

# 2010 HINSDALE COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2010

Mr. Mike Mauer Director of Research Colorado Legislative Council Room 029, State Capitol Building Denver, Colorado 80203

RE: Final Report for the 2010 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2010 Colorado Property Assessment Study.

These reports are the result of two analyses: A procedural audit and a statistical audit.

The procedural audit examines all classes of property. It specifically looks at how the assessor develops economic areas, confirms and qualifies sales, develops time adjustments and performs periodic physical property inspections. The audit reviews the procedures for determining subdivision absorption and subdivision discounting. Valuation methodology is examined for residential properties and commercial properties. Procedures are reviewed for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests, and non-producing patented mining claims.

Statistical audits are performed on vacant land, residential properties, commercial/industrial properties and agricultural land. A statistical analysis is performed for personal property compliance on the eleven largest counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo and Weld. The remaining counties receive a personal property procedural study.

Wildrose Appraisal Inc. – Audit Division appreciates the opportunity to be of service to the State of Colorado. Please contact us with any questions or concerns.

Harry J. Fuller Project Manager

Harry J. Zulla

Wildrose Appraisal Inc. – Audit Division



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# INTRODUCTION



The State Board of Equalization (SBOE) reviews assessments for conformance to the Constitution. The SBOE will order revaluations for counties whose valuations do not reflect the proper valuation period level of value.

The statutory basis for the audit is found in C.R.S. 39-1-104 (16)(a)(b) and (c).

The legislative council sets forth two criteria that are the focus of the audit group:

To determine whether each county assessor is applying correctly the constitutional and statutory provisions, compliance requirements of the State Board of Equalization, and the manuals published by the State Property Tax Administrator to arrive at the actual value of each class of property.

To determine if each assessor is applying correctly the provisions of law to the actual values when arriving at valuations for assessment of all locally valued properties subject to the property tax.

The property assessment audit conducts a twopart analysis: A procedural analysis and a statistical analysis. The procedural analysis includes all classes of property and specifically looks at how the assessor develops economic areas, confirms and qualifies sales, and develops time adjustments. The audit also examines the procedures for adequately discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out subdivision and Valuation discounting procedures. methodology for vacant land, improved residential properties commercial and properties is examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests and non-producing patented mining claims are also reviewed.

Statistical analysis is performed on vacant land, residential properties, commercial industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax Administrator.

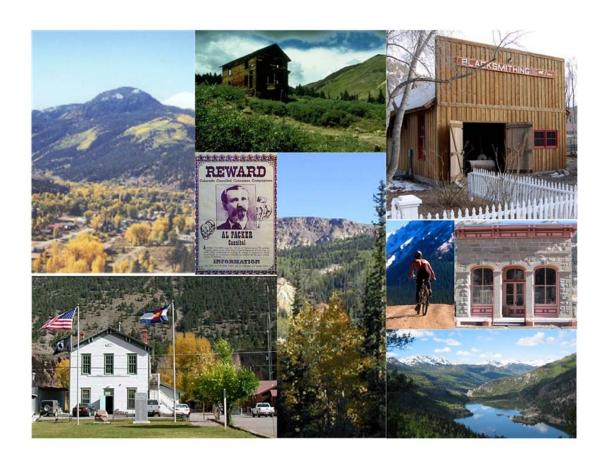
Wildrose Audit has completed the Property Assessment Study for 2010 and is pleased to report its findings for Hinsdale County in the following report.



# REGIONAL/HISTORICAL SKETCH OF HINSDALE COUNTY

## **Regional Information**

Hinsdale County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region west of the Rocky Mountains. It includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.





#### **Historical Information**

Hinsdale County has a population of approximately 821 people with 0.7 people per square mile, according to the U.S. Census Bureau's 2009 estimated population data.

Hinsdale County was formed in 1874, from Conejos, Costilla and Lake Counties and is the least densely populated of the 64 Colorado counties. The county seat and the only municipality in the county is the Town of Lake City. Hinsdale County is named for George A. Hinsdale, a prominent pioneer and former Lt. Governor of Colorado.

It is approximately 96% public lands, with 49% of that land designated as wilderness. The second largest natural lake in Colorado, Lake San Cristobal, is located in Hinsdale County. The lake was formed naturally over 700 years ago by the Slumgullion Earthflow, which

blocked the Lake Fork of the Gunnison River. There are five mountain peaks over 14,000 feet in Hinsdale County - Uncomphagre, Wetterhorn, Sunshine, Handies and Redcloud - all located near Lake City.

Lake City was formed in 1874 when a road building crew found gold in the nearby hills and the Town was officially established in 1875. During the 1880's the town boomed to almost 5,000 residents and had two breweries, two banks, seven saloons, and the first newspaper and Protestant church on the Western Slope of Colorado. Today, Lake City is a national historic district with many ghost towns such as Spencer, Vulcan (Vulcan Hill), Carson, Sherman, Burrows Park, Capitol City and others nearby.

(Wikipedia.org & www.rootsweb.ancestry.com)



# RATIO ANALYSIS

# Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 2007 and June 2008. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2008 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and pricerelated differential for each class of property. Counties were not passed or failed by these

latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

#### **Conclusions**

For this final analysis report, the minimum acceptable statistical standards allowed by the State Board of Equalization are:

ALLOWABLE	ALLOWABLE STANDARDS RATIO GRID			
Property Class	Unweighted Median Ratio	Coefficient of Dispersion		
Commercial/Industrial	Between .95-1.05	Less than 20.99		
Condominium	Between .95-1.05	Less than 15.99		
Single Family	Between .95-1.05	Less than 15.99		
Vacant Land	Between .95-1.05	Less than 20.99		



#### The results for Hinsdale County are:

Hinsdale County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
*Commercial/Industrial	N/A	N/A	N/A	N/A	N/A
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	43	0.977	1.019	8.1	Compliant
Vacant Land	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup>Due to the small number of sales, a procedural audit was performed.

After applying the above described methodologies, it is concluded from the sales ratios that Hinsdale County is in compliance with SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None

# **Random Deed Analysis**

An additional analysis was performed as part of the Ratio Analysis. Ten randomly selected deeds with documentary fees were obtained from the Clerk and Recorder. These deeds were for sales that occurred from January 1, 2007 through June 30, 2008. These sales were then checked for inclusion on the Assessor's qualified or unqualified database.

#### Conclusions

After comparing the list of randomly selected deeds with the Assessor's database, Hinsdale County has accurately transferred sales data from the recorded deeds to the qualified or unqualified database.

Recommendations



# TIME TRENDING VERIFICATION

### Methodology

While we recommend that counties use the inverted ratio regression analysis method to account for market (time) trending, some counties have used other IAAO-approved methods, such as the weighted monthly median approach. We are not auditing the methods used, but rather the results of the methods used. Given this range of methodologies used to account for market trending, we concluded that the best validation method was to examine the sale ratios for each class across the appropriate sale period. To be specific, if a county has considered and adjusted correctly for market trending, then the sale ratios should remain stable (i.e. flat) across the sale period. If a residual market trend is detected, then the county may or may not have addressed market

trending adequately, and a further examination is warranted. This validation methodology also considers the number of sales and the length of the sale period. Counties with few sales across the sale period were carefully examined to determine if the statistical results were valid.

#### Conclusions

After verification and analysis, it has been determined that Hinsdale County has complied with the statutory requirements to analyze the effects of time on value in their county. Hinsdale County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

#### Recommendations



# SOLD/UNSOLD ANALYSIS

# Methodology

Hinsdale County was tested for the equal treatment of sold and unsold properties to ensure that "sales chasing" has not occurred. The auditors employed a multi-step process to determine if sold and unsold properties were valued in a consistent manner.

All qualified residential and commercial class properties were examined using the unit value method, where the actual value per square foot was compared between sold and unsold properties. A class was considered qualified if it met the criteria for the ratio analysis. The median value per square foot for both groups was compared from an appraisal and statistical perspective. If no significant difference was indicated, then we concluded that no further testing was warranted and that the county was in compliance in terms of sold/unsold consistency.

If either residential or commercial differences were significant using the unit value method, or if data limitations made the comparison invalid, then the next step was to perform a ratio analysis comparing the 2009 and 2010 actual values for each qualified class of property. All qualified vacant land classes were tested using this method. The sale property ratios were arrayed using a range of 0.8 to 1.5, which theoretically excluded changes between years that were due to other unrelated changes in the property. These ratios were also stratified at the appropriate level of analysis. percent change was determined for each appropriate class and sub-class, the next step was to select the unsold sample. This sample

was at least 1% of the total population of unsold properties and excluded any sale properties. The unsold sample was filtered based on the attributes of the sold dataset to closely correlate both groups. The ratio analysis was then performed on the unsold properties and stratified. The median and mean ratio distribution was then compared between the sold and unsold group. A nonparametric test such as the Mann-Whitney test for differences between independent samples was undertaken to determine whether any observed differential was significant. If this test determined that the unsold properties were treated in a manner similar to the sold properties, it was concluded that no further testing was warranted and that the county was in compliance.

If a class or sub-class of property was determined to be significantly different by this method, the final step was to perform a multivariate mass appraisal model that developed ratio statistics from the sold properties that were then applied to the unsold sample. This test compared the measures of central tendency and confidence intervals for the sold properties with the unsold property sample. If this comparison was also determined to be significantly different, then the conclusion was that the county had treated the unsold properties in a different manner than sold properties.

These tests were supported by both tabular and chart presentations, along with saved sold and unsold sample files.



Sold/Unsold Results				
Property Class	Results			
Commercial/Industrial	N/A			
Condominium	N/A			
Single Family	Compliant			
Vacant Land	N/A			

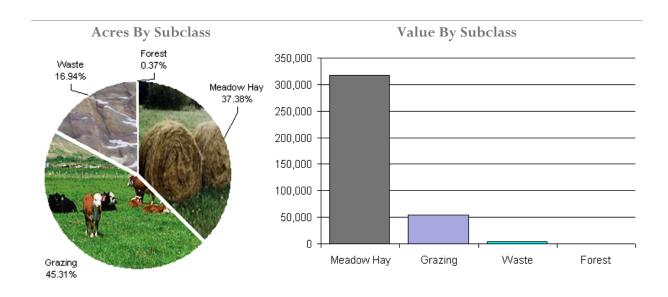
#### Conclusions

After applying the above described methodologies, it is concluded that Hinsdale County is reasonably treating its sold and unsold properties in the same manner.

#### Recommendations



# AGRICULTURAL LAND STUDY



# **Agricultural Land**

County records were reviewed to determine major land categories such as irrigated farm, dry farm, meadow hay, grazing and other In addition, county records were lands. reviewed in order to determine if: photographs are available and are being used; soil conservation guidelines have been used to classify lands based on productivity; crop rotations have been documented; typical commodities and yields have been determined; orchard lands have been properly classified and valued; expenses reflect a ten year average and are typical landlord expenses; grazing lands have been properly classified and valued; the number of acres in each class and subclass have been determined; the capitalization rate was properly applied. Also, documentation was required for the valuation methods used and locally developed yields, carrying capacities, and expenses. Records were also checked to ensure that the commodity prices and expenses, furnished by the Property Tax Administrator (PTA), were applied properly.

(See Assessor Reference Library Volume 3 Chapter 5.)

#### Conclusions

An analysis of the agricultural land data indicates an acceptable appraisal of this property type. Directives, commodity prices and expenses provided by the PTA were properly applied. County yields compared favorably to those published by Colorado Agricultural Statistics. Expenses used by the county were allowable expenses and were in an acceptable range. Grazing lands carrying capacities were in an acceptable range. The data analyzed resulted in the following ratios:



	Hinsdale County Agricultural Land Ratio Grid					
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4137	Meadow Hay	5,298	60.00	317,828	317,828	1.00
4147	Grazing	6,421	9.00	54,620	54,620	1.00
4177	Forest	53	2.00	86	86	1.00
4167	Waste	2,400	2.00	3,876	3,876	1.00
Total/Avg		14,172	27.00	376,410	376,410	1.00

# Recommendations



# **Agricultural Outbuildings**

# Methodology

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.74 through 5.77 were being followed.

#### **Conclusions**

Hinsdale County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

#### Recommendations



# SALES VERIFICATION

#### According to 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.)

Part of the Property Assessment Study is the sales verification analysis. WRA has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

WRA reviewed the sales verification procedures in 2010 for Hinsdale County. This study was conducted by checking selected sales from the master sales list for the Jan 1, 2007 - June 30, 2008 valuation period. Specifically WRA selected 28 sales listed as unqualified.

All of the sales in the unqualified sales sample had reasons that were clear and supportable.

#### Conclusions

Hinsdale County appears to be doing an excellent job of verifying their sales. WRA agreed with the county's reason for disqualifying each of the sales selected in the sample. There are no recommendations or suggestions.

#### Recommendations



# EVALUATION EVALUATION

## Methodology

Hinsdale County has submitted a written narrative describing the economic areas that make up the county's market areas. Hinsdale County has also submitted a map illustrating these areas. Each of these narratives have been read and analyzed for logic and appraisal sensibility. The maps were also compared to the narrative for consistency between the written description and the map.

#### Conclusions

After review and analysis, it has been determined that Hinsdale County has

adequately identified homogeneous economic areas comprised of smaller neighborhoods. Each economic area defined is equally subject to a set of economic forces that impact the value of the properties within that geographic area and this has been adequately addressed. Each economic area defined adequately delineates an area that will give "similar values for similar properties in similar areas."

#### Recommendations



# NATURAL RESOURCES

# Producing Mine Valuation Procedures

## Methodology

Colorado Revised Statutes (CRS) Article 39, Section 6, and the Assessor's Reference Library (ARL), Volume 3 are the basis for valuing producing mine property. The gross value of the ore extracted during the preceding year is determined. All costs of treatment, reduction, transportation and sale are deducted to estimate gross proceeds. The costs of extraction are deducted from the gross proceeds to estimate net proceeds.

The current value for assessment is determined by determining if 25% of the gross proceeds or 100% of the net proceeds is greater, then applying that number as the valuation for assessment.

#### Conclusions

The County valued the producing mine production using acceptable appraisal procedures.

#### Recommendations



# VACANT LAND

## **Subdivision Discounting**

Subdivisions were reviewed in 2010 in Hinsdale County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year was accomplished by reducing the absorption period by one year.

#### Conclusions

Hinsdale County has implemented proper procedures to adequately estimate absorption periods, discount rates, and lot values for qualifying subdivisions.

#### Recommendations



# POSSESSORY INTEREST PROPERTIES

### **Possessory Interest**

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of C.R.S. Chapter 39-1-103 (17)(a)(II)Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Chapter 7: A private property interest in government-owned property or the right to the occupancy and use of any benefit in government-owned property that has been under lease, permit, concession, contract, or other agreement.

Hinsdale County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural and commercial possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

#### Conclusions

Hinsdale County has implemented a discovery process to place possessory interest properties on the roll. They have also correctly and consistently applied the correct procedures and valuation methods in the valuation of possessory interest properties.

#### Recommendations



# PERSONAL PROPERTY AUDIT

Hinsdale County was studied for its procedural compliance with the personal property assessment outlined in the Assessor's Reference Library (ARL) Volume 5, and in the State Board of Equalization (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, classification, documentation procedures, current economic lives table, cost factor tables, depreciation table, and level of value adjustment factor table.

The personal property audit standards narrative must be in place and current. A listing of businesses that have been audited by the assessor within the twelve-month period reflected in the plan is given to the auditor. The audited businesses must be in conformity with those described in the plan.

Aggregate ratio will be determined solely from the personal property accounts that have been physically inspected. The minimum assessment sample is one percent or ten schedules, whichever is greater, and the maximum assessment audit sample is 100 schedules.

For the counties having over 100,000 population, WRA selected a sample of all personal property schedules to determine whether the assessor is correctly applying the provisions of law and manuals of the Property Tax Administrator in arriving at the assessment This sample was levels of such property. selected from the personal property schedules audited by the assessor. In no event was the sample selected by the contractor less than 30 schedules. The counties to be included in this study are Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Hinsdale County is compliant with the guidelines set forth in ARL Volume 5 regarding discovery procedures, using the following methods to discover personal property accounts in the county:

- Public Record Documents
- MLS Listing and/or Sold Books
- Chamber of Commerce/Economic Development Contacts
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth
- Questionnaires, Letters and/or Phone Calls to Buyer, Seller and/or Realtor
- Online search for vacation rentals

The county uses the Division of Property Taxation (DPT) recommended classification and documentation procedures. The DPT's recommended cost factor tables, depreciation tables and level of value adjustment factor tables are also used.

Hinsdale County submitted their personal property written audit plan and was current for the 2010 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

 Accounts close to the \$4,000 actual value exemption status



#### **Conclusions**

Hinsdale County has employed adequate discovery, classification, documentation, valuation, and auditing procedures for their

personal property assessment and is in statistical compliance with SBOE requirements.

#### Recommendations



# WILDROSE AUDITOR STAFF

Harry J. Fuller, Audit Project Manager

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# APPENDICES

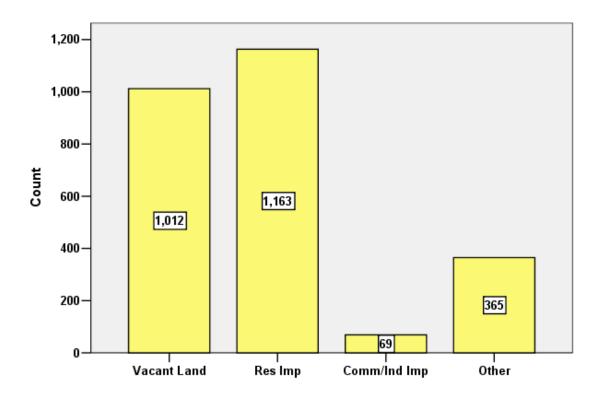


# STATISTICAL COMPLIANCE REPORT FOR HINSDALE COUNTY 2010

#### I. OVERVIEW

Hinsdale County is located in the San Juan Mountain region of southwestern Colorado. The county has a total of 2,609 real property parcels, according to data submitted by the county assessor's office in 2010. The following provides a breakdown of property classes for this county:

#### Real Property Class Distribution



The vacant land class of properties was dominated by residential land. Residential lots (coded 100 or 1112) accounted for 62% of all vacant land parcels. Based on the number of vacant land parcels in Hinsdale County, we were not required to analyze this class of property for audit compliance.

For residential improved properties, single family properties accounted for 92% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 3% of all such properties in this county.



#### II. DATA FILES

The following sales analyses were based on the requirements of the 2010 Colorado Property Assessment Study. Information was provided by the Hinsdale Assessor's Office in June 2010. The data included all 5 property record files as specified by the Auditor.

#### III. RESIDENTIAL SALES RESULTS

The following steps were taken to analyze the residential sales:

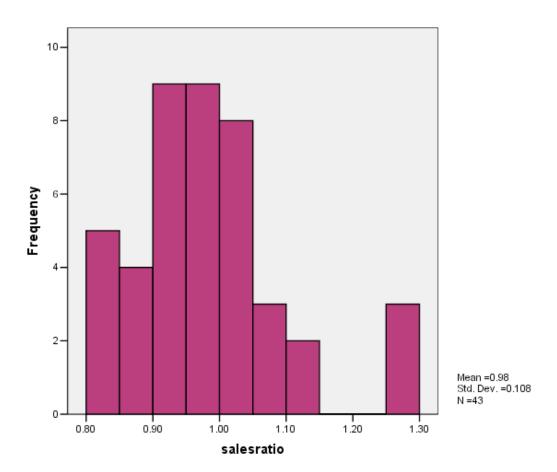
1. All sales	279
2. Select qualified sales	164
3. Select improved sales	72
4. Select residential sales only	66
5. Sales between January 1, 2007 and June 30, 2008	43

The sales ratio analysis was analyzed as follows:

Median	0.977
Price Related Differential	1.019
Coefficient of Dispersion	.081

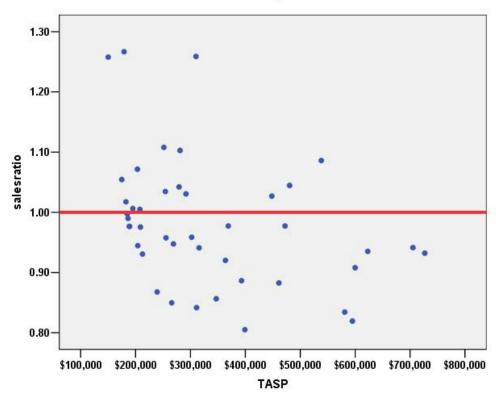
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for all of these properties:











The above graphs indicate that the distribution of the sale ratios was within state mandated limits, and that there were no significant price-related differential issues. No sales were trimmed.

#### **Residential Market Trend Analysis**

We next analyzed the residential dataset using the 18-month sale period, with the following results:

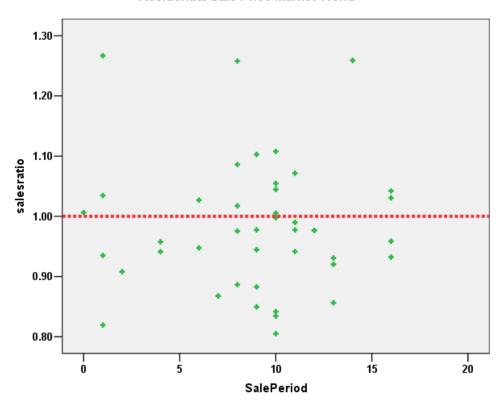
#### Coefficientsa

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.982	.039		25.209	.000
	SalePeriod	9.51E-005	.004	.004	.024	.981

a. Dependent Variable: salesratio



#### Residential Sale Price Market Trend



The above analysis indicated that no market trend was present in the sale ratio data. We concluded that the assessor has adequately considered market trending in the residential valuation of properties in Hinsdale County.

#### **Sold/Unsold Analysis**

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot between sold and unsold residential properties, as follows:

Group	No. Props	Median Act Val/SF	Mean Act Val/SF
Unsold	1,026	\$190	\$199
Sold	43	\$237	\$240

The above results indicate that sold and unsold residential properties were valued in a consistent manner.



#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

Hinsdale County did not have enough qualified commercial/industrial sales to be statistically significant. A procedural audit was completed for taxable year 2010. This analysis reviewed all six sales. Information was gathered concerning class of property, year built, improvement size, type and quality of construction, condition at the time of sale, sale date and amount and the Assessor value. The audit then determined sale price per square foot and the sales ratio.

The audit concluded that Hinsdale County is in compliance due to the lack of substantive data to support a revaluation decision.

#### V. AGRICULTURAL IMPROVEMENTS ANALYSIS

The final statistical verification concerned the assigned actual values for agricultural residential improvements. We compared the actual value per square foot rate for this group and compared it to rates assigned to residential single family improvements in Hinsdale County.

The following indicates that agricultural residential improvements were valued in a manner similar to the single family residential improvements in this county:



#### Descriptives

	abstrimp			Statistic	Std. Error
ImpValSF	1212	Mean		\$1,291.19	\$617.484
		95% Confidence	Lower Bound	\$79.57	
		Interval for Mean	Upper Bound	\$2,502.82	
		5% Trimmed Mean		\$ <del>137.8</del> 1	
		Median		\$141.20	)
		Variance		405307138	
		Std. Deviation		\$20,132.241	
		Minimum		\$10	
		Maximum		\$403,200	
		Range		\$403,190	
		Interquartile Range		\$64	
		Skewness		18.378	.075
		Kurtosis		343.575	.150
	4277	Mean		\$143.66	\$18.698
		95% Confidence	Lower Bound	\$101.36	
		Interval for Mean	Upper Bound	\$185.96	
		5% Trimmed Mean		\$ <del>143.7</del> 3	
		Median		\$142.24	)
		Variance		3496.086	
		Std. Deviation		\$59.128	
		Minimum		\$42	
		Maximum		\$244	
		Range		\$202	
		Interquartile Range		\$85	
		Skewness		034	.687
		Kurtosis		142	1.334

#### VI. Conclusions

Based on this statistical analysis, there were no significant compliance issues concluded for Hinsdale County as of the date of this report.



#### **STATISTICAL ABSTRACT**

#### **Residential**

#### **Ratio Statistics for CURRTOT / TASP**

Mean		.982
95% Confidence Interval	Lower Bound	.949
for Mean	Upper Bound	1.016
Median		.977
95% Confidence Interval	Lower Bound	.941
for Median	Upper Bound	1.006
	Actual Coverage	96.8%
Weighted Mean		.964
95% Confidence Interval	Lower Bound	.932
for Weighted Mean	Upper Bound	.996
Price Related Differential		1.019
Coefficient of Dispersion		.081
Coefficient of Variation	Mean Centered	11.0%

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.

#### Commercial/Industrial

## **Not Applicable**

#### **Residential Median Ratio Stratification**

#### Sale Price

#### **Case Processing Summary**

		Count	Percent
SPRec	\$150K to \$200K	9	20.9%
	\$200K to \$300K	14	32.6%
	\$300K to \$500K	13	30.2%
	\$500K to \$750K	7	16.3%
Overall		43	100.0%
Excluded		0	
Total		43	



#### **Ratio Statistics for CURRTOT / TASP**

				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
\$150K to \$200K	1.006	1.005	.072	12.9%
\$200K to \$300K	.990	.998	.066	8.1%
\$300K to \$500K	.941	1.001	.086	12.4%
\$500K to \$750K	.932	1.001	.061	9.5%
Overall	.977	1.019	.081	11.1%

# Improved Area

## **Case Processing Summary**

		Count	Percent
ImpSFRec	500 to 1,000 sf	16	37.2%
	1,000 to 1,500 sf	9	20.9%
	1,500 to 2,000 sf	10	23.3%
	2,000 to 3,000 sf	5	11.6%
	3,000 sf or Higher	3	7.0%
Overall		43	100.0%
Excluded		0	
Total		43	

#### **Ratio Statistics for CURRTOT / TASP**

				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
500 to 1,000 sf	.977	1.006	.043	6.0%
1,000 to 1,500 sf	.977	1.050	.134	17.4%
1,500 to 2,000 sf	.950	1.013	.074	9.7%
2,000 to 3,000 sf	1.045	1.032	.114	15.9%
3,000 sf or Higher	.941	1.007	.042	6.9%
Overall	.977	1.019	.081	11.1%



Age

## **Case Processing Summary**

		Count	Percent
AgeRec	Over 100	1	2.3%
	50 to 75	2	4.7%
	25 to 50	22	51.2%
	5 to 25	14	32.6%
	5 or Newer	4	9.3%
Overall		43	100.0%
Excluded		0	
Total		43	

#### Ratio Statistics for CURRTOT / TASP

				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
Over 100	1.259	1.000	.000	
50 to 75	1.101	1.022	.142	20.1%
25 to 50	.976	1.022	.065	9.6%
5 to 25	1.016	1.014	.076	10.0%
5 or Newer	.909	.991	.052	6.5%
Overall	.977	1.019	.081	11.1%