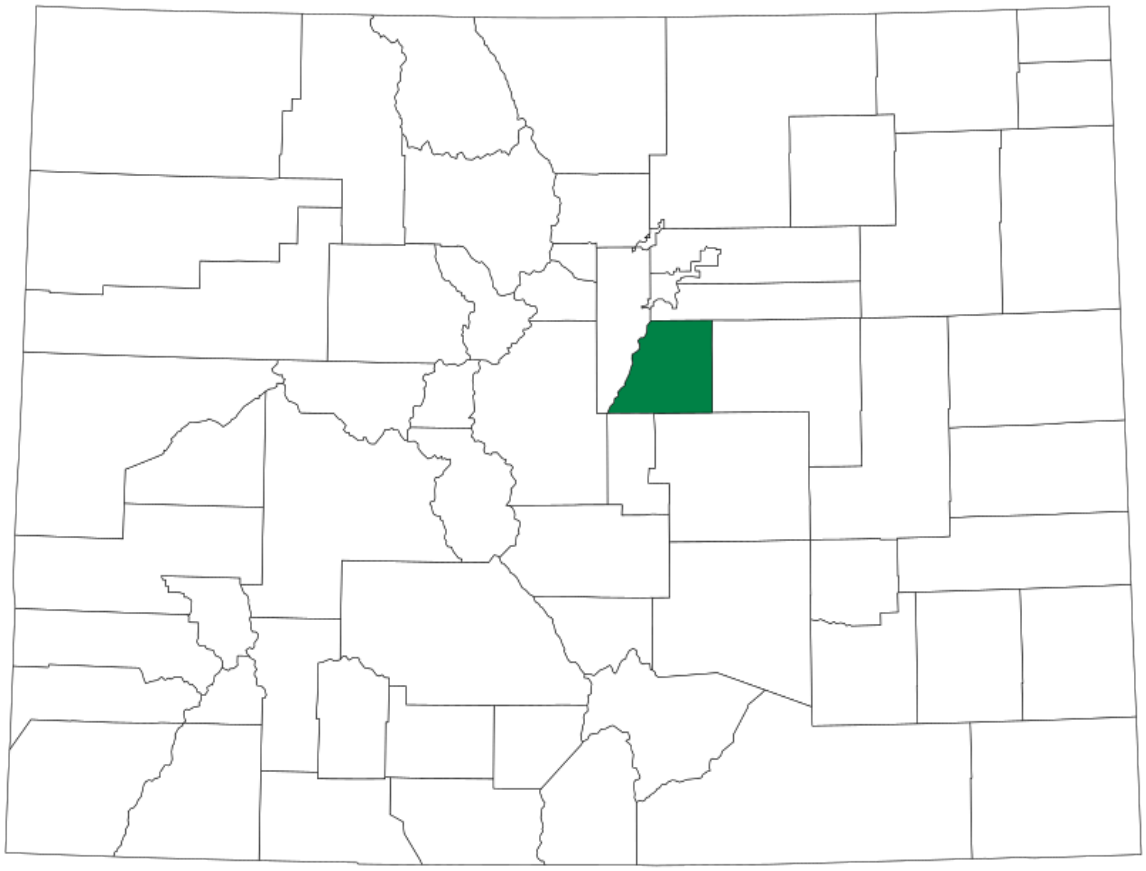
San Matteo

DATA ANALYTICS

2025 Property Assessment Study

Douglas County



September 15, 2025

Natalie Castle
Director of Research, Colorado Legislative Council
Room 029, 200 East Colfax Avenue
Denver, CO 80203

San Matteo Data Analytics (SMDA) respectfully submits the **Final Report regarding the 2025 Colorado Property Assessment Study for Douglas County**. This report summarizes the results of both a procedural review and a statistical analysis.

The **procedural review** evaluated local assessment practices, including valuation methods of residential, commercial, agricultural properties, as well as natural resources, personal property, possessory interests, and subdivision discounting. It also examined processes related to the development of economic areas, and sales qualification.

The **statistical analysis** measured compliance with statutory assessment levels for vacant land, residential, and commercial/industrial properties.

We value the opportunity to support the State of Colorado in ensuring fair and consistent property assessments. Please contact us if you have any questions or need additional details regarding these reports.

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1. Statistical Overview

Compliance and Evaluations

Douglas County was found to be in compliance.

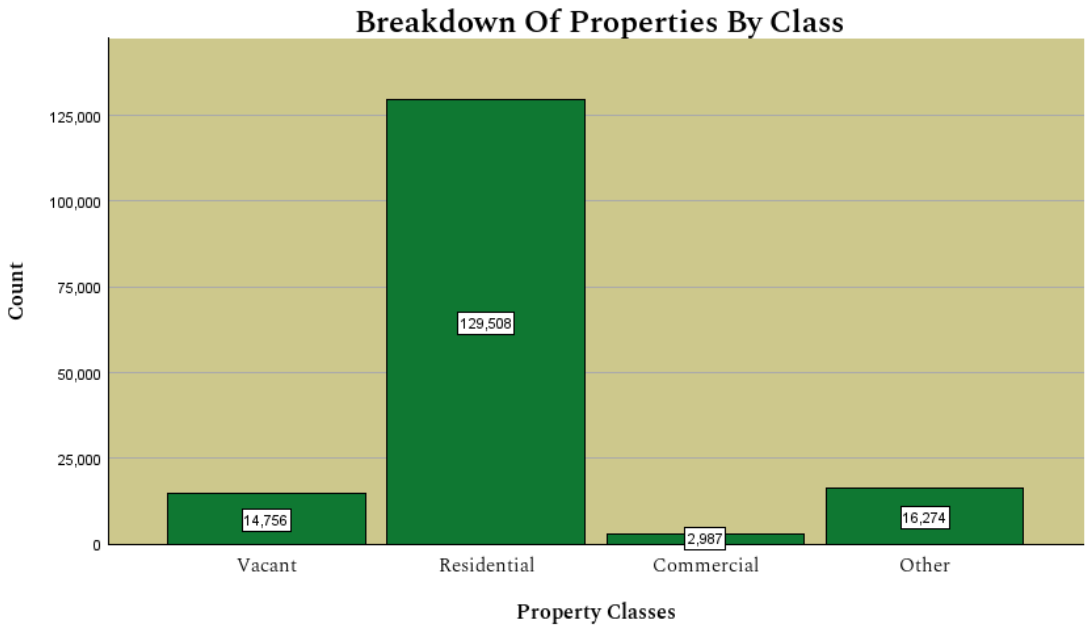
	Result	Value
Vacant Land		
Median Sales Ratio	Pass	0.95
Coefficient of Dispersion	Pass	18.11%
Time Adjustments	Pass	0.093
Price Related Differential	Sufficient	1.17
Price Related Bias	Sufficient	-0.04
Sold/Unsold Similarity	Sufficient	
Qualified Sales > 50%	Yes	

	Result	Value
Residential		
Median Sales Ratio	Pass	1.00
Coefficient of Dispersion	Pass	6.10%
Time Adjustments	Pass	0.000
Price Related Differential	Sufficient	1.01
Price Related Bias	Sufficient	-0.01
Sold/Unsold Similarity	Sufficient	
Qualified Sales > 50%	Yes	

	Result	Value
Commercial/Industrial		
Median Sales Ratio	Pass	0.98
Coefficient of Dispersion	Pass	12.09%
Time Adjustments	Pass	0.500
Price Related Differential	Sufficient	1.01
Price Related Bias	Sufficient	-0.01
Sold/Unsold Similarity	Sufficient	
Qualified Sales > 50%	Yes	

Property Types

Below is a breakdown of the property types of the 163,525 parcels in Douglas County.



2. Vacant Land

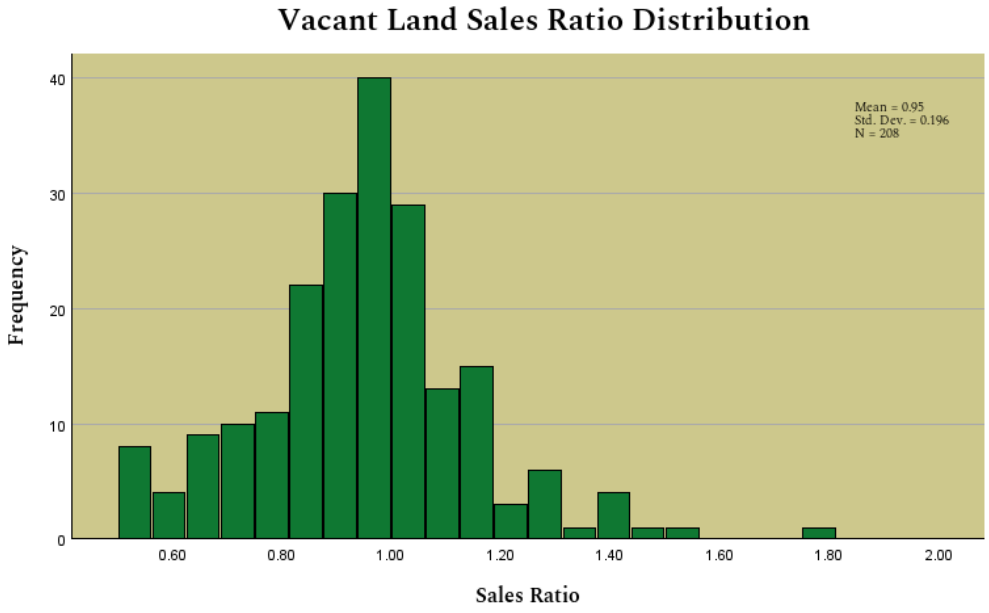
Overview

Douglas was found to be compliant for Vacant Land properties.

	Result	Value
Vacant Land		
Median Sales Ratio	Pass	0.95
Coefficient of Dispersion	Pass	18.11%
Time Adjustments	Pass	0.093
Price Related Differential	Sufficient	1.17
Price Related Bias	Sufficient	-0.04
Sold/Unsold Similarity	Sufficient	
Qualified Sales > 50%	Yes	

Vacant Land Median Sales Ratio

The median sales ratio (MSR) tests how close the Assessor's valuations (estimates of market value) are to the true market value. The distribution of these sales ratios should be centered around 1.00. The Vacant Land MSR for Douglas County was calculated to be 0.95, which is not within the acceptable statistical range of 0.95 to 1.05 established by the State Board of Equalization (SBOE). We trimmed zero sales during the development of this analysis. The MSR was also calculated for all applicable subclass, neighborhoods, economic areas, size and valuation strata identified by the auditor. See appendix for more details.

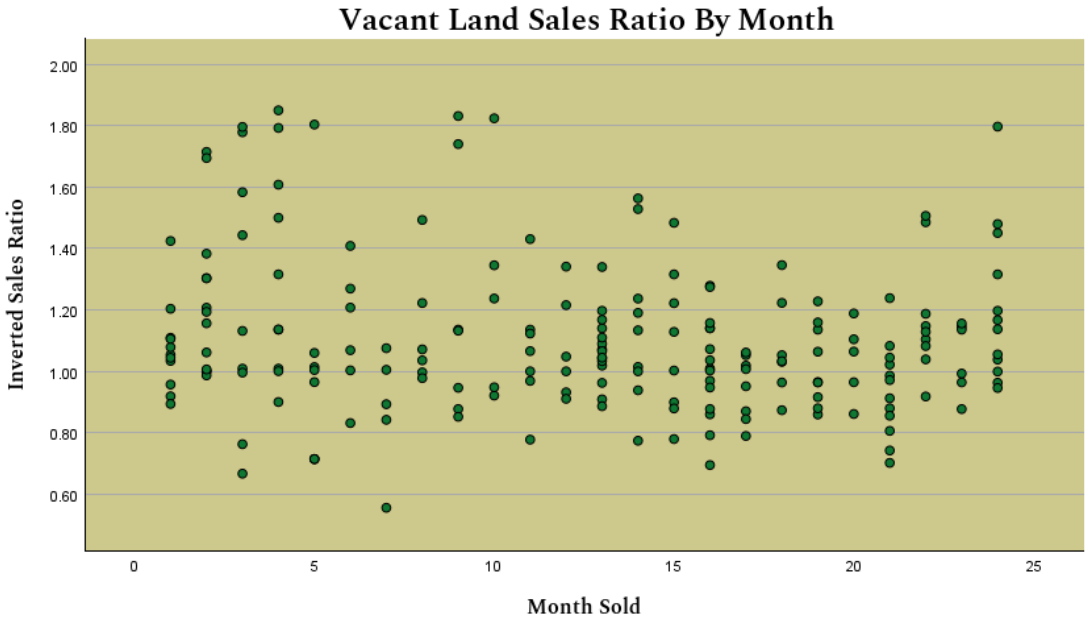


Vacant Land Coefficient of Dispersion

The Coefficient of Dispersion (COD) tests for undesirable variance in the valuations. The variance in sales ratios should be as small as possible. The COD for Vacant Land properties in Douglas County was calculated at 18.11% which is within the acceptable statistical standard of 20.99% or less established by the State Board of Equalization (SBOE). The COD was also calculated for all applicable class, subclass, neighborhoods, economic areas, and valuation strata identified by the auditor. See appendix for more details.

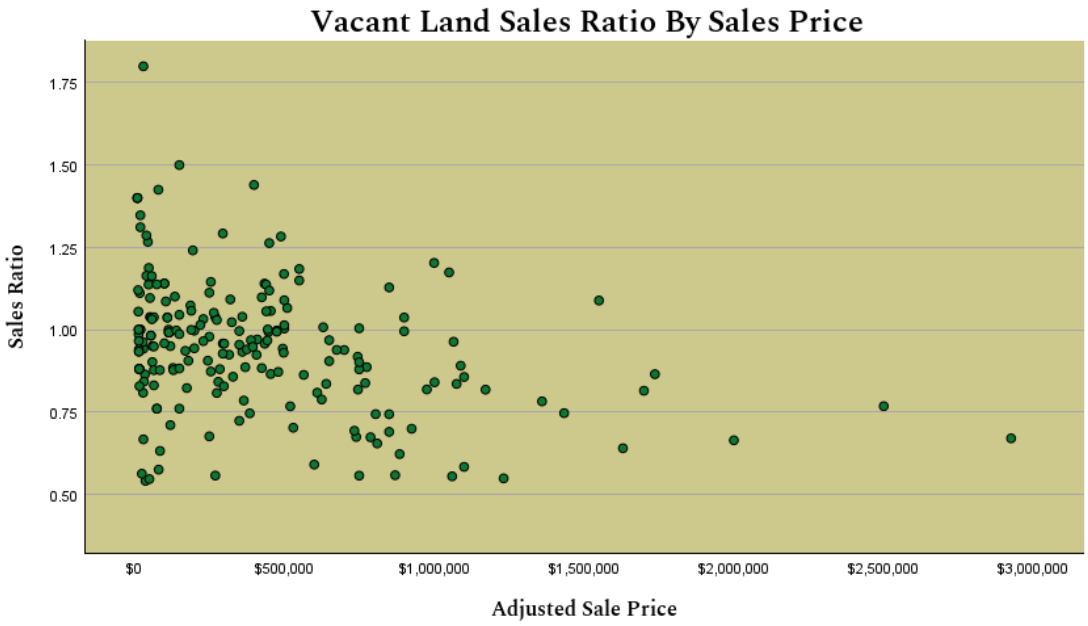
Vacant Land Market (Time) Adjustments

All previous statistics used the time-adjusted sales price to ensure that the effect of time on sales ratios has been appropriately addressed. There should be a consistent and reasonable time adjustment methodology, not one tailored to improve sales ratios. We examined the sales ratios over the 24 - month period of sales. There does not appear to be a significant effect of time on Douglas's Vacant Land sales ratios.



Vacant Land Price Related Differential

The Price Related Differential (PRD) tests for differences in the valuations of high and low value sold properties. Sales ratios should be consistent across the range of sale prices so the PRD should be very close to 1.00. The PRD for Douglas County was calculated at 1.17, which is not within the acceptable range of 0.98 to 1.03 established by the International Association of Assessing Officers (IAAO). The PRD was also calculated for all applicable class, subclass, neighborhoods, economic areas, size, and valuation strata identified by the auditor. This test, combined with the Price Related Bias results, indicates that although the measure falls slightly outside the IAAO's acceptable range, it does not appear to present a concern. See appendix for more details.



Vacant Land Price Related Bias

The Price Related Bias (PRB) measures whether assessment levels change systematically with property value. A PRB close to 0.00 indicates that high- and low-value properties are valued consistently, without upward or downward bias in the sales ratios. For Douglas County, the PRB was calculated at -0.04 which is within the acceptable statistical range of -0.05 to 0.05 established by the International Association of Assessing Officers. The PRB was also analyzed across all applicable categories, including property class, subclass, neighborhood, economic area, size, and valuation strata as identified by the auditor. Additional details are provided in the appendix.

Vacant Land Sold/Unsold Comparison

All previous Vacant Land statistics focus only on the compliance of properties that were sold during the Vacant Land data collection period. In order to ensure that the unsold properties are also being valued consistently we evaluate whether or not they were treated the same as the sold properties.

Our default comparison approach utilizes the Mann-Whitney U test (also known as the Wilcoxon rank-sum test), to analyze two samples of sold and unsold properties. First, we compare the price per square foot, followed by the change in price per square foot from last reappraisal to this one, and finally we compare the change in total value from last reappraisal to this one. If necessary, we will also consider the stratified (economic area, neighborhood, improvement abstract, etc.) medians of the following unitary metrics: price per foot, change in price per foot, and change in value. See appendix for more details.

Our study indicates that the Vacant Land sold and unsold properties are treated similarly.

Vacant Land Sales Qualification

All the analysis above, notwithstanding the sold/unsold comparison, relies entirely on qualified sales. In order to ensure that this is a complete and unbiased analysis of assessment practices, we will verify that sales are being correctly coded. We have concluded that Vacant Land sales are being coded in an acceptable way.

There were 220 Vacant Land sales. We have confirmed that more than 50% of all sales were qualified.

3. Residential

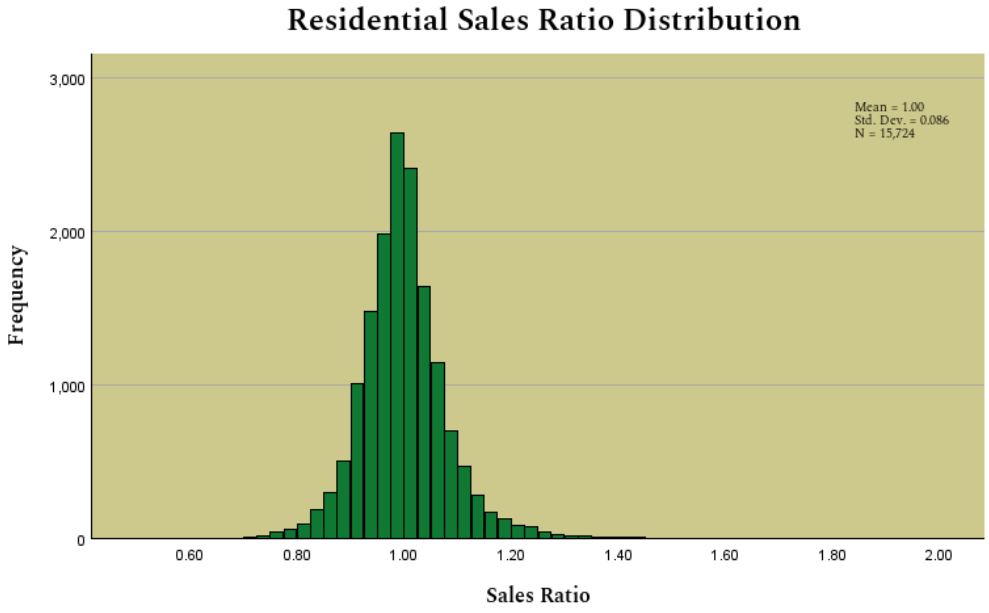
Overview

Douglas County was found to be compliant for Residential properties.

	Result	Value
Residential		
Median Sales Ratio	Pass	1.00
Coefficient of Dispersion	Pass	6.10%
Time Adjustments	Pass	0.000
Price Related Differential	Sufficient	1.01
Price Related Bias	Sufficient	-0.01
Sold/Unsold Similarity	Sufficient	
Qualified Sales > 50%	Yes	

Residential Median Sales Ratio

The median sales ratio (MSR) tests how close the Assessor's valuations (estimates of market value) are to the true market value. The distribution of these sales ratios should be centered around 1.00. The Residential MSR for Douglas County was calculated to be 1.00, which is within the acceptable statistical range of 0.95 to 1.05 established by the State Board of Equalization (SBOE). We trimmed zero sales during the development of this analysis. The MSR was also calculated for all applicable subclass, neighborhoods, economic areas, size and valuation strata identified by the auditor. See appendix for more details.



Residential Coefficient of Dispersion

The Coefficient of Dispersion (COD) tests for undesirable variance in the valuations. The variance in sales ratios should be as small as possible. The COD for Residential properties in Douglas County was calculated at 6.10% which is within the acceptable statistical standard of 15.99% or less established by the State Board of Equalization (SBOE). The COD was also calculated for all applicable class, subclass, neighborhoods, economic areas, and valuation strata identified by the auditor. See appendix for more details.

Residential Market (Time) Adjustments

All previous statistics used the time-adjusted sales price to ensure that the effect of time on sales ratios has been appropriately addressed. There should be a consistent and reasonable time adjustment methodology, not one tailored to improve sales ratios. We examined the sales ratios over the 24 - month period of sales. There does not appear to be a significant effect of time on Douglas County's Residential sales ratios.

Residential Price Related Differential

The Price Related Differential (PRD) tests for differences in the valuations of high and low value sold properties. Sales ratios should be consistent across the range of sale prices so the PRD should be very close to 1.00. The PRD for Douglas County was calculated at 1.01, which is within the acceptable range of 0.98 to 1.03 established by the International Association of Assessing Officers (IAAO). The PRD was also calculated for all applicable class, subclass, neighborhoods, economic areas, size, and valuation strata identified by the auditor. See appendix for more details.

Residential Price Related Bias

The Price Related Bias (PRB) measures whether assessment levels change systematically with property value. A PRB close to 0.00 indicates that high- and low-value properties are valued consistently, without upward or downward bias in the sales ratios. For Douglas County, the PRB was calculated at -0.01 which is within the acceptable statistical range of -0.05 to 0.05 established by the International Association of Assessing Officers. The PRB was also analyzed across all applicable categories, including property class, subclass, neighborhood, economic area, size, and valuation strata as identified by the auditor. Additional details are provided in the appendix.

Residential Sold/Unsold Comparison

All previous Residential statistics focus only on the compliance of properties that were sold during the Residential data collection period. In order to ensure that the unsold properties are also being valued consistently we evaluate whether or not they were treated the same as the sold properties.

Our default comparison approach utilizes the Mann-Whitney U test (also known as the Wilcoxon rank-sum test), to analyze two samples of sold and unsold properties. First, we compare the price per square foot, followed by the change in price per square foot from last reappraisal to this one, and finally we compare the change in total value from last reappraisal to this one. If necessary, we will also consider the stratified (economic area, neighborhood, improvement abstract, etc.) medians of the following unitary metrics: price per foot, change in price per foot, and change in value. See appendix for more details.

Our analysis indicates that the Residential sold and unsold properties are treated similarly. See appendix for more details.

Residential Sales Qualification

All the analysis above, notwithstanding the sold/unsold comparison, relies entirely on qualified sales. In order to ensure that this is a complete and unbiased analysis of assessment practices, we will verify that sales are being correctly coded. We have concluded that Residential sales are being coded in an acceptable way.

There were 15,806 Residential sales. We have confirmed that more than 50% of all sales were qualified.

4. Commercial and Industrial

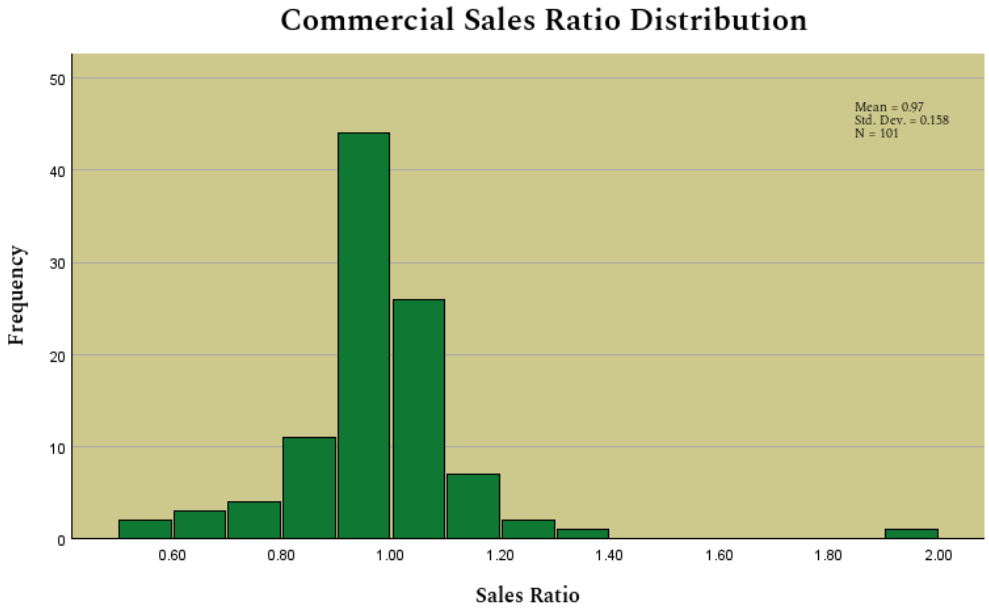
Overview

Douglas was found to be compliant for Commercial and Industrial properties.

	Result	Value
Commercial and Industrial		
Median Sales Ratio	Pass	0.98
Coefficient of Dispersion	Pass	12.09%
Time Adjustments	Pass	0.500
Price Related Differential	Sufficient	1.01
Price Related Bias	Sufficient	-0.01
Sold/Unsold Similarity	Sufficient	
Qualified Sales > 50%	Yes	

Commercial Median Sales Ratio

The median sales ratio (MSR) tests how close the Assessor's valuations (estimates of market value) are to the true market value. The distribution of these sales ratios should be centered around 1.00. The Commercial MSR for Douglas County was calculated to be 0.98, which is within the acceptable statistical range of 0.95 to 1.05 established by the State Board of Equalization (SBOE). We trimmed zero sales during the development of this analysis. The MSR was also calculated for all applicable subclass, neighborhoods, economic areas, size and valuation strata identified by the auditor. See appendix for more details.

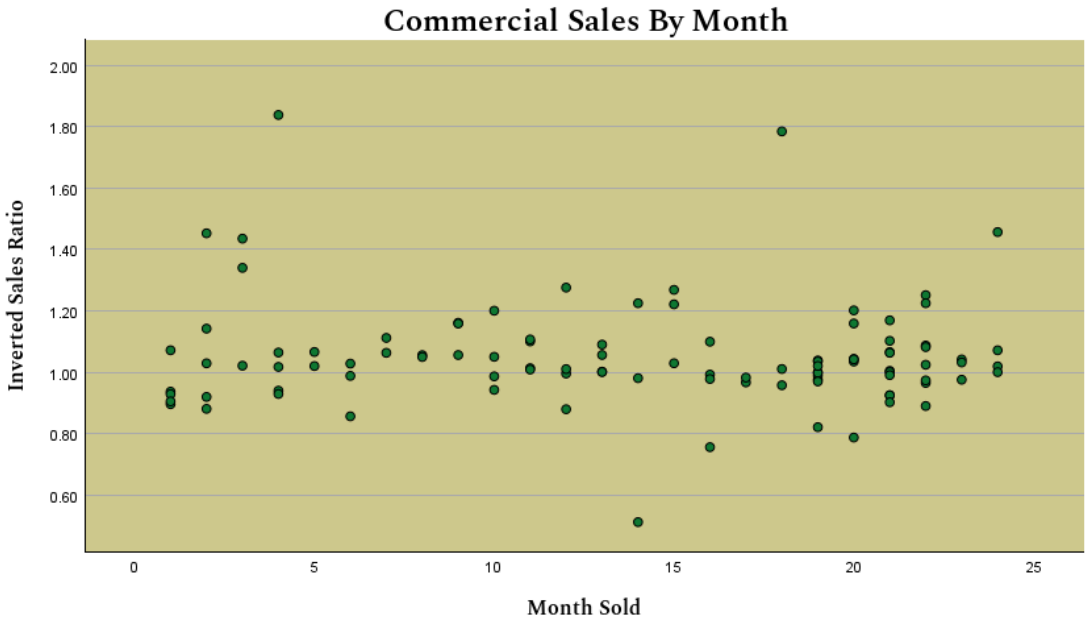


Commercial Coefficient of Dispersion

The Coefficient of Dispersion (COD) tests for undesirable variance in the valuations. The variance in sales ratios should be as small as possible. The COD for Commercial properties in Douglas County was calculated at 12.09% which is within the acceptable statistical standard of 20.99% or less established by the State Board of Equalization (SBOE). The COD was also calculated for all applicable class, subclass, neighborhoods, economic areas, and valuation strata identified by the auditor. See appendix for more details.

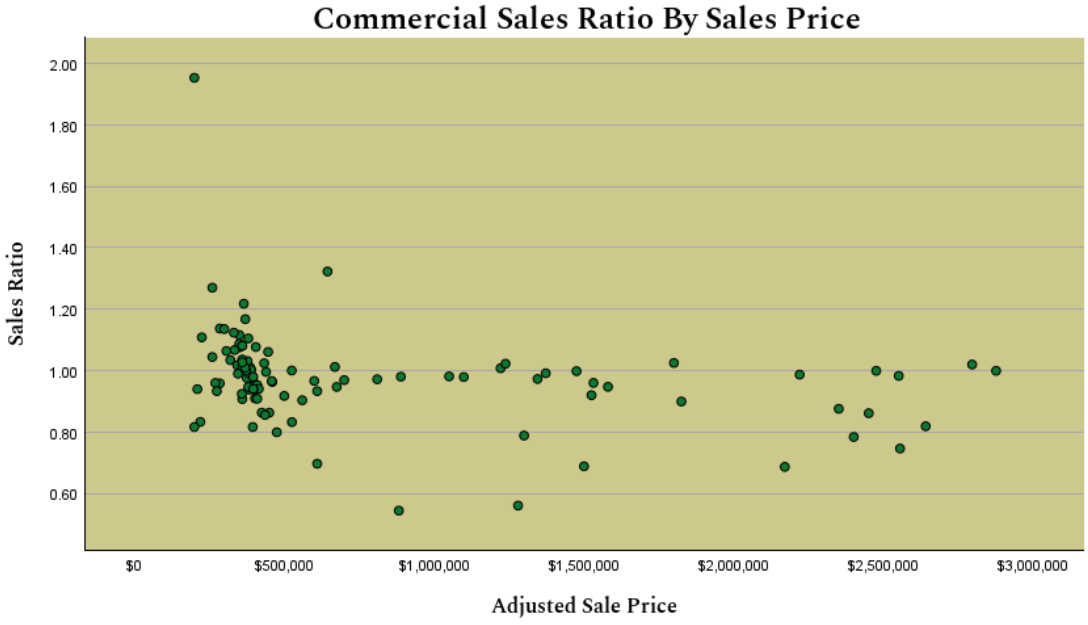
Commercial Market (Time) Adjustments

All previous statistics used the time-adjusted sales price to ensure that the effect of time on sales ratios has been appropriately addressed. There should be a consistent and reasonable time adjustment methodology, not one tailored to improve sales ratios. We examined the sales ratios over the 24 - month period of sales. There does not appear to be a significant effect of time on Douglas County's Commercial sales ratios.



Commercial Price Related Differential

The Price Related Differential (PRD) tests for differences in the valuations of high and low value sold properties. Sales ratios should be consistent across the range of sale prices so the PRD should be very close to 1.00. The PRD for Douglas County was calculated at 1.01, which is within the acceptable range of 0.98 to 1.03 established by the International Association of Assessing Officers (IAAO) The PRD was also calculated for all applicable class, subclass, neighborhoods, economic areas, size, and valuation strata identified by the auditor. See appendix for more details.



Commercial Price Related Bias

The Price Related Bias (PRB) measures whether assessment levels change systematically with property value. A PRB close to 0.00 indicates that high- and low-value properties are valued consistently, without upward or downward bias in the sales ratios. For Douglas County, the PRB was calculated at -0.01 which is within the acceptable statistical range of -0.05 to 0.05 established by the International Association of Assessing Officers. The PRB was also analyzed across all applicable categories, including property class, subclass, neighborhood, economic area, size, and valuation strata as identified by the auditor. Additional details are provided in the appendix.

Commercial Sold/Unsold Comparison

All previous commercial statistics focus only on the compliance of properties that were sold during the Commercial data collection period. In order to ensure that the unsold properties are also being valued consistently we evaluate whether or not they were treated the same as the sold properties.

Our default comparison approach utilizes the Mann-Whitney U test (also known as the Wilcoxon rank-sum test), to analyze two samples of sold and unsold properties. First, we compare the price per square foot, followed by the change in price per square foot from last reappraisal to this one, and finally we compare the change in total value from last reappraisal to this one. If necessary, we will also consider the stratified (economic area, neighborhood, improvement abstract, etc.) medians of the following unitary metrics: price per foot, change in price per foot, and change in value. See appendix for more details.

The study shows that commercial sold and unsold properties are treated similarly when a subclass contains a significant number of sales. See the appendix for more information.

Commercial Sales Qualification

All the analysis above, notwithstanding the sold/unsold comparison, relies entirely on qualified sales. In order to ensure that this is a complete and unbiased analysis of assessment practices, we will verify that sales are being correctly coded. We have concluded that Commercial sales are being coded in an acceptable way.

There were 133 commercial sales. We have confirmed that more than 50% of all sales were qualified.

5. Agriculture

Methodology

SMDA conducted a comprehensive review of county records to evaluate the classification and valuation of agricultural lands. The review included an assessment of major land categories, such as sprinkler irrigated farmland (4107), flood irrigated (4117), dry farmland (4127), meadow hay (4137), grazing areas (4147), orchard land (4157), farm/ranch waste land (4167), and forest land (4177).

Douglas County applied the following methods to determine agricultural land classification and appropriate valuation methodology:

- Aerial photos are available and used for land classification
- Soil conservation guidelines determine land productivity classes
- Crop rotations are documented using a ten-year average
- Expenses reflect a ten-year average of typical landlord costs
- Ten-year crop yield averages are based on local and supporting data
- Grazing land is classified by its ten-year carrying capacity
- Orchards are correctly classified but valued at irrigated land rates
- Forest land is classified properly and valued like surrounding parcels
- Acreage totals for all classes and subclasses are verified
- A 13% capitalization rate is correctly applied

Additionally, SMDA checked the county records to confirm that the commodity prices and expense data provided by the Property Tax Administrator (PTA) were accurately applied. Guidance from the **Assessor's Reference Library** (**ARL**)**, Volume 3, Chapter 5** was referenced where appropriate.

Conclusions

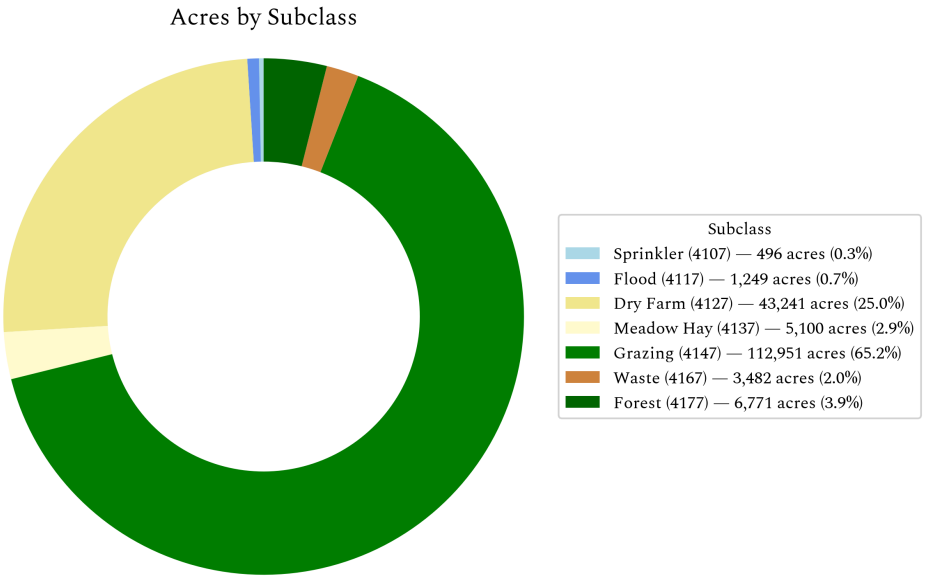
Based on the review and analysis, SMDA considers Douglas County's appraisal practices for agricultural property acceptable and in alignment with statutory requirements. The directives, commodity pricing, and expense figures issued by the Property Tax Administrator were correctly applied throughout the process. County-reported yields closely matched the figures published by Colorado Agricultural Statistics, and the expenses used were both reasonable and within allowable ranges. Grazing land carrying capacities were properly supported and fell within acceptable limits. Overall, the analysis confirms that the valuation approach is sound, well-documented, and based on reliable data.

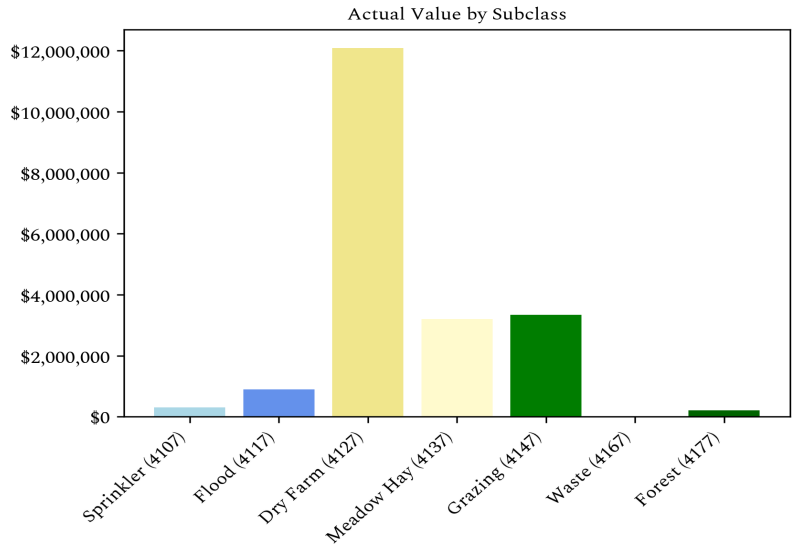
Recommendations

None

Agricultural Land Breakdown

Abstract	Class	Acres	Actual Value	Actual Value/Acre	Assessed Value
4107	Sprinkler	496	$299,299	$603.43	$80,810
4117	Flood	1,249	$901,105	$721.46	$243,270
4127	Dry Farm	43,241	$12,083,042	$279.43	$3,262,360
4137	Meadow Hay	5,100	$3,203,635	$628.16	$865,020
4147	Grazing	112,951	$3,340,006	$29.57	$901,700
4167	Waste	3,482	$21,238	$6.10	$5,610
4177	Forest	6,771	$212,408	$31.37	$57,320





6. Agriculture Non-Integral

Methodology

SMDA reviewed Douglas County's processes to determine whether it complied with the guidelines outlined in the **Assessor's Reference Library** (**ARL**)**, Volume 3, Chapter 5.** The review focused on Douglas County's approach to identifying land associated with residential improvements on farms and ranches, as well as land beneath residential structures that may not be integral to an agricultural operation under **§39-1-102, C.R.S.**

For Residential Improvements on a Farm or Ranch

When identifying land under residential structures on a **farm or ranch** that is determined to be not integral to agricultural activity, Douglas County applied the following discovery methods:

- Questionnaires
- Field Inspections
- Phone Interviews
- In Person Interviews
- Written Correspondence
- Personal Knowledge of Occupants
- Aerial Photography

For Residential Improvements Not Integral to Agriculture

When identifying land under residential structures that is determined to be **not integral** to agricultural activity, Douglas County applied the following discovery methods:

- Questionnaires
- Field Inspections
- Phone Interviews
- In Person Interviews
- Written Correspondence
- Personal Knowledge of Occupants
- Aerial Photography

Conclusions

Douglas County followed the procedures set forth by the **Division of Property Taxation** for classifying and valuing land associated with residential improvements, whether or not the property is considered integral to agricultural use.

Recommendations

None

7. Economic Areas

Methodology

Douglas County submitted written narratives and maps outlining its economic areas. SMDA reviewed these materials for clarity, logical consistency, and alignment between the descriptions and mapped boundaries.

Conclusions

Each area is affected by comparable market conditions, which supports consistent property valuations and helps maintain uniformity in values among properties with similar characteristics within the same geographic region.

Recommendations

None

8. Natural Resources

Earth and Stone

Methodology

In accordance with the **Assessor's Reference Library** (**ARL**), **Volume 3, Chapter 6: Natural Resource Valuation Procedures**, the county used the **income approach** to determine the value of earth and stone production. Production totals, measured in tons, were multiplied by the economic royalty rate established by the **Division of Property Taxation** to calculate projected income. This income figure was then capitalized using the **Hoskold factor**, which is based on the expected life of the reserves or lease. Since production data is not collected by any state or private agency, the operator is the source for both estimated tonnage and reserve life. Ultimately, valuation depends on two primary variables: the quantity of material and the remaining productive life of the site.

Conclusions

The county applied the correct formulas and state guidelines to earth and stone resources.

Recommendations

None

9. Personal Property

Methodology

SMDA reviewed Douglas County's personal property assessment procedures for compliance with the **Assessor's Reference Library** (**ARL**), **Volume 5** and the requirements of the **State Board of Equalization** (**SBOE**). The SBOE mandates the use of ARL Volume 5, which includes up-to-date discovery processes, classification methods, documentation standards, economic life tables, cost factor tables, depreciation schedules, and level-of-value adjustment tables.

The county provided a current personal property audit plan for the 2025 valuation period along with a list of audited businesses, which matched the plan requirements. For counties with populations over 100,000, including Douglas, a statistically valid sample of audited schedules was selected to confirm compliance with state laws and Property Tax Administrator guidelines. To identify and discover personal property accounts, Douglas County used several methods:

- Public record documents
- MLS listing or sold books
- Chamber of Commerce/Economic Development contacts
- Local publications
- Personal observation
- Questionnaires

The county follows all classification, documentation, and valuation procedures recommended by the **Division of Property Taxation** (**DPT**), including the prescribed cost factor tables, depreciation schedules, and level-of-value adjustment factors.

Douglas County also employed a structured audit process using multiple audit triggers to select accounts for review:

- Accounts close to $56,000 actual value exemption status
- Accounts protested with substantial disagreement
- Non-filing taxpayers
- Businesses with no deletions or additions for 2 or more years
- Same business type or use
- Accounts with omitted property
- Incomplete or inconsistent declarations
- Accounts with greater than 10% change
- New businesses filing for the first time
- Accounts with obvious discrepancies
- Businesses in selected area

Conclusions

Douglas County

Douglas County implemented effective discovery, classification, documentation, valuation, and auditing practices for personal property assessments. The county's procedures align with ARL Volume 5, meet all SBOE requirements, and demonstrate statistical compliance.

Recommendations

None

10. Possessory Interest

Methodology

SMDA reviewed Douglas County's discovery and valuation of possessory interest properties to ensure they correctly applied the guidelines outlined in the **Assessor's Reference Library** (**ARL**)**, Volume 3, Chapter 7,** in accordance with **§39-1-103**(**17**)(**a**)(**II**)**, C.R.S.** Possessory interest refers to a private right to occupy or use government-owned property granted through a lease, license, permit, concession, contract, or other agreement, as defined by the Property Tax Administrator.

SMDA reviewed Douglas County's assessment procedures for compliance with these guidelines for **agricultural and commercial** possessory interests. The county confirmed the completeness of its discovery process and whether it was confident that all relevant possessory interest properties had been identified and placed on the assessment roll.

Conclusions

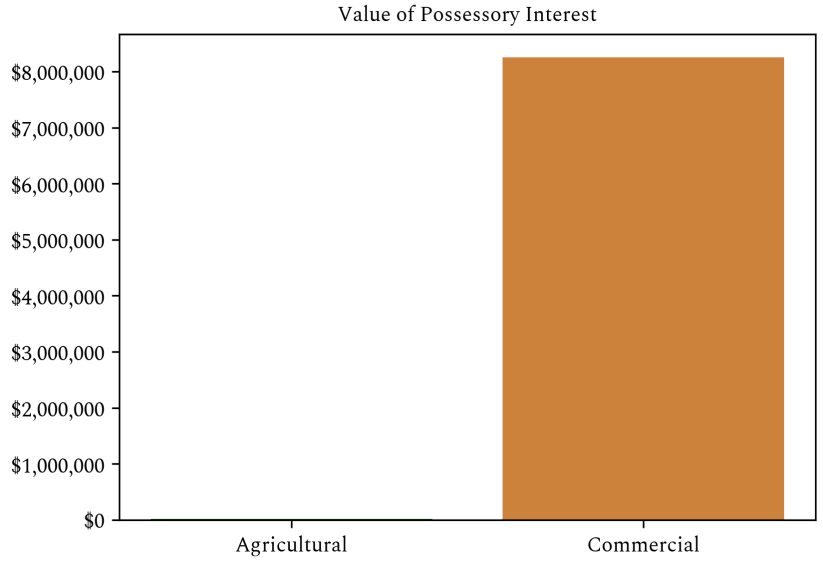
Douglas County established an effective discovery process to ensure that possessory interest properties were added to the tax roll. The county consistently applied the proper procedures and valuation methods according to State guidelines, resulting in accurate and compliant assessments.

Recommendations

None

Possessory Interest Breakdown

Possessory Interest Type	Value
Agricultural	$17,768
Commercial	$8,254,409



11. Sales Verification

Methodology

As part of the Property Assessment Study, SMDA conducted an evaluation of Douglas County's procedures for verifying real estate sales. This review was guided by the relevant provisions of the **Colorado Revised Statutes:**

> A representative body of sales is required when considering the market approach to appraisal.
>
> *(8) In any case in which sales prices of comparable properties within any class or subclass are utilized when considering the market approach to appraisal in the determination of actual value of any taxable property, the following limitations and conditions shall apply:*
>
> *(a)(I) Use of the market approach shall require a representative body of sales, including sales by a lender or government, sufficient to set a pattern, and appraisals shall reflect due consideration of the degree of comparability of sales, including the extent of similarities and dissimilarities among properties that are compared for assessment purposes. In order to obtain a reasonable sample and to reduce sudden price changes or fluctuations, all sales shall be included in the sample that reasonably reflect a true or typical sales price during the period specified in section **39-1-104 (10.2)**. Sales of personal property exempt pursuant to the provisions of sections **39-3-102, 39-3-103, and 39-3-119 to 39-3-122** shall not be included in any such sample.*
>
> *(b) Each such sale included in the sample shall be coded to indicate a typical, negotiated sale, as screened and verified by the assessor. **(39-1-103, C.R.S.)***
>
> The assessor is required to use sales of real property only in the valuation process.
>
> *(8)(f) Such true and typical sales shall include only those sales which have been determined on an individual basis to reflect the selling price of the real property only or which have been adjusted on an individual basis to reflect the selling price of the real property only. **(39-1-103, C.R.S.)***

SMDA examined Douglas County's sales verification practices for the 2025 valuation period by reviewing a selection of sales from Douglas County's master sales list. A total of 50 unqualified and 2 qualified sales were analyzed. Of these, the 50 unqualified sales provided clear and supportable reasons for disqualification. 10 qualified sales were corrected to be unqualified.

Where fewer than **50% of sales** were qualified within a property class, SMDA evaluated the reasons for disqualification within any subclass comprising **20% or more** of the class (by property count or value). When indications arose that sales data might be inadequate, unrepresentative, or incorrectly disqualified, SMDA discussed these cases directly with the assessor. SMDA also reviewed disqualified sales by assigned code to confirm consistent application; additional analysis was performed if SMDA discovered discrepancies.

Because Douglas County maintained a sufficient percentage of qualified sales, an in-depth subclass analysis was not required.

Conclusions

Based on SMDA's review, Douglas County performed adequately in verifying sales and applying statutory requirements.

Recommendations

None

12. Subdivision Discounting

Methodology

SMDA reviewed Douglas County's subdivision discounting practices to ensure compliance with **§39-1-103(14), C.R.S.** The review confirmed that discounting was applied to subdivisions where fewer than 80% of vacant lots had been sold. For each qualifying subdivision, an absorption rate was estimated to reflect the expected timeframe for selling the remaining parcels. Using the Summation Method and following the Division of Property Taxation guidelines, an appropriate discount rate was developed to account for the anticipated holding period and associated carrying costs.

Conclusions

Douglas County properly applied discounting procedures for qualifying subdivisions. The county's estimates of absorption periods, discount rates, and lot values are consistent with statutory requirements and state-recommended methodologies.

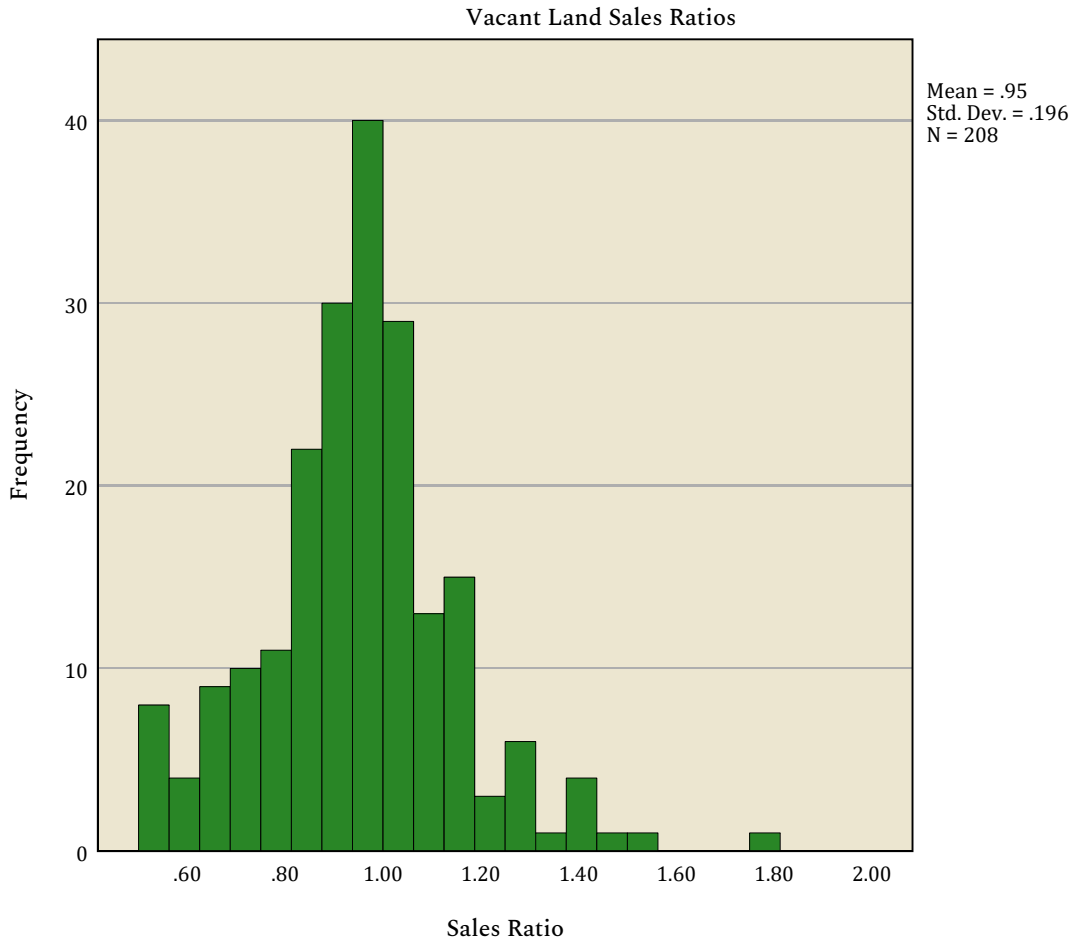
Recommendations

None

13. Appendix

OVERALL Vacant Land: Sales Ratio Distribution

Graph



OVERALL Vacant Land: Central Tendencies

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

N	Median	Coefficient of Dispersion
220	.948	.181

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Price Related Bias	Price Related Differential
-.045	1.168

OVERALL Vacant Land: Sales Price by Sales Ratio

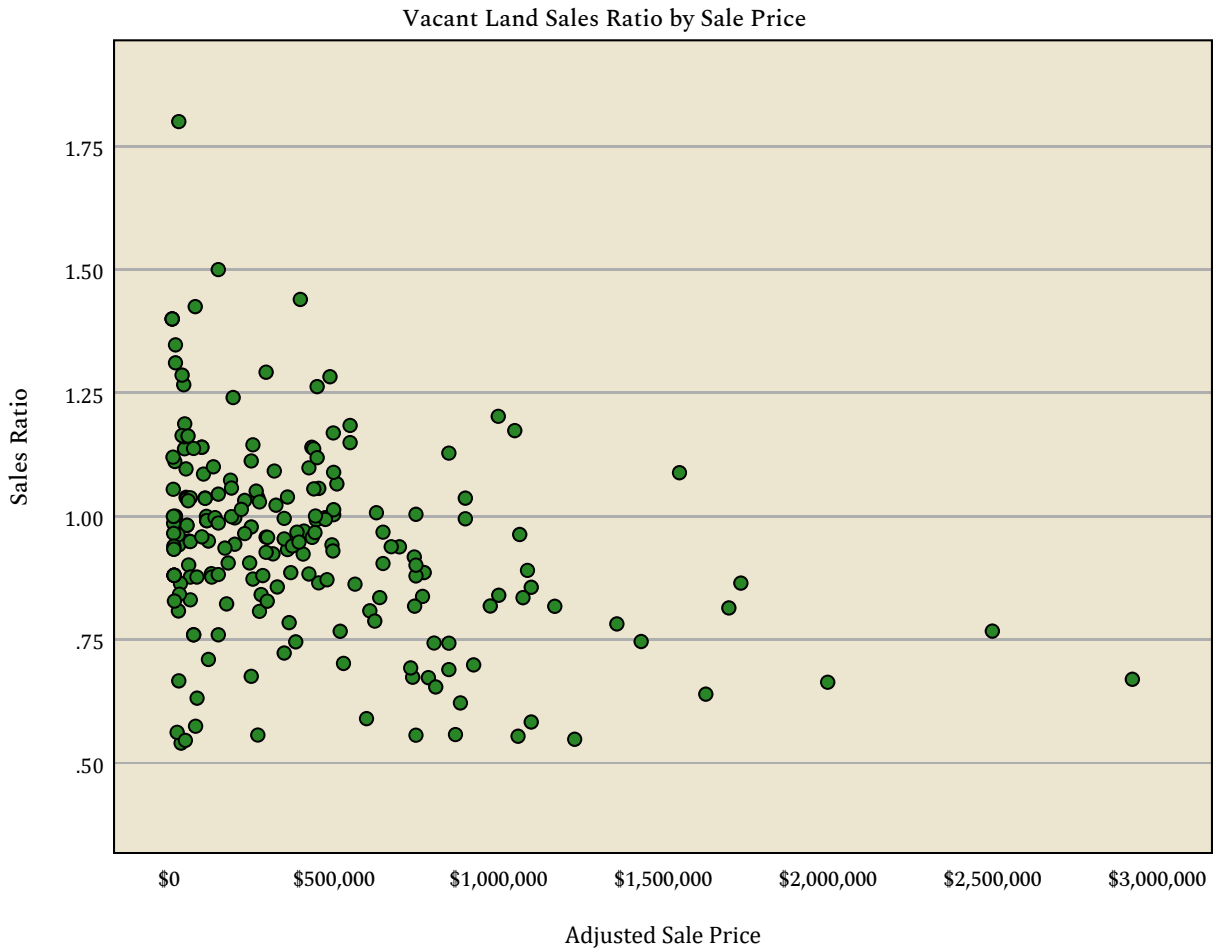
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.999	.021		48.437	<.001
	Adjusted Sale Price	-7.875E-8	.000	-.275	-4.219	<.001

a. Dependent Variable: Sales Ratio

Graph



OVERALL Vacant Land: Months by Inverted Sales Ratio

Regression

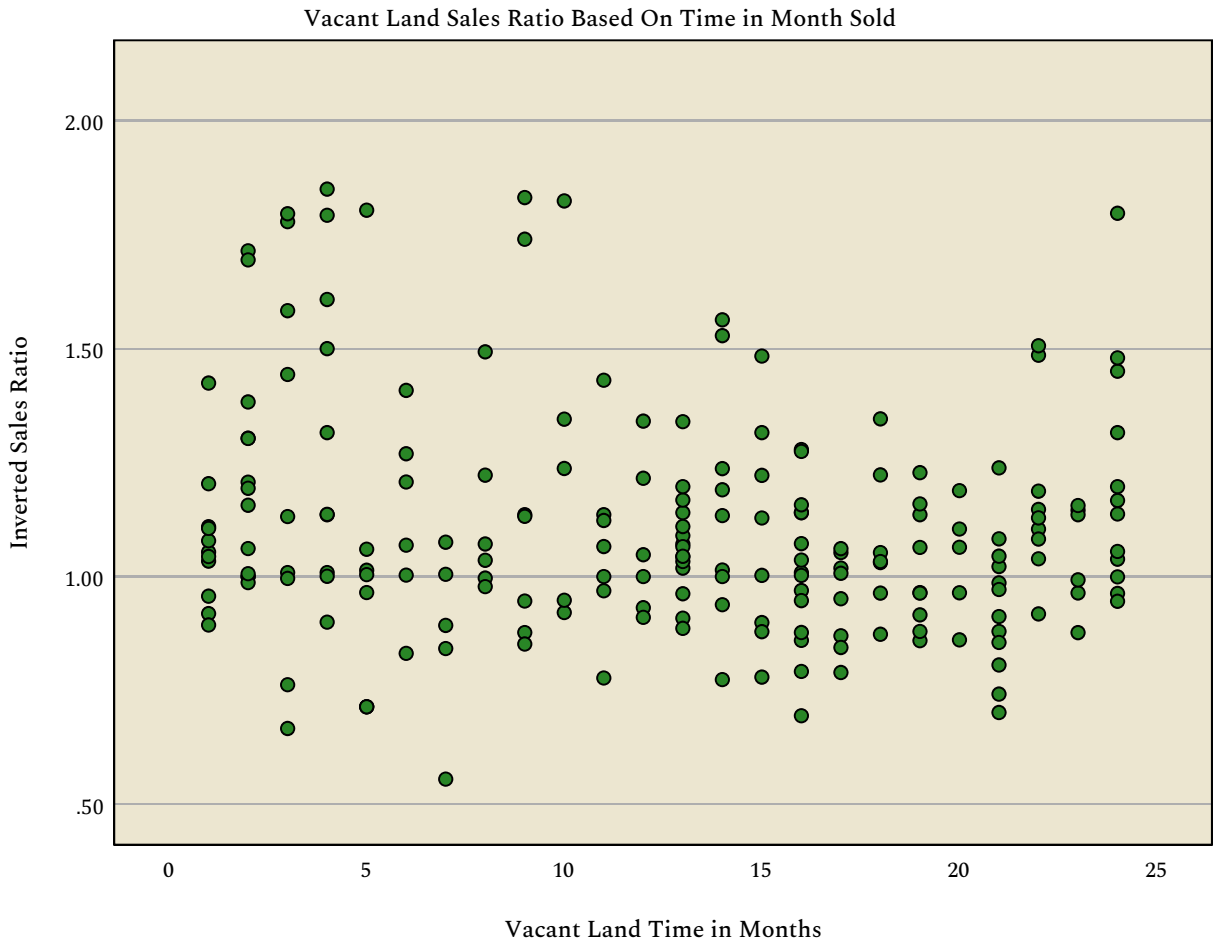
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.175	.040		29.751	<.001
	Vacant Land Time in Months	-.005	.003	-.114	-1.690	.092

a. Dependent Variable: Inverted Sales Ratio

Graph

OVERALL Vacant Land: Months by Inverted Sales Ratio



OVERALL Vacant Land: Descriptive Statistics

Frequencies

Statistics

		Previous Total Value	Current Total Value	Difference in Total Value
N	Valid	220	220	220
	Missing	0	0	0
Mean		$321,345.70	$438,839.94	$117,494.25
Median		$240,519.50	$279,367.50	$5,931.00
Percentiles	2.5	$9,600.00	$14,000.00	-$70,067.18
	25	$76,000.00	$57,837.50	-$5,422.25
	50	$240,519.50	$279,367.50	$5,931.00
	75	$477,818.50	$541,233.75	$62,649.75
	97.5	$1,077,347.22	$2,509,931.82	$1,377,643.35

OVERALL Vacant Land: Mann-Whitney U-Test (Rank-sum)

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Current Total Value is the same across categories of Vacant Land Sold vs. Unsold.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Current Total Value across Vacant Land Sold vs. Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	9739
Mann-Whitney U	627147.500
Wilcoxon W	45937587.500
Test Statistic	627147.500
Standard Error	41227.199
Standardized Test Statistic	-10.186
Asymptotic Sig.(2-sided test)	<.001

Nonparametric Tests

OVERALL Vacant Land: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Total Value is the same across categories of Vacant Land Sold vs. Unsold.	Independent-Samples Mann-Whitney U Test	.049

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

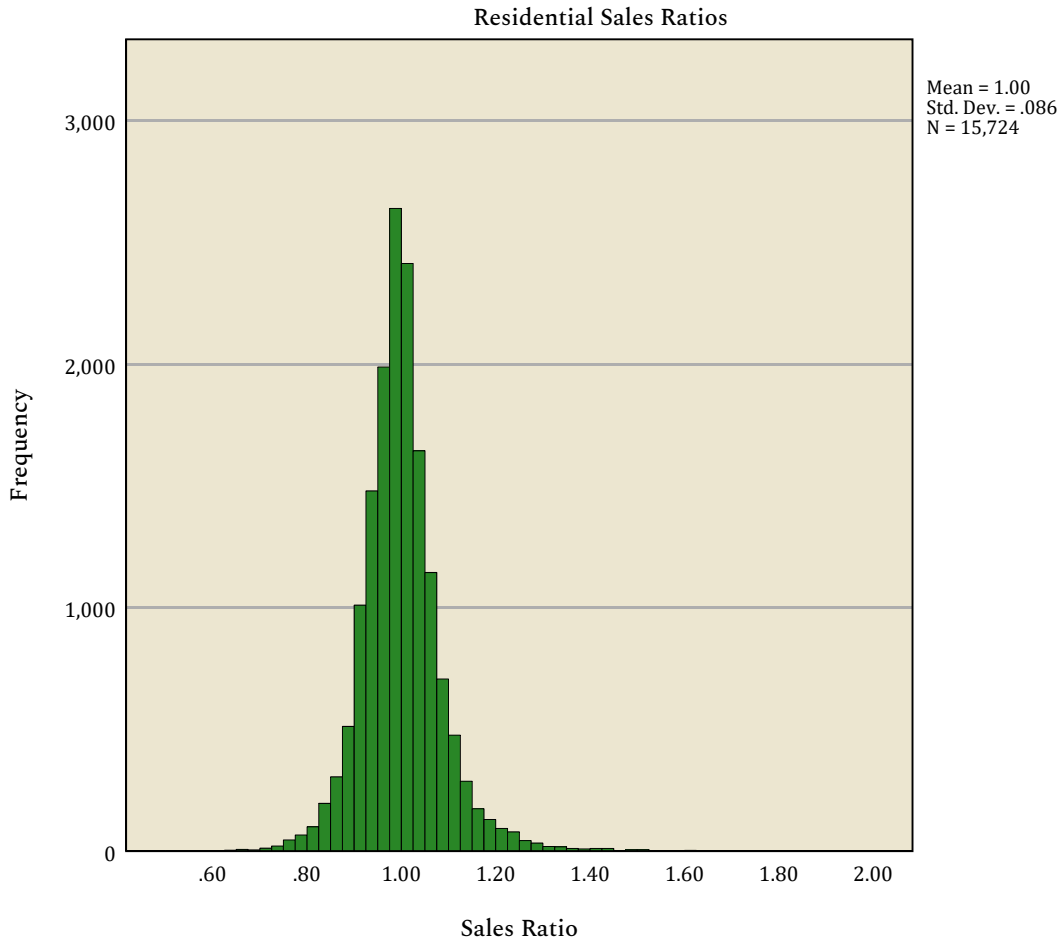
Difference in Total Value across Vacant Land Sold vs. Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	11995
Mann-Whitney U	927420.500
Wilcoxon W	70836820.500
Test Statistic	927420.500
Standard Error	42430.931
Standardized Test Statistic	-1.969
Asymptotic Sig.(2-sided test)	.049

OVERALL Residential: Sales Ratio Distribution

Graph



OVERALL Residential: Central Tendencies

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

N	Median	Coefficient of Dispersion
15806	.996	.061

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Price Related Bias	Price Related Differential
-.011	1.008

OVERALL Residential: Sales Price by Sales Ratio

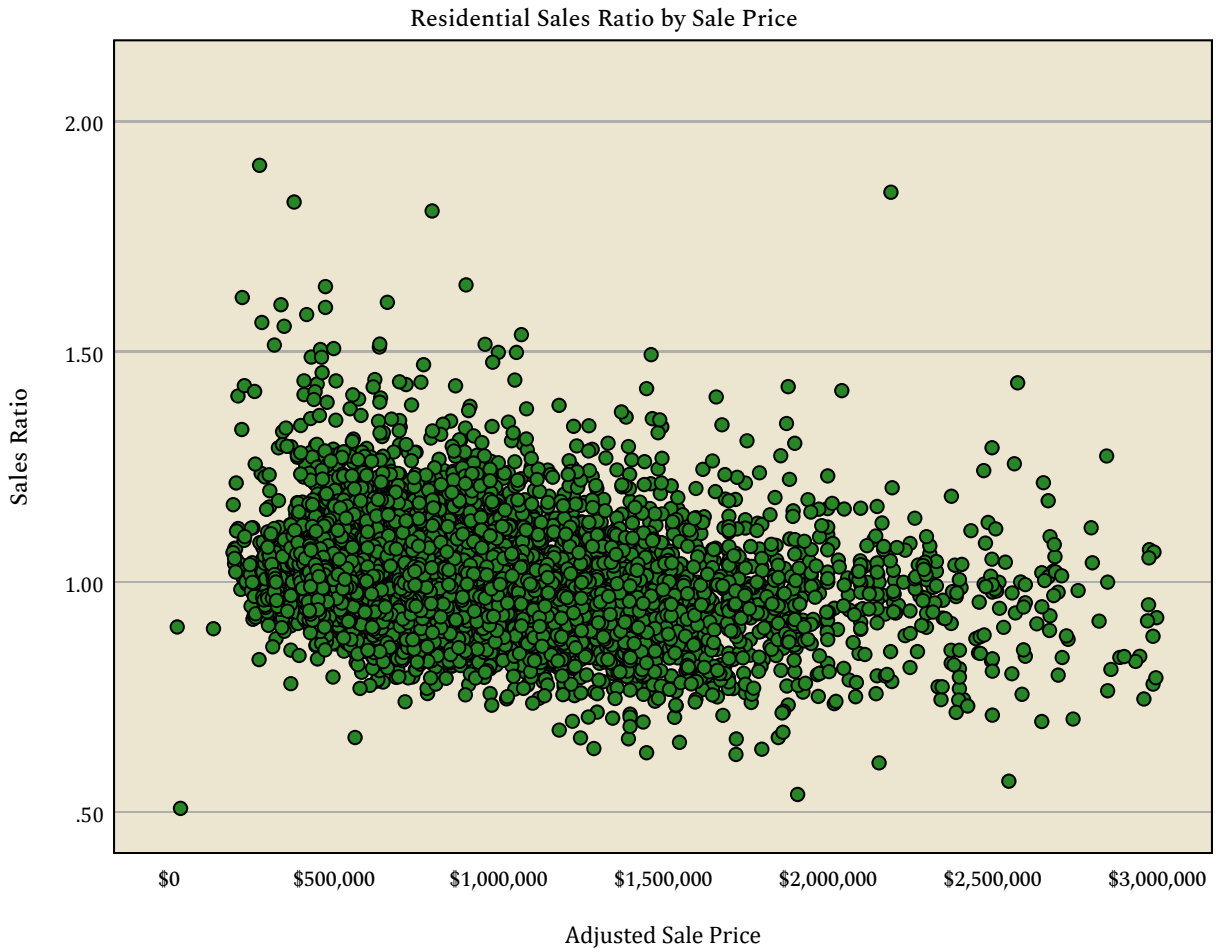
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.006	.001		998.687	<.001
	Adjusted Sale Price	-7.670E-9	.000	-.074	-9.298	<.001

a. Dependent Variable: Sales Ratio

Graph



OVERALL Residential: Months by Inverted Sales Ratio

Regression

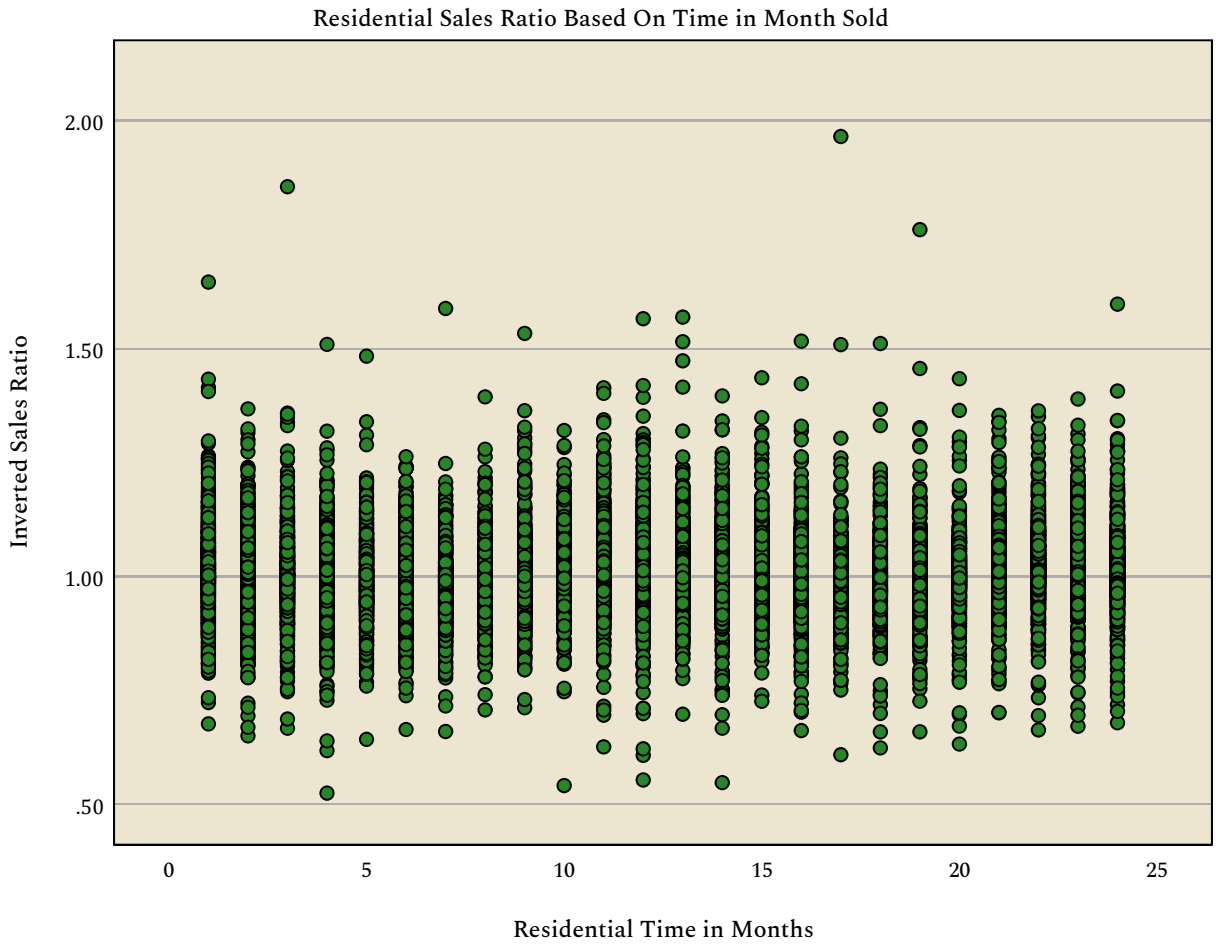
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.997	.003		377.923	<.001
	Residential Time in Months	.001	.000	.045	5.643	<.001

a. Dependent Variable: Inverted Sales Ratio

Graph

OVERALL Residential: Months by Inverted Sales Ratio



OVERALL Residential: Descriptive Statistics

Frequencies

Statistics

		Previous Price Per Foot	Price Per Foot	Difference in Price Per Foot
N	Valid	15803	15803	15803
	Missing	3	3	3
Mean		$282.03	$287.42	1.12
Median		$279.62	$279.83	.98
Percentiles	2.5	$97.56	$189.71	.88
	25	$237.45	$242.30	.94
	50	$279.62	$279.83	.98
	75	$326.43	$323.42	1.03
	97.5	$432.52	$424.96	2.96

Frequencies

Statistics

		Previous Total Value	Current Total Value	Difference in Total Value
N	Valid	15806	15806	15806
	Missing	0	0	0
Mean		$787,288.93	$808,988.51	$21,699.58
Median		$702,804.00	$700,355.00	-$15,817.50
Percentiles	2.5	$246,759.40	$391,161.13	-$116,805.10
	25	$592,536.00	$588,278.50	-$42,155.00
	50	$702,804.00	$700,355.00	-$15,817.50
	75	$875,425.75	$884,894.00	$22,698.00
	97.5	$1,743,340.72	$1,821,587.15	$508,129.90

OVERALL Residential: Mann-Whitney U-Test (Rank-sum)

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Total Value is the same across categories of Residential Sold vs Unsold.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Total Value across Residential Sold vs Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	121682
Mann-Whitney U	591479829.000
Wilcoxon W	6305658985.000
Test Statistic	591479829.000
Standard Error	4002596.300
Standardized Test Statistic	-49.588
Asymptotic Sig.(2-sided test)	<.001

Nonparametric Tests

OVERALL Residential: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Price Per Foot is the same across categories of Residential Sold vs Unsold.	Independent-Samples Mann-Whitney U Test	.098

Hypothesis Test Summary

	Decision
1	Retain the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Price Per Foot across Residential Sold vs Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	121692
Mann-Whitney U	805503852.500
Wilcoxon W	6469123087.500
Test Statistic	805503852.500
Standard Error	4058748.289
Standardized Test Statistic	-1.653
Asymptotic Sig.(2-sided test)	.098

Nonparametric Tests

OVERALL Residential: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Price Per Foot is the same across categories of Residential Sold vs Unsold.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Price Per Foot across Residential Sold vs Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	121692
Mann-Whitney U	599259106.500
Wilcoxon W	6325952816.500
Test Statistic	599259106.500
Standard Error	3990426.377
Standardized Test Statistic	-46.571
Asymptotic Sig.(2-sided test)	<.001

OVERALL Residential: Unit Value Comparison

Summarize

Sold vs Unsold

Difference in Price Per Foot

Residential Sold vs Unsold	N	Median	Mean
SOLD	15803	.98	1.12
UNSOLD	112295	.95	1.06
Total	128098	.95	1.07

OVERALL Residential: Neighborhood Group

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Median	Coefficient of Dispersion
	862	1.000	.048
13201	64	1.000	.049
13205	66	1.000	.042
1BB	44	.975	.073
1CC	2260	.990	.056
1DD	1019	.995	.048
1EE	1100	.997	.062
23201	50	1.003	.039
23202	47	.993	.052
23203	98	.998	.046
23206	119	1.000	.041
2AA	286	.999	.087
2BB	961	1.000	.063
2CA	77	1.006	.063
2CC	1195	1.000	.054
33203	183	.975	.038
3AA	31	.985	.099
3BC	927	.996	.052
3CC	46	.993	.088
3DD	720	.995	.070
43201	33	1.001	.047
43202	112	.985	.030
43204	46	1.006	.055
43207	80	1.000	.034
4AA	194	1.000	.090
4BB	1387	.992	.063
4CC	558	1.000	.056

OVERALL Residential: Neighborhood Group

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Median	Coefficient of Dispersion
4DD	1523	.995	.060
4EE	835	.999	.052
4FF	61	.998	.071
9AA	69	.989	.122
9BB	189	.999	.115
9C1	57	1.006	.139
9C2	57	1.001	.129
9CC	116	.989	.128
9DD	48	1.010	.135
Overall	15520	.996	.060

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Price Related Bias	Price Related Differential
	862	.018	1.004
13201	64	.052	1.001
13205	66	-.192	1.002
1BB	44	-.024	1.012
1CC	2260	-.013	1.005
1DD	1019	.002	1.002
1EE	1100	-.068	1.006
23201	50	-.169	1.004
23202	47	.049	1.002
23203	98	-.108	1.010
23206	119	-.040	1.002
2AA	286	-.011	1.011
2BB	961	-.025	1.008

OVERALL Residential: Neighborhood Group

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Price Related Bias	Price Related Differential
2CA	77	-.085	1.005
2CC	1195	-.045	1.005
33203	183	-.029	1.002
3AA	31	-.087	1.014
3BC	927	-.013	1.003
3CC	46	.002	1.006
3DD	720	.000	1.004
43201	33	-.069	1.004
43202	112	-.032	1.001
43204	46	.166	1.000
43207	80	-.195	1.002
4AA	194	-.035	1.017
4BB	1387	-.037	1.011
4CC	558	.005	1.003
4DD	1523	-.033	1.007
4EE	835	.020	1.001
4FF	61	-.052	1.007
9AA	69	-.096	1.032
9BB	189	-.019	1.016
9C1	57	-.114	1.032
9C2	57	-.089	1.021
9CC	116	-.100	1.035
9DD	48	-.137	1.051
Overall	15520	-.011	1.007

OVERALL Residential: Number of Sales by Value Group

Frequencies

Statistics

Groups of Value

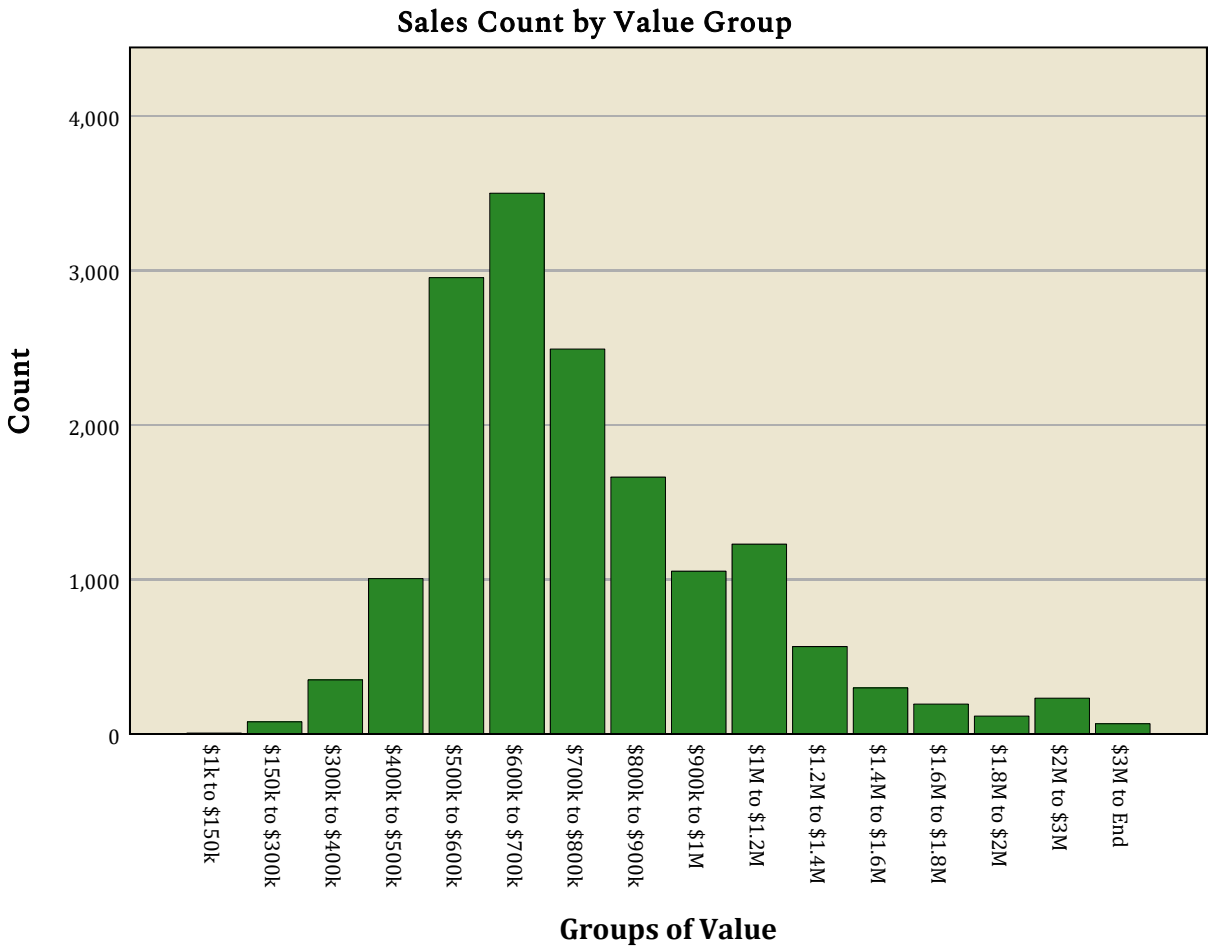
N	Valid	15806
	Missing	0

Groups of Value

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	$1k to $150k	6	.0	.0	.0
	$150k to $300k	79	.5	.5	.5
	$300k to $400k	350	2.2	2.2	2.8
	$400k to $500k	1006	6.4	6.4	9.1
	$500k to $600k	2954	18.7	18.7	27.8
	$600k to $700k	3501	22.1	22.1	50.0
	$700k to $800k	2492	15.8	15.8	65.7
	$800k to $900k	1663	10.5	10.5	76.2
	$900k to $1M	1054	6.7	6.7	82.9
	$1M to $1.2M	1229	7.8	7.8	90.7
	$1.2M to $1.4M	566	3.6	3.6	94.3
	$1.4M to $1.6M	298	1.9	1.9	96.2
	$1.6M to $1.8M	194	1.2	1.2	97.4
	$1.8M to $2M	116	.7	.7	98.1
	$2M to $3M	232	1.5	1.5	99.6
	$3M to End	66	.4	.4	100.0
	Total	15806	100.0	100.0	

Graph

OVERALL Residential: Number of Sales by Value Group



OVERALL Residential: Central Tendencies by Value Group

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Median	Coefficient of Dispersion
$1k to $150k	6	.704	.685
$150k to $300k	79	.984	.082
$300k to $400k	350	.998	.050
$400k to $500k	1006	.993	.049
$500k to $600k	2954	.990	.047
$600k to $700k	3501	.995	.050
$700k to $800k	2492	.999	.056
$800k to $900k	1663	1.004	.061
$900k to $1M	1054	1.003	.074
$1M to $1.2M	1229	.994	.085
$1.2M to $1.4M	566	.985	.094
$1.4M to $1.6M	298	1.009	.108
$1.6M to $1.8M	194	.989	.106
$1.8M to $2M	116	1.014	.101
$2M to $3M	232	1.004	.101
$3M to End	66	.993	.105
Overall	15806	.996	.061

Ratio Statistics

OVERALL Residential: Central Tendencies by Value Group

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Price Related Bias	Price Related Differential
$1k to $150k	6	.399	.959
$150k to $300k	79	-.420	1.084
$300k to $400k	350	-.283	1.005
$400k to $500k	1006	-.402	1.006
$500k to $600k	2954	-.412	1.004
$600k to $700k	3501	-.590	1.006
$700k to $800k	2492	-.699	1.006
$800k to $900k	1663	-.818	1.007
$900k to $1M	1054	-1.050	1.011
$1M to $1.2M	1229	-.728	1.013
$1.2M to $1.4M	566	-.901	1.016
$1.4M to $1.6M	298	-1.226	1.022
$1.6M to $1.8M	194	-1.109	1.018
$1.8M to $2M	116	-1.070	1.020
$2M to $3M	232	-.439	1.019
$3M to End	66	-.037	1.024
Overall	15806	-.011	1.008

OVERALL Residential: Sales by Building Area Group

Frequencies

Statistics

Groups by Building Area

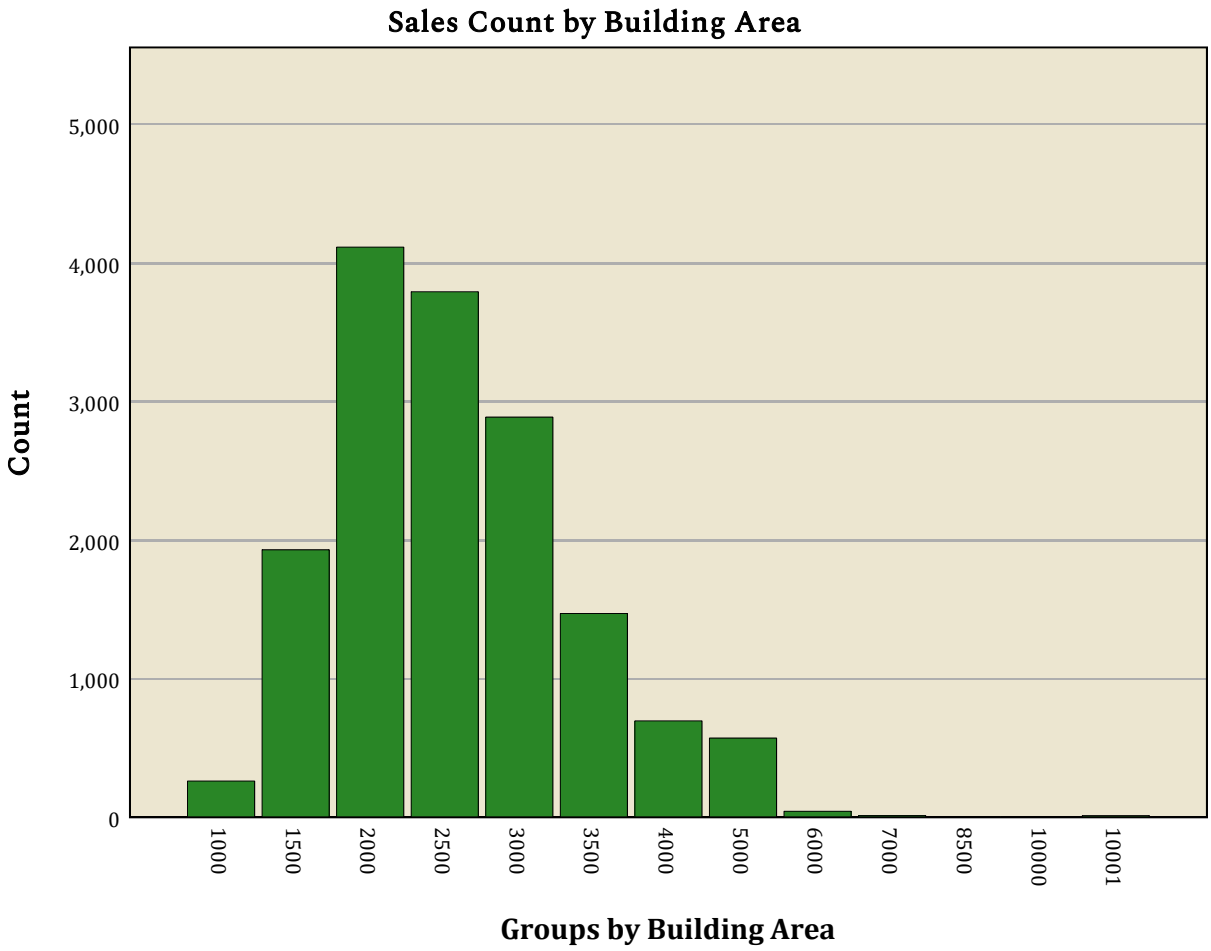
N	Valid	15806
	Missing	0

Groups by Building Area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1000	262	1.7	1.7	1.7
	1500	1931	12.2	12.2	13.9
	2000	4115	26.0	26.0	39.9
	2500	3793	24.0	24.0	63.9
	3000	2888	18.3	18.3	82.2
	3500	1471	9.3	9.3	91.5
	4000	696	4.4	4.4	95.9
	5000	572	3.6	3.6	99.5
	6000	44	.3	.3	99.8
	7000	13	.1	.1	99.9
	8500	6	.0	.0	99.9
	10000	3	.0	.0	99.9
	10001	12	.1	.1	100.0
	Total	15806	100.0	100.0	

Graph

OVERALL Residential: Sales by Building Area Group



OVERALL Residential: Central Tendencies by Area Group

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Median	Coefficient of Dispersion
1000	262	.999	.069
1500	1931	.996	.049
2000	4115	.997	.051
2500	3793	.995	.059
3000	2888	.995	.064
3500	1471	.998	.072
4000	696	.999	.084
5000	572	.994	.094
6000	44	1.006	.107
7000	13	.993	.152
8500	6	1.118	.112
10000	3	.902	.141
10001	12	.868	.332
Overall	15806	.996	.061

Ratio Statistics

OVERALL Residential: Central Tendencies by Area Group

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Price Related Bias	Price Related Differential
1000	262	.039	1.005
1500	1931	-.023	1.004
2000	4115	-.048	1.005
2500	3793	-.037	1.007
3000	2888	-.027	1.008
3500	1471	-.033	1.010
4000	696	-.034	1.012
5000	572	-.056	1.015
6000	44	-.102	1.033
7000	13	.027	1.031
8500	6	.073	.984
10000	3	-.359	1.098
10001	12	.042	.859
Overall	15806	-.011	1.008

OVERALL Residential: Sales by Economic Area Group

Frequencies

Statistics

economic_area

N	Valid	15806
	Missing	0

economic_area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		862	5.5	5.5	5.5
	1	4847	30.7	30.7	36.1
	2	2851	18.0	18.0	54.2
	3	1864	11.8	11.8	65.9
	4	4899	31.0	31.0	96.9
	5	173	1.1	1.1	98.0
	6	310	2.0	2.0	100.0
	Total	15806	100.0	100.0	

Graph

OVERALL Residential: Sales by Economic Area Group

OVERALL Residential: Central Tendencies by Economic Area Group

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Median	Coefficient of Dispersion
	862	1.000	.048
1	4847	.993	.059
2	2851	1.000	.059
3	1864	.992	.059
4	4899	.996	.060
5	173	1.001	.129
6	310	.999	.136
Overall	15806	.996	.061

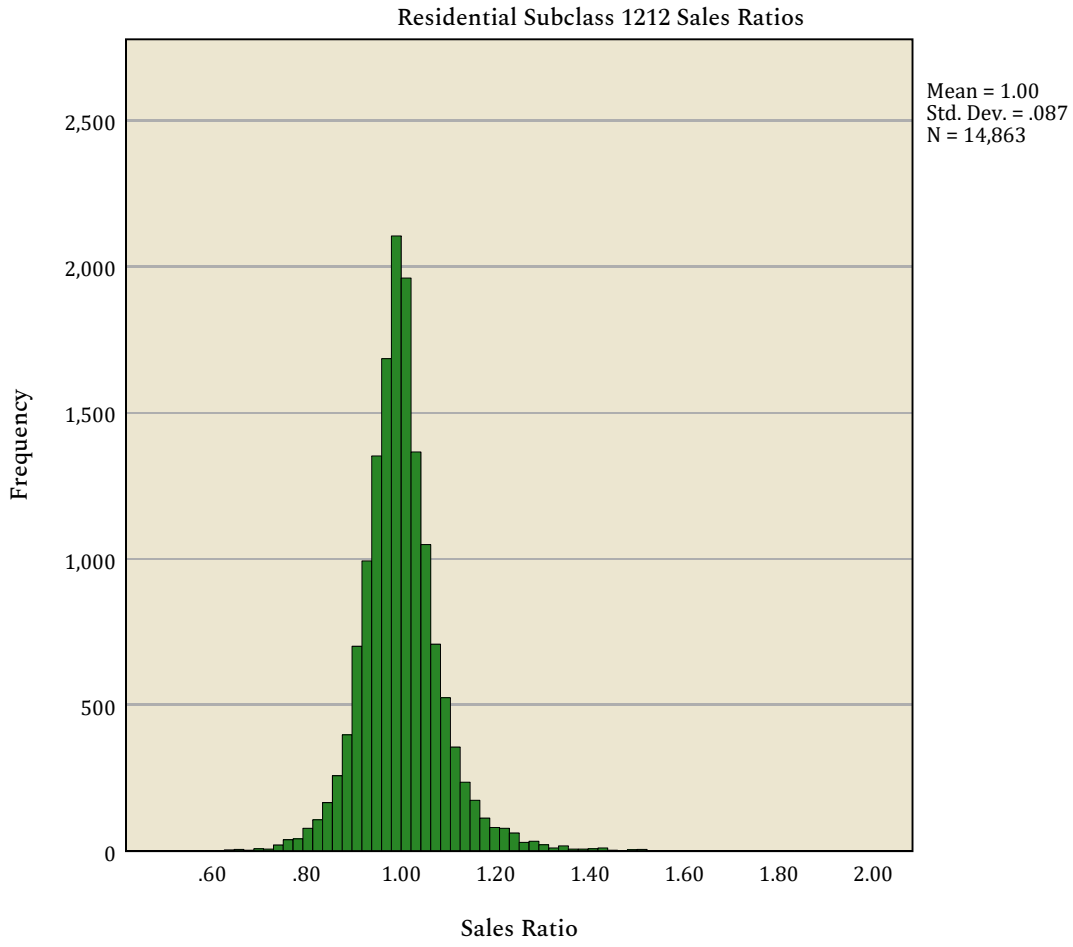
Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Price Related Bias	Price Related Differential
	862	.018	1.004
1	4847	-.020	1.007
2	2851	-.014	1.008
3	1864	.002	1.004
4	4899	-.015	1.008
5	173	-.086	1.031
6	310	-.032	1.026
Overall	15806	-.011	1.008

Residential Subclass 1212: Sales Ratio Distribution

Graph



Residential Subclass 1212: Central Tendencies

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

N	Median	Coefficient of Dispersion
14941	.996	.062

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Price Related Bias	Price Related Differential
-.014	1.008

Residential Subclass 1212: Sales Price by Sales Ratio

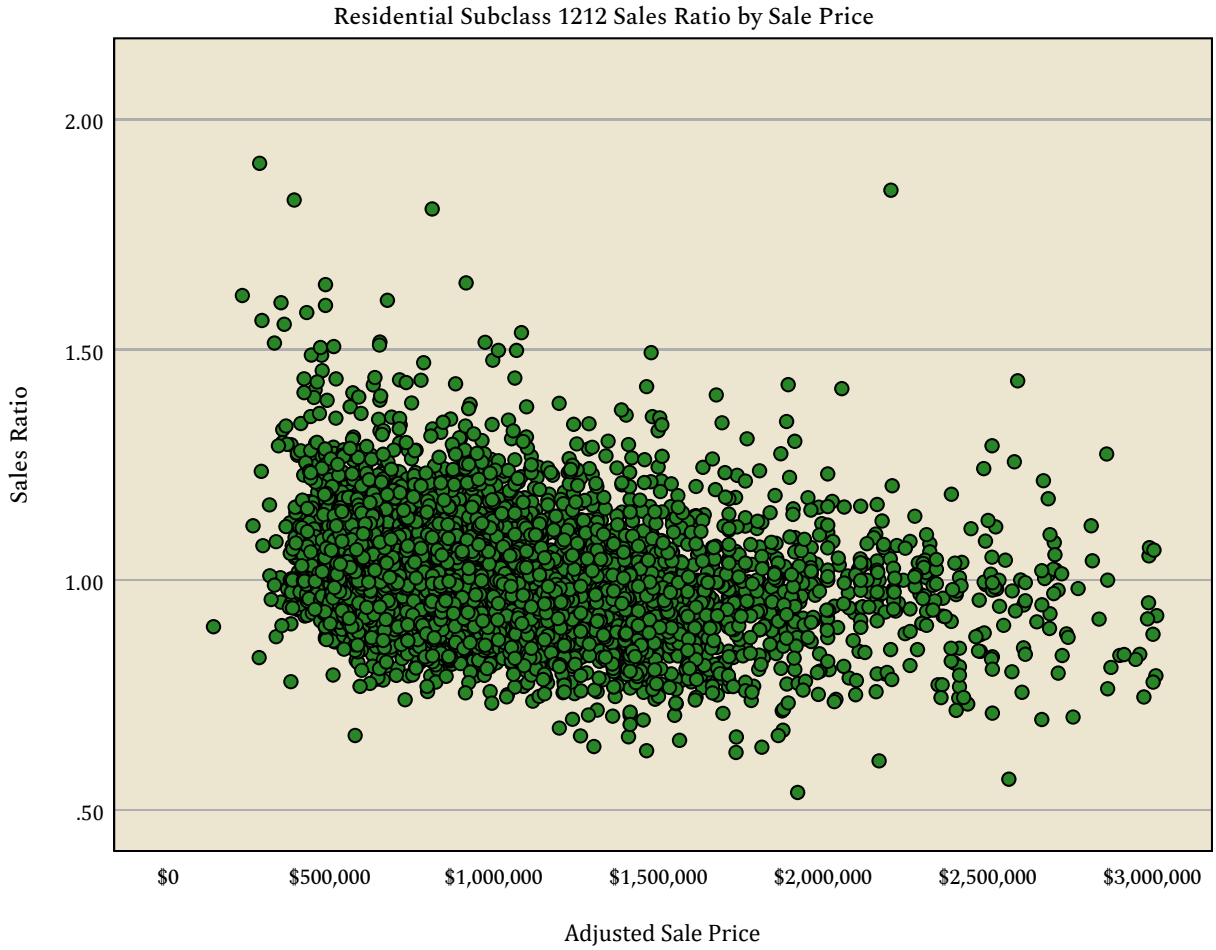
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.033	.002		587.465	<.001
	Adjusted Sale Price	-4.007E-8	.000	-.169	-20.971	<.001

a. Dependent Variable: Sales Ratio

Graph



Residential Subclass 1212: Months by Inverted Sales Ratio

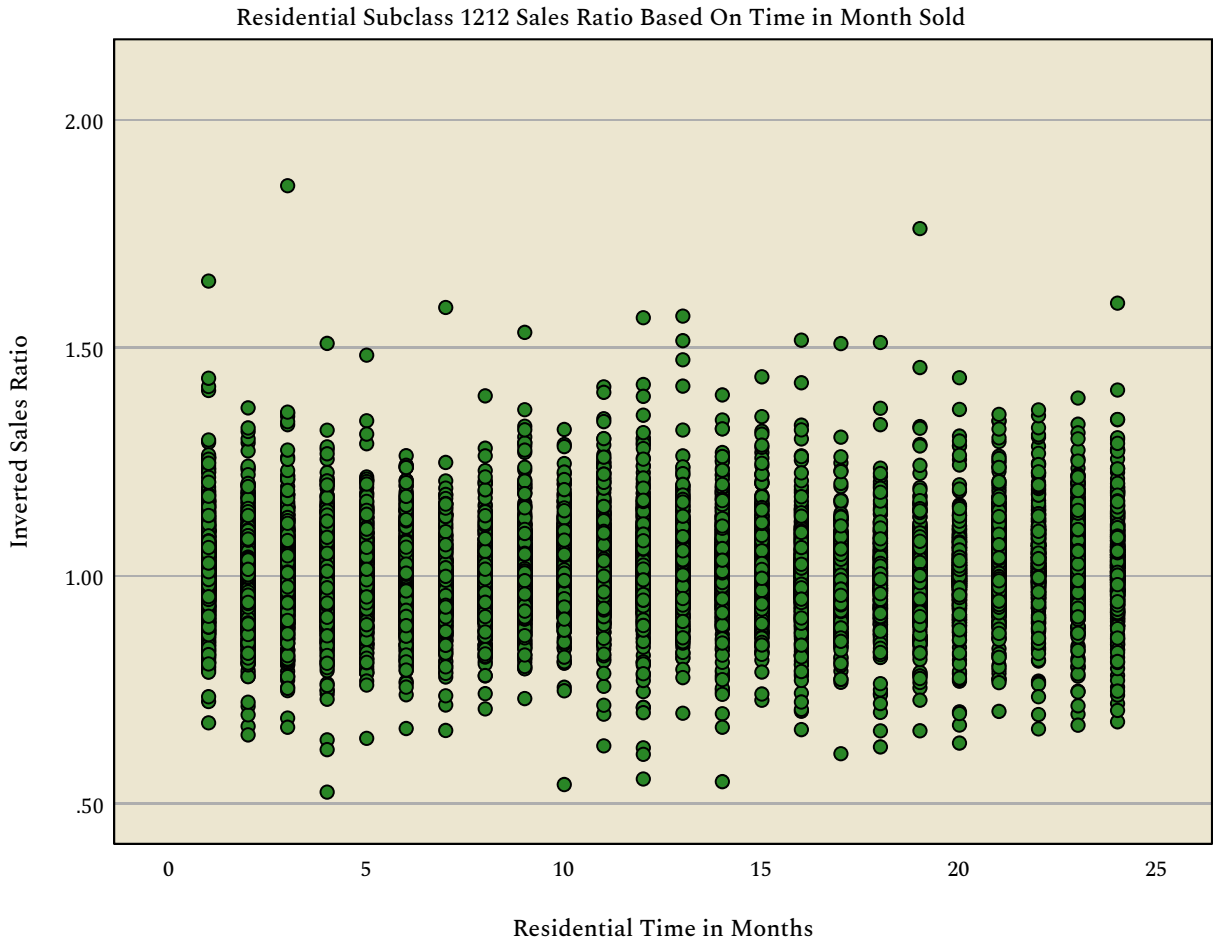
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.998	.001		681.071	<.001
	Residential Time in Months	.001	.000	.068	8.344	<.001

a. Dependent Variable: Inverted Sales Ratio

Graph



Residential Subclass 1212: Descriptive Statistics

Frequencies

Statistics

		Previous Price Per Foot	Price Per Foot	Difference in Price Per Foot
N	Valid	14939	14939	14939
	Missing	2	2	2
Mean		$278.93	$284.63	1.12
Median		$276.00	$276.41	.98
Percentiles	2.5	$95.68	$189.12	.88
	25	$235.32	$240.53	.94
	50	$276.00	$276.41	.98
	75	$321.81	$319.77	1.03
	97.5	$431.38	$423.83	2.94

Frequencies

Statistics

		Previous Total Value	Current Total Value	Difference in Total Value
N	Valid	14941	14941	14941
	Missing	0	0	0
Mean		$797,694.20	$821,129.36	$23,435.16
Median		$716,249.00	$713,574.00	-$16,152.00
Percentiles	2.5	$263,577.15	$473,991.05	-$119,150.15
	25	$609,280.00	$603,253.00	-$43,608.50
	50	$716,249.00	$713,574.00	-$16,152.00
	75	$889,513.50	$900,744.00	$25,095.50
	97.5	$1,767,427.40	$1,846,766.05	$516,332.70

Residential Subclass 1212: Mann-Whitney U-Test (Rank-sum)

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Total Value is the same across categories of Residential Sold vs Unsold.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Total Value across Residential Sold vs Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	113978
Mann-Whitney U	514394791.000
Wilcoxon W	5515744882.000
Test Statistic	514394791.000
Standard Error	3642256.235
Standardized Test Statistic	-50.503
Asymptotic Sig.(2-sided test)	<.001

Nonparametric Tests

Residential Subclass 1212: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Price Per Foot is the same across categories of Residential Sold vs Unsold.	Independent-Samples Mann-Whitney U Test	.066

Hypothesis Test Summary

	Decision
1	Retain the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Price Per Foot across Residential Sold vs Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	113987
Mann-Whitney U	707438169.000
Wilcoxon W	5672848200.000
Test Statistic	707438169.000
Standard Error	3683560.715
Standardized Test Statistic	-1.839
Asymptotic Sig.(2-sided test)	.066

Nonparametric Tests

Residential Subclass 1212: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Price Per Foot is the same across categories of Residential Sold vs Unsold.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Price Per Foot across Residential Sold vs Unsold

Independent-Samples Mann-Whitney U Test Summary

Total N	113987
Mann-Whitney U	521335671.500
Wilcoxon W	5532291666.500
Test Statistic	521335671.500
Standard Error	3632778.737
Standardized Test Statistic	-47.710
Asymptotic Sig.(2-sided test)	<.001

Residential Subclass 1212: Unit Comparison Method

Summarize

Sold vs Unsold Percent Change for Subclass 1212

Difference in Price Per Foot

Residential Sold vs Unsold	N	Median	Mean
SOLD	14939	.98	1.12
UNSOLD	105048	.95	1.06
Total	119987	.95	1.07

Summarize

Sold vs Unsold Percent Change for Subclass 1212 by Economic Area

Difference in Price Per Foot

economic_area	Residential Sold vs Unsold	N	Median	Mean
	UNSOLD	48	1.10	1.28
	Total	48	1.10	1.28
1	SOLD	4846	.98	1.15
	UNSOLD	31691	.94	1.04
	Total	36537	.95	1.05
2	SOLD	2850	.96	.98
	UNSOLD	33460	.95	.98
	Total	36310	.95	.98
3	SOLD	1864	.99	1.37
	UNSOLD	5906	.97	1.61
	Total	7770	.98	1.55
4	SOLD	4897	.98	1.08
	UNSOLD	28139	.95	1.08
	Total	33036	.96	1.08
5	SOLD	173	.98	1.02
	UNSOLD	2065	.96	1.00
	Total	2238	.96	1.00
6	SOLD	309	.99	1.00
	UNSOLD	3739	.95	1.04
	Total	4048	.95	1.04

Residential Subclass 1212: Unit Comparison Method

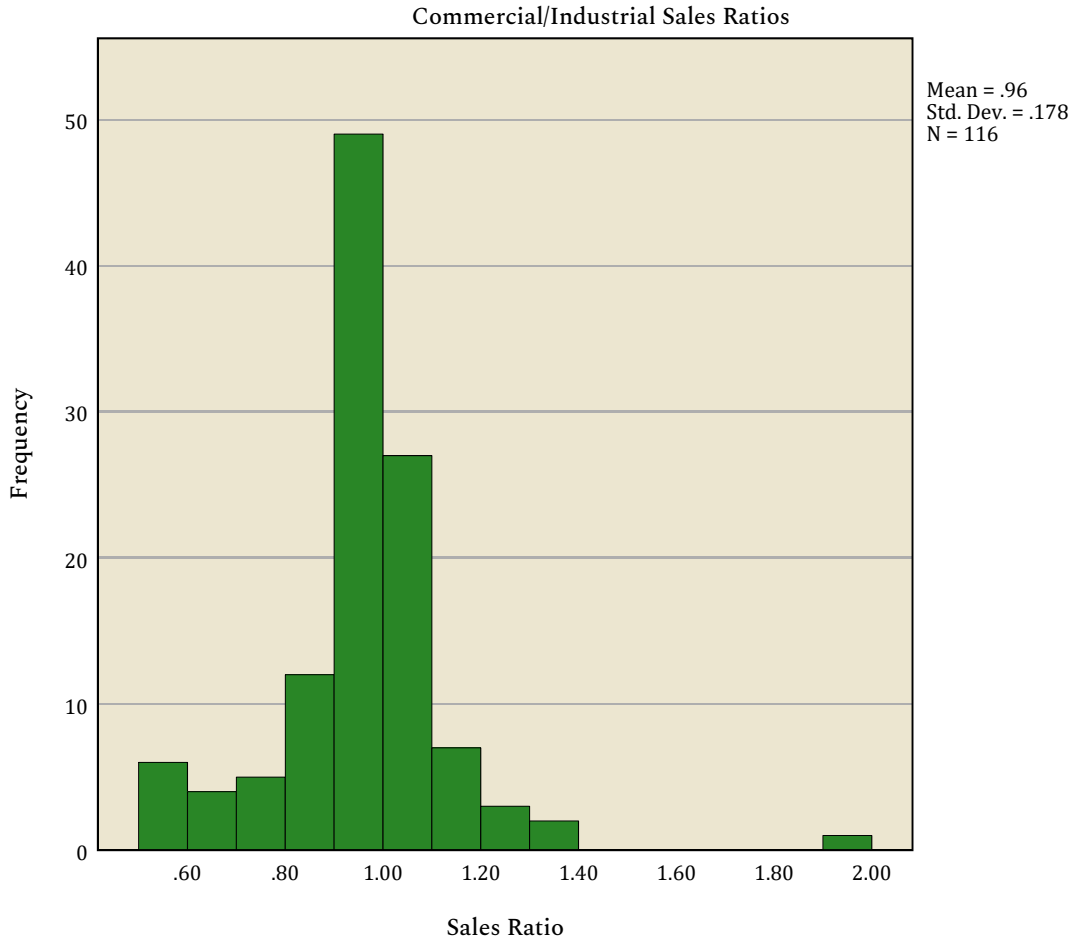
Sold vs Unsold Percent Change for Subclass 1212 by Economic Area

Difference in Price Per Foot

economic_area	Residential Sold vs Unsold	N	Median	Mean
Total	SOLD	14939	.98	1.12
	UNSOLD	105048	.95	1.06
	Total	119987	.95	1.07

OVERALL Commercial/Industrial: Sales Ratio Distribution

Graph



OVERALL Commercial/Industrial: Central Tendencies

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

N	Median	Coefficient of Dispersion
133	.979	.121

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Price Related Bias	Price Related Differential
-.012	1.009

OVERALL Commercial/Industrial: Sales Price by Sales Ratio

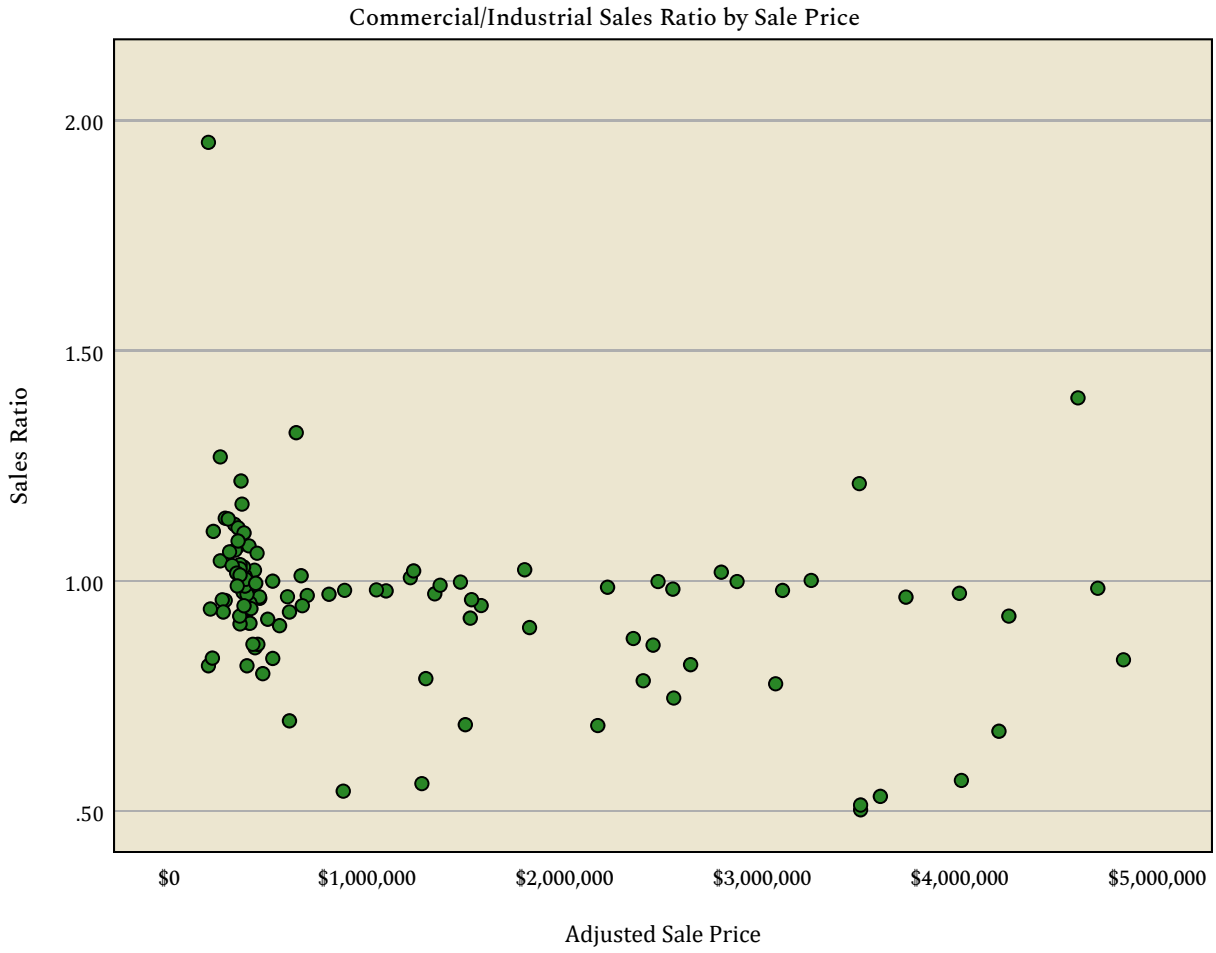
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.960	.019		49.994	<.001
	Adjusted Sale Price	-1.113E-9	.000	-.025	-.286	.776

a. Dependent Variable: Sales Ratio

Graph



OVERALL Commercial/Industrial: Months by Inverted Sales Ratio

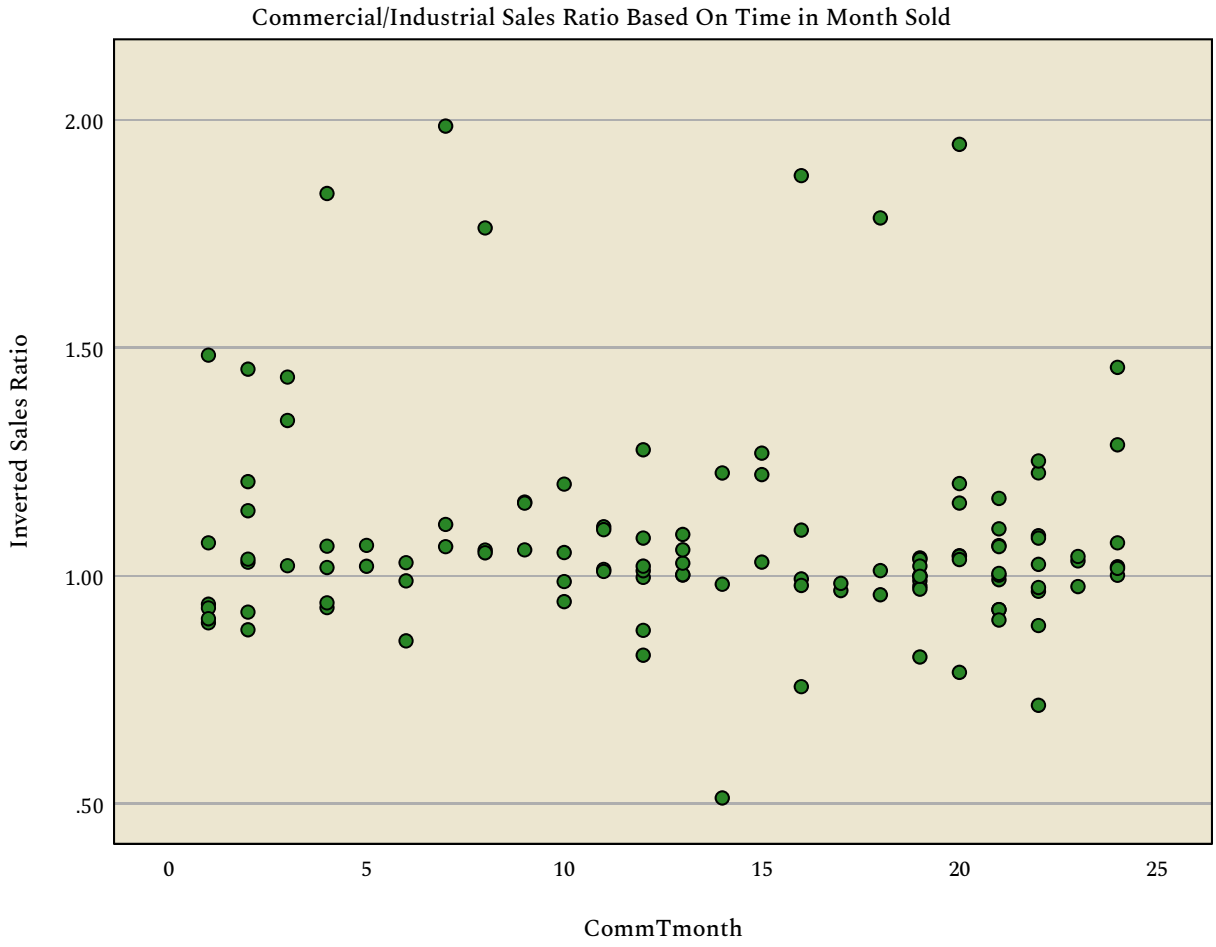
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.131	.055		20.701	<.001
	CommTmonth	-.002	.004	-.059	-.677	.500

a. Dependent Variable: Inverted Sales Ratio

Graph



OVERALL Commercial/Industrial: Descriptive Statistics

Frequencies

Statistics

		Previous Price Per Foot	Price Per Foot	Difference in Price Per Foot
N	Valid	133	133	133
	Missing	0	0	0
Mean		$221.96	$323.31	1.76
Median		$200.00	$305.00	1.32
Percentiles	2.5	$84.65	$90.50	.71
	25	$139.87	$240.00	1.10
	50	$200.00	$305.00	1.32
	75	$250.08	$375.00	1.62
	97.5	$600.00	$671.94	4.73

Frequencies

Statistics

		Previous Total Value	Current Total Value	Difference in Total Value
N	Valid	133	133	133
	Missing	0	0	0
Mean		$2,078,670.42	$2,272,712.50	$194,042.08
Median		$403,084.00	$505,850.00	$180,000.00
Percentiles	2.5	$78,898.00	$215,452.00	-$3,089,835.00
	25	$216,712.50	$372,800.00	$51,345.00
	50	$403,084.00	$505,850.00	$180,000.00
	75	$1,702,470.00	$2,135,462.50	$314,118.00
	97.5	$19,772,375.85	$19,165,846.00	$2,589,999.65

OVERALL Commercial/Industrial: Mann-Whitney U-Test (Rank-sum)

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Total Value is the same across categories of CommSOLDFLG.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Total Value across CommSOLDFLG

Independent-Samples Mann-Whitney U Test Summary

Total N	2594
Mann-Whitney U	83147.500
Wilcoxon W	3149673.500
Test Statistic	83147.500
Standard Error	7933.409
Standardized Test Statistic	-7.933
Asymptotic Sig.(2-sided test)	<.001

Nonparametric Tests

OVERALL Commercial/Industrial: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Price Per Foot is the same across categories of CommSOLDFLG.	Independent-Samples Mann-Whitney U Test	.009

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Price Per Foot across CommSOLDFLG

Independent-Samples Mann-Whitney U Test Summary

Total N	2602
Mann-Whitney U	139820.000
Wilcoxon W	3193976.000
Test Statistic	139820.000
Standard Error	8378.091
Standardized Test Statistic	-2.630
Asymptotic Sig.(2-sided test)	.009

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Price Per Foot is the same across categories of CommSOLDFLG.	Independent-Samples Mann-Whitney U Test	<.001

OVERALL Commercial/Industrial: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Price Per Foot across CommSOLDFLG

Independent-Samples Mann-Whitney U Test Summary

Total N	2598
Mann-Whitney U	64764.000
Wilcoxon W	3151134.000
Test Statistic	64764.000
Standard Error	7816.140
Standardized Test Statistic	-9.829
Asymptotic Sig.(2-sided test)	<.001

OVERALL Commercial/Industrial: Unit Value Comparison

Summarize

Sold vs Unsold

Difference in Price Per Foot

CommSOLDFLG	N	Median	Mean
SOLD	133	1.32	1.76
UNSOLD	2607	1.03	1.38
Total	2740	1.04	1.40

Summarize

Sold vs Unsold

Difference in Price Per Foot

Improvement Abstract Codes	CommSOLDFLG	N	Median	Mean
2212	SOLD	17	1.08	1.26
	UNSOLD	512	1.00	1.09
	Total	529	1.00	1.10
2215	SOLD	3	1.29	1.26
	UNSOLD	26	1.00	.99
	Total	29	1.00	1.02
2220	SOLD	12	1.06	1.06
	UNSOLD	218	.97	.96
	Total	230	.98	.96
2225	UNSOLD	92	1.00	1.00
	Total	92	1.00	1.00
2230	SOLD	19	1.25	1.31
	UNSOLD	655	1.02	1.65
	Total	674	1.02	1.64
2235	SOLD	3	1.23	1.31
	UNSOLD	160	1.02	1.07
	Total	163	1.03	1.07
2245	SOLD	10	1.10	1.19
	UNSOLD	223	1.10	1.31
	Total	233	1.10	1.30

OVERALL Commercial/Industrial: Unit Value Comparison

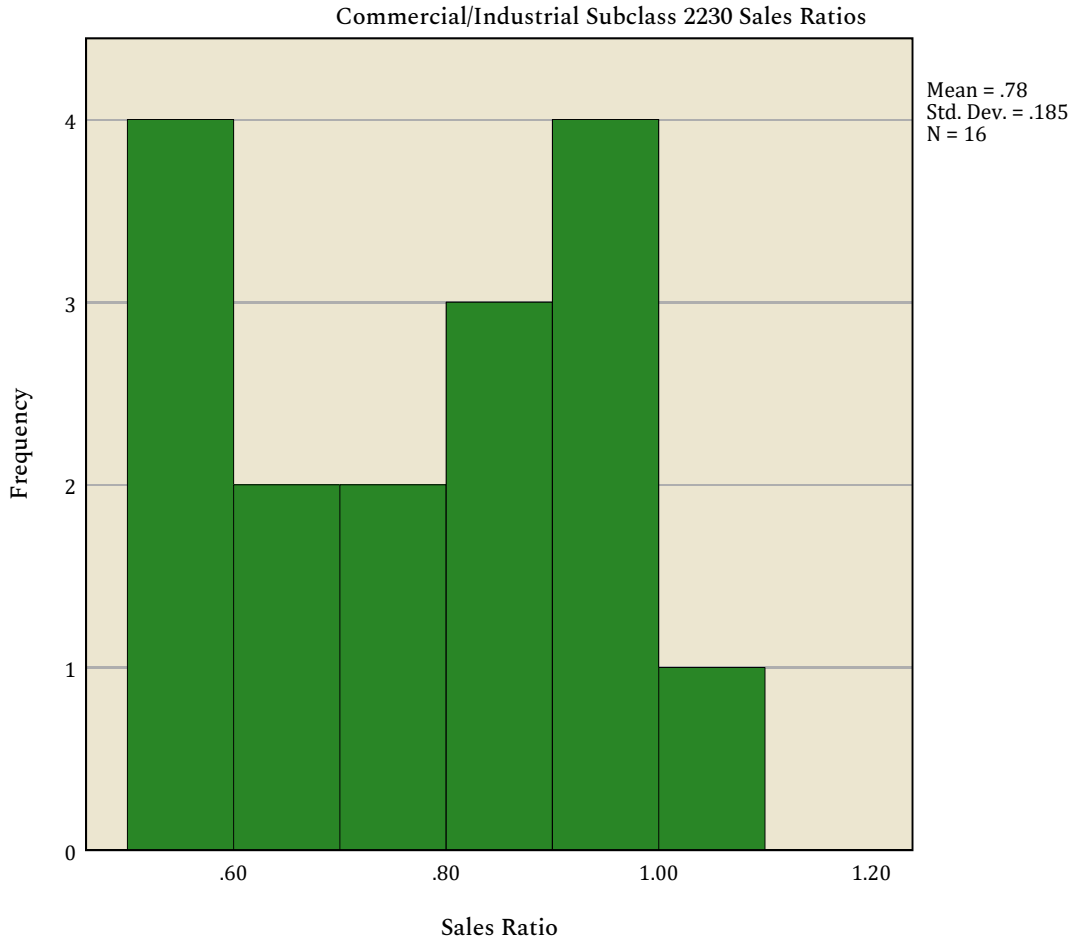
Sold vs Unsold

Difference in Price Per Foot

Improvement Abstract Codes	CommSOLDFLG	N	Median	Mean
3212	SOLD	1	3.42	3.42
	UNSOLD	190	1.02	1.06
	Total	191	1.02	1.08
3215	SOLD	1	1.22	1.22
	UNSOLD	39	1.04	1.09
	Total	40	1.04	1.09
3230	SOLD	67	1.53	2.25
	UNSOLD	492	1.36	1.87
	Total	559	1.36	1.91
Total	SOLD	133	1.32	1.76
	UNSOLD	2607	1.03	1.38
	Total	2740	1.04	1.40

Commercial/Industrial Subclass 2230: Sales Ratio Distribution

Graph



Commercial/Industrial Subclass 2230: Central Tendencies

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

N	Median	Coefficient of Dispersion
19	.784	.226

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Price Related Bias	Price Related Differential
.053	1.020

Commercial/Industrial Subclass 2230: Sales Price by Sales Ratio

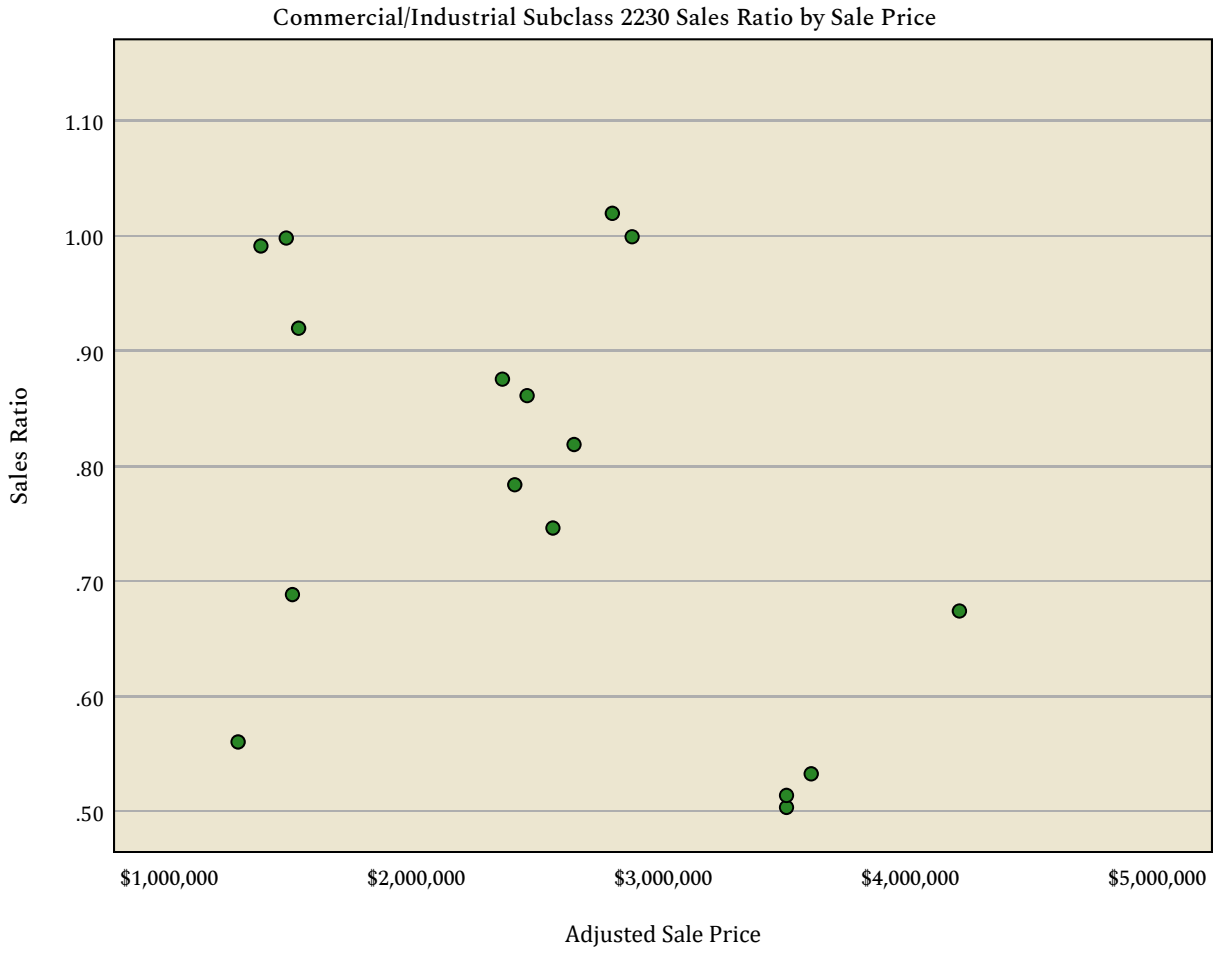
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.800	.083		9.665	<.001
	Adjusted Sale Price	-9.143E-9	.000	-.103	-.427	.675

a. Dependent Variable: Sales Ratio

Graph



Commercial/Industrial Subclass 2230: Months by Inverted Sales Ratio

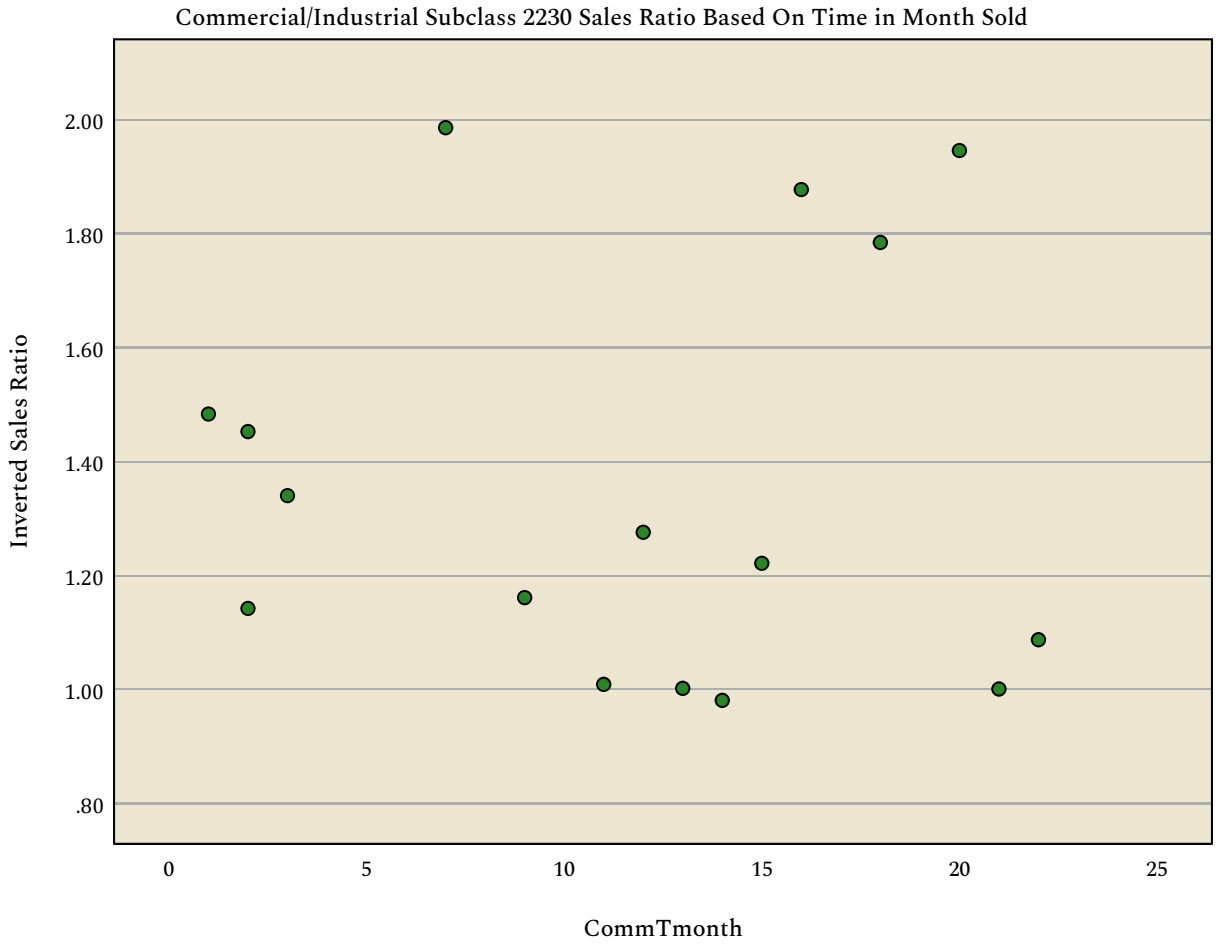
Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.552	.170		9.119	<.001
	CommTmonth	-.014	.013	-.256	-1.092	.290

a. Dependent Variable: Inverted Sales Ratio

Graph



Commercial/Industrial Subclass 2230: Descriptive Statistics

Frequencies

Statistics

		Previous Price Per Foot	Price Per Foot	Difference in Price Per Foot
N	Valid	19	19	19
	Missing	0	0	0
Mean		$249.33	$309.62	1.31
Median		$224.09	$295.00	1.25
Percentiles	2.5	$106.75	$140.58	.94
	25	$175.00	$235.00	1.10
	50	$224.09	$295.00	1.25
	75	$315.00	$345.00	1.48
	97.5	.	.	.

Frequencies

Statistics

		Previous Total Value	Current Total Value	Difference in Total Value
N	Valid	19	19	19
	Missing	0	0	0
Mean		$1,870,955.74	$2,360,572.05	$489,616.32
Median		$1,595,568.00	$1,905,929.00	$428,050.00
Percentiles	2.5	$470,999.00	$592,484.00	-$46,640.00
	25	$955,555.00	$1,402,480.00	$194,300.00
	50	$1,595,568.00	$1,905,929.00	$428,050.00
	75	$2,092,440.00	$2,831,085.00	$756,840.00
	97.5	.	.	.

Commercial/Industrial Subclass 2230: Mann-Whitney U-Test (Rank-sum)

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Total Value is the same across categories of CommSOLDFLG.	Independent-Samples Mann-Whitney U Test	<.001

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Total Value across CommSOLDFLG

Independent-Samples Mann-Whitney U Test Summary

Total N	634
Mann-Whitney U	1901.000
Wilcoxon W	191937.000
Test Statistic	1901.000
Standard Error	764.393
Standardized Test Statistic	-4.766
Asymptotic Sig.(2-sided test)	<.001

Nonparametric Tests

Commercial/Industrial Subclass 2230: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Price Per Foot is the same across categories of CommSOLDFLG.	Independent-Samples Mann-Whitney U Test	.958

Hypothesis Test Summary

	Decision
1	Retain the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Price Per Foot across CommSOLDFLG

Independent-Samples Mann-Whitney U Test Summary

Total N	640
Mann-Whitney U	5941.500
Wilcoxon W	199072.500
Test Statistic	5941.500
Standard Error	793.658
Standardized Test Statistic	.053
Asymptotic Sig.(2-sided test)	.958

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]
1	The distribution of Difference in Price Per Foot is the same across categories of CommSOLDFLG.	Independent-Samples Mann-Whitney U Test	<.001

Commercial/Industrial Subclass 2230: Mann-Whitney U-Test (Rank-sum)

Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Independent-Samples Mann-Whitney U Test

Difference in Price Per Foot across CommSOLDFLG

Independent-Samples Mann-Whitney U Test Summary

Total N	637
Mann-Whitney U	1866.000
Wilcoxon W	193137.000
Test Statistic	1866.000
Standard Error	788.439
Standardized Test Statistic	-5.080
Asymptotic Sig.(2-sided test)	<.001

Commercial/Industrial Subclass 2230: Unit Comparison Method

Summarize

Sold vs Unsold Percent Change for Subclass 2230

Difference in Price Per Foot

CommSOLDFLG	N	Median	Mean
SOLD	19	1.25	1.31
UNSOLD	655	1.02	1.65
Total	674	1.02	1.64

Commercial/Industrial Subclass 2230: Economic Area Analysis

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Median	Coefficient of Dispersion
	1	.242	.000
1	18	.723	1.263
2	24	.558	2.466
3	1	.965	.000
4	24	.750	.693
5	1	.514	.000
6	1	.173	.000
Overall	70	.671	1.366

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Price Related Bias	Price Related Differential
	1	.	1.000
1	18	-.318	2.958
2	24	-.809	3.065
3	1	.	1.000
4	24	-.274	1.425
5	1	.	1.000
6	1	.	1.000
Overall	70	-.339	3.029

Summarize

Commercial/Industrial Subclass 2230: Economic Area Analysis

Sold vs Unsold Percent Change for Subclass 2230 by Economic Area

Difference in Price Per Foot

economic_area	CommSOLDFLG	N	Median	Mean
	UNSOLD	56	1.00	1.21
	Total	56	1.00	1.21
1	SOLD	6	1.30	1.38
	UNSOLD	153	1.06	1.14
	Total	159	1.07	1.15
2	SOLD	7	1.15	1.18
	UNSOLD	211	1.02	1.05
	Total	218	1.02	1.05
3	UNSOLD	10	1.07	1.56
	Total	10	1.07	1.56
4	SOLD	5	1.20	1.29
	UNSOLD	191	1.02	2.96
	Total	196	1.02	2.92
5	SOLD	1	1.88	1.88
	UNSOLD	8	1.03	1.05
	Total	9	1.05	1.14
6	UNSOLD	26	1.00	1.04
	Total	26	1.00	1.04
Total	SOLD	19	1.25	1.31
	UNSOLD	655	1.02	1.65
	Total	674	1.02	1.64

Final Analysis: OVERALL Statistical Abstract.

Ratio Statistics

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	N	Mean	95% Confidence Interval for Mean		Median
			Lower Bound	Upper Bound	
Vacant Land	220	.957	.920	.994	.948
Residential	15806	1.000	.998	1.001	.996
Commercial/Industrial	133	.957	.924	.990	.979
Overall	16159	.999	.997	1.000	.996

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for ...
	Lower Bound	Upper Bound	Actual Coverage		Lower Bound
Vacant Land	.924	.970	96.4%	.819	.756
Residential	.995	.997	95.1%	.992	.990
Commercial/Industrial	.960	.991	96.3%	.948	.900
Overall	.995	.997	95.1%	.990	.987

Ratio Statistics for Current Total Value / Adjusted Sale Price

Group	95% Confidence Interval for ...	Price Related Differential	Coefficient of Dispersion
	Upper Bound		
Vacant Land	.883	1.168	.181
Residential	.994	1.008	.061
Commercial/Industrial	.997	1.009	.121
Overall	.992	1.010	.063

The confidence interval for the median is constructed without any distribution assumptions. The actual coverage level may be greater than the specified level. Other confidence intervals are constructed by assuming a Normal distribution for the ratios.