



Appraiser Survey Results: Central Air, Pool, Outbuilding, "As-is" Value Site Improvements

Appraisers were asked to estimate the impact on value of features above.

No central air in a Q3 house	3.63%
No central air in a Q4 house	2.73%
No central air in a Q5 house	2.11%
In-ground pool in cold winter climate	2.85%
In-ground pool in mild winter climate	4.01%
In-ground pool in warm winter climate	5.96%
Pole Building with gravel floor 40 x 60	\$13,173
Steel Building with concrete floor and power 24 x 40	\$16,752
"As-is" Site Improvements including city sewer and water	3.94%
"As-is" Site Improvements including well and septic	4.21%

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 64 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 page 2.

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

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