



Appraiser Survey Results: Quality and Condition

Appraisers were asked to estimate the impact on value quality and condition.

Q4 House C1 vs C2	8.48%
Q4 House C2 vs C3	8.46%
Q4 House C3vs C4	7.48%
Q4 House C4 vs C5	9.8%
Q4 House C5 vs C6	14.9%
Q3 House C1 vs C2	7.93%
Q3 House C2 vs C3	8.91%
Q3 House C3 vs C4	7.86%
Q3 House C4 vs C5	10%
Q3 House C5 vs C6	13.2%
C3 House Q1 vs Q2	14.1%
C3 House Q2 vs Q3	10.2%
C3 House Q3 vs Q4	8.5%
C3 House Q4 vs Q5	10.2%
C3 House Q5 vs Q6	12.8%

Below is a 5 minute video that does an excellent job of explaining the concept called The Wisdom of the Crowd. In 1906, Sir Francis Galton proved that the mean of many non-expert opinions is more reliable than one expert opinion. The inference being drawn is that an aggregate of many appraisers who understand the adjustment process, but do not have geographic expertise (non-experts) are more reliable at estimating adjustment rates than one local appraiser who has geographic competence.

<https://www.youtube.com/watch?v=iOucwX7Z1HU>

We had 30 responses which is a credible sample size(n).

“In practice, the Central Limit Theorem allows us to make inferences about population means relying on the normal distribution when a) the population is normal or b) when $n \geq 30$. As a practical matter, the sampling distribution of the mean will be approximately normal when $n \geq 15$ and the population is symmetrically distributed. However, appraisers usually know very little about the shape of population distributions of price, property attributes, financing arrangements, and the like. Therefore, the $n \geq 30$ criterion generally applies to real property valuation work.”¹

Other descriptive statistics are shown on pages 2 and 3.

¹ An Introduction to Statistics for Appraisers p171 by Martin L. Wolverton, PhD, MAI, published by The Appraisal Institute

Condition of Q4

Q4 C1 vs C2	
Mean	8.483333333
Standard Error	1.499901018
Median	5
Mode	5
Standard Deviation	8.215296218
Sample Variance	67.49109195
Kurtosis	1.088828156
Skewness	1.492482967
Range	29
Minimum	1
Maximum	30
Sum	254.5
Count	30

Q4 C2 vs C3	
Mean	8.458333333
Standard Error	0.94123935
Median	7
Mode	5
Standard Deviation	5.155380238
Sample Variance	26.5779454
Kurtosis	2.880275572
Skewness	1.594424194
Range	23.25
Minimum	1.75
Maximum	25
Sum	253.75
Count	30

Q4 C3 vs C4	
Mean	7.476666667
Standard Error	0.793416638
Median	7.5
Mode	10
Standard Deviation	4.345721902
Sample Variance	18.88529885
Kurtosis	8.494309131
Skewness	2.091676814
Range	24
Minimum	1
Maximum	25
Sum	224.3
Count	30

Q4 C4 vs C5	
Mean	9.8
Standard Error	1.003900439
Median	10
Mode	10
Standard Deviation	5.498589161
Sample Variance	30.23448276
Kurtosis	2.230273918
Skewness	1.315699144
Range	23
Minimum	2
Maximum	25
Sum	294
Count	30

Q4 C5 vs C6	
Mean	14.9
Standard Error	2.104374207
Median	12
Mode	20
Standard Deviation	11.52613223
Sample Variance	132.8517241
Kurtosis	4.334302367
Skewness	1.954936319
Range	48
Minimum	2
Maximum	50
Sum	447
Count	30

Condition of Q3

Q3 C1 vs C2	
Mean	7.933333333
Standard Error	1.313881092
Median	5
Mode	5
Standard Deviation	7.196423122
Sample Variance	51.78850575
Kurtosis	2.644507153
Skewness	1.752696842
Range	29
Minimum	1
Maximum	30
Sum	238
Count	30

Q3 C2 vs C3	
Mean	8.908333333
Standard Error	1.143477463
Median	7
Mode	5
Standard Deviation	6.263084006
Sample Variance	39.22622126
Kurtosis	2.495988151
Skewness	1.739584866
Range	23.25
Minimum	1.75
Maximum	25
Sum	267.25
Count	30

Q3 C3 vs C4	
Mean	7.86
Standard Error	0.898627306
Median	7
Mode	5
Standard Deviation	4.921984461
Sample Variance	24.22593103
Kurtosis	4.870793778
Skewness	1.865891676
Range	23.7
Minimum	1.3
Maximum	25
Sum	235.8
Count	30

Q3 C4 vs C5	
Mean	10
Standard Error	1.228259211
Median	10
Mode	10
Standard Deviation	6.727452764
Sample Variance	45.25862069
Kurtosis	3.803497834
Skewness	1.837066115
Range	28
Minimum	2
Maximum	30
Sum	300
Count	30

Q3 C5 vs C6	
Mean	13.23333333
Standard Error	2.075407914
Median	10
Mode	15
Standard Deviation	11.3674773
Sample Variance	129.2195402
Kurtosis	6.143432059
Skewness	2.331277272
Range	48
Minimum	2
Maximum	50
Sum	397
Count	30

Quality of C3

<u>C3 Q1vs Q2</u>		<u>C3 Q2 vs Q3</u>	
Mean	14.1	Mean	10.2
Standard Error	3.215747889	Standard Error	1.368277716
Median	10	Median	10
Mode	10	Mode	10
Standard Deviation	17.61337658	Standard Deviation	7.4943657
Sample Variance	310.2310345	Sample Variance	56.16551724
Kurtosis	20.74026122	Kurtosis	8.243167888
Skewness	4.259229159	Skewness	2.53422208
Range	99	Range	39
Minimum	1	Minimum	1
Maximum	100	Maximum	40
Sum	423	Sum	306
Count	30	Count	30

<u>C3 Q3 vs Q4</u>		<u>C3 Q4 vs Q5</u>		<u>C3 Q5 vs Q6</u>	
Mean	8.5	Mean	10.2	Mean	12.8
Standard Error	1.017942482	Standard Error	1.355618364	Standard Error	2.14283087
Median	6.5	Median	8	Median	10
Mode	5	Mode	5	Mode	5
Standard Deviation	5.575500596	Standard Deviation	7.425027575	Standard Deviation	11.73676804
Sample Variance	31.0862069	Sample Variance	55.13103448	Sample Variance	137.7517241
Kurtosis	1.860933957	Kurtosis	1.161923194	Kurtosis	5.433112736
Skewness	1.490655044	Skewness	1.451884391	Skewness	2.252797831
Range	23	Range	28	Range	48
Minimum	2	Minimum	2	Minimum	2
Maximum	25	Maximum	30	Maximum	50
Sum	255	Sum	306	Sum	384
Count	30	Count	30	Count	30

No AC Q3

Mean	3.62890625
Standard Error	0.491999238
Median	2
Mode	2
Standard Deviation	3.935993901
Sample Variance	15.49204799
Kurtosis	13.87205145
Skewness	3.270173099
Range	24.25
Minimum	0.75
Maximum	25
Sum	232.25
Count	64
Confidence Level(95.0%)	0.983182024

No AC Q4

Mean	2.73046875
Standard Error	0.300633048
Median	2
Mode	1
Standard Deviation	2.405064385
Sample Variance	5.784334697
Kurtosis	2.62620367
Skewness	1.753757372
Range	10
Minimum	0
Maximum	10
Sum	174.75
Count	64
Confidence Level(95.0%)	0.600767209

No AC Q5

Mean	2.10546875
Standard Error	0.277661448
Median	1
Mode	1
Standard Deviation	2.22129158
Sample Variance	4.934136285
Kurtosis	2.883379393
Skewness	1.718636757
Range	10
Minimum	0
Maximum	10
Sum	134.75
Count	64
Confidence Level(95.0%)	0.554862128

IG Pool Cold

Mean	2.85483871
Standard Error	0.269993022
Median	2.5
Mode	1
Standard Deviation	2.125927178
Sample Variance	4.519566367
Kurtosis	-0.19090187
Skewness	0.714476908
Range	8
Minimum	0
Maximum	8
Sum	177
Count	62
Confidence Level(95.0%)	0.539884414

IG Pool Mild

Mean	4.015873016
Standard Error	0.355263302
Median	4
Mode	5
Standard Deviation	2.819815045
Sample Variance	7.951356887
Kurtosis	2.523357907
Skewness	1.195789392
Range	15
Minimum	0
Maximum	15
Sum	253
Count	63
Confidence Level(95.0%)	0.710161223

IG Pool Warm

Mean	5.96031746
Standard Error	0.532158555
Median	5
Mode	5
Standard Deviation	4.223877583
Sample Variance	17.84114183
Kurtosis	5.805338937
Skewness	1.949429477
Range	24
Minimum	1
Maximum	25
Sum	375.5
Count	63
Confidence Level(95.0%)	1.063769794

Pole Bldg 40x60

Mean	13173.4375
Standard Error	996.9428522
Median	10000
Mode	10000
Standard Deviation	7975.542818
Sample Variance	63609283.23
Kurtosis	0.884809648
Skewness	1.053576751
Range	40000
Minimum	0
Maximum	40000
Sum	843100
Count	64
Confidence Level(95.0%)	1992.23132

Steel Bldg 24x40

Mean	16751.57813
Standard Error	1378.723884
Median	15000
Mode	15000
Standard Deviation	11029.79107
Sample Variance	121656291.1
Kurtosis	4.121530375
Skewness	1.863964594
Range	60001
Minimum	0
Maximum	60001
Sum	1072101
Count	64
Confidence Level(95.0%)	2755.159835

city sewer water

Mean	3.9453125
Standard Error	0.674444693
Median	2
Mode	2
Standard Deviation	5.39555754
Sample Variance	29.11204117
Kurtosis	15.80114361
Skewness	3.562503878
Range	33
Minimum	0
Maximum	33
Sum	252.5
Count	64
Confidence Level(95.0%)	1.347770173

well and septic

Mean	4.2109375
Standard Error	0.607370884
Median	3
Mode	2
Standard Deviation	4.858967073
Sample Variance	23.60956101
Kurtosis	11.80915912
Skewness	2.823372753
Range	30
Minimum	0
Maximum	30
Sum	269.5
Count	64
Confidence Level(95.0%)	1.213733862

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