @ 100%	96.2	87.5
Coefficient of Interquartile Deviation	14.5	30.2
Median Percent Deviation	14.6	21.1
Lower Quartile (25th Percentile)	91.2	85.1
Upper Quartile (75th Percentile)	122.0	142.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.33	0.55
Relative Kurtosis	3.37	1.88
Arithmetic Mean Ratio	104.7	102.2
Weighted Mean Ratio	99.1	97.1
Geometric Mean Ratio	102.2	98.9
Harmonic Mean Ratio	99.5	95.8
Standard Deviation	23	28.9
Coefficient of Variation	22	28.3
Price Related Differential (PRD)	1.06	1.05
Lower PRD Confidence Interval	1.03	0.86
Upper PRD Confidence Interval	1.08	1.25
Price Related Bias (PRB)	-0.132	0.113
Lower PRB Confidence Interval	-0.199	-0.239
Upper PRB Confidence Interval	-0.065	0.464
Average Sale Price	81,036	101,571
Average Market Value	80,281	98,660

068 : NESS		*S-7*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	24	7
Number of Ratios: Outliers Removed	4	0
Number of Sales Trimmed	20	7
Minimum Ratio	38.7	56.4
Maximum Ratio	3030	99.6
Minimum Sale Price	500	4,500
Maximum Sale Price	130,000	535,500
DISTRIBUTION FREE STATISTICS		
Median Ratio	101.6	82.3
Lower Median Confidence Interval	97.7	77.4
Upper Median Confidence Interval	121.1	99.5
Broadened Median Ratio (BMED)	102.2	86.8
Coefficient of Dispersion (COD)	20.6	14.5
Lower COD Confidence Interval	9.1	4.1
Upper COD Confidence Interval	35.4	20.7
Weighted Coefficient Of Dispersion	16.7	17.4
Coefficient of Concentration @ 10%	45.8	42.9
Coefficient of Concentration @ 15%	45.8	42.9
Coefficient of Concentration @ 20%	62.5	57.1
Coefficient of Concentration @ 50%	75.0	100.0
Coefficient of Concentration @ 100%	79.2	100.0
Coefficient of Interquartile Deviation	22.9	13.4
Median Percent Deviation	17.8	19.2
Lower Quartile (25th Percentile)	94.0	77.4
Upper Quartile (75th Percentile)	140.5	99.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	1.93	-0.66
Relative Kurtosis	8.52	2.41
Arithmetic Mean Ratio	104.7	84.8
Weighted Mean Ratio	93.6	95.7
Geometric Mean Ratio	99.2	83.4
Harmonic Mean Ratio	93.6	81.8
Standard Deviation	38	15.8
Coefficient of Variation	36.2	18.6
Price Related Differential (PRD)	1.12	0.89
Lower PRD Confidence Interval	1.02	0.79
Upper PRD Confidence Interval	1.36	1.02
Price Related Bias (PRB)	-0.536	0.052
Lower PRB Confidence Interval	-1.956	-0.012
Upper PRB Confidence Interval	0.884	0.116
Average Sale Price	47,615	107,286
Average Market Value	44,561	102,641

069 : NORTON

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	67	9
Number of Ratios: Outliers Removed	11	1
Number of Sales Trimmed	56	8
Minimum Ratio	29.5	28.3
Maximum Ratio	312	273.8
Minimum Sale Price	1,000	15,000
Maximum Sale Price	405,000	200,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	89.3	76.6
Lower Median Confidence Interval	83.5	29.7
Upper Median Confidence Interval	97.8	126.9
Broadened Median Ratio (BMED)	89.1	77.1
Coefficient of Dispersion (COD)	16.6	29.2
Lower COD Confidence Interval	13.0	10.1
Upper COD Confidence Interval	20.0	66.4
Weighted Coefficient Of Dispersion	15.1	16.2
Coefficient of Concentration @ 10%	35.8	44.4
Coefficient of Concentration @ 15%	46.3	44.4
Coefficient of Concentration @ 20%	52.2	44.4
Coefficient of Concentration @ 50%	82.1	55.6
Coefficient of Concentration @ 100%	91.0	88.9
Coefficient of Interquartile Deviation	16.7	40.7
Median Percent Deviation	17.4	25.9
Lower Quartile (25th Percentile)	78.9	43.2
Upper Quartile (75th Percentile)	108.7	105.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.16	0.26
Relative Kurtosis	2.59	2.56
Arithmetic Mean Ratio	86.3	69.6
Weighted Mean Ratio	81.2	77.1
Geometric Mean Ratio	84.3	62.5
Harmonic Mean Ratio	82.1	55
Standard Deviation	18.2	31.9
Coefficient of Variation	21.1	45.8
Price Related Differential (PRD)	1.06	0.90
Lower PRD Confidence Interval	1.01	0.77
Upper PRD Confidence Interval	1.14	1.05
Price Related Bias (PRB)	-0.168	0.385
Lower PRB Confidence Interval	-0.252	-0.156
Upper PRB Confidence Interval	-0.084	0.926
Average Sale Price	73,774	67,781
Average Market Value	59,874	52,275

070 : OSAGE

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	159	10
Number of Ratios: Outliers Removed	16	1
Number of Sales Trimmed	143	9
Minimum Ratio	46.5	77.9
Maximum Ratio	495	1719.2
Minimum Sale Price	2,500	1,300
Maximum Sale Price	285,000	365,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	102.4	96.1
Lower Median Confidence Interval	99.0	86.5
Upper Median Confidence Interval	106.1	208.4
Broadened Median Ratio (BMED)	102.2	104.7
Coefficient of Dispersion (COD)	17.9	43.4
Lower COD Confidence Interval	15.0	9.0
Upper COD Confidence Interval	20.8	64.1
Weighted Coefficient Of Dispersion	14.3	15.7
Coefficient of Concentration @ 10%	37.7	40.0
Coefficient of Concentration @ 15%	52.8	50.0
Coefficient of Concentration @ 20%	62.9	60.0
Coefficient of Concentration @ 50%	83.0	60.0
Coefficient of Concentration @ 100%	93.7	70.0
Coefficient of Interquartile Deviation	17.6	68.5
Median Percent Deviation	13.4	15.3
Lower Quartile (25th Percentile)	90.8	86.1
Upper Quartile (75th Percentile)	126.8	217.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.81	1.08
Relative Kurtosis	3.77	2.54
Arithmetic Mean Ratio	105	126.5
Weighted Mean Ratio	98.3	104.1
Geometric Mean Ratio	102.1	115.8
Harmonic Mean Ratio	99.3	107.9
Standard Deviation	25.1	61.5
Coefficient of Variation	23.9	48.6
Price Related Differential (PRD)	1.07	1.22
Lower PRD Confidence Interval	1.04	1.01
Upper PRD Confidence Interval	1.10	1.58
Price Related Bias (PRB)	-0.286	-0.660
Lower PRB Confidence Interval	-0.366	-3.193
Upper PRB Confidence Interval	-0.206	1.873
Average Sale Price	91,359	59,311
Average Market Value	89,770	61,717

071 : OSBORNE		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	26	7
Number of Ratios: Outliers Removed	2	0
Number of Sales Trimmed	24	7
Minimum Ratio	47.1	36.1
Maximum Ratio	1403.3	174.3
Minimum Sale Price	300	2,500
Maximum Sale Price	180,000	140,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	109.0	102.5
Lower Median Confidence Interval	81.9	44.4
Upper Median Confidence Interval	143.0	147.5
Broadened Median Ratio (BMED)	109.5	105.8
Coefficient of Dispersion (COD)	41.3	37.0
Lower COD Confidence Interval	27.2	13.3
Upper COD Confidence Interval	58.6	96.5
Weighted Coefficient Of Dispersion	30.6	27.3
Coefficient of Concentration @ 10%	19.2	28.6
Coefficient of Concentration @ 15%	23.1	28.6
Coefficient of Concentration @ 20%	23.1	42.9
Coefficient of Concentration @ 50%	69.2	57.1
Coefficient of Concentration @ 100%	80.8	100.0
Coefficient of Interquartile Deviation	41.5	50.3
Median Percent Deviation	32.4	43.9
Lower Quartile (25th Percentile)	78.9	44.4
Upper Quartile (75th Percentile)	169.3	147.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.95	-0.05
Relative Kurtosis	2.82	1.84
Arithmetic Mean Ratio	118.6	102.8
Weighted Mean Ratio	87.4	112
Geometric Mean Ratio	106.1	90.1
Harmonic Mean Ratio	95.7	76.6
Standard Deviation	59.4	50.5
Coefficient of Variation	50	49.1
Price Related Differential (PRD)	1.36	0.92
Lower PRD Confidence Interval	1.20	0.71
Upper PRD Confidence Interval	1.60	1.09
Price Related Bias (PRB)	-0.403	0.135
Lower PRB Confidence Interval	-0.931	-0.124
Upper PRB Confidence Interval	0.125	0.394
Average Sale Price	43,408	35,735
Average Market Value	37,928	40,040

072 : OTTAWA		S-8
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	43	10
Number of Ratios: Outliers Removed	5	1
Number of Sales Trimmed	38	9
Minimum Ratio	75.8	41.4
Maximum Ratio	2175	117.4
Minimum Sale Price	200	2,650
Maximum Sale Price	343,000	75,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.7	101.1
Lower Median Confidence Interval	94.9	80.1
Upper Median Confidence Interval	103.4	111.0
Broadened Median Ratio (BMED)	100.5	101.6
Coefficient of Dispersion (COD)	8.9	10.5
Lower COD Confidence Interval	6.3	4.0
Upper COD Confidence Interval	11.3	18.0
Weighted Coefficient Of Dispersion	8.9	12.2
Coefficient of Concentration @ 10%	62.8	60.0
Coefficient of Concentration @ 15%	69.8	70.0
Coefficient of Concentration @ 20%	76.7	80.0
Coefficient of Concentration @ 50%	93.0	90.0
Coefficient of Concentration @ 100%	95.3	100.0
Coefficient of Interquartile Deviation	8.3	12.9
Median Percent Deviation	8.5	8.8
Lower Quartile (25th Percentile)	92.2	84.9
Upper Quartile (75th Percentile)	108.9	110.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.62	-1.37
Relative Kurtosis	4.02	4.22
Arithmetic Mean Ratio	98.3	100.4
Weighted Mean Ratio	97.2	98.2
Geometric Mean Ratio	97.6	99
Harmonic Mean Ratio	97	97.4
Standard Deviation	11.8	16.1
Coefficient of Variation	12	16.1
Price Related Differential (PRD)	1.01	1.02
Lower PRD Confidence Interval	0.99	0.98
Upper PRD Confidence Interval	1.04	1.11
Price Related Bias (PRB)	-1.678	0.008
Lower PRB Confidence Interval	-2.245	-0.137
Upper PRB Confidence Interval	-1.111	0.152
Average Sale Price	124,200	31,294
Average Market Value	120,754	30,731

073 : PAWNEE		S-13
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	83	16
Number of Ratios: Outliers Removed	11	2
Number of Sales Trimmed	72	14
Minimum Ratio	41.7	50.4
Maximum Ratio	989.6	189.1
Minimum Sale Price	250	2,500
Maximum Sale Price	370,000	2,270,330
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.3	98.3
Lower Median Confidence Interval	90.0	90.6
Upper Median Confidence Interval	99.3	114.4
Broadened Median Ratio (BMED)	96.2	99.0
Coefficient of Dispersion (COD)	12.2	15.0
Lower COD Confidence Interval	9.8	7.6
Upper COD Confidence Interval	14.7	23.1
Weighted Coefficient Of Dispersion	13.0	40.2
Coefficient of Concentration @ 10%	44.6	43.8
Coefficient of Concentration @ 15%	60.2	56.3
Coefficient of Concentration @ 20%	67.5	62.5
Coefficient of Concentration @ 50%	86.7	87.5
Coefficient of Concentration @ 100%	92.8	100.0
Coefficient of Interquartile Deviation	11.8	19.9
Median Percent Deviation	11.3	13.0
Lower Quartile (25th Percentile)	84.1	85.7
Upper Quartile (75th Percentile)	106.8	124.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.07	-0.2
Relative Kurtosis	3.23	3.28
Arithmetic Mean Ratio	93.2	96
Weighted Mean Ratio	90.6	60.2
Geometric Mean Ratio	92	93.7
Harmonic Mean Ratio	90.7	91
Standard Deviation	14.9	21
Coefficient of Variation	15.9	21.9
Price Related Differential (PRD)	1.03	1.59
Lower PRD Confidence Interval	1.00	1.02
Upper PRD Confidence Interval	1.06	1.84
Price Related Bias (PRB)	-0.255	-0.118
Lower PRB Confidence Interval	-0.384	-0.208
Upper PRB Confidence Interval	-0.126	-0.027
Average Sale Price	92,292	207,166
Average Market Value	83,626	124,788

074 : PHILLIPS		S-3
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	61	9
Number of Ratios: Outliers Removed	5	0
Number of Sales Trimmed	56	9
Minimum Ratio	15.5	22.3
Maximum Ratio	414.2	125.5
Minimum Sale Price	1,700	5,000
Maximum Sale Price	250,000	108,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	87.1	83.0
Lower Median Confidence Interval	77.6	46.2
Upper Median Confidence Interval	92.2	113.7
Broadened Median Ratio (BMED)	86.9	77.4
Coefficient of Dispersion (COD)	21.5	35.7
Lower COD Confidence Interval	16.7	15.5
Upper COD Confidence Interval	26.9	64.1
Weighted Coefficient Of Dispersion	20.1	40.4
Coefficient of Concentration @ 10%	26.2	11.1
Coefficient of Concentration @ 15%	41.0	22.2
Coefficient of Concentration @ 20%	54.1	22.2
Coefficient of Concentration @ 50%	85.2	77.8
Coefficient of Concentration @ 100%	96.7	100.0
Coefficient of Interquartile Deviation	18.3	38.0
Median Percent Deviation	18.6	37.0
Lower Quartile (25th Percentile)	70.7	48.8
Upper Quartile (75th Percentile)	102.6	111.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.46	-0.13
Relative Kurtosis	3.28	1.69
Arithmetic Mean Ratio	84.8	77.9
Weighted Mean Ratio	80.5	73.9
Geometric Mean Ratio	81.4	69.1
Harmonic Mean Ratio	78	59
Standard Deviation	24	35.6
Coefficient of Variation	28.3	45.6
Price Related Differential (PRD)	1.05	1.05
Lower PRD Confidence Interval	1.00	0.92
Upper PRD Confidence Interval	1.13	1.32
Price Related Bias (PRB)	-0.144	-0.001
Lower PRB Confidence Interval	-0.244	-0.269
Upper PRB Confidence Interval	-0.044	0.266
Average Sale Price	69,521	50,083
Average Market Value	55,964	37,013

075 : POTTAWATOMIE		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	290	15
Number of Ratios: Outliers Removed	36	1
Number of Sales Trimmed	254	14
Minimum Ratio	8.5	52.1
Maximum Ratio	2260	213.7
Minimum Sale Price	500	23,000
Maximum Sale Price	550,000	12,700,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.5	88.6
Lower Median Confidence Interval	96.3	61.3
Upper Median Confidence Interval	98.2	110.7
Broadened Median Ratio (BMED)	97.5	87.3
Coefficient of Dispersion (COD)	7.7	28.1
Lower COD Confidence Interval	6.8	15.4
Upper COD Confidence Interval	8.5	38.9
Weighted Coefficient Of Dispersion	7.0	28.7
Coefficient of Concentration @ 10%	60.0	13.3
Coefficient of Concentration @ 15%	72.8	33.3
Coefficient of Concentration @ 20%	81.4	40.0
Coefficient of Concentration @ 50%	95.2	86.7
Coefficient of Concentration @ 100%	97.6	93.3
Coefficient of Interquartile Deviation	6.8	27.9
Median Percent Deviation	6.6	25.0
Lower Quartile (25th Percentile)	89.8	61.3
Upper Quartile (75th Percentile)	103.1	110.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.02	0.93
Relative Kurtosis	3.21	3.51
Arithmetic Mean Ratio	96.9	88.6
Weighted Mean Ratio	97	62.7
Geometric Mean Ratio	96.4	84.3
Harmonic Mean Ratio	95.9	80.4
Standard Deviation	10	30.2
Coefficient of Variation	10.3	34.1
Price Related Differential (PRD)	1.00	1.41
Lower PRD Confidence Interval	0.99	1.10
Upper PRD Confidence Interval	1.01	1.80
Price Related Bias (PRB)	-0.418	-0.069
Lower PRB Confidence Interval	-0.562	-0.204
Upper PRB Confidence Interval	-0.274	0.065
Average Sale Price	194,744	1,179,714
Average Market Value	188,820	739,514

076 : PRATT		*S-6*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	100	9
Number of Ratios: Outliers Removed	12	1
Number of Sales Trimmed	88	8
Minimum Ratio	47	16
Maximum Ratio	558.3	233.3
Minimum Sale Price	600	5,000
Maximum Sale Price	305,000	1,935,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	99.2	96.6
Lower Median Confidence Interval	94.4	45.4
Upper Median Confidence Interval	102.2	115.4
Broadened Median Ratio (BMED)	99.1	92.8
Coefficient of Dispersion (COD)	12.9	32.0
Lower COD Confidence Interval	10.6	10.8
Upper COD Confidence Interval	15.3	64.4
Weighted Coefficient Of Dispersion	11.6	55.2
Coefficient of Concentration @ 10%	44.0	22.2
Coefficient of Concentration @ 15%	59.0	33.3
Coefficient of Concentration @ 20%	68.0	55.6
Coefficient of Concentration @ 50%	89.0	66.7
Coefficient of Concentration @ 100%	94.0	88.9
Coefficient of Interquartile Deviation	11.9	32.4
Median Percent Deviation	12.0	19.4
Lower Quartile (25th Percentile)	87.6	50.1
Upper Quartile (75th Percentile)	111.3	112.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.37	-0.58
Relative Kurtosis	3.33	2.01
Arithmetic Mean Ratio	97.5	77.5
Weighted Mean Ratio	95.4	41.6
Geometric Mean Ratio	96.1	66.9
Harmonic Mean Ratio	94.7	52.3
Standard Deviation	16.6	35.4
Coefficient of Variation	17	45.6
Price Related Differential (PRD)	1.02	1.86
Lower PRD Confidence Interval	1.00	1.41
Upper PRD Confidence Interval	1.05	3.66
Price Related Bias (PRB)	-0.241	-0.154
Lower PRB Confidence Interval	-0.318	-0.310
Upper PRB Confidence Interval	-0.164	0.001
Average Sale Price	96,343	686,250
Average Market Value	91,898	285,489

077 : RAWLINS		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	32	7
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	29	7
Minimum Ratio	20.1	45.9
Maximum Ratio	218.3	119.4
Minimum Sale Price	600	6,500
Maximum Sale Price	268,000	65,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.5	80.5
Lower Median Confidence Interval	87.3	56.9
Upper Median Confidence Interval	107.2	117.3
Broadened Median Ratio (BMED)	96.7	83.4
Coefficient of Dispersion (COD)	17.7	27.8
Lower COD Confidence Interval	12.1	10.7
Upper COD Confidence Interval	22.4	41.8
Weighted Coefficient Of Dispersion	12.9	32.1
Coefficient of Concentration @ 10%	28.1	28.6
Coefficient of Concentration @ 15%	46.9	28.6
Coefficient of Concentration @ 20%	59.4	42.9
Coefficient of Concentration @ 50%	87.5	100.0
Coefficient of Concentration @ 100%	96.9	100.0
Coefficient of Interquartile Deviation	17.1	37.6
Median Percent Deviation	16.4	29.3
Lower Quartile (25th Percentile)	84.1	56.9
Upper Quartile (75th Percentile)	117.1	117.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	1.04	0.03
Relative Kurtosis	3.99	1.65
Arithmetic Mean Ratio	100.1	84.2
Weighted Mean Ratio	92.8	90.8
Geometric Mean Ratio	98	79.9
Harmonic Mean Ratio	96	75.5
Standard Deviation	22.1	28.4
Coefficient of Variation	22.1	33.7
Price Related Differential (PRD)	1.08	0.93
Lower PRD Confidence Interval	1.03	0.83
Upper PRD Confidence Interval	1.15	1.09
Price Related Bias (PRB)	-0.148	0.135
Lower PRB Confidence Interval	-0.219	-0.158
Upper PRB Confidence Interval	-0.076	0.429
Average Sale Price	69,284	28,714
Average Market Value	64,278	26,083

078 : RENO		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	224	34
Number of Ratios: Outliers Removed	28	4
Number of Sales Trimmed	196	30
Minimum Ratio	19.5	12
Maximum Ratio	2033.3	239.8
Minimum Sale Price	500	5,500
Maximum Sale Price	749,000	3,718,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.0	95.8
Lower Median Confidence Interval	92.6	89.0
Upper Median Confidence Interval	98.4	101.2
Broadened Median Ratio (BMED)	95.0	95.7
Coefficient of Dispersion (COD)	12.8	14.9
Lower COD Confidence Interval	11.3	10.2
Upper COD Confidence Interval	14.3	19.8
Weighted Coefficient Of Dispersion	12.8	28.0
Coefficient of Concentration @ 10%	42.9	44.1
Coefficient of Concentration @ 15%	61.2	52.9
Coefficient of Concentration @ 20%	68.3	61.8
Coefficient of Concentration @ 50%	87.5	85.3
Coefficient of Concentration @ 100%	93.8	97.1
Coefficient of Interquartile Deviation	12.8	13.2
Median Percent Deviation	12.4	13.4
Lower Quartile (25th Percentile)	83.9	80.5
Upper Quartile (75th Percentile)	108.2	105.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.07	-0.06
Relative Kurtosis	3.26	3.15
Arithmetic Mean Ratio	93.2	97.2
Weighted Mean Ratio	91.6	75.5
Geometric Mean Ratio	91.8	95.2
Harmonic Mean Ratio	90.4	92.8
Standard Deviation	15.5	19.7
Coefficient of Variation	16.6	20.3
Price Related Differential (PRD)	1.02	1.29
Lower PRD Confidence Interval	1.00	0.99
Upper PRD Confidence Interval	1.04	1.59
Price Related Bias (PRB)	-0.464	-0.065
Lower PRB Confidence Interval	-0.644	-0.129
Upper PRB Confidence Interval	-0.283	-0.002
Average Sale Price	112,484	240,340
Average Market Value	102,991	181,508

079 : REPUBLIC		S-7
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	44	11
Number of Ratios: Outliers Removed	6	1
Number of Sales Trimmed	38	10
Minimum Ratio	56.9	27.2
Maximum Ratio	355.5	257
Minimum Sale Price	2,500	2,000
Maximum Sale Price	175,000	135,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	101.8	68.5
Lower Median Confidence Interval	94.0	39.9
Upper Median Confidence Interval	107.8	98.5
Broadened Median Ratio (BMED)	101.6	74.5
Coefficient of Dispersion (COD)	14.9	38.7
Lower COD Confidence Interval	11.0	18.1
Upper COD Confidence Interval	18.9	66.8
Weighted Coefficient Of Dispersion	13.2	39.1
Coefficient of Concentration @ 10%	36.4	18.2
Coefficient of Concentration @ 15%	50.0	18.2
Coefficient of Concentration @ 20%	61.4	27.3
Coefficient of Concentration @ 50%	86.4	63.6
Coefficient of Concentration @ 100%	88.6	90.9
Coefficient of Interquartile Deviation	15.2	42.8
Median Percent Deviation	14.7	41.7
Lower Quartile (25th Percentile)	87.8	39.9
Upper Quartile (75th Percentile)	118.7	98.5
PARAMETRIC STATISTICS		
Normality Test	AcceptK	AcceptK
Relative Skewness	-0.01	0.24
Relative Kurtosis	2.78	2.09
Arithmetic Mean Ratio	97.1	69.9
Weighted Mean Ratio	93.3	59.3
Geometric Mean Ratio	95.3	62.1
Harmonic Mean Ratio	93.3	54.3
Standard Deviation	18.9	33.3
Coefficient of Variation	19.4	47.7
Price Related Differential (PRD)	1.04	1.18
Lower PRD Confidence Interval	1.01	1.02
Upper PRD Confidence Interval	1.08	1.47
Price Related Bias (PRB)	-0.217	-0.504
Lower PRB Confidence Interval	-0.358	-0.899
Upper PRB Confidence Interval	-0.076	-0.110
Average Sale Price	52,105	57,050
Average Market Value	48,639	33,816

080 : RICE		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	151	20
Number of Ratios: Outliers Removed	17	1
Number of Sales Trimmed	134	19
Minimum Ratio	27.8	49.8
Maximum Ratio	1204.4	216.1
Minimum Sale Price	1,600	5,000
Maximum Sale Price	255,000	307,500
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.0	96.1
Lower Median Confidence Interval	92.2	84.2
Upper Median Confidence Interval	100.0	102.2
Broadened Median Ratio (BMED)	95.8	96.9
Coefficient of Dispersion (COD)	18.3	15.0
Lower COD Confidence Interval	15.6	8.3
Upper COD Confidence Interval	21.0	22.7
Weighted Coefficient Of Dispersion	15.2	12.1
Coefficient of Concentration @ 10%	35.1	50.0
Coefficient of Concentration @ 15%	46.4	65.0
Coefficient of Concentration @ 20%	57.6	65.0
Coefficient of Concentration @ 50%	84.8	95.0
Coefficient of Concentration @ 100%	92.7	95.0
Coefficient of Interquartile Deviation	17.6	13.3
Median Percent Deviation	15.7	10.5
Lower Quartile (25th Percentile)	81.7	77.5
Upper Quartile (75th Percentile)	115.1	103.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.47	-0.46
Relative Kurtosis	3.54	2.65
Arithmetic Mean Ratio	94.6	90.2
Weighted Mean Ratio	89.9	91.3
Geometric Mean Ratio	91.9	87.9
Harmonic Mean Ratio	89	85.4
Standard Deviation	22.7	19.6
Coefficient of Variation	24	21.7
Price Related Differential (PRD)	1.05	0.99
Lower PRD Confidence Interval	1.02	0.93
Upper PRD Confidence Interval	1.09	1.08
Price Related Bias (PRB)	-0.296	-0.063
Lower PRB Confidence Interval	-0.448	-0.193
Upper PRB Confidence Interval	-0.144	0.066
Average Sale Price	64,384	62,111
Average Market Value	57,851	56,677

081 : RILEY		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	253	17
Number of Ratios: Outliers Removed	24	0
Number of Sales Trimmed	229	17
Minimum Ratio	29.3	63.1
Maximum Ratio	15658	110.6
Minimum Sale Price	500	36,500
Maximum Sale Price	700,000	8,700,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	96.7	81.1
Lower Median Confidence Interval	95.4	77.3
Upper Median Confidence Interval	98.0	97.7
Broadened Median Ratio (BMED)	96.7	81.7
Coefficient of Dispersion (COD)	6.6	12.1
Lower COD Confidence Interval	5.9	6.5
Upper COD Confidence Interval	7.4	16.2
Weighted Coefficient Of Dispersion	6.4	22.3
Coefficient of Concentration @ 10%	69.6	64.7
Coefficient of Concentration @ 15%	81.0	64.7
Coefficient of Concentration @ 20%	87.7	64.7
Coefficient of Concentration @ 50%	97.2	100.0
Coefficient of Concentration @ 100%	98.8	100.0
Coefficient of Interquartile Deviation	5.7	13.4
Median Percent Deviation	5.6	5.5
Lower Quartile (25th Percentile)	91.6	77.0
Upper Quartile (75th Percentile)	102.6	98.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.19	0.53
Relative Kurtosis	3.35	2.31
Arithmetic Mean Ratio	96.7	85.8
Weighted Mean Ratio	96.3	94.7
Geometric Mean Ratio	96.4	84.9
Harmonic Mean Ratio	96	84
Standard Deviation	8.4	13.3
Coefficient of Variation	8.7	15.5
Price Related Differential (PRD)	1.00	0.91
Lower PRD Confidence Interval	1.00	0.85
Upper PRD Confidence Interval	1.01	1.08
Price Related Bias (PRB)	-2.455	0.012
Lower PRB Confidence Interval	-4.141	-0.037
Upper PRB Confidence Interval	-0.769	0.060
Average Sale Price	191,892	983,083
Average Market Value	184,717	931,386

082 : ROOKS		*S-8*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	61	11
Number of Ratios: Outliers Removed	7	0
Number of Sales Trimmed	54	11
Minimum Ratio	51.5	24.7
Maximum Ratio	990.6	133.4
Minimum Sale Price	3,000	11,000
Maximum Sale Price	230,000	180,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	88.1	74.9
Lower Median Confidence Interval	75.5	46.2
Upper Median Confidence Interval	97.2	103.5
Broadened Median Ratio (BMED)	88.2	80.2
Coefficient of Dispersion (COD)	25.0	37.2
Lower COD Confidence Interval	19.3	16.2
Upper COD Confidence Interval	31.0	57.7
Weighted Coefficient Of Dispersion	22.8	37.1
Coefficient of Concentration @ 10%	23.0	9.1
Coefficient of Concentration @ 15%	32.8	18.2
Coefficient of Concentration @ 20%	39.3	18.2
Coefficient of Concentration @ 50%	82.0	81.8
Coefficient of Concentration @ 100%	86.9	100.0
Coefficient of Interquartile Deviation	26.4	38.3
Median Percent Deviation	24.3	38.2
Lower Quartile (25th Percentile)	67.3	46.2
Upper Quartile (75th Percentile)	113.8	103.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	1.16	-0.01
Relative Kurtosis	4.41	1.92
Arithmetic Mean Ratio	87.9	78.1
Weighted Mean Ratio	78.3	58.7
Geometric Mean Ratio	84.1	70.5
Harmonic Mean Ratio	80.8	62
Standard Deviation	27.7	33.6
Coefficient of Variation	31.5	43
Price Related Differential (PRD)	1.12	1.33
Lower PRD Confidence Interval	1.07	1.15
Upper PRD Confidence Interval	1.19	1.63
Price Related Bias (PRB)	-0.349	-0.229
Lower PRB Confidence Interval	-0.643	-0.494
Upper PRB Confidence Interval	-0.055	0.037
Average Sale Price	62,676	48,364
Average Market Value	49,045	28,406

083 : RUSH		*S-10*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	40	12
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	37	12
Minimum Ratio	61.6	45.1
Maximum Ratio	1447	155.5
Minimum Sale Price	300	500
Maximum Sale Price	192,500	346,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	105.4	95.1
Lower Median Confidence Interval	100.0	61.9
Upper Median Confidence Interval	120.6	115.1
Broadened Median Ratio (BMED)	106.3	96.9
Coefficient of Dispersion (COD)	21.1	29.5
Lower COD Confidence Interval	15.1	15.7
Upper COD Confidence Interval	27.0	46.8
Weighted Coefficient Of Dispersion	16.1	32.6
Coefficient of Concentration @ 10%	32.5	25.0
Coefficient of Concentration @ 15%	45.0	25.0
Coefficient of Concentration @ 20%	52.5	33.3
Coefficient of Concentration @ 50%	85.0	75.0
Coefficient of Concentration @ 100%	92.5	100.0
Coefficient of Interquartile Deviation	17.6	28.8
Median Percent Deviation	18.4	26.8
Lower Quartile (25th Percentile)	91.6	60.6
Upper Quartile (75th Percentile)	128.7	115.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	0.58	0.21
Relative Kurtosis	3.16	2.05
Arithmetic Mean Ratio	107.7	95.8
Weighted Mean Ratio	103.2	72.3
Geometric Mean Ratio	103.7	89.3
Harmonic Mean Ratio	99.8	82.8
Standard Deviation	29.9	35.9
Coefficient of Variation	27.8	37.5
Price Related Differential (PRD)	1.04	1.33
Lower PRD Confidence Interval	0.99	1.05
Upper PRD Confidence Interval	1.11	1.68
Price Related Bias (PRB)	-0.811	-0.054
Lower PRB Confidence Interval	-1.282	-0.152
Upper PRB Confidence Interval	-0.340	0.045
Average Sale Price	44,600	52,875
Average Market Value	46,021	38,203

084 : RUSSELL		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	89	9
Number of Ratios: Outliers Removed	11	1
Number of Sales Trimmed	78	8
Minimum Ratio	31.8	46.9
Maximum Ratio	379	228.8
Minimum Sale Price	1,000	2,500
Maximum Sale Price	320,000	140,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	91.0	90.0
Lower Median Confidence Interval	87.9	48.7
Upper Median Confidence Interval	95.2	123.2
Broadened Median Ratio (BMED)	90.8	86.2
Coefficient of Dispersion (COD)	16.2	36.9
Lower COD Confidence Interval	12.8	13.5
Upper COD Confidence Interval	19.5	48.8
Weighted Coefficient Of Dispersion	13.7	31.1
Coefficient of Concentration @ 10%	40.4	11.1
Coefficient of Concentration @ 15%	55.1	11.1
Coefficient of Concentration @ 20%	62.9	22.2
Coefficient of Concentration @ 50%	83.1	88.9
Coefficient of Concentration @ 100%	93.3	88.9
Coefficient of Interquartile Deviation	13.8	38.1
Median Percent Deviation	12.9	36.9
Lower Quartile (25th Percentile)	80.0	49.3
Upper Quartile (75th Percentile)	105.1	117.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	Reject4
Relative Skewness	-0.1	0.17
Relative Kurtosis	3.52	1.33
Arithmetic Mean Ratio	89.2	80
Weighted Mean Ratio	85.7	71.6
Geometric Mean Ratio	86.8	74.4
Harmonic Mean Ratio	84.1	69.2
Standard Deviation	19.7	31.7
Coefficient of Variation	22.1	39.6
Price Related Differential (PRD)	1.04	1.12
Lower PRD Confidence Interval	1.02	0.92
Upper PRD Confidence Interval	1.07	1.52
Price Related Bias (PRB)	-0.321	-0.108
Lower PRB Confidence Interval	-0.407	-0.357
Upper PRB Confidence Interval	-0.236	0.142
Average Sale Price	87,587	52,688
Average Market Value	75,089	37,716

085 : SALINE

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	260	38
Number of Ratios: Outliers Removed	34	4
Number of Sales Trimmed	226	34
Minimum Ratio	22.4	61.1
Maximum Ratio	482	263.6
Minimum Sale Price	7,000	56,000
Maximum Sale Price	1,930,000	21,675,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.1	92.8
Lower Median Confidence Interval	96.5	87.4
Upper Median Confidence Interval	99.9	103.0
Broadened Median Ratio (BMED)	98.1	93.2
Coefficient of Dispersion (COD)	8.7	19.4
Lower COD Confidence Interval	7.7	13.4
Upper COD Confidence Interval	9.7	25.4
Weighted Coefficient Of Dispersion	8.2	16.4
Coefficient of Concentration @ 10%	57.7	36.8
Coefficient of Concentration @ 15%	70.4	42.1
Coefficient of Concentration @ 20%	78.8	52.6
Coefficient of Concentration @ 50%	92.3	81.6
Coefficient of Concentration @ 100%	97.3	89.5
Coefficient of Interquartile Deviation	8.0	21.4
Median Percent Deviation	8.1	18.9
Lower Quartile (25th Percentile)	91.5	77.0
Upper Quartile (75th Percentile)	107.1	116.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.22	1.02
Relative Kurtosis	3.29	3.46
Arithmetic Mean Ratio	97.3	95.6
Weighted Mean Ratio	96.1	88.1
Geometric Mean Ratio	96.6	92.9
Harmonic Mean Ratio	96	90.5
Standard Deviation	11.1	24.4
Coefficient of Variation	11.4	25.5
Price Related Differential (PRD)	1.01	1.09
Lower PRD Confidence Interval	1.00	0.98
Upper PRD Confidence Interval	1.02	1.18
Price Related Bias (PRB)	-0.186	0.009
Lower PRB Confidence Interval	-0.246	-0.073
Upper PRB Confidence Interval	-0.126	0.090
Average Sale Price	140,135	1,354,629
Average Market Value	134,630	1,193,485

086 : SCOTT

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	66	9
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	65	9
Minimum Ratio	28.8	5.7
Maximum Ratio	129.5	108
Minimum Sale Price	8,000	10,800
Maximum Sale Price	275,000	130,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	88.1	73.2
Lower Median Confidence Interval	83.2	19.1
Upper Median Confidence Interval	94.9	100.0
Broadened Median Ratio (BMED)	88.6	73.6
Coefficient of Dispersion (COD)	16.2	38.5
Lower COD Confidence Interval	12.9	13.4
Upper COD Confidence Interval	19.0	135.5
Weighted Coefficient Of Dispersion	14.3	33.0
Coefficient of Concentration @ 10%	39.4	11.1
Coefficient of Concentration @ 15%	51.5	11.1
Coefficient of Concentration @ 20%	65.2	11.1
Coefficient of Concentration @ 50%	98.5	77.8
Coefficient of Concentration @ 100%	100.0	100.0
Coefficient of Interquartile Deviation	13.5	40.5
Median Percent Deviation	13.4	29.8
Lower Quartile (25th Percentile)	74.7	38.1
Upper Quartile (75th Percentile)	98.4	97.5
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.13	-0.6
Relative Kurtosis	2.5	2.06
Arithmetic Mean Ratio	89.2	67.3
Weighted Mean Ratio	88.2	78.4
Geometric Mean Ratio	87.4	51.2
Harmonic Mean Ratio	85.5	28.2
Standard Deviation	17.9	36
Coefficient of Variation	20	53.5
Price Related Differential (PRD)	1.01	0.86
Lower PRD Confidence Interval	0.98	0.66
Upper PRD Confidence Interval	1.04	0.97
Price Related Bias (PRB)	0.028	0.320
Lower PRB Confidence Interval	-0.022	0.156
Upper PRB Confidence Interval	0.078	0.485
Average Sale Price	107,194	62,051
Average Market Value	94,594	48,670

087 : SEDGWICK

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	362	166
Number of Ratios: Outliers Removed	46	11
Number of Sales Trimmed	316	155
Minimum Ratio	6.6	19.1
Maximum Ratio	15700	466.7
Minimum Sale Price	500	13,000
Maximum Sale Price	750,000	5,800,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	93.0	91.3
Lower Median Confidence Interval	91.1	85.5
Upper Median Confidence Interval	95.0	96.5
Broadened Median Ratio (BMED)	93.0	91.1
Coefficient of Dispersion (COD)	11.5	21.9
Lower COD Confidence Interval	10.4	19.0
Upper COD Confidence Interval	12.6	24.8
Weighted Coefficient Of Dispersion	10.2	24.0
Coefficient of Concentration @ 10%	47.8	32.5
Coefficient of Concentration @ 15%	64.4	45.2
Coefficient of Concentration @ 20%	72.4	50.0
Coefficient of Concentration @ 50%	89.0	84.3
Coefficient of Concentration @ 100%	95.3	97.0
Coefficient of Interquartile Deviation	11.1	18.8
Median Percent Deviation	10.6	20.0
Lower Quartile (25th Percentile)	85.1	77.1
Upper Quartile (75th Percentile)	105.8	111.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.71	0.18
Relative Kurtosis	3.64	3.03
Arithmetic Mean Ratio	93.4	91.8
Weighted Mean Ratio	91.8	85.7
Geometric Mean Ratio	92.4	88.1
Harmonic Mean Ratio	91.5	83.9
Standard Deviation	13.9	25.2
Coefficient of Variation	14.9	27.5
Price Related Differential (PRD)	1.02	1.07
Lower PRD Confidence Interval	1.01	1.00
Upper PRD Confidence Interval	1.03	1.20
Price Related Bias (PRB)	-0.974	-0.004
Lower PRB Confidence Interval	-1.877	-0.053
Upper PRB Confidence Interval	-0.072	0.045
Average Sale Price	149,710	549,745
Average Market Value	137,390	471,343

088 : SEWARD

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	196	16
Number of Ratios: Outliers Removed	25	1
Number of Sales Trimmed	171	15
Minimum Ratio	37.8	19.3
Maximum Ratio	270.8	421.5
Minimum Sale Price	12,000	684
Maximum Sale Price	405,000	1,000,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	95.3	74.4
Lower Median Confidence Interval	92.8	60.6
Upper Median Confidence Interval	97.3	100.3
Broadened Median Ratio (BMED)	95.3	79.3
Coefficient of Dispersion (COD)	9.4	30.6
Lower COD Confidence Interval	8.2	16.2
Upper COD Confidence Interval	10.6	45.1
Weighted Coefficient Of Dispersion	8.4	45.3
Coefficient of Concentration @ 10%	56.1	18.8
Coefficient of Concentration @ 15%	66.8	25.0
Coefficient of Concentration @ 20%	77.6	31.3
Coefficient of Concentration @ 50%	93.4	87.5
Coefficient of Concentration @ 100%	98.5	93.8
Coefficient of Interquartile Deviation	8.3	34.0
Median Percent Deviation	8.6	33.7
Lower Quartile (25th Percentile)	86.2	52.7
Upper Quartile (75th Percentile)	102.0	103.3
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.05	-0.41
Relative Kurtosis	3.21	2.05
Arithmetic Mean Ratio	93.7	73.6
Weighted Mean Ratio	93.9	51.5
Geometric Mean Ratio	93	67.2
Harmonic Mean Ratio	92.2	59
Standard Deviation	11.6	27.8
Coefficient of Variation	12.4	37.8
Price Related Differential (PRD)	1.00	1.43
Lower PRD Confidence Interval	0.99	0.99
Upper PRD Confidence Interval	1.01	1.92
Price Related Bias (PRB)	-0.033	0.130
Lower PRB Confidence Interval	-0.077	-0.144
Upper PRB Confidence Interval	0.011	0.404
Average Sale Price	134,391	211,479
Average Market Value	126,160	108,875

089 : SHAWNEE		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	320	73
Number of Ratios: Outliers Removed	42	2
Number of Sales Trimmed	278	71
Minimum Ratio	37.7	45.5
Maximum Ratio	4038	385.3
Minimum Sale Price	500	11,025
Maximum Sale Price	5,650,000	14,362,417
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.2	96.5
Lower Median Confidence Interval	97.4	92.5
Upper Median Confidence Interval	99.8	111.4
Broadened Median Ratio (BMED)	98.2	96.6
Coefficient of Dispersion (COD)	9.7	24.3
Lower COD Confidence Interval	8.6	19.7
Upper COD Confidence Interval	10.8	28.7
Weighted Coefficient Of Dispersion	8.0	22.6
Coefficient of Concentration @ 10%	57.5	26.0
Coefficient of Concentration @ 15%	67.8	34.2
Coefficient of Concentration @ 20%	74.4	47.9
Coefficient of Concentration @ 50%	88.4	90.4
Coefficient of Concentration @ 100%	94.4	97.3
Coefficient of Interquartile Deviation	9.8	23.5
Median Percent Deviation	8.0	20.4
Lower Quartile (25th Percentile)	91.9	81.2
Upper Quartile (75th Percentile)	111.2	126.6
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.78	0.53
Relative Kurtosis	3.85	3.17
Arithmetic Mean Ratio	99.8	102
Weighted Mean Ratio	98.7	79.5
Geometric Mean Ratio	98.9	97.7
Harmonic Mean Ratio	98.1	93.3
Standard Deviation	13.2	30
Coefficient of Variation	13.2	29.4
Price Related Differential (PRD)	1.01	1.28
Lower PRD Confidence Interval	0.99	1.15
Upper PRD Confidence Interval	1.03	1.48
Price Related Bias (PRB)	-0.602	-0.094
Lower PRB Confidence Interval	-0.830	-0.148
Upper PRB Confidence Interval	-0.374	-0.040
Average Sale Price	163,602	1,001,198
Average Market Value	161,468	795,849

090 : SHERIDAN		*S-9*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	21	11
Number of Ratios: Outliers Removed	1	1
Number of Sales Trimmed	20	10
Minimum Ratio	42.2	44.9
Maximum Ratio	110.8	362
Minimum Sale Price	47,500	7,500
Maximum Sale Price	220,000	871,815
DISTRIBUTION FREE STATISTICS		
Median Ratio	90.3	82.2
Lower Median Confidence Interval	85.9	55.4
Upper Median Confidence Interval	96.3	102.4
Broadened Median Ratio (BMED)	91.2	86.6
Coefficient of Dispersion (COD)	11.4	26.2
Lower COD Confidence Interval	6.7	11.5
Upper COD Confidence Interval	16.4	42.7
Weighted Coefficient Of Dispersion	10.3	24.8
Coefficient of Concentration @ 10%	52.4	27.3
Coefficient of Concentration @ 15%	61.9	27.3
Coefficient of Concentration @ 20%	81.0	45.5
Coefficient of Concentration @ 50%	95.2	81.8
Coefficient of Concentration @ 100%	100.0	90.9
Coefficient of Interquartile Deviation	10.9	28.6
Median Percent Deviation	8.9	24.5
Lower Quartile (25th Percentile)	78.3	55.4
Upper Quartile (75th Percentile)	98.0	102.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-1.01	0.62
Relative Kurtosis	4.09	3.03
Arithmetic Mean Ratio	89.4	83.8
Weighted Mean Ratio	88.9	87.1
Geometric Mean Ratio	88.1	79.1
Harmonic Mean Ratio	86.6	74.6
Standard Deviation	14.5	29.8
Coefficient of Variation	16.2	35.6
Price Related Differential (PRD)	1.01	0.96
Lower PRD Confidence Interval	0.99	0.82
Upper PRD Confidence Interval	1.03	1.20
Price Related Bias (PRB)	-0.031	0.151
Lower PRB Confidence Interval	-0.180	-0.248
Upper PRB Confidence Interval	0.117	0.550
Average Sale Price	103,138	146,782
Average Market Value	91,696	127,919

091 : SHERMAN		S-5
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	78	10
Number of Ratios: Outliers Removed	9	1
Number of Sales Trimmed	69	9
Minimum Ratio	45	39.8
Maximum Ratio	430	583
Minimum Sale Price	700	1,000
Maximum Sale Price	315,000	1,450,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	100.4	97.8
Lower Median Confidence Interval	98.1	82.0
Upper Median Confidence Interval	106.7	143.1
Broadened Median Ratio (BMED)	100.6	97.4
Coefficient of Dispersion (COD)	13.0	22.9
Lower COD Confidence Interval	10.4	5.5
Upper COD Confidence Interval	15.6	44.9
Weighted Coefficient Of Dispersion	12.9	24.4
Coefficient of Concentration @ 10%	44.9	50.0
Coefficient of Concentration @ 15%	60.3	50.0
Coefficient of Concentration @ 20%	69.2	60.0
Coefficient of Concentration @ 50%	88.5	70.0
Coefficient of Concentration @ 100%	97.4	90.0
Coefficient of Interquartile Deviation	12.5	23.6
Median Percent Deviation	12.1	12.1
Lower Quartile (25th Percentile)	90.4	79.9
Upper Quartile (75th Percentile)	115.5	126.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.22	1.13
Relative Kurtosis	3.48	4.55
Arithmetic Mean Ratio	100.2	97.4
Weighted Mean Ratio	95	77.5
Geometric Mean Ratio	98.7	90.9
Harmonic Mean Ratio	97.2	84.2
Standard Deviation	17	39.1
Coefficient of Variation	17	40.1
Price Related Differential (PRD)	1.05	1.26
Lower PRD Confidence Interval	1.03	1.06
Upper PRD Confidence Interval	1.09	1.72
Price Related Bias (PRB)	-0.142	-0.518
Lower PRB Confidence Interval	-0.215	-0.932
Upper PRB Confidence Interval	-0.068	-0.105
Average Sale Price	89,650	249,517
Average Market Value	85,203	193,488

092 : SMITH		S-12
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	38	14
Number of Ratios: Outliers Removed	3	1
Number of Sales Trimmed	35	13
Minimum Ratio	64.4	49.5
Maximum Ratio	472.8	237.4
Minimum Sale Price	2,000	3,500
Maximum Sale Price	140,000	155,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	103.9	83.9
Lower Median Confidence Interval	94.4	63.1
Upper Median Confidence Interval	127.9	115.9
Broadened Median Ratio (BMED)	107.6	85.4
Coefficient of Dispersion (COD)	22.5	34.5
Lower COD Confidence Interval	16.7	17.3
Upper COD Confidence Interval	26.8	50.6
Weighted Coefficient Of Dispersion	22.8	25.0
Coefficient of Concentration @ 10%	18.4	28.6
Coefficient of Concentration @ 15%	26.3	35.7
Coefficient of Concentration @ 20%	36.8	35.7
Coefficient of Concentration @ 50%	86.8	78.6
Coefficient of Concentration @ 100%	92.1	85.7
Coefficient of Interquartile Deviation	24.0	39.5
Median Percent Deviation	23.5	30.7
Lower Quartile (25th Percentile)	86.0	60.0
Upper Quartile (75th Percentile)	136.0	126.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.32	1
Relative Kurtosis	2.03	3
Arithmetic Mean Ratio	108.3	90.9
Weighted Mean Ratio	102.6	83.3
Geometric Mean Ratio	105	84.2
Harmonic Mean Ratio	101.7	78.5
Standard Deviation	27.5	39
Coefficient of Variation	25.4	42.9
Price Related Differential (PRD)	1.06	1.09
Lower PRD Confidence Interval	1.00	0.94
Upper PRD Confidence Interval	1.14	1.40
Price Related Bias (PRB)	-0.304	-0.108
Lower PRB Confidence Interval	-0.487	-0.339
Upper PRB Confidence Interval	-0.121	0.123
Average Sale Price	46,571	52,792
Average Market Value	47,800	43,977

093 : STAFFORD		S-6
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	42	9
Number of Ratios: Outliers Removed	7	1
Number of Sales Trimmed	35	8
Minimum Ratio	41.1	77
Maximum Ratio	676	393
Minimum Sale Price	2,000	1,000
Maximum Sale Price	175,000	75,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	103.1	94.5
Lower Median Confidence Interval	94.3	81.0
Upper Median Confidence Interval	115.1	200.0
Broadened Median Ratio (BMED)	103.5	94.8
Coefficient of Dispersion (COD)	14.8	37.6
Lower COD Confidence Interval	10.7	6.1
Upper COD Confidence Interval	19.0	51.1
Weighted Coefficient Of Dispersion	13.5	22.0
Coefficient of Concentration @ 10%	33.3	11.1
Coefficient of Concentration @ 15%	54.8	55.6
Coefficient of Concentration @ 20%	71.4	66.7
Coefficient of Concentration @ 50%	81.0	66.7
Coefficient of Concentration @ 100%	90.5	77.8
Coefficient of Interquartile Deviation	14.5	58.2
Median Percent Deviation	14.0	14.8
Lower Quartile (25th Percentile)	90.9	81.1
Upper Quartile (75th Percentile)	120.9	191.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.15	1.05
Relative Kurtosis	3.71	2.32
Arithmetic Mean Ratio	101.3	113.2
Weighted Mean Ratio	96.1	99
Geometric Mean Ratio	99.3	105.5
Harmonic Mean Ratio	97	99.7
Standard Deviation	19.6	49.3
Coefficient of Variation	19.3	43.6
Price Related Differential (PRD)	1.05	1.14
Lower PRD Confidence Interval	1.02	0.98
Upper PRD Confidence Interval	1.12	1.33
Price Related Bias (PRB)	-0.204	-0.520
Lower PRB Confidence Interval	-0.385	-0.957
Upper PRB Confidence Interval	-0.023	-0.084
Average Sale Price	52,829	34,688
Average Market Value	50,789	34,336

094 : STANTON		S-3
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	14	5
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	13	5
Minimum Ratio	26	39.7
Maximum Ratio	138.8	128.8
Minimum Sale Price	18,500	2,500
Maximum Sale Price	200,000	223,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	90.2	80.0
Lower Median Confidence Interval	76.9	40.1
Upper Median Confidence Interval	100.7	122.9
Broadened Median Ratio (BMED)	90.4	67.7
Coefficient of Dispersion (COD)	14.8	31.5
Lower COD Confidence Interval	7.6	10.1
Upper COD Confidence Interval	21.1	60.1
Weighted Coefficient Of Dispersion	12.3	37.1
Coefficient of Concentration @ 10%	35.7	40.0
Coefficient of Concentration @ 15%	57.1	40.0
Coefficient of Concentration @ 20%	71.4	40.0
Coefficient of Concentration @ 50%	85.7	60.0
Coefficient of Concentration @ 100%	100.0	100.0
Coefficient of Interquartile Deviation	14.5	39.4
Median Percent Deviation	12.5	46.2
Lower Quartile (25th Percentile)	74.9	41.4
Upper Quartile (75th Percentile)	101.1	104.4
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	1.03	0.54
Relative Kurtosis	4.07	2.06
Arithmetic Mean Ratio	93.1	74.3
Weighted Mean Ratio	92	51.3
Geometric Mean Ratio	91.6	67.6
Harmonic Mean Ratio	90.2	61.6
Standard Deviation	18.2	36.1
Coefficient of Variation	19.5	48.5
Price Related Differential (PRD)	1.01	1.45
Lower PRD Confidence Interval	0.96	1.16
Upper PRD Confidence Interval	1.09	2.13
Price Related Bias (PRB)	0.093	-0.115
Lower PRB Confidence Interval	-0.053	-0.346
Upper PRB Confidence Interval	0.239	0.116
Average Sale Price	80,846	76,300
Average Market Value	74,372	39,154

095 : STEVENS

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	69	7
Number of Ratios: Outliers Removed	7	1
Number of Sales Trimmed	62	6
Minimum Ratio	36.5	48.3
Maximum Ratio	270.5	323
Minimum Sale Price	15,000	32,000
Maximum Sale Price	340,000	775,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	89.3	74.3
Lower Median Confidence Interval	85.1	66.1
Upper Median Confidence Interval	96.2	125.8
Broadened Median Ratio (BMED)	90.3	86.9
Coefficient of Dispersion (COD)	14.4	31.7
Lower COD Confidence Interval	11.2	6.9
Upper COD Confidence Interval	17.2	39.0
Weighted Coefficient Of Dispersion	13.5	13.1
Coefficient of Concentration @ 10%	36.2	28.6
Coefficient of Concentration @ 15%	58.0	42.9
Coefficient of Concentration @ 20%	69.6	42.9
Coefficient of Concentration @ 50%	89.9	57.1
Coefficient of Concentration @ 100%	98.6	85.7
Coefficient of Interquartile Deviation	12.2	40.2
Median Percent Deviation	12.2	35.0
Lower Quartile (25th Percentile)	78.5	66.1
Upper Quartile (75th Percentile)	100.3	125.8
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	-0.34	0.47
Relative Kurtosis	2.98	1.62
Arithmetic Mean Ratio	88.1	83.5
Weighted Mean Ratio	90.7	73.7
Geometric Mean Ratio	86.6	78.9
Harmonic Mean Ratio	84.8	74.7
Standard Deviation	16.1	31.1
Coefficient of Variation	18.3	37.3
Price Related Differential (PRD)	0.97	1.13
Lower PRD Confidence Interval	0.94	0.94
Upper PRD Confidence Interval	1.00	1.32
Price Related Bias (PRB)	0.054	-0.128
Lower PRB Confidence Interval	-0.029	-1.251
Upper PRB Confidence Interval	0.137	0.996
Average Sale Price	110,287	216,167
Average Market Value	100,039	159,215

096 : SUMNER

GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	215	7
Number of Ratios: Outliers Removed	29	1
Number of Sales Trimmed	186	6
Minimum Ratio	33.8	34.5
Maximum Ratio	1040	191.6
Minimum Sale Price	1,000	11,150
Maximum Sale Price	300,450	130,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	99.9	64.4
Lower Median Confidence Interval	97.2	52.3
Upper Median Confidence Interval	103.6	90.7
Broadened Median Ratio (BMED)	100.0	69.6
Coefficient of Dispersion (COD)	17.1	23.8
Lower COD Confidence Interval	14.8	7.7
Upper COD Confidence Interval	19.4	39.3
Weighted Coefficient Of Dispersion	14.8	23.7
Coefficient of Concentration @ 10%	36.3	28.6
Coefficient of Concentration @ 15%	50.7	28.6
Coefficient of Concentration @ 20%	60.9	42.9
Coefficient of Concentration @ 50%	81.4	85.7
Coefficient of Concentration @ 100%	89.3	85.7
Coefficient of Interquartile Deviation	16.7	29.8
Median Percent Deviation	14.9	28.7
Lower Quartile (25th Percentile)	87.6	52.3
Upper Quartile (75th Percentile)	120.9	90.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	0.64	-0.1
Relative Kurtosis	3.91	1.96
Arithmetic Mean Ratio	99.7	64.4
Weighted Mean Ratio	97.3	72.4
Geometric Mean Ratio	97.1	61.4
Harmonic Mean Ratio	94.6	58.3
Standard Deviation	22.7	20.4
Coefficient of Variation	22.8	31.7
Price Related Differential (PRD)	1.02	0.89
Lower PRD Confidence Interval	1.00	0.80
Upper PRD Confidence Interval	1.05	1.01
Price Related Bias (PRB)	-0.385	0.020
Lower PRB Confidence Interval	-0.491	-0.620
Upper PRB Confidence Interval	-0.280	0.659
Average Sale Price	94,229	60,942
Average Market Value	91,708	44,092

097 : THOMAS		S-5
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	93	11
Number of Ratios: Outliers Removed	3	0
Number of Sales Trimmed	90	11
Minimum Ratio	55.8	47.5
Maximum Ratio	219.8	151.9
Minimum Sale Price	5,500	40,500
Maximum Sale Price	267,500	340,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	92.6	95.8
Lower Median Confidence Interval	89.8	70.2
Upper Median Confidence Interval	96.2	107.2
Broadened Median Ratio (BMED)	93.0	94.6
Coefficient of Dispersion (COD)	11.9	23.8
Lower COD Confidence Interval	9.9	11.7
Upper COD Confidence Interval	13.9	37.5
Weighted Coefficient Of Dispersion	11.7	32.3
Coefficient of Concentration @ 10%	49.5	27.3
Coefficient of Concentration @ 15%	64.5	54.5
Coefficient of Concentration @ 20%	80.6	54.5
Coefficient of Concentration @ 50%	96.8	81.8
Coefficient of Concentration @ 100%	97.8	100.0
Coefficient of Interquartile Deviation	10.3	19.3
Median Percent Deviation	10.2	11.9
Lower Quartile (25th Percentile)	83.5	70.2
Upper Quartile (75th Percentile)	102.6	107.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptK
Relative Skewness	-0.1	0.21
Relative Kurtosis	3.16	2.5
Arithmetic Mean Ratio	92.4	94.3
Weighted Mean Ratio	91.4	91.3
Geometric Mean Ratio	91.3	89.5
Harmonic Mean Ratio	90.1	84.4
Standard Deviation	14.2	30.9
Coefficient of Variation	15.4	32.8
Price Related Differential (PRD)	1.01	1.03
Lower PRD Confidence Interval	0.99	0.91
Upper PRD Confidence Interval	1.03	1.20
Price Related Bias (PRB)	-0.074	0.069
Lower PRB Confidence Interval	-0.123	-0.181
Upper PRB Confidence Interval	-0.025	0.319
Average Sale Price	114,952	125,046
Average Market Value	105,111	114,174

098 : TREGO		S-5
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	33	9
Number of Ratios: Outliers Removed	2	1
Number of Sales Trimmed	31	8
Minimum Ratio	49.1	51.6
Maximum Ratio	144.8	502
Minimum Sale Price	4,000	500
Maximum Sale Price	350,000	1,300,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	84.8	97.9
Lower Median Confidence Interval	81.0	62.3
Upper Median Confidence Interval	91.9	188.9
Broadened Median Ratio (BMED)	84.8	96.1
Coefficient of Dispersion (COD)	12.2	31.1
Lower COD Confidence Interval	8.5	10.7
Upper COD Confidence Interval	15.5	50.9
Weighted Coefficient Of Dispersion	9.1	26.5
Coefficient of Concentration @ 10%	48.5	22.2
Coefficient of Concentration @ 15%	60.6	44.4
Coefficient of Concentration @ 20%	75.8	55.6
Coefficient of Concentration @ 50%	97.0	77.8
Coefficient of Concentration @ 100%	100.0	88.9
Coefficient of Interquartile Deviation	11.1	40.9
Median Percent Deviation	10.3	19.5
Lower Quartile (25th Percentile)	79.1	72.9
Upper Quartile (75th Percentile)	97.9	153.0
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.68	1.16
Relative Kurtosis	2.82	3.72
Arithmetic Mean Ratio	88.4	99
Weighted Mean Ratio	86.3	97.4
Geometric Mean Ratio	87.5	92.2
Harmonic Mean Ratio	86.6	86.3
Standard Deviation	13.6	42.2
Coefficient of Variation	15.4	42.7
Price Related Differential (PRD)	1.02	1.02
Lower PRD Confidence Interval	1.00	0.69
Upper PRD Confidence Interval	1.06	1.28
Price Related Bias (PRB)	-0.064	-0.256
Lower PRB Confidence Interval	-0.118	-0.634
Upper PRB Confidence Interval	-0.009	0.121
Average Sale Price	100,476	229,913
Average Market Value	86,738	224,021

099 : WABAUNSEE		*S-10*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	61	11
Number of Ratios: Outliers Removed	6	0
Number of Sales Trimmed	55	11
Minimum Ratio	62.6	61
Maximum Ratio	277	166.7
Minimum Sale Price	2,000	5,500
Maximum Sale Price	349,000	52,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.9	100.8
Lower Median Confidence Interval	94.8	86.5
Upper Median Confidence Interval	101.7	123.9
Broadened Median Ratio (BMED)	97.9	99.8
Coefficient of Dispersion (COD)	11.9	24.3
Lower COD Confidence Interval	9.2	12.4
Upper COD Confidence Interval	14.7	34.8
Weighted Coefficient Of Dispersion	9.6	23.5
Coefficient of Concentration @ 10%	50.8	27.3
Coefficient of Concentration @ 15%	60.7	45.5
Coefficient of Concentration @ 20%	70.5	54.5
Coefficient of Concentration @ 50%	90.2	90.9
Coefficient of Concentration @ 100%	91.8	100.0
Coefficient of Interquartile Deviation	11.4	18.6
Median Percent Deviation	9.7	15.5
Lower Quartile (25th Percentile)	88.1	86.5
Upper Quartile (75th Percentile)	110.4	123.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.16	0.45
Relative Kurtosis	3.18	2.49
Arithmetic Mean Ratio	96.6	104.6
Weighted Mean Ratio	96	102.2
Geometric Mean Ratio	95.4	100.1
Harmonic Mean Ratio	94.1	95.7
Standard Deviation	15.5	32.2
Coefficient of Variation	16	30.8
Price Related Differential (PRD)	1.01	1.02
Lower PRD Confidence Interval	0.99	0.96
Upper PRD Confidence Interval	1.03	1.14
Price Related Bias (PRB)	-0.221	0.057
Lower PRB Confidence Interval	-0.301	-0.194
Upper PRB Confidence Interval	-0.142	0.308
Average Sale Price	125,526	29,409
Average Market Value	120,550	30,059

100 : WALLACE		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	14	1
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	13	1
Minimum Ratio	57.2	
Maximum Ratio	152.7	
Minimum Sale Price	4,680	
Maximum Sale Price	200,000	
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.8	
Lower Median Confidence Interval	80.7	
Upper Median Confidence Interval	107.6	
Broadened Median Ratio (BMED)	96.8	
Coefficient of Dispersion (COD)	15.4	
Lower COD Confidence Interval	8.0	
Upper COD Confidence Interval	22.4	
Weighted Coefficient Of Dispersion	16.3	
Coefficient of Concentration @ 10%	42.9	
Coefficient of Concentration @ 15%	57.1	
Coefficient of Concentration @ 20%	64.3	
Coefficient of Concentration @ 50%	92.9	
Coefficient of Concentration @ 100%	100.0	
Coefficient of Interquartile Deviation	15.0	
Median Percent Deviation	12.5	
Lower Quartile (25th Percentile)	78.3	
Upper Quartile (75th Percentile)	107.9	
PARAMETRIC STATISTICS		
Normality Test	RejectK	
Relative Skewness	-0.32	
Relative Kurtosis	2.25	
Arithmetic Mean Ratio	91.9	
Weighted Mean Ratio	91	
Geometric Mean Ratio	90	
Harmonic Mean Ratio	88	
Standard Deviation	18.6	
Coefficient of Variation	20.3	
Price Related Differential (PRD)	1.01	
Lower PRD Confidence Interval	0.95	
Upper PRD Confidence Interval	1.08	
Price Related Bias (PRB)	-0.021	
Lower PRB Confidence Interval	-0.120	
Upper PRB Confidence Interval	0.077	
Average Sale Price	64,591	
Average Market Value	58,767	

101 : WASHINGTON		S-10
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	38	15
Number of Ratios: Outliers Removed	6	2
Number of Sales Trimmed	32	13
Minimum Ratio	61	32.7
Maximum Ratio	301.2	211
Minimum Sale Price	1,000	10,000
Maximum Sale Price	217,500	140,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	103.6	86.1
Lower Median Confidence Interval	94.6	67.4
Upper Median Confidence Interval	110.3	96.8
Broadened Median Ratio (BMED)	103.0	82.6
Coefficient of Dispersion (COD)	14.1	26.3
Lower COD Confidence Interval	10.0	12.7
Upper COD Confidence Interval	18.4	36.5
Weighted Coefficient Of Dispersion	16.1	17.2
Coefficient of Concentration @ 10%	42.1	20.0
Coefficient of Concentration @ 15%	55.3	33.3
Coefficient of Concentration @ 20%	60.5	46.7
Coefficient of Concentration @ 50%	84.2	73.3
Coefficient of Concentration @ 100%	89.5	86.7
Coefficient of Interquartile Deviation	14.4	25.7
Median Percent Deviation	13.8	21.7
Lower Quartile (25th Percentile)	84.6	67.4
Upper Quartile (75th Percentile)	114.5	111.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	-0.41	0.35
Relative Kurtosis	2.11	3.13
Arithmetic Mean Ratio	95.6	80.3
Weighted Mean Ratio	89.3	75
Geometric Mean Ratio	94	76
Harmonic Mean Ratio	92.2	71.3
Standard Deviation	17.4	26.4
Coefficient of Variation	18.2	32.9
Price Related Differential (PRD)	1.07	1.07
Lower PRD Confidence Interval	1.03	0.97
Upper PRD Confidence Interval	1.13	1.22
Price Related Bias (PRB)	-0.242	0.103
Lower PRB Confidence Interval	-0.333	-0.226
Upper PRB Confidence Interval	-0.150	0.432
Average Sale Price	68,313	51,058
Average Market Value	61,014	38,284

102 : WICHITA		S-8
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	18	10
Number of Ratios: Outliers Removed	1	0
Number of Sales Trimmed	17	10
Minimum Ratio	40.3	57.1
Maximum Ratio	325.5	160.6
Minimum Sale Price	8,000	2,750
Maximum Sale Price	195,000	65,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	94.4	97.1
Lower Median Confidence Interval	77.5	65.3
Upper Median Confidence Interval	102.5	120.9
Broadened Median Ratio (BMED)	93.6	95.2
Coefficient of Dispersion (COD)	19.9	26.1
Lower COD Confidence Interval	11.5	12.5
Upper COD Confidence Interval	30.3	40.3
Weighted Coefficient Of Dispersion	16.1	29.9
Coefficient of Concentration @ 10%	38.9	40.0
Coefficient of Concentration @ 15%	44.4	40.0
Coefficient of Concentration @ 20%	55.6	50.0
Coefficient of Concentration @ 50%	83.3	90.0
Coefficient of Concentration @ 100%	94.4	100.0
Coefficient of Interquartile Deviation	16.0	24.8
Median Percent Deviation	16.0	26.0
Lower Quartile (25th Percentile)	74.2	65.0
Upper Quartile (75th Percentile)	104.4	113.2
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.25	0.64
Relative Kurtosis	3.07	2.47
Arithmetic Mean Ratio	90.9	96.7
Weighted Mean Ratio	90.4	99.3
Geometric Mean Ratio	87.3	91.8
Harmonic Mean Ratio	83.2	87.4
Standard Deviation	25.9	33.2
Coefficient of Variation	28.4	34.3
Price Related Differential (PRD)	1.01	0.97
Lower PRD Confidence Interval	0.94	0.88
Upper PRD Confidence Interval	1.09	1.13
Price Related Bias (PRB)	-0.207	0.038
Lower PRB Confidence Interval	-0.500	-0.174
Upper PRB Confidence Interval	0.086	0.249
Average Sale Price	95,170	29,775
Average Market Value	86,024	29,569

103 : WILSON		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	67	7
Number of Ratios: Outliers Removed	8	0
Number of Sales Trimmed	59	7
Minimum Ratio	52.1	58.4
Maximum Ratio	911.5	196.9
Minimum Sale Price	2,000	10,250
Maximum Sale Price	225,000	310,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	102.4	106.2
Lower Median Confidence Interval	97.0	61.2
Upper Median Confidence Interval	120.6	151.9
Broadened Median Ratio (BMED)	102.8	104.5
Coefficient of Dispersion (COD)	30.5	33.8
Lower COD Confidence Interval	22.9	13.0
Upper COD Confidence Interval	38.4	60.9
Weighted Coefficient Of Dispersion	21.1	39.4
Coefficient of Concentration @ 10%	25.4	28.6
Coefficient of Concentration @ 15%	32.8	42.9
Coefficient of Concentration @ 20%	44.8	42.9
Coefficient of Concentration @ 50%	74.6	85.7
Coefficient of Concentration @ 100%	82.1	100.0
Coefficient of Interquartile Deviation	33.1	42.7
Median Percent Deviation	27.7	42.4
Lower Quartile (25th Percentile)	85.9	61.2
Upper Quartile (75th Percentile)	153.8	151.9
PARAMETRIC STATISTICS		
Normality Test	RejectK	AcceptW
Relative Skewness	1.22	0.59
Relative Kurtosis	4.09	2.28
Arithmetic Mean Ratio	110.5	111.7
Weighted Mean Ratio	96	71.8
Geometric Mean Ratio	103.4	102.7
Harmonic Mean Ratio	97.4	94.5
Standard Deviation	43.2	49.4
Coefficient of Variation	39.1	44.3
Price Related Differential (PRD)	1.15	1.56
Lower PRD Confidence Interval	1.08	1.32
Upper PRD Confidence Interval	1.25	2.05
Price Related Bias (PRB)	-0.403	-0.246
Lower PRB Confidence Interval	-0.633	-0.455
Upper PRB Confidence Interval	-0.173	-0.037
Average Sale Price	61,729	88,393
Average Market Value	59,282	63,431

104 : WOODSON		*S-9*
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	28	12
Number of Ratios: Outliers Removed	2	1
Number of Sales Trimmed	26	11
Minimum Ratio	39.8	50.3
Maximum Ratio	275.9	413
Minimum Sale Price	2,300	1,000
Maximum Sale Price	120,000	225,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	98.8	111.9
Lower Median Confidence Interval	85.1	83.2
Upper Median Confidence Interval	109.9	181.2
Broadened Median Ratio (BMED)	99.3	111.8
Coefficient of Dispersion (COD)	35.8	43.2
Lower COD Confidence Interval	21.3	13.6
Upper COD Confidence Interval	48.1	77.0
Weighted Coefficient Of Dispersion	21.5	45.5
Coefficient of Concentration @ 10%	25.0	33.3
Coefficient of Concentration @ 15%	42.9	33.3
Coefficient of Concentration @ 20%	53.6	41.7
Coefficient of Concentration @ 50%	64.3	66.7
Coefficient of Concentration @ 100%	89.3	75.0
Coefficient of Interquartile Deviation	31.8	55.6
Median Percent Deviation	18.0	25.6
Lower Quartile (25th Percentile)	80.9	82.2
Upper Quartile (75th Percentile)	143.8	206.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	1.11	1.61
Relative Kurtosis	3.79	4.51
Arithmetic Mean Ratio	104.9	130.5
Weighted Mean Ratio	84.6	97.9
Geometric Mean Ratio	95.6	114.3
Harmonic Mean Ratio	87.2	102.6
Standard Deviation	47.9	80.1
Coefficient of Variation	45.7	61.4
Price Related Differential (PRD)	1.24	1.33
Lower PRD Confidence Interval	1.11	0.95
Upper PRD Confidence Interval	1.43	2.39
Price Related Bias (PRB)	-0.288	-0.247
Lower PRB Confidence Interval	-0.441	-0.548
Upper PRB Confidence Interval	-0.135	0.053
Average Sale Price	45,568	52,754
Average Market Value	38,547	51,650

105 : WYANDOTTE		
GENERAL STATISTICS	Residential	Comm./Ind.
Original Number of Sales	307	62
Number of Ratios: Outliers Removed	37	4
Number of Sales Trimmed	270	58
Minimum Ratio	22.8	4.3
Maximum Ratio	1629.3	238.8
Minimum Sale Price	1,000	10,700
Maximum Sale Price	425,000	21,250,000
DISTRIBUTION FREE STATISTICS		
Median Ratio	97.4	73.4
Lower Median Confidence Interval	95.6	63.8
Upper Median Confidence Interval	101.4	87.0
Broadened Median Ratio (BMED)	97.7	73.9
Coefficient of Dispersion (COD)	20.0	30.7
Lower COD Confidence Interval	17.8	24.4
Upper COD Confidence Interval	22.2	37.8
Weighted Coefficient Of Dispersion	15.7	14.7
Coefficient of Concentration @ 10%	33.2	17.7
Coefficient of Concentration @ 15%	46.9	24.2
Coefficient of Concentration @ 20%	55.4	32.3
Coefficient of Concentration @ 50%	80.5	80.6
Coefficient of Concentration @ 100%	90.9	93.5
Coefficient of Interquartile Deviation	18.7	28.6
Median Percent Deviation	16.7	26.7
Lower Quartile (25th Percentile)	85.8	54.6
Upper Quartile (75th Percentile)	122.2	96.7
PARAMETRIC STATISTICS		
Normality Test	RejectK	RejectK
Relative Skewness	0.57	0.11
Relative Kurtosis	3.72	2.71
Arithmetic Mean Ratio	98.7	72.9
Weighted Mean Ratio	94	71.4
Geometric Mean Ratio	95.2	66.3
Harmonic Mean Ratio	91.5	52.2
Standard Deviation	26.2	27.3
Coefficient of Variation	26.5	37.4
Price Related Differential (PRD)	1.05	1.02
Lower PRD Confidence Interval	1.03	0.93
Upper PRD Confidence Interval	1.07	1.13
Price Related Bias (PRB)	-0.428	-0.031
Lower PRB Confidence Interval	-0.566	-0.095
Upper PRB Confidence Interval	-0.289	0.033
Average Sale Price	96,352	1,266,182
Average Market Value	90,600	903,991

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: DEED BOOK _____ PAGE _____	COV # _ _ _ _ _ _	CO. NO.	MAP	SEC	SHEET	QTR.	BLOCK	PARCEL	OWN
RECORDING DATE _____/_____/_____	TYPE OF INSTRUMENT _____ CR _____ RA _____ DE _____	SPLIT ☐ MULTI ☐	MO	YR	TY	AMOUNT	S	V	

SELLER (Grantor)
NAME _____
MAILING _____
CITY/ST/ZIP _____
PHONE NO. (_____)_____
email (optional) _____

BUYER (Grantee)
NAME _____
MAILING _____
CITY/ST/ZIP _____
PHONE NO. (_____)_____
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
_____
_____
_____

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

K.S.A. 79-1437g. Same; penalty for violations. Any person who shall falsify the value of real estate transferred shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not more than $500.

12. **TOTAL SALE PRICE $**_____

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

Print name _____

Signature _____

☐ Grantor (Seller) ☐ Grantee (Buyer)
☐ Agent Daytime phone number (_____)_____

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

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

INSTRUCTIONS FOR COMPLETING THE SALES VALIDATION QUESTIONNAIRE
One Part Form

ITEM 1 Please check all boxes which pertain to the sale.

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

ITEM 3 Check yes if the buyer assumed any long term lease(s) (more than 3 years remaining) at the time of sale. Enter the years remaining if known. Check the box if a tenant (renter or lessee) purchased the property.

ITEM 4 Check yes if the purchase price included an operating business that may include intangible personal property such as a franchise, trade license, patent, trademark, stocks, bonds, and/or goodwill. Estimate the value of the intangibles if this was part of the purchase agreement and included in the total sale price.

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

ITEM 6 Check yes if the property characteristics changed after January 1st of the sale year. Indicate what type of major change(s) (such as demolition, new construction, remodeling, rehabilitation) took place by marking the appropriate box. Indicate the approximate date the changes took place and the approximate cost.

ITEM 7 Check yes if any delinquent property taxes were paid by the buyer and included as part of the sale price. Do not include the estimated real estate taxes prorated for the year the property sold included as part of the typical escrow closing cost.

ITEM 8 Check the predominate method of financing used to acquire the property. Check "Not Applicable" if money did not exchange hands.

ITEM 9 Check yes if the property was advertised on the open market, listed with a real estate agent or broker, displayed a for sale sign, advertised in a newspaper or other publication, listed on the internet, and/or offered by word of mouth. A private sale is an exchange that was not made available to the general public or the property was not exposed on the open market.

ITEM 10 Check yes if the buyer owns or controls the property adjoining or adjacent to the property being purchased.

ITEM 11 Provide a brief explanation if either the buyer or seller did not act prudently, was not fully informed about the property, did not have knowledge of the local market, was poorly advised, did not use good judgment in the negotiations, was acting under duress, or was compelled to sell or buy the property out of necessity.

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

ITEM 13 Please sign the questionnaire and list a daytime phone number. The county appraiser may need to make a follow up phone call to clarify unusual terms or conditions.

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

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

(1) Recorded prior to the effective date of this act, i.e., July 1, 1991;
(2) made solely for the purpose of securing or releasing security for a debt or other obligation;
(3) made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration;
(4) by way of gift, donation or contribution stated in the deed or other instruments;
(5) to cemetery lots;
(6) by leases and transfers of severed mineral interests;
(7) to or from a trust, and without consideration;
(8) resulting from a divorce settlement where one party transfers interest in property to the other;
(9) made solely for the purpose of creating a joint tenancy or tenancy in common;
(10) by way of a sheriff's deed;
(11) by way of a deed which has been in escrow for longer than five years;
(12) by way of a quit claim deed filed for the purpose of clearing title encumbrances;
(13) when title is transferred to convey right-of-way or pursuant to eminent domain;
(14) made by a guardian, executor, administrator, conservator or trustee of an estate pursuant to judicial order;
(15) when title is transferred due to repossession; or
(16) made for the purpose of releasing an equitable lien on a previously recorded affidavit of equitable interest, and without additional consideration.

(b) **When a real estate sales validation questionnaire is not required due to one or more of the exemptions provided in 1-16 above, the exemption shall be clearly stated on the document being filed.**

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

Section III

Ratio Study Validation

&

Statistical Procedures

Sales Ratio Study

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 or highest and best use of the property changed after January 1, 2015, and before the sale occurred
- Sale involved a governmental agency liquidating repossessed property
- Transfer was determined to be 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 date not within the current study timeframe
- Split parcel
- Uninformed buyer and/or seller

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.

Sale	*Appraised Value*	*Sale Price*	*Ratio*	***Ratio as a Percentage***
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*
5	*$19,200*	*$16,000*	*1.20*	*120.0*

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 absolution 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.

Sale	*Ratio*	
1	*80.0*	
2	*90.0*	
3	***100.0***	***Median Ratio***
4	*120.0*	
5	*125.0*	

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.

Sale	*Ratio*	
1	*80.0*	
2	*90.0*	
3	*100.0*	
4	*120.0*	← ***Median Ratio***
5	*125.0*	
6	*130.0*	

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.

$$\frac{100.0 + 120.0}{2} = \mathbf{110.0} \quad \underline{\textbf{\textit{Median Ratio}}}$$

Broadened Median Ratio *(BMED)*

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

Broadened Median Ratio Computation

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

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

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

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

13.3 + 30.0 + 33.3 + 20.0 = **96.7** ***Broadened Median Ratio***

Coefficient of Dispersion *(COD)*

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

COD Computation

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

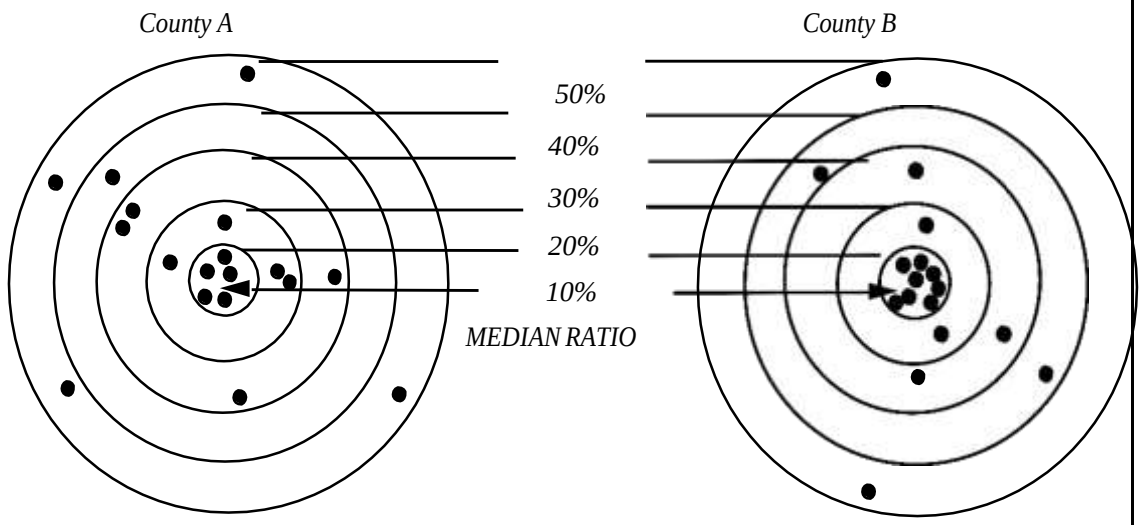
Sale	*Ratio*	*Median Ratio*	*Absolute Deviation From Median*
1	*80.0*	*100.0*	*20.0*
2	*90.0*	*100.0*	*10.0*
3	*100.0*	*100.0*	*00.0*
4	*120.0*	*100.0*	*20.0*
5	*125.0*	*100.0*	*25.0*
		Sum of Deviations	*75.0*

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

$$\frac{15.0}{100.0}=0.15*100=\mathbf{15.0} \quad \underline{\textbf{\textit{Coefficient of Dispersion (COD)}}}$$

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.

Example of Two Coefficients of Dispersion



40 Coefficient of Dispersion

20 Coefficient of Dispersion

Each dot represents one individual assessment/sales ratio..

- *In Diagram "A" the individual assessment/sales ratios are spread out, or dispersed considerably in relationship to the median ratio for the group of properties sold.*
- *In Diagram "B" the individual assessment/sales ratios are grouped closely in relation to the median ratio for the group of properties sold.*

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

Weighted Coefficient of Dispersion

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

Weighted COD Computation

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

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

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

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

Coefficient of Concentration *(COC)*

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

COC @ 15%

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

95.0 – 14.3 = 80.7

95.0 + 14.3 = 109.3

If the range selected is 15%, to select the proportion that falls within the range:
*95.0 * 15.0% = 14.3*
95.0 - 14.3% = 80.7
95.0 + 14.3% = 109.3
10 ratios in the sample fall within the range of 80.7 to 109.3

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

Coefficient of Interquartile Deviation

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

Sale	*Ratio*
1	*60.0*
2	*80.8*
3	*88.1*
4	***96.0***
5	*115.2*
6	*120.4*
7	*145.7*

Median Ratio 96.0

1st Quartile = (Sale 2) 80.8
3rd Quartile = (Sale 6) 120.4

Interquartile range 120.4 - 80.8 = 39.6

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

Median Percent Deviation

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

Median Percent Deviation Computation

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

Sale	*Ratio*	*Median Ratio*	*Absolute Deviation From Median*
1	*80.0*	*100.0*	*20.0*
2	*90.0*	*100.0*	*10.0*
3	*100.0*	*100.0*	*00.0*
4	*120.0*	*100.0*	*20.0*
5	*125.0*	*100.0*	*25.0*

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

MAD = 20.0, Median = 100.0

$$\frac{20.0}{100.0} = 0.200 * 100 = .\mathbf{200}$$ ***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 Test

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

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

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

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

Skewness

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

Kurtosis

Kurtosis is a measure that is used to describe the concentration of ratio data in a frequency distribution. A flat distribution with short tails is sometimes referred to as platykurtic. A peaked distribution with thinner tails is referred to as leptokurtic, or centralized. The degree of kurtosis in this analysis is measured by the moment coefficient of kurtosis (based on the fourth moment about the mean). It is also called a measure of relative kurtosis. A normal distribution is bell shaped and referred to as mesokurtic, or neutral. It will have a value close to 3. Ratio study samples tend to have high peaks. Values above 6 tend to be associated with samples drawn from populations that would not be considered normal.

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.

Sale	*Ratio*
1	*80.0*
2	*90.0*
3	*100.0*
4	*120.0*
5	*125.0*

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

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

Weighted Mean Ratio

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

Weighted Mean Ratio Computation

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

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

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

Geometric Mean Ratio

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

Geometric Mean Ratio Computation

1. *Multiply the ratios in the sample together and finding the nth root of the result, where n equals the number of ratios in the sample*
2. *Find the nth root of the product, where n equals the number of ratios in the sample*

Sale	*Ratio*
1	*80.0*
2	*90.0*
3	*100.0*
4	*120.0*
5	*125.0*

$$(80.0*90.0*100.0*120.0*125.0)^{1/5} = \mathbf{101.6}$$ ***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 (1divided by the ratio)*
2. *Sum the reciprocals*
3. *Divide the number of ratios in the sample by the sum of the reciprocals*

Sale	*Appraised Value*	*Sale Price*	*Ratio*	*Reciprocal Values*
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*

$$\frac{5}{0.0499} = \mathbf{100.2}$$ ***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 $$s = \sqrt{\frac{\sum\left(A_i/S_i - \overline{A}/\overline{S}\right)^2}{n-1}}$$

s	= standard deviation
$\sum$	= algebraic symbol for sum
A_i	= each Appraised Value
S_i	= each Sale Price
$\overline{A}/\overline{S}$	= Sample Mean Ratio
^{2}	= square or take to the 2nd Power
$\sqrt{\ }$	= the square root symbol

Standard Deviation Computation

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

Sale	*Appraised Value*	*Sale Price*	*Ratio*	*Ratio Minus Mean*	*Square the Difference*
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*				

$$\sqrt{\frac{1480.0}{5-1}} = \sqrt{\frac{1480.0}{4}} = \sqrt{370.0} \quad \underline{\textit{Variance}}$$

$$\sqrt{370.0} = \mathbf{19.2} \quad \underline{\textbf{\textit{Standard Deviation}}}$$

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 and the arithmetic mean ratio of 103.0, the calculation would be as follows.

$$\frac{19.2}{103.0} * 100 = \mathbf{18.6}$$ ***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

Sale	*Appraised Value*	*Sale Price*	*Ratio*
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*

$$\frac{515.0}{5} = 103.0 \quad \textit{Arithmetic Mean}$$

$$\frac{131{,}200}{131{,}000} * 100 = 100.2 \textit{ Weighted Mean Ratio}$$

$$\frac{103.0}{100.2} = \mathbf{1.03} \quad \textbf{\textit{Price-Related Differential (PRD)}}$$

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

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

Price-Related Bias *(PRB)*

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

Price-Related Bias (PRB) Computation

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

   $$Proxy_MV = 0.50 \times (AV/Median\ ratio) + 0.50 \times SP$$

   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):*

   Ln_ProxyMV = LN(Proxy_MV)/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: LN(100,000)/LN(2) = 16.613 and LN(200,000)/LN(2) = 17.613).
4. *Compute percentage differences of each sale ratio in the sample when compared to the sample median ratio:*

   Pct_Diff = (Sale ratio – Median ratio)/Median ratio

   Where:

   PCT_Diff = Percentage Difference

   Sale ratio = Appraised value / 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): Pct_Diff = $\beta_0 + \beta_1 \times$ Ln_ProxyMV*
6. *Evaluate the p-Value for significance. It must be <= .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.

AV	SP	Ratio	AV/Med	MV proxy	X Ind Var LN(MV Proxy)	Y Dep Var Pct Diff
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

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	5.292	0.2881	18.370	1.108E-10	4.670	5.915
X Variable 1	-0.340	0.0188	-18.137	1.300E-10	-0.381	-0.300

Note: No outlier trimming was employed for this new 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 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 -.010 and +0.010.

Average Sale Price

Average Sale Price Computation

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

Sale	Sale Price
1	$20,000
2	$50,000
3	$15,000
4	$30,000
5	$16,000
Total	$131,000

$$\frac{\$131{,}000}{5} = \mathbf{\$26{,}200}$$ ***Average Sale Price***

Average Market *(Appraised)* Value Estimate

Average Market Value Computation

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

Sale	Appraised Value
1	$25,000
2	$45,000
3	$12,000
4	$30,000
5	$19,200
Total	$131,200

$$\frac{\$131{,}200}{5} = \mathbf{\$26{,}240}$$ ***Average Market Value***

Trimming Outlier Ratios

Outliers are extreme ratios that are considered highly unusual when compared to the sample as a whole. 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
*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 x .25) + .75 for Q1 and (n x .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 13 sales and achieve an 85 percent probability that 75 percent of the population ratios will be represented by the sample. Small counties will require supplemental sales (over the past 4 years) if less than five recent sales are available to develop a ratio sample for the Commercial/Industrial subclass. Large counties that qualify for representative residential sampling are held to higher standards. The sample size goal is expected to meet a 90 percent probability that 98 percent of the population ratios will be represented by the sample distribution. To meet this threshold, a county must have more than 194 valid residential sales during the study year.

Sample Sizes for Nonparametric Tolerance Limits

Proportion of Ratios	*50%*	*70%*	*75%*	*80%*	*85%*	*90%*	*95%*	*98%*
85% Probability	*6*	*10*	*13*	*16*	*22*	*33*	*67*	*168*
90% Probability	*7*	*12*	*15*	*18*	*25*	*38*	*77*	*194*
95% Probability	*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.

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References:

Efron, Bradley and Robert J. Tibshirani. 1993. *An introduction to the bootstrap*. New York: Chapman & Hall.

Diaconis, Persi and Bradley Efron. 1983. Computer-intensive methods in statistics. *Scientific American.* 148:116-130.

Gunter, Bert. 1991. Bootstrapping: How to make something from almost nothing and get statistically valid answers. *Quality Progress.* 24(12)97-103.

Hall, Peter. 1992. *Bootstrap and the edgeworth expansion.* New York: Springer-Verlag.

Residential Sampling Counties

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

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

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

Residential Sampling Counties

County	Sample Size	County	Sample Size	County	Sample Size
Butler	*250*	*McPherson*	*200*	*Wyandotte*	*300*
Douglas	*200*	*Reno*	*200*		
Ford	*200*	*Riley*	*250*		
Harvey	*200*	*Saline*	*250*		
Johnson	*350*	*Sedgwick*	*350*		
Leavenworth	*200*	*Shawnee*	*300*		

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 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, 2010 through December 31, 2013)* pursuant to K.S.A. 79-1488. Fifty-seven Kansas counties required supplemental sales for the commercial/industrial subclass for the year 2015. Approximately 330 supplemental commercial sales have been included in the statistical analysis for the year 2015 ratio studies. For the year 2013 ratio study forty-nine counties were supplemented with approximately 330 commercial sales.

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

Section IV

Kansas Statutes Pertaining to the

"2015 Appraisal Sales 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.

"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 factors including but not by way of exclusion:

(a) The proper classification of land 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 or 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 which are adaptable to mass appraisal and 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; 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 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 court of tax appeals for conducting valuation appeal proceedings;

(g) the board of county commissioners for conducting any of the boards 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; 2008, ch. 109, §87; 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 court of tax appeals. Written notice of appeal shall be served on the state court 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 court 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 court 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; 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.

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David N. Harper, Director

Sam Brownback, Governor

DIRECTIVE #14-046

TO: **County Appraisers**

SUBJECT: **Scope of Work and Substantial Compliance**

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

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

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

Criteria and Standards

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

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

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

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

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

The Compliance Scorecard along with the points possible follows:

Compliance Scorecard - *Example of total points possible*

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

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

2. Procedures	Compliance Points Possible	Points Received
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 times 25 = 21.2
.847 times 25 = 21.2
.153 times 25 = 3.8
.153 times 25 = 3.8

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

b. Appraisal Uniformity

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

For example:

COD: 18.0 95% Confidence interval: 13.0 to 22.0

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

COD: 30.0 95% Confidence interval: 22.0 to 38.0

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

COD: 22.0 95% Confidence interval: 17.0 to 26.0

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

c. Sample Size

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

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

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

d. Land Valuation Model Calibration (4 points)

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

e. Construction Cost Multiplier Analysis (4 points)

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

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

f. Depreciation Analysis (4 points)

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

g. Income Approach (4 points)

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

h. Comparable Sales Approach (4 points)

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

i. Final Review Process (4 points)

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

3. AGRICULTURAL USE VALUATION (2 points)

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

4. CADASTRAL MAPPING (2 points)

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

5. STATUTORY COMPLIANCE (10 points)

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

a. A real estate value trend study is published at least five business days prior to the mailing of the CVN's (K.S.A. 79-1460A). Change of value notices are mailed on or before the statutory deadline, provided an extension has not been granted pursuant to K.S.A. 79-1404, *Seventeenth*, or an alternate form of notification approved pursuant to K.S.A. 79-1460 (K.S.A. 79-1460).

b. Informal hearings are held within statutory timeframe, provided an extension has not been granted pursuant to K.S.A. 79-1404, *Seventeenth* (K.S.A. 79-1448).

c. Values are certified to county clerk by statutory deadline, provided an extension has not been granted pursuant to K.S.A. 79-1404, *Seventeenth* (K.S.A. 79-1466 and 79-1467).

d. Personal property is listed as required and penalties applied where applicable (K.S.A. 79-306 and 79-1422; K.S.A. 79-332a).

e. The preservation and protection of all property tax records (K.S.A. 45-403).

Approved: June 3, 2014

David N. Harper
Director of Property Valuation

APPENDIX A. Scoring Example

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

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

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

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

Compliance Scorecard
Example

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

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

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

K A N S A S

DEPARTMENT OF REVENUE
DIVISION OF PROPERTY VALUATION

DIRECTIVE 03-041

TO: **REGISTER OF DEEDS**

FROM: **Mark S. Beck, Director**

SUBJECT: **Real Estate Sales Validation Questionnaires; Filing Requirements**
(To replace Directive #92-016 and 94-028)

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

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

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

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

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

(1) recorded prior to the effective date of this act;

(2) made solely for the purpose of securing or releasing security for a debt or other obligation;

(3) made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration;

(4) by way of gift, donation or contribution stated in the deed or other instrument;

(5) to cemetery lots;

(6) by leases and transfers of severed mineral interests;

(7) to or from a trust, and without consideration;

(8) resulting from a divorce settlement where one party transfers interest in property to the other;

(9) made solely for the purpose of creating a joint tenancy or tenancy in common;

(10) by way of a sheriff's deed;

(11) by way of a deed which has been in escrow for longer than five years;

(12) by way of a quit claim deed filed for the purpose of clearing title encumbrances;

(13) when title is transferred to convey right-of-way or pursuant to eminent domain;

(14) made by a guardian, executor, administrator, conservator or trustee of an estate pursuant to judicial order;

(15) when title is transferred due to repossession; or

(16) made for the purpose of releasing an equitable lien on a previously recorded affidavit of equitable interest, and without additional consideration.

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

2. The Division of Property Valuation supplies a three-part real estate sales validation questionnaire (form number PV-RE-21) which is required when an affidavit of equitable interest, deed in real estate, or any other instrument used to transfer real property is recorded in the office of the register of deeds. Only counties having prior written approval from the director may use a special one-part version of the form (PV-RE-21-OP). The one-part form can be used in conjunction with image document management systems. Photocopies are not acceptable; however, filers may submit a computer-printed form. The digital version of the form (PV-RE-21-OP-CG) can be obtained from the Department of Revenue website. Instructions for completing the questionnaire must be printed on the reverse side or attached on a separate page. Counties accepting one-part forms are required to provide the original document(s) to the Division of Property Valuation.

3. The "total sale price" must be entered on the real estate sales validation questionnaire. If one dollar ($1.00), ten dollars ($10.00) or any nominal sale price is entered on the real estate sales validation questionnaire, the register of deeds shall question the accuracy of the sale price as entered. If the grantor, grantee, or agent affirms that the sale price as entered is correct, the deed should be recorded.

4. A real estate sales validation questionnaire is not required on a deed that states "without consideration" or that has one dollar ($1.00), ten dollars ($10.00) or some other nominal value entered thereon. "Without consideration" as used in K.S.A. 79-1437(e)(7), as amended by L. 1992, ch. a59, § 2, means "gift." Therefore, an entered consideration of one dollar ($1), ten dollars ($10) or "love and affection" on a deed shall be construed as a "gift," and the deed accepted without a real estate sales validation questionnaire. However, if the phrase "one dollar ($1.00) and other valuable consideration" has been entered on the deed, a real estate sales validation questionnaire is required to record the deed.

5. The buyer, seller or agent thereof may complete and sign the real estate validation questionnaire.

6. If a government entity, such as a county, conveys real property, the real estate sales validation questionnaire must be signed by the government official(s) who signed the deed or an agent.

7. Multiple deeds conveying partial interests and filed simultaneously, do not require multiple real estate sales validation questionnaires, provided the real estate sales validation questionnaire filed is annotated to state that the consideration entered thereon is the total consideration for the transfer of the entire interest. The register of deeds shall indicate in the upper left-hand corner of the real estate sales validation questionnaire the deed book and page number range assigned to the corresponding deeds.

8. A real estate sales validation questionnaire with the phrase "other valuable consideration" entered as the sales price shall not be accepted. It shall be returned for the sale price to be entered before the deed, instrument or affidavit may be recorded.

9. The Register of Deeds has a legal obligation to see that the real estate sales validation questionnaire is completed. At a minimum, this requires that each real estate sales validation questionnaire be scrutinized for completion of the identification and location information and all questions thereon.

10. A real estate sales validation questionnaire without every question answered, including the sale price, the signature and phone numbers entered is not "completed". Incomplete real estate sales validation questionnaires accompanied by the deed, other instrument transferring title to real estate or affidavit of equitable interest must be returned to the filer with notice that such deed, instrument or affidavit has not been recorded.

11. Phone numbers for both the buyer and the seller are required when the agent completes a real estate sales validation questionnaire.

12. The phrase "made for the purpose of confirming, correcting, modifying or supplementing a deed previously recorded, and without additional consideration," (K.S.A. 79-1437e) is explained as follows:

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

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

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

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

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

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

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

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

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

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

15. Transfer on Death Deeds do not require the completion of the *Kansas Real Estate Sales Validation Questionnaire* because it does not actually transfer property at the time of filing.

16. Only those deeds to and from a trust and *without consideration* do not require a questionnaire be completed.

17. The Register of Deeds shall also comply with the Permanent Administrative Regulations promulgated by the Department of Revenue, Division of Property Valuation. Article 4 (Real Estate Ratio Study), 93-4-2 and 93-4-3 reference the duties of the Register of Deeds.

Approved: February 5, 2003
Date

Mark S. Beck
Director of Property Valuation.

REAL PROPERTY SUBCLASSES & ASSESSMENT RATES

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

System of taxation; classification: exemption.

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

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

(1) Real Property used for residential purposes including multi-family residential real property and real property necessary to accommodate a residential community of mobile or manufactured homes including the real property upon which same homes are located **11.5%**

(KSCAMA Suffix Codes RR, RU, FR, FU)

(2) Land devoted to agricultural use that shall be valued upon the basis of its agricultural income or agricultural productivity pursuant to section 12 of article 11 of the constitution **30.0%**

(KSCAMA Suffix Codes AU, AR)

(3) Vacant Lots **12.0%**

(KSCAMA Suffix Codes VU, VR)

(4) Real property which is owned and operated by a not-for-profit organization not subject to federal income taxation pursuant to section 501 of the federal internal revenue code, and which is included in this subclass by law **12.0%**

(KSCAMA Suffix Codes NR, NU)

(5) Public utility real property, except railroad real property that shall be assessed at the average rate that all other commercial and industrial property **33.0%**

(KSCAMA Suffix Codes UL, UU)

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

(KSCAMA Suffix Codes CU, CR, AU & AR with agricultural improvements)

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

(KSCAMA Suffix Codes OU, OR)

State of Kansas

Department of Revenue

Division of Property Valuation

Permanent Administrative Regulations

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.)

Doc. No. 042890 Nick Jordan Secretary of Revenue

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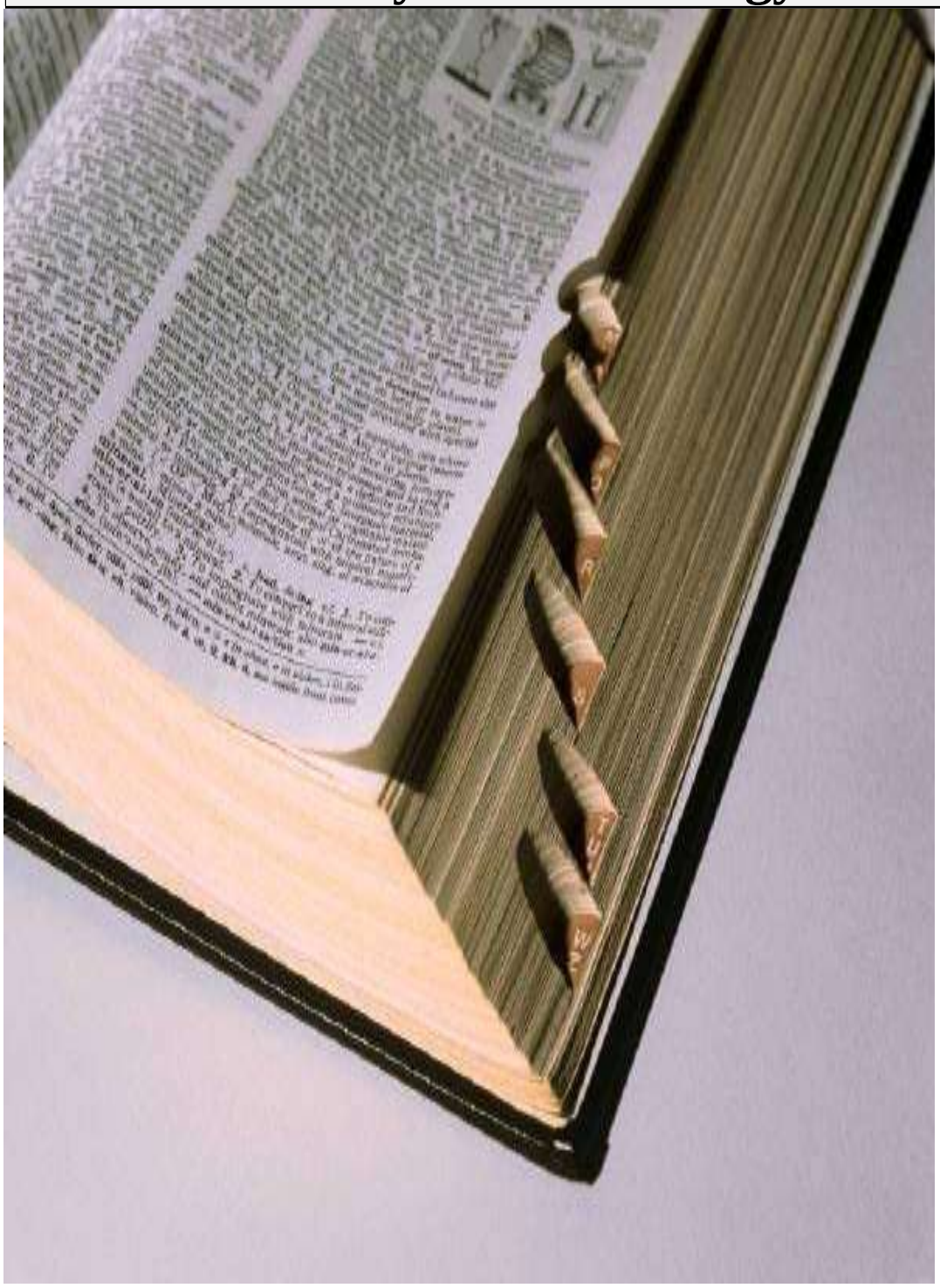
Section V

Glossary of Terminology



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 *(or adjusted sale price)* of a property. The appraised value divided by the sale price.
Array	An ordered arrangement of data such as a listing of sales ratios in order to magnitude from high to low or low to high.
Assessment Progressivity ***(Regressivity)***	An appraisal bias such that high-value properties are appraised higher *(lower)* than low-value properties. *(See also Price-Related Differential.)*
Assessment Ratio	The ratio of the assessed value to an indicator of market value.
Average Absolute Deviation	The sum of the absolute *(sign ignored)* 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 insensivity to rounding and grouping of observations around the middle ratio.
Coefficient of Concentration *(COC)*	The percentage of ratios falling within a specified percentage range ($\pm$) of the median ratio.
Coefficient of Dispersion *(COD)*	The average of the absolute deviation of a sample of ratios from the median ratio, expressed as a percentage of the median. The most common measure of uniformity in sales ratio studies. Low COD's tend to be associated with good appraisal uniformity.
Coefficient of Quartile Deviation	The interquartile ranges of a sample of ratios divided by 2 and expressed as a percentage of the median ratio. This measure of uniformity was referred to as the coefficient of dispersion when it was first adopted for use in assessment performance in 1954. Like the median, it is very resistant to the influence of outlier ratios.

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

Confidence Interval — For a given confidence level, the range within which one can conclude that a population parameter *(such as the median ratio)* 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 *(a set of possible values of a sample statistic)* into mutually exclusive parts called the acceptance region and the rejection *(or critical)* 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. *(Reciprocal: the inverse of a number, i.e., the reciprocal of 0.40 is 2.50.)* 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 *(Interquartile Deviation)*	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, *"…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…"*
Maximum Ratio	Largest sales ratio in the sample.
Mean Ratio	Result of adding all the ratios and dividing by the number of ratios. *(Also called the arithmetic mean or average.)*
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 *(MAD)*	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 *(MAD)* 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 *(Gaussian shape).*
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 *(sales ratio study)* or independent "expert" appraisals *(appraisal ratio study)*. 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 *(the appraisal date)*.

Sales Ratio — A ratio of the county appraiser's estimate of value to the sale price of a property *(appraised value ÷ sale price)*.

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. *(See random sample and representative sample.)*

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 — (1) Numerical point estimates calculated from a sample *(for example, the mean, median or coefficient of dispersion)*. Statistics are used to estimate corresponding measures, termed parameters for the population.

(2) The science of studying numerical data systematically and presenting useful results. Two main branches of statistics exist: *descriptive and inferential*.

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 — 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:

(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 *(the appraisal date)* 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 *(or assessments)*, 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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