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In the Matter of:
Carson City
Churchill County
Elko County
Lander County
Pershing County
White Pine County
2014-2015 Ratio Study

NOTICE OF DECISION

Appearances

Terry Rubald, Deputy Executive Director, and Bruce Bartolowits, Supervisor, Locally-Assessed Section, appeared on behalf of the Department of Taxation.

Dave Dawley, Carson City Assessor, Norma Green, Churchill County Assessor, Celeste Hamilton, Pershing County Assessor, and Deborah K. Underwood, White Pine County Assessor, appeared for their respective counties. Katrinka Russell, Elko County Assessor, appeared by telephone. Lura Duvall, Lander County Assessor, made no appearance as required by NRS 361.333(4)(a) and (b).

Summary

The matter of the approval of the 2014-2015 Ratio Study came before the Nevada Tax Commission (Commission) for hearing in Reno and via video conference to Las Vegas, Nevada, on May 5, 2014 after due notice to each Assessor. The Commission reviewed the ratio study and the report of the Department. Using statistical tests designed for mass appraisal, the Commission found all types of property fell within the range required by NRS 361.333. The Commission adopted the recommendations of the Department with regard to work practices, as follows:

Table with 1 column and 7 rows containing directives for Carson City and Churchill/Elko counties regarding assessment practices.

Elko County: Directive #2: The Assessor is directed to review all commercial parcels for correct occupancy codes.
Elko County: Directive #3: The Assessor is directed to correct data transfers when updating property files.
Lander County: Directive #1: The Assessor is directed to update properties containing discrepancies as listed in the Outlier Report.
Pershing County: Directive #1: The Assessor is directed to review ADS system as to whether foundation costs are included the costing system and to provide printed Marshall & Swift Residential reports in the Standard Report format.
Pershing County: Directive #2: The Assessor is directed to continue performing physical re-inspection on a rotating basis to minimize property escaping taxation.
White Pine County: Directive #1: The Assessor is directed apply the Rural Building Manual only to those improvements where unprofessional or unskilled was used to build the improvement per NAC 361.128(2) and (3).
White Pine County: Directive #2: The Assessor is directed to review the quality class and occupancy of all commercial properties during reappraisal to make accurate identifications, using the information provided in Marshall & Swift.
White Pine County: Directive #3: The Assessor is directed to maintain a history of parcels or areas in which obsolescence was applied and the amount applied in each year to enable a better defense of values and future trending.
White Pine County: Directive #4: The Assessor is directed to clearly document changes to and from agricultural land status.
White Pine County: Directive #5: The Assessor is directed to include internet sales in the sales file and coded for validity and add a reference of "utilities available" for vacant land.

DECISION

The Commission, having considered all evidence and testimony pertaining to the matter, hereby approves the 2014-2015 Ratio Study as reported by the Department and finds no further action is required, except as listed above, pursuant to the authority granted in NRS 361.333.

BY THE NEVADA TAX COMMISSION THIS 17 DAY OF JULY, 2014.

Christopher G. Nielsen, Executive Director

cc: County Assessors
Gina Session, Chief Deputy Attorney General



NEVADA DEPARTMENT OF TAXATION
Division of Local Government Services

2014-2015 REPORT OF ASSESSMENT RATIO STUDY

Division of Local Government Services

2014 - 2015

Report of Assessment Ratio Study

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INTRODUCTION

2014 - 2015 RATIO STUDY

AUTHORITY, OVERSIGHT AND REPORTING

Under NRS 361.333, the Nevada Tax Commission is obligated to equalize property under its jurisdiction. Equalization is the process by which the Commission ensures “that all property subject to taxation within the county has been assessed as required by law.”¹

There are two types of information which the Commission considers to determine whether property has been assessed equitably. The first type of information comes from a ratio study, which is a statistical analysis designed to study the level and uniformity of the assessments. The second type of information comes from a procedural audit which is designed to fulfill the requirements of NRS 361.333(1)(b)(2). The procedural audit examines the work practices of the assessor to determine whether all property is being assessed in a correct and timely manner.

It is important to note that the statistical analysis required by NRS 361.333 is a quality control technique designed for mass appraisal. Mass appraisal, like single-property appraisal, is a “systematic method for arriving at estimates of value.”² The difference between mass appraisal and single-property appraisal is only a matter of scope:

Mass appraisal models have more terms because they attempt to replicate the market for one or more land uses across a wide geographic area. Single-property models, on the other hand, represent the market for one kind of land use in a limited area.

Quality is measured differently in mass appraisal and single-property appraisal. The quality of a single-property appraisal is measured against a small number of comparable properties that have sold. The quality of mass appraisals is measured with statistics developed from a sample of sales in the entire area appraised by the model.³

Typically, mass appraisal techniques using valuation models for groups and classes of property are used by county assessors to determine taxable value. For example, mass appraisal techniques for land valuation are described in NAC 361.11795, and reference the use of base lot values as benchmarks for valuing properties within a stratum. In addition an assessor is required to use the IAAO “Standard on Automated Valuation Models” when developing mass appraisal models, pursuant to NAC 361.1216.

NRS 361.333(2) permits the Department to conduct a ratio study on smaller groups of counties instead of the entire state in any one year. The ratio study is therefore conducted over a three year cycle. The

¹ NRS 361.333(4)(a) “The board of county commissioners and the county assessor, or their representatives, shall present evidence to the Nevada Tax Commission of the steps taken to ensure that all property subject to taxation within the county has been assessed as required by law.” Compare this statutory requirement to the International Association of Assessing Officers definition of equalization: “The process by which an appropriate governmental body attempts to ensure that property under its jurisdiction is appraised equitably at market value or as otherwise required by law.”

² Eckert, Joseph K., Ed., Property Appraisal and Assessment Administration (IAAO: Chicago, 1990), p. 35.

³ Ibid.

counties reviewed for 2014 - 2015 are Carson City, Churchill, Elko, Lander, Pershing and White Pine Counties.

If inequity or bias is discovered, NRS 361.333 provides the Nevada Tax Commission the authority to apply factors designed to correct inequitable conditions to classes of property or it may order reappraisal, the goal of which is to determine whether all real and personal property is assessed at 35% of taxable value. In addition, NRS 360.215 authorizes the Department of Taxation to assist county assessors in appraising property which the ratio study shows to be in need of reappraisal. The Department also consults on the development and maintenance of standard assessment procedures to ensure that property assessments are uniformly made.

RATIO STUDY DESIGN PARAMETERS AND STANDARDS FOR ANALYSIS

Generally speaking, a "ratio study" is "designed to evaluate appraisal performance by comparing the estimate of assessed value produced by the assessor on each parcel in the sample to the estimate of taxable value produced by the Department. The comparison is called a "ratio."

The properties comprising the sample are physically inspected by Department appraisers and valued according to statutory and regulatory requirements. For instance, the Department valued improvements using the Valuation Cost Service published by Marshall Swift, pursuant to NAC 361.128. Land was valued for each sample property by using comparable sales and analyzed pursuant to NAC 361.118. In the event there were insufficient sales of vacant land, Department staff extracted land values using allocation or abstraction methods authorized pursuant to NAC 361.119.

The appraisals conducted by the Department comprise a *sample* of the *universe or population* of all properties within the jurisdiction being reviewed. From the information about the *sample*, the Department *infers* what is happening to the population as a whole.

The Department examines the ratio information for *appraisal level* and *appraisal uniformity*. Appraisal level compares how close the assessor's estimate of assessed value is to the legally mandated standard of 35% of taxable value. Appraisal level is measured by a descriptive statistic called a *measure of central tendency*. A measure of central tendency, such as the mean, median, or aggregate ratio, is a single number or value that describes the center or the middle of a set of data. In the case of this ratio study, the median describes the middle of the array of all ratios comparing the assessed value to the taxable value established for each parcel.

Assessment uniformity refers to the degree to which different properties are assessed at equal percentages of taxable value. If taxable value could be described as the center of a "target," then assessment uniformity looks at how much dispersion or distance there is between each ratio and the "target." The statistical measure known as the coefficient of dispersion (COD) measures uniformity or the distance from the "target."

The ratio study by law must include the median ratio of the total property within each subject county and each class of property. The study must also include two comparative statistics known as the overall ratio (also known as the aggregate ratio or weighted mean ratio) and the coefficient of dispersion (COD) of the median, for both the total property in each subject county and for each major class of property within the county. NRS 361.333 (5)(c) defines the major classes of property as:

- I. Vacant land;
- II. Single-family residential;
- III. Multi-residential;
- IV. Commercial and industrial; and
- V. Rural

In addition, the statistics are calculated specifically for improvement, land, and total property values. The classes are further defined as those within the reappraisal area.

The median is a statistic describing the measure of central tendency of the sample. It is the middle ratio when all the ratios are arrayed in order of magnitude, and divides the sample into two equal parts. The median is the most widely used measure of central tendency by equalization agencies because it is less affected by extreme ratios or “outliers,” and is therefore the preferred measure for monitoring appraisal performance or evaluating the need for a reappraisal.⁴ NRS 361.333(5)(c) states that under- or- over assessment may exist if the median of the ratios falls in a range less than 32% or more than 36%.

The Department calculates the overall or aggregate ratio by dividing the total assessed value of all the observations (parcels) in the sample by the total taxable value of all the observations (parcels) in the sample. This produces a ratio weighted by dollar value. Because of the weight given to each dollar of value, parcels with higher values exert more influence than parcels with lower values. The aggregate ratio helps identify under or over assessment of higher valued property. For instance, an unusually high aggregate ratio might indicate that higher valued property is over assessed, or valued at a rate higher than other property. The statutory and regulatory framework does not dictate any range of acceptability for the aggregate ratio.

The COD is a measure of dispersion relating to the uniformity of the ratios and is calculated for all property within the subject jurisdiction and for each class of property within the subject jurisdiction. The COD measures the deviation of the individual ratios from the median ratio as a percentage of the median and is calculated by (1) subtracting the median from each ratio; (2) taking the absolute value of the calculated differences; (3) summing the absolute differences; (4) dividing by the number of ratios to obtain the “average absolute deviation;” and (5) dividing by the median. The COD has “the desirable feature that its interpretation does not depend on the assumption that the ratios are normally distributed.”⁵ The COD is a relative measure and useful for comparing samples from different classes of property within counties, as well as among counties.

In 2010, the Nevada Tax Commission adopted NAC 361.1216. The regulation adopted the Standard on Automated Valuation Models, September 2003 edition published by the International Association of Assessing Officers. The Standard on Automated Valuation Models, Section 8.4.2.1, discusses the coefficient of dispersion and Table 2 references Ratio Study Performance Standards with regard to the COD. The IAAO Standard on Ratio Studies states that “the smaller the measure, the better the uniformity, but extremely low measures can signal acceptable causes such as extremely homogeneous properties or very stable markets; or unacceptable causes such as lack of quality control, calculation errors, poor sample representativeness or sales chasing. Note that as market activity changes or as the complexity of

⁴ International Association of Assessing Officers, Standard on Ratio Studies, (2010), p.12; 27.

⁵ International Association of Assessing Officers, Standard on Ratio Studies, (2010), p. 13.

properties increases, the measures of variability usually increase, even though appraisal procedures may be equally valid.”⁶ The IAAO recommended ratio study performance standards are as follows:

<u>Type of Property</u>	<u>COD</u>
Single-family Residential	
Newer, more homogenous areas	5.0 to 10.0
Older, heterogeneous areas	5.0 to 15.0
Rural residential and seasonal	5.0 to 20.0
Income-producing properties	
Larger, urban jurisdictions	5.0 to 15.0
Smaller, rural jurisdictions	5.0 to 20.0
Vacant land	5.0 to 25.0
Other real and personal property	Varies with local conditions ⁷

R A T I O S T U D Y C O N C L U S I O N S

The 2014 - 2015 Ratio Study presentation includes the comparison of the median and aggregate ratios and the COD of all 17 counties required by NRS 361.333(1)(b)(1). These charts show the aggregate and median ratios and the coefficient of dispersion for the past three study years (2012 - 2014) across all counties for all properties.

Similar data is shown just for the counties in the 2014-15 study year. Here the aggregate and median ratios, the COD, and the median related differential (MRD) are compared across types of property in the six counties. Data for each individual county is displayed for each type of property across all appraisal areas within the county, not just the reappraisal area.

Median Related Differential

The median related differential is a statistic that tends to indicate regressivity when it is above 1.03 and progressivity when it is below .98. It is an indication of whether high-value properties are appraised higher or lower than low-value properties. The standard is not an absolute when samples are small or when wide variations in prices exist. In that case, other statistical tests may be more useful. This particular test is not required by statute.

The chart indicates that of the six counties studied for 2014 - 2015, regressivity is present for vacant land in Carson City and Lander County; and in commercial / industrial properties in Carson City and Elko Counties. Other counties where progressivity or regressivity occurred in prior years are also listed. The Department

⁶ International Association of Assessing Officers, Standard on Ratio Studies, (2013), p. 17.

⁷ International Association of Assessing Officers, Standard on Ratio Studies, (2010), p. 17; and Standard on Automated Valuation Models (2003), p. 25 and p. 28.

recommends reviewing stratifications of property and neighborhoods to ensure sufficient sales data is available, or use alternate methods of land valuation.

Aggregate Ratio

The data for the aggregate (overall) ratio, or weighted mean, for the subject counties are within the range of 32% to 36% on a composite basis, except vacant land in Carson City which is out at 29.9% and vacant land in Lander County which is out at 28.9%

Median Ratio

The median ratios of assessed value to taxable value generally indicate over-or-undervaluation of those types of property taken as a whole within the entire appraisal jurisdiction. This is not to say that inequity might not exist in pocket areas. However, this study makes these inferences for property groups as a whole within the jurisdiction, without regard to individual market areas. As noted above, for purposes of monitoring appraisal performance and for direct equalization, the median ratio is the preferred measure of central tendency.

Based on the median ratio, we can infer the appraisal level for all classes of property in each county included in this study fell between 32% and 36% using the results of the sample taken by the Department. The land, improvement, and the overall ratios of the assessed value established by each county assessor, measured against the taxable value established by the Department, are within statutory limits.

In addition, the COD for each reappraisal area for each county indicate the appraisals are relatively uniform.

PROCEDURAL AUDIT/OFFICE REVIEW AND PERFORMANCE AUDIT

2014 - 2015 RATIO STUDY

NRS 361.333 (1)(b)(2) requires the Department to make a determination about whether each county has adequate procedures to ensure that all property subject to taxation is being assessed in a correct and timely manner, and to note any deficiencies. The Department historically used Procedural Audits / Office Reviews to obtain information used in this determination. The Department now conducts Performance Audits to build on the past Procedural Audits / Office Reviews for this determination. However, Department appraisers continue to make observations and recommendations regarding appraisal and assessment methodologies which are included in the Outlier reports.

PERFORMANCE AUDIT PROGRAM

In January 2010, the Department implemented its Performance Audit Program. The Performance Audit Program is designed to provide a much more in depth analysis of specific areas of the Nevada property tax system. Topics are selected for performance audits based on assessment of risk, current circumstances, significance, and cost/benefit analysis. Performance Audits are performed in compliance with Generally Accepted Government Auditing Standards.

The first performance audit evaluated each of the 17 counties' practices related to valuation of land for property tax assessment, including whether activities were carried out in accordance with applicable state laws, regulations, policies, and procedures. The audit focused on each of the 17 counties' activities for the 2010 - 2011 secured roll cycle beginning in May 2009 and ending October or November 2010. The audits also included activities through June 2011 for certain areas.

Information about the Performance Audit Program, the definition of the program, as well as the actual Performance Audit #1001 on Land Valuation and the associated 2012 Economic and Demographic Report may be downloaded from the Taxation website at <http://tax.state.nv.us> . Select "Publications;" then "Local Government Services Publications"; then "Performance Audit Program."

The 2014 – 2015 Ratio Study reviewed the findings from this audit for the counties in the study. Carson City had one finding, to provide documentation for site adjustments. This has been completed. Churchill County had two findings, the mapping and valuation of surface patented mining claims. The county is making progress and is working towards completion. Elko County had five findings. Mapping and valuation of patented mining claims has been started and is in progress. Supporting documentation for adjustments and assigning parcel numbers to all land has been completed. The correction of non-contiguous parcels having the same parcel number has not been started. Lander County had three findings, mapping and valuation of patented mining claims and documentation of adjustments. All three have been started but are not complete. Pershing County had seven findings. Mapping patented mining claims, taxation of a private shooting range, supporting documents for adjustments, the sales data collection process, insuring values are applied correctly to individual parcels, and correctly applying subdivision discounts have been completed. Valuing patented mining claims has been started but not completed. White Pine County had eight findings. Providing a website has been completed. White Pine County has a new assessor and has requested the Department provide guidance for the remaining findings. This will be done.

The Department will continue to monitor the progress of all findings until fully implemented.

LAND AND IMPROVEMENT FACTORS

The Department reviews assessments in those areas where land and improvement factors are applied pursuant to NRS 361.260(5) to ensure the factors are appropriately applied. In the last fiscal year no counties in the State used the factor for land values since all counties annually reappraise land in each county. Improvement Factors for the 2014 - 2015 tax year are also available on the Taxation website at <http://tax.state.nv.us> .

2014-2015

REPORT OF ASSESSMENT RATIO STUDY

STATISTICAL TABLES

NEVADA DEPARTMENT OF TAXATION
2014-2015 RATIO STUDY
AGGREGATE RATIOS

SUBJECT COUNTY	STUDY YEAR	ALL PROPERTY	IMPROVEMENTS	IMPROVED LAND	VACANT LAND	SINGLE FAMILY RESIDENCE	MULTI-FAMILY RESIDENCE	COMMERCIAL INDUSTRIAL	RURAL LAND & IMPROVEMENTS
CARSON CITY	2014	32.5	32.6	33.9	29.9	33.9	34.9	32.3	34.9
CHURCHILL	2014	34.6	34.7	34.1	34.6	34.4	34.6	34.9	35.0
CLARK	2012	34.2	34.2	34.4	34.2	33.8	34.0	34.3	34.9
DOUGLAS	2013	34.3	34.0	34.8	34.1	34.7	34.0	34.2	35.4
ELKO	2014	33.2	32.4	34.7	35.2	32.7	33.9	32.6	35.0
ESMERALDA	2012	32.9	32.7	33.2	33.0	33.4	30.5	32.2	35.0
EUREKA	2012	34.1	34.1	34.5	33.4	34.8	32.2	34.6	35.0
HUMBOLDT	2013	33.7	34.1	32.5	33.9	33.8	33.6	33.6	35.1
LANDER	2014	34.0	34.2	34.4	28.9	34.3	34.2	34.2	33.5
LINCOLN	2012	33.1	33.2	34.2	28.8	33.2	34.2	32.6	35.0
LYON	2013	32.9	33.0	31.9	35.5	34.0	33.5	32.1	35.0
MINERAL	2012	32.1	31.4	34.0	33.3	31.1	30.0	33.2	34.4
NYE	2013	34.2	34.1	34.6	33.6	33.8	34.5	34.2	35.1
PERSHING	2014	34.7	34.8	34.5	33.9	33.5	33.8	35.3	35.0
STOREY	2012	33.9	34.3	33.7	32.6	34.6	33.2	34.1	35.0
WASHOE	2013	34.3	34.6	34.0	33.3	34.1	33.7	34.6	35.1
WHITE PINE	2014	34.3	34.3	34.3	33.5	33.6	34.1	34.4	34.9
STATEWIDE	2014	34.0	34.0	34.1	32.8	33.9	33.9	34.1	35.0

NEVADA DEPARTMENT OF TAXATION
2014-2015 RATIO STUDY
MEDIAN RATIOS

SUBJECT COUNTY	STUDY YEAR	ALL PROPERTY	IMPROVEMENTS	IMPROVED LAND	VACANT LAND	SINGLE FAMILY RESIDENCE	MULTI-FAMILY RESIDENCE	COMMERCIAL INDUSTRIAL	RURAL LAND & IMPROVEMENTS
CARSON CITY	2014	34.4	34.4	34.4	33.9	34.2	34.9	34.0	34.9
CHURCHILL	2014	34.8	35.0	34.0	34.8	34.7	34.7	35.0	35.0
CLARK	2012	34.4	34.4	34.0	34.5	34.5	34.1	34.1	35.0
DOUGLAS	2013	34.8	34.8	34.9	34.9	34.9	34.4	34.8	35.0
ELKO	2014	34.5	33.5	34.9	35.0	33.8	34.3	34.1	35.0
ESMERALDA	2012	33.2	33.3	34.4	32.7	33.2	30.2	32.4	35.0
EUREKA	2012	34.5	34.9	34.7	34.2	35.0	33.1	34.7	35.0
HUMBOLDT	2013	34.2	33.7	34.4	34.7	34.2	33.8	33.9	35.0
LANDER	2014	34.5	34.6	34.6	34.8	34.7	34.1	34.6	32.7
LINCOLN	2012	33.7	33.3	34.0	33.3	33.2	33.8	32.9	35.0
LYON	2013	34.0	33.8	35.0	34.6	34.3	33.9	33.6	35.0
MINERAL	2012	33.3	32.0	34.0	33.9	30.0	30.1	33.1	34.9
NYE	2013	34.3	34.1	34.0	34.6	34.0	34.1	34.1	35.0
PERSHING	2014	34.4	34.5	34.7	34.4	34.0	34.3	35.0	35.0
STOREY	2012	33.9	33.7	34.2	33.4	33.7	34.2	33.9	35.0
WASHOE	2013	34.2	34.0	34.9	34.7	34.2	33.9	34.9	35.0
WHITE PINE	2014	34.2	34.1	34.3	34.0	33.8	33.7	34.4	34.9
STATEWIDE	2014	34.1	34.2	34.5	34.4	34.2	34.2	34.3	35.0

NEVADA DEPARTMENT OF TAXATION
2014-2015 RATIO STUDY
COEFFICIENTS OF DISPERSION

SUBJECT COUNTY	STUDY YEAR	ALL PROPERTY	IMPROVEMENTS	IMPROVED LAND	VACANT LAND	SINGLE FAMILY RESIDENCE	MULTI-FAMILY RESIDENCE	COMMERCIAL INDUSTRIAL	RURAL LAND & IMPROVEMENTS
CARSON CITY	2014	4.8	5.6	4.0	7.2	2.2	3.5	7.4	0.7
CHURCHILL	2014	1.4	1.5	2.2	1.9	1.5	1.0	0.8	0.0
CLARK	2012	3.0	3.8	2.9	2.7	3.0	2.7	3.1	1.3
DOUGLAS	2013	2.1	3.1	1.6	2.8	1.8	1.8	2.0	0.4
ELKO	2014	3.7	6.0	1.2	0.9	4.1	2.7	6.8	0.0
ESMERALDA	2012	6.7	3.5	8.9	10.5	1.4	10.7	5.7	0.0
EUREKA	2012	3.6	5.7	2.6	2.7	4.7	2.7	2.2	0.0
HUMBOLDT	2013	5.2	10.1	3.0	3.0	3.4	4.0	10.3	0.2
LANDER	2014	7.7	2.4	2.8	20.3	1.6	1.6	2.4	2.1
LINCOLN	2012	7.6	5.6	3.7	15.9	5.2	3.6	2.7	0.0
LYON	2013	6.3	23.2	4.9	4.8	10.8	3.4	6.3	0.0
MINERAL	2012	13.0	20.4	10.5	5.0	18.4	30.5	14.4	1.6
NYE	2013	4.8	2.9	21.1	8.3	3.4	1.8	5.8	1.1
PERSHING	2014	3.6	5.3	2.3	2.3	4.4	3.3	3.6	0.0
STOREY	2012	6.7	11.7	3.2	5.1	10.7	4.0	4.2	0.0
WASHOE	2013	1.7	1.8	1.7	2.9	1.0	2.3	1.4	0.2
WHITE PINE	2014	3.3	4.5	2.7	3.0	4.1	2.0	3.5	0.4
STATEWIDE	2014	5.8	6.3	4.4	5.7	4.1	3.7	5.1	0.7

NEVADA DEPARTMENT OF TAXATION
 2014-2015 RATIO STUDY
 MEDIAN RELATED DIFFERENTIALS

SUBJECT COUNTY	STUDY YEAR	ALL PROPERTY	IMPROVEMENTS	IMPROVED LAND	VACANT LAND	SINGLE FAMILY RESIDENCE	MULTI-FAMILY RESIDENCE	COMMERCIAL INDUSTRIAL	RURAL LAND & IMPROVEMENTS
CARSON CITY	2014	1.06	1.06	1.02	1.13	1.01	1.00	1.05	1.00
CHURCHILL	2014	1.01	1.01	1.00	1.00	1.01	1.00	1.00	1.00
CLARK	2012	1.00	1.01	0.99	1.01	1.02	1.00	0.99	1.00
DOUGLAS	2013	1.02	1.02	1.00	1.02	1.01	1.01	1.02	0.99
ELKO	2014	1.04	1.04	1.00	0.99	1.03	1.01	1.05	1.00
ESMERALDA	2012	1.01	1.02	1.03	0.99	0.99	0.99	1.01	1.00
EUREKA	2012	1.01	1.02	1.01	1.02	1.01	1.03	1.00	1.00
HUMBOLDT	2013	1.02	0.99	1.06	1.02	1.01	1.01	1.01	1.00
LANDER	2014	1.02	1.01	1.01	1.20	1.01	1.00	1.01	0.98
LINCOLN	2012	1.02	1.00	0.99	1.16	1.00	0.99	1.01	1.00
LYON	2013	1.04	1.02	1.09	0.97	1.01	1.01	1.04	1.00
MINERAL	2012	1.04	1.02	1.00	1.02	0.96	1.01	1.00	1.01
NYE	2013	1.00	1.00	0.98	1.03	1.01	0.99	1.00	1.00
PERSHING	2014	0.99	0.99	1.00	1.01	1.01	1.01	0.99	1.00
STOREY	2012	1.00	0.99	1.01	1.02	0.97	1.03	0.99	1.00
WASHOE	2013	1.00	0.98	1.03	1.04	1.00	1.01	1.01	1.00
WHITE PINE	2014	1.00	0.99	1.00	1.01	1.01	0.99	1.00	1.00
STATEWIDE	2014	1.00	1.00	1.01	1.05	1.01	1.01	1.01	1.00

NEVADA DEPARTMENT OF TAXATION
2014-2015 RATIO STUDY
ALL APPRAISAL AREAS

OVERALL (AGGREGATE) RATIO

Subject County	All Property
CARSON CITY	32.5
CHURCHILL	34.6
ELKO	33.2
LANDER	34.0
PERSHING	34.7
WHITE PINE	34.3
ALL COUNTIES	33.5

Class of Property							
Improvements	Improved Land	Vacant Land	Single Family Residence	Multi-Family Residence	Commercial Industrial	Rural Land & Improvements	
32.6	33.9	29.9	33.9	34.9	32.3	34.9	
34.7	34.1	34.6	34.4	34.6	34.9	35.0	
32.4	34.7	35.2	32.7	33.9	32.6	35.0	
34.2	34.4	28.9	34.3	34.2	34.2	33.5	
34.8	34.5	33.9	33.5	33.8	35.3	35.0	
34.3	34.3	33.5	33.6	34.1	34.4	34.9	
33.6	34.2	31.0	33.8	34.3	33.5	34.8	

MEDIAN RATIO

Subject County	All Property
CARSON CITY	34.4
CHURCHILL	34.8
ELKO	34.5
LANDER	34.5
PERSHING	34.4
WHITE PINE	34.2
ALL COUNTIES	34.5

Class of Property							
Improvements	Improved Land	Vacant Land	Single Family Residence	Multi-Family Residence	Commercial Industrial	Rural Land & Improvements	
34.4	34.4	33.9	34.2	34.9	34.0	34.9	
35.0	34.0	34.8	34.7	34.7	35.0	35.0	
33.5	34.9	35.0	33.8	34.3	34.1	35.0	
34.6	34.6	34.8	34.7	34.1	34.6	32.7	
34.5	34.7	34.4	34.0	34.3	35.0	35.0	
34.1	34.3	34.0	33.8	33.7	34.4	34.9	
34.5	34.5	34.6	34.4	34.5	34.6	35.0	

NEVADA DEPARTMENT OF TAXATION
 2014-2015 RATIO STUDY
 ALL APPRAISAL AREAS
 COEFFICIENT OF DISPERSION (COD)

Subject County	All Property
CARSON CITY	4.8
CHURCHILL	1.4
ELKO	3.7
LANDER	7.7
PERSHING	3.6
WHITE PINE	3.3
ALL COUNTIES	4.1

Class of Property							
Improvements	Improved Land	Vacant Land	Single Family Residence	Multi-Family Residence	Commercial Industrial	Rural Land & Improvements	
5.6	4.0	7.2	2.2	3.5	7.4	0.7	
1.5	2.2	1.9	1.5	1.0	0.8	0.0	
6.0	1.2	0.9	4.1	2.7	6.8	0.0	
2.4	2.8	20.3	1.6	1.6	2.4	2.1	
5.3	2.3	2.3	4.4	3.3	3.6	0.0	
4.5	2.7	3.0	4.1	2.0	3.5	0.4	
4.5	2.7	6.8	3.0	2.7	4.5	1.1	

MEDIAN RELATED DIFFERENTIAL

Subject County	All Property
CARSON CITY	1.06
CHURCHILL	1.01
ELKO	1.04
LANDER	1.02
PERSHING	0.99
WHITE PINE	1.00
ALL COUNTIES	1.03

Class of Property							
Improvements	Improved Land	Vacant Land	Single Family Residence	Multi-Family Residence	Commercial Industrial	Rural Land & Improvements	
1.06	1.02	1.13	1.01	1.00	1.05	1.00	
1.01	1.00	1.00	1.01	1.00	1.00	1.00	
1.04	1.00	0.99	1.03	1.01	1.05	1.00	
1.01	1.01	1.20	1.01	1.00	1.01	0.98	
0.99	1.00	1.01	1.01	1.01	0.99	1.00	
0.99	1.00	1.01	1.01	0.99	1.00	1.00	
1.03	1.01	1.12	1.02	1.01	1.03	1.01	

CARSON CITY
2014-2015 RATIO STUDY

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
COUNTYWIDE TOTAL PROPERTY	32.5%	34.4%	4.8%	128
COUNTYWIDE IMPROVEMENTS	32.6%	34.4%	5.6%	100
COUNTYWIDE IMPROVED LAND	33.9%	34.4%	4.0%	100
COUNTYWIDE VACANT LAND	29.9%	33.9%	7.2%	28
SINGLE FAMILY IMPROVEMENTS	33.9%	34.3%	2.2%	46
SINGLE FAMILY LAND	33.8%	34.4%	4.9%	46
SINGLE FAMILY TOTAL PROPERTY	33.9%	34.2%	2.2%	46
MULTIPLE FAMILY IMPROVEMENTS	34.9%	34.8%	5.0%	19
MULTIPLE FAMILY LAND	35.2%	34.6%	4.1%	19
MULTIPLE FAMILY TOTAL PROPERTY	34.9%	34.9%	3.5%	19
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	31.9%	33.4%	11.9%	29
COMMERCIAL/INDUSTRIAL LAND	33.7%	33.9%	3.0%	29
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	32.3%	34.0%	7.4%	29
RURAL IMPROVEMENTS	35.0%	35.0%	0.0%	1
RURAL LAND	34.8%	34.9%	0.7%	6
RURAL TOTAL PROPERTY	34.9%	34.9%	0.7%	6
SECURED PERSONAL PROPERTY				
ALL SECURED	35.0%	35.0%	0.6%	11
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	34.8%	34.8%	0.0%	1
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	35.0%	34.9%	1.4%	4
MOBILE HOMES	35.0%	35.0%	0.0%	6
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	0.1%	22
AIRCRAFT	35.0%	35.0%	0.1%	6
AGRICULTURAL	35.0%	35.0%	0.0%	2
BILLBOARDS	35.0%	35.0%	0.0%	2
COMMERCIAL/INDUSTRIAL	35.0%	34.9%	0.4%	6
MOBILE HOMES	35.0%	35.0%	0.0%	6
TOTAL PERSONAL PROPERTY	35.0%	35.0%	0.3%	33

**CHURCHILL COUNTY
2014-2015 RATIO STUDY**

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
COUNTYWIDE TOTAL PROPERTY	34.6%	34.8%	1.4%	117
COUNTYWIDE IMPROVEMENTS	34.7%	35.0%	1.5%	80
COUNTYWIDE IMPROVED LAND	34.1%	34.0%	2.2%	86
COUNTYWIDE VACANT LAND	34.6%	34.8%	1.9%	31
SINGLE FAMILY IMPROVEMENTS	34.6%	35.0%	1.8%	50
SINGLE FAMILY LAND	33.6%	33.6%	2.1%	50
SINGLE FAMILY TOTAL PROPERTY	34.4%	34.7%	1.5%	50
MULTIPLE FAMILY IMPROVEMENTS	34.8%	34.9%	1.1%	15
MULTIPLE FAMILY LAND	34.0%	34.0%	1.6%	15
MULTIPLE FAMILY TOTAL PROPERTY	34.6%	34.7%	1.0%	15
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	34.9%	35.0%	0.6%	15
COMMERCIAL/INDUSTRIAL LAND	34.7%	34.9%	2.2%	15
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	34.9%	35.0%	0.8%	15
RURAL IMPROVEMENTS	n/a	n/a	n/a	-
RURAL LAND	35.0%	35.0%	0.0%	6
RURAL TOTAL PROPERTY	35.0%	35.0%	0.0%	6
SECURED PERSONAL PROPERTY				
ALL SECURED	35.0%	35.0%	0.0%	11
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	35.0%	35.0%	0.0%	3
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	34.9%	34.9%	0.0%	2
MOBILE HOMES	35.0%	35.0%	0.0%	6
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	0.0%	17
AIRCRAFT	35.0%	35.0%	0.0%	4
AGRICULTURAL	35.0%	35.0%	0.0%	3
BILLBOARDS	35.0%	35.0%	0.0%	1
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.0%	3
MOBILE HOMES	35.0%	35.0%	0.1%	6
TOTAL PERSONAL PROPERTY	35.0%	35.0%	0.0%	28

ELKO COUNTY
2014-2015 RATIO STUDY

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
COUNTYWIDE TOTAL PROPERTY	33.2%	34.5%	3.7%	102
COUNTYWIDE IMPROVEMENTS	32.4%	33.5%	6.0%	75
COUNTYWIDE IMPROVED LAND	34.7%	34.9%	1.2%	81
COUNTYWIDE VACANT LAND	35.2%	35.0%	0.9%	21
SINGLE FAMILY IMPROVEMENTS	32.3%	33.5%	5.0%	29
SINGLE FAMILY LAND	34.8%	34.9%	1.1%	29
SINGLE FAMILY TOTAL PROPERTY	32.7%	33.8%	4.1%	29
MULTIPLE FAMILY IMPROVEMENTS	33.3%	33.6%	4.3%	30
MULTIPLE FAMILY LAND	34.6%	34.8%	1.2%	30
MULTIPLE FAMILY TOTAL PROPERTY	33.9%	34.3%	2.7%	30
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	31.5%	34.0%	10.5%	16
COMMERCIAL/INDUSTRIAL LAND	34.9%	34.8%	1.3%	16
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	32.6%	34.1%	6.8%	16
RURAL IMPROVEMENTS	n/a	n/a	n/a	-
RURAL LAND	35.0%	35.0%	0.0%	6
RURAL TOTAL PROPERTY	35.0%	35.0%	0.0%	6
SECURED PERSONAL PROPERTY				
ALL SECURED	34.9%	35.0%	0.2%	8
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	35.0%	35.0%	0.2%	4
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	34.9%	34.9%	0.3%	4
MOBILE HOMES	n/a	n/a	n/a	-
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	0.0%	23
AIRCRAFT	35.0%	35.0%	0.0%	6
AGRICULTURAL	35.0%	35.0%	0.0%	4
BILLBOARDS	35.0%	35.0%	0.0%	3
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.0%	3
MOBILE HOMES	35.0%	35.0%	0.0%	7
TOTAL PERSONAL PROPERTY	35.0%	35.0%	0.1%	31

**LANDER COUNTY
2014-2015 RATIO STUDY**

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
COUNTYWIDE TOTAL PROPERTY	34.0%	34.5%	7.7%	102
COUNTYWIDE IMPROVEMENTS	34.2%	34.6%	2.4%	69
COUNTYWIDE IMPROVED LAND	34.4%	34.6%	2.8%	71
COUNTYWIDE VACANT LAND	28.9%	34.8%	20.3%	31
SINGLE FAMILY IMPROVEMENTS	34.2%	34.8%	2.1%	30
SINGLE FAMILY LAND	34.9%	35.1%	1.7%	30
SINGLE FAMILY TOTAL PROPERTY	34.3%	34.7%	1.6%	30
MULTIPLE FAMILY IMPROVEMENTS	34.4%	34.3%	2.4%	15
MULTIPLE FAMILY LAND	33.8%	33.8%	2.4%	15
MULTIPLE FAMILY TOTAL PROPERTY	34.2%	34.1%	1.6%	15
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	34.1%	34.5%	2.6%	20
COMMERCIAL/INDUSTRIAL LAND	34.6%	34.3%	3.3%	20
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	34.2%	34.6%	2.4%	20
RURAL IMPROVEMENTS	35.2%	35.2%	0.0%	1
RURAL LAND	33.4%	32.7%	2.2%	6
RURAL TOTAL PROPERTY	33.5%	32.7%	2.1%	6
SECURED PERSONAL PROPERTY				
ALL SECURED	34.9%	35.0%	0.3%	14
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	35.0%	35.0%	0.1%	4
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	35.0%	34.9%	0.1%	4
MOBILE HOMES	34.8%	35.0%	0.5%	6
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	0.1%	18
AIRCRAFT	35.0%	35.0%	0.1%	4
AGRICULTURAL	35.0%	35.0%	0.0%	3
BILLBOARDS	35.0%	35.0%	0.0%	3
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.2%	4
MOBILE HOMES	35.0%	35.0%	0.0%	4
TOTAL PERSONAL PROPERTY	35.0%	35.0%	0.2%	32

PERSHING COUNTY
2014-2015 RATIO STUDY

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
COUNTYWIDE TOTAL PROPERTY	34.7%	34.4%	3.6%	91
COUNTYWIDE IMPROVEMENTS	34.8%	34.5%	5.3%	70
COUNTYWIDE IMPROVED LAND	34.5%	34.7%	2.3%	76
COUNTYWIDE VACANT LAND	33.9%	34.4%	2.3%	15
SINGLE FAMILY IMPROVEMENTS	33.3%	33.9%	5.5%	30
SINGLE FAMILY LAND	34.5%	34.5%	2.5%	30
SINGLE FAMILY TOTAL PROPERTY	33.5%	34.0%	4.4%	30
MULTIPLE FAMILY IMPROVEMENTS	33.6%	34.3%	4.2%	20
MULTIPLE FAMILY LAND	34.7%	35.0%	1.8%	20
MULTIPLE FAMILY TOTAL PROPERTY	33.8%	34.3%	3.3%	20
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	35.4%	35.3%	4.5%	20
COMMERCIAL/INDUSTRIAL LAND	34.2%	34.0%	2.5%	20
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	35.3%	35.0%	3.6%	20
RURAL IMPROVEMENTS	n/a	n/a	n/a	-
RURAL LAND	35.0%	35.0%	0.0%	6
RURAL TOTAL PROPERTY	35.0%	35.0%	0.0%	6
SECURED PERSONAL PROPERTY				
ALL SECURED	35.0%	35.0%	0.2%	14
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	35.0%	35.0%	0.2%	3
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.4%	5
MOBILE HOMES	35.0%	35.0%	0.0%	6
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	34.9%	35.0%	0.6%	16
AIRCRAFT	34.2%	35.0%	2.1%	4
AGRICULTURAL	35.0%	35.0%	0.0%	3
BILLBOARDS	35.0%	35.0%	0.0%	2
COMMERCIAL/INDUSTRIAL	35.0%	35.1%	0.3%	4
MOBILE HOMES	35.0%	35.0%	0.0%	3
TOTAL PERSONAL PROPERTY	34.9%	35.0%	0.4%	30

**WHITE PINE COUNTY
2014-2015 RATIO STUDY**

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
COUNTYWIDE TOTAL PROPERTY	34.3%	34.2%	3.3%	111
COUNTYWIDE IMPROVEMENTS	34.3%	34.1%	4.5%	82
COUNTYWIDE IMPROVED LAND	34.3%	34.3%	2.7%	82
COUNTYWIDE VACANT LAND	33.5%	34.0%	3.0%	29
SINGLE FAMILY IMPROVEMENTS	33.3%	33.9%	5.5%	30
SINGLE FAMILY LAND	34.2%	34.2%	2.4%	30
SINGLE FAMILY TOTAL PROPERTY	33.6%	33.8%	4.1%	30
MULTIPLE FAMILY IMPROVEMENTS	34.2%	33.6%	3.0%	16
MULTIPLE FAMILY LAND	33.5%	33.5%	2.7%	16
MULTIPLE FAMILY TOTAL PROPERTY	34.1%	33.7%	2.0%	16
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	34.4%	34.3%	4.5%	30
COMMERCIAL/INDUSTRIAL LAND	34.4%	34.4%	2.8%	30
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	34.4%	34.4%	3.5%	30
RURAL IMPROVEMENTS	34.8%	34.9%	0.7%	4
RURAL LAND	35.0%	35.0%	0.1%	6
RURAL TOTAL PROPERTY	34.9%	34.9%	0.4%	6
SECURED PERSONAL PROPERTY				
ALL SECURED	35.0%	35.0%	0.2%	16
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	34.9%	34.9%	0.4%	4
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.2%	6
MOBILE HOMES	35.0%	35.0%	0.0%	6
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	0.2%	19
AIRCRAFT	35.0%	35.0%	0.1%	4
AGRICULTURAL	35.0%	35.0%	0.0%	2
BILLBOARDS	35.0%	35.0%	0.0%	1
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.7%	5
MOBILE HOMES	35.0%	35.0%	0.0%	7
TOTAL PERSONAL PROPERTY	35.0%	35.0%	0.2%	35

**ALL COUNTIES INCLUDED IN
2014-2015 RATIO STUDY**

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
ALL COUNTIES TOTAL PROPERTY	33.5%	34.5%	4.1%	651
ALL COUNTIES IMPROVEMENTS	33.6%	34.5%	4.5%	476
ALL COUNTIES IMPROVED LAND	34.2%	34.5%	2.7%	496
ALL COUNTIES VACANT LAND	31.0%	34.6%	6.8%	155
SINGLE FAMILY IMPROVEMENTS	33.8%	34.4%	3.8%	215
SINGLE FAMILY LAND	34.1%	34.4%	3.0%	215
SINGLE FAMILY TOTAL PROPERTY	33.8%	34.4%	3.0%	215
MULTIPLE FAMILY IMPROVEMENTS	34.2%	34.4%	3.9%	115
MULTIPLE FAMILY LAND	34.5%	34.5%	2.5%	115
MULTIPLE FAMILY TOTAL PROPERTY	34.3%	34.5%	2.7%	115
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	33.4%	34.6%	6.4%	130
COMMERCIAL/INDUSTRIAL LAND	34.0%	34.4%	2.7%	130
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	33.5%	34.6%	4.5%	130
RURAL IMPROVEMENTS	34.9%	34.9%	0.7%	6
RURAL LAND	34.8%	35.0%	1.1%	36
RURAL TOTAL PROPERTY	34.8%	35.0%	1.1%	36
SECURED PERSONAL PROPERTY				
ALL SECURED	35.0%	35.0%	0.3%	74
AIRCRAFT	n/a	n/a	n/a	-
AGRICULTURAL	35.0%	35.0%	0.2%	19
BILLBOARDS	n/a	n/a	n/a	-
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.4%	25
MOBILE HOMES	35.0%	35.0%	0.1%	30
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	0.2%	115
AIRCRAFT	34.9%	35.0%	0.3%	28
AGRICULTURAL	35.0%	35.0%	0.0%	17
BILLBOARDS	35.0%	35.0%	0.0%	12
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	0.3%	25
MOBILE HOMES	35.0%	35.0%	0.0%	33
TOTAL PERSONAL PROPERTY	35.0%	35.0%	0.2%	189

**STATEWIDE
2012-2015 RATIO STUDIES**

ALL APPRAISAL AREAS

REAL PROPERTY	AGGREGATE RATIO	MEDIAN RATIO	COD MEDIAN	SAMPLE SIZE
STATEWIDE TOTAL PROPERTY	34.0%	34.3%	4.5%	1,979
STATEWIDE IMPROVEMENTS	34.0%	34.2%	6.3%	1,440
STATEWIDE IMPROVED LAND	34.1%	34.5%	4.4%	1,516
STATEWIDE VACANT LAND	32.8%	34.4%	5.7%	463
SINGLE FAMILY IMPROVEMENTS	33.9%	34.2%	6.9%	693
SINGLE FAMILY LAND	34.1%	34.4%	3.2%	694
SINGLE FAMILY TOTAL PROPERTY	33.9%	34.2%	4.1%	694
MULTIPLE FAMILY IMPROVEMENTS	33.7%	34.0%	4.3%	316
MULTIPLE FAMILY LAND	34.2%	34.5%	4.3%	316
MULTIPLE FAMILY TOTAL PROPERTY	33.9%	34.2%	3.7%	316
COMMERCIAL/INDUSTRIAL IMPROVEMENTS	34.1%	34.4%	7.0%	395
COMMERCIAL/INDUSTRIAL LAND	34.0%	34.4%	7.5%	399
COMMERCIAL/INDUSTRIAL TOTAL PROPERTY	34.1%	34.3%	5.1%	399
RURAL IMPROVEMENTS	35.0%	35.0%	1.6%	12
RURAL LAND	35.0%	35.0%	0.6%	107
RURAL TOTAL PROPERTY	35.0%	35.0%	0.7%	107
SECURED PERSONAL PROPERTY				
ALL SECURED	35.0%	35.0%	9.6%	228
AIRCRAFT	35.0%	35.0%	0.0%	2
AGRICULTURAL	35.1%	35.0%	9.6%	65
BILLBOARDS	32.8%	35.0%	2.0%	4
COMMERCIAL/INDUSTRIAL	35.0%	35.0%	13.0%	71
MOBILE HOMES	35.0%	35.0%	7.5%	83
UNSECURED PERSONAL PROPERTY				
ALL UNSECURED	35.0%	35.0%	6.7%	375
AIRCRAFT	35.6%	35.0%	6.3%	78
AGRICULTURAL	35.0%	35.0%	9.2%	53
BILLBOARDS	35.1%	35.0%	0.1%	40
COMMERCIAL/INDUSTRIAL	34.9%	35.0%	9.7%	89
MOBILE HOMES	35.0%	35.0%	5.9%	115
TOTAL PERSONAL PROPERTY	35.0%	35.0%	7.8%	603

2014-2015

REPORT OF ASSESSMENT RATIO STUDY

OUTLIER REPORTS

**CARSON CITY RATIO STUDY 2014-2015
NARRATIVE**

All land is reappraised each year in Carson City. The Nevada Tax Commission approved the Assessor's¹ request to reappraise all land, rather than apply a land factor in non-reappraisal areas, in 2008. Carson City has conducted a full revaluation of all improvements throughout the county since 2009. The Assessor continues to physically inspect 1/5 of the county each year to capture any new improvements added without a permit within the previous 5 years. This is consistent with the requirements of the law.

NRS 361.333 requires the Department to determine the ratio of the assessed value of each type or class of property for which the county assessor has the responsibility of assessing in each county to the taxable value of that type or class of property within that county determined by the Department through appraisals of individual parcels. The ratio is in compliance with statute if the ratio of assessed value to taxable value is more than 32 percent or less than 36 percent. *See NRS 361.333(5)(c).*

Property Type	Sample Size	Samples in Compliance	Samples out of Compliance	Exception Rate
Vacant Land	30	25	5	17%
Single-Family Residential Land	45	43	2	4%
Multi-Family Residential Land	20	18	2	10%
Commercial and Industrial Land	30	30	0	0%
Agricultural Land	6	6	0	0%
Single Family Residential Improvements (Note 1)	45	42	3	7%
Multi-family Residential Improvements (Note 2)	20	17	3	15%
Commercial and Industrial Improvements (Note 3)	30	16	14	47%

¹ All references to the Assessor means the Assessor or the Assessor's staff.

Note 1: Single Family Residential Improvements: Of the 3 outliers listed above, 2 were found in the 4/5 of the county which was not *physically* inspected during the 2014-2015 tax year.

Note 2: Multi-Family Residential Improvements: Of the 3 outliers listed above, 2 were found in the 4/5 of the county which was not *physically* inspected during the 2014-2015 tax year.

Note 3: Commercial and Industrial Improvements: Of the 14 outliers listed above, 10 were found in the 4/5 of the county which was not *physically* inspected during the 2014-2015 tax year.

Procedures, Issues and Recommendations

Staffing: The Assessor's office went through a major change in staff in the 2013 work year. As a result, many deficiencies were found that have not been concerns in past Ratio Studies. The office is now at full staff and major findings from this study are to be addressed and corrected in the 2014 work year.

Marshall & Swift: The Assessor is using the zip code default multipliers within the ADS system for Residential properties. These multipliers are verified correct by the Assessor prior to implementation and have been confirmed correct by the Department. Carson City does not include attached garages on the Marshall & Swift costing sheet. They are added as a separate improvement, valued using the Marshall & Swift segregated costs, to the property after accounting for common walls. Outliers are created when a home with an attached garage has an addition added and the home is age weighted but the attached garage which was built as part of the original structure is not. To correct any outliers created by this practice and bring these structures into compliance with NRS 361.229, the Assessor's office will identify all homes that have been age weighted and apply the weighted age to the garages as well and any future age weighting will be applied to both the house and garage.

Minor Improvements: Minor improvements are identified by the Assessor and valued from either the Marshall & Swift cost manuals or the Assessor's Handbook of Rural Building Costs. The Assessor employs lump sums for fencing and sprinklers. It is the preferred method that all improvements be valued by what is actually on the parcel but lump sum values are an acceptable practice. To comply with NAC 361.124, when the year of an improvement is unknown, the Assessor should utilize known information and apply an effective or estimated age in lieu of simply applying the same year as the building to the improvement in question. Inequality was discovered specifically in contiguous neighbor fencing where a shared fence would have 2 different depreciated ages because the fencing was given the same

age as the house on each parcel when the actual age was unknown. This causes one property to be assessed higher than the neighboring property for the same improvement because it was depreciated at different years. A similar situation can be created with every contiguous parcel causing a chain reaction with in that block that has shared improvements. If an improvement is found during physical re-inspection of the property and there were no permits or notifications, the Assessor instructs the staff to use the year of the last inspection. There are some properties within the county that do not appear to have been valued using this procedure. They date back to before any of the current staff was employed therefore it is unknown what procedure was in place at that time. Attempting to discover and research this issue on older properties is not feasible or cost effective. However, it is recommended that when able, the Assessor's staff should attempt to correct any age differences in shared improvements.

New Construction Valuation: The Assessor discovers new construction using the county building permits. Nearly all new construction is discovered in this manner. New construction that is discovered before the close of the roll in December is included at that time. New construction that is discovered after the close of the roll, but before July 1st, is included on the roll log. However, many improvements are put in place without the need or use of a county permit and therefore are not discovered until physical reappraisal. It was found that the assessor is correctly valuing and depreciating new improvements once discovered. A review of several properties with new construction revealed that most of the improvements are being captured and when measured, are done so correctly and valued accurately by the Assessor with the exception of those stated in the minor improvement section above. There were a few properties for which non-permitted minor improvements were not captured in the reappraisal area but were not significant enough to create an outlier.

Obsolescence: The previous Assessor's staff applied obsolescence to the entire county and additional obsolescence in specific areas or individual properties. The Department reviewed a sampling of the properties within the scope of the Ratio Study and found the final improvement values to be low in many areas. When determining outliers within the county, obsolescence created outliers with the majority of the sample. The Department removed the obsolescence as an outlier cause and decided to address it as a blanket countywide issue instead of citing individual parcel outliers. In addition to applying too much obsolescence, rather than removing the obsolescence each year, it appears that it has been compounded in past years which could be the main cause of this issue. The current staff has stated that they will remove all obsolescence in the 2014 work year in order to start with "clean" values and make adjustments as appropriate ensuring they have proper documentation to support those adjustments. They will attempt to get updated information from commercial properties receiving economic and functional obsolescence to ensure that the percentage of obsolescence is still appropriate and make adjustments where needed.

Land: When attempting to review the support documentation for land values, in many cases, the supporting information was either missing or did not support the value assigned. Because of recent changes to the Real Property Appraisal staff, it is unknown whether the missing documents were a result of the new staff being unable to locate them or that the documentation never existed. In many areas throughout the county, the land values are too low for entire complexes or subdivisions. The current staff has committed to an in-depth land study and valuation of all properties in the coming 2014 reappraisal year to ensure all land is properly valued and supported by sales data.

Appraisal Records: Carson City's files are maintained with a minimum of one prior reappraisal cycle for comparison. The county has implemented a paper free system and all information is now available either on their website or in their computer system with the exception of personal property mobile homes and aircraft. Apex and Marshall & Swift information is now available on their website for the public to view. Carson City conforms to best practice standards in this area.

Personal Property: Carson City maintains records for Personal Property. 33 accounts with 224 records were examined. After adjusting for rounding errors, there are two outliers caused by incorrect life.

1. One of the two outliers was a result of a 7yr life on a microwave that should have been 15yrs and the other was an Ultra Battery Backup that had a 15yr life that should have been 5yrs. The Assessor's Office was given a copy of the findings to make the appropriate changes.
2. Some of the older mobile home files, 30 years and older, do not have proper Dealer Record of Sale (DRS) or purchase price documentation making verification of purchase price impossible. These accounts are fully depreciated and have minimal assessed value. They do not pose a significant problem and attempting to correct this issue is not feasible or cost effective.
3. When examining the records and identifying deactivated items, it was discovered that identical items, sometimes within the same account, were given different lives. The records examined with life differences were limited to the 2006 & 2007 acquisition years. The Department recommends running an "item description" query in ADS for the 3 items in which the discrepancy was found in order to verify that all the items are assigned the same life throughout all accounts. It is further recommended that queries be run periodically to randomly check specific items of personal property to verify all lives are consistently being assigned.

**CARSON CITY
OUTLIER REPORT
2014-15 RATIO STUDY**

A.O. Assessor's Office 1/5 county physically inspected

<i>APN</i>	<i>L</i>	<i>I</i>	<i>T</i>	<i>ENTITY I. D.</i>	<i>COMMENTS</i>
01-091-01	34.27%	31.67%	33.53%	COM	Barriers valued as parking bumpers, not enough CFW or curbing, Shed not valued, Property was in re-inspection area in 2013 improvements not updated
01-181-01	33.17%	16.66%	20.42%	COM	AO does not have documentation to support additional Obsolescence
02-061-36	21.00%	n/a	21.00%	VAC	Land Value too Low
02-131-09	32.64%	31.32%	31.87%	COM	Occupancy difference, 100% Retail Store vs. 100% Mixed Retail w/ Res Units Parcel in re-inspection area in 2014
02-142-23	35.40%	21.79%	34.40%	COM	Asphalt incorrectly calculated. Parcel in re-inspection area in 2014
02-431-11	19.25%	35.28%	29.93%	SFR	Land Value too Low
02-441-21	34.81%	20.43%	32.20%	COM	Bldg. does not have a mezzanine, not enough CFW, CLF or Asphalt valued. Parcel in re-inspection area in 2014 requires full re-inspection of property
02-441-23	19.84%	n/a	19.84%	VAC	Land Value too Low
02-755-14	33.47%	37.30%	36.24%	COM	Occupancy difference, not enough Asphalt valued Parcel in re-inspection area in 2014 requires full re-inspection of property
03-072-04	44.40%	33.74%	39.39%	MFR	Land Value too High
03-352-43	33.00%	29.30%	30.32%	SFR	Many additional improvements, parcel in re-inspection area in 2014 requires full re-inspection of property
04-041-01	35.55%	36.17%	35.96%	MFR	Bldg. does not have Warm and cooled air, bldg. has small removable window units
04-245-03	34.40%	29.71%	32.95%	COM	Age of imp's should be actual age or estimated age based on changes between re-inspection dates not of house (est. age 1992 vs. 1922)
04-332-22	33.62%	36.12%	35.15%	SFR	Parcel is top floor only commercial condo, valued as 2 story unit but only one floor applies to parcel. Entire bldg. should be valued and cost per sq ft applied to top floor sq ft
05-081-13	35.19%	41.43%	40.98%	COM	Bldg. is sectioned into commercial condos, entire bldg. should be valued and then total cost per sq ft applied to parcel
08-175-18	33.41%	19.12%	26.77%	MFR	Improvements escaping taxation, common fencing has same age as improvements but different age on adjacent parcels

**CARSON CITY
OUTLIER REPORT
2014-15 RATIO STUDY**

08-181-04	34.65%	27.42%	30.18%	MFR	Changes and differences in small improvements
08-293-05	35.16%	31.90%	32.62%	SFR	Many improvements have been added to property and warm and cooled air to house
08-531-25	32.56%	29.06%	29.44%	COM	Obsolete occupancy code used, 334 vs. 494, additional improvements escaping taxation
08-671-14	12.96%	34.88%	31.63%	SFR	Land Value too Low
08-815-05	32.21%	27.00%	27.78%	COM	Occupancy Code difference, Office Bldg. vs. Alternative School and additional small improvements added
09-031-09	21.11%	n/a	21.11%	VAC	Land Value too Low
09-052-12	33.37%	24.59%	26.14%	COM	Bldg. is sectioned into condos, entire bldg. should be valued and then total cost per sq ft applied to parcel & no support documentation for additional Obsolescence
09-052-17	32.45%	23.04%	24.59%	COM	No support documentation for additional Obsolescence
09-262-08	32.17%	31.21%	31.41%	COM	Quality Class difference 1.5 vs. 2.0
10-061-83	32.68%	39.63%	37.51%	COM	Climate Code 2 missing Property was in re-inspection area in 2013
10-161-15	31.34%	n/a	31.34%	VAC	Land Value too Low
10-194-02	28.00%	n/a	28.00%	VAC	Land Value too Low
04-303-16	36.54%	33.77%	34.61%	MFR	Recommend no action by Assessor

**CHURCHILL COUNTY RATIO STUDY 2014-2015
NARRATIVE**

For administrative purposes, Churchill County is divided into five areas using township, range or section as well as roads, parcel boundaries and development potential. All land is reappraised each year. Beginning in 2010, the Assessor¹ has also elected to perform a current cost reappraisal from the Marshall & Swift cost manuals for all improvements as well, rather than apply the Improvement Factor that is approved by the Nevada Tax Commission. The Assessor will continue to “physically” re-inspect no less than one-fifth of the county each year based on the previous reappraisal area rotation. This is a best-practice for discovery of new improvements where a permit may not have been required.

NRS 361.333 requires the Department to determine the ratio of the assessed value of each type or class of property for which the county assessor has the responsibility of assessing in each county to the taxable value of that type or class of property within that county determined by the Department through appraisals of individual parcels. The ratio is in compliance with statute if the ratio of assessed value to taxable value is more than 32 percent or less than 36 percent. *See NRS 361.333(5)(c).*

(a) Property Type	(b) Sample Size	(c) Samples in Compliance	(d) Samples out of Compliance	(e) Exception Rate
Vacant Land	31	31	0	0%
Single-Family Residential Land	50	50	0	0%
Multi-Family Residential Land	15	15	0	0%
Commercial and Industrial Land	15	15	0	0%
Agricultural Land	6	6	0	0%
Single Family Residential Improvements	50	46	4	8%
Multi-family Residential Improvements	15	14	1	7%
Commercial and Industrial Improvements	15	15	0	0%

¹ All references to the Assessor means the Assessor or the Assessor’s staff.

Procedures, Issues and Recommendations

Minor Improvements: Churchill County utilizes a consolidated list of various minor improvements compiled into an inter-office reference manual that is updated yearly. These costs are derived directly from the statutorily approved cost manuals (Marshall & Swift and the Rural Manual), with reference columns that include Unit of Measurement, Total Cost; Base Cost; Section & Page from the corresponding manual, and the proper multipliers assigned to Churchill County. These costs were confirmed with a variance study of each of the cost manuals. The Assessor occasionally still utilizes a lump sum method for various yard improvements such as sprinkler/drip systems, patio bricks, flower boxes, etc. As time allows, these items are being valued on an individual basis as this is a more accurate method. Individual analysis is also a best practice.

New Construction Improvement Valuation: The Assessor discovers and tracks the progress of new construction through permit programs, monthly reports and the reappraisal process. All new construction is visited during various phases and valued in a timely manner. Building plans & specifications are used as back up for appraisers to use after an on-site inspection.

Improvement Factor: Churchill County has conducted a full revaluation of all improvements throughout the county beginning in 2010. Therefore, the Improvement Factor is no longer applied to any improvements.

Improvement Discovery / Identification: Churchill County is divided into five separate reappraisal areas. Although the Assessor is now conducting a complete revaluation of all land and improvements throughout the entire county each year, the office will continue to perform some type of a physical inspection (although not mandatory) of all properties within a given reappraisal area on a rotating 5-year cycle. This is considered a best-practice. The Assessor is doing a better job of individually valuing the minor improvements at each property; however, it was noted in many cases that the fencing, regardless of clear ownership, was being valued as “neighbor” fence even where there was evidence of sole ownership by one owner and no benefit to the “neighbor”. It is recommended that the Assessor more closely monitor this “neighbor” fence valuation practice to be sure that one taxpayer is not paying for part of the property (fencing) of another.

Obsolescence: Due to the recent economic decline, the Assessor has applied obsolescence to improvements in various market areas throughout Churchill County as a result of an extensive analysis of recent sales data. The Assessor maintains a listing of sales of improved and vacant properties within the county. Once a median land value is established for a given market area, the Assessor’s taxable improvement values for these properties are then compared to their total sales prices, and a ratio of taxable value to sales price is calculated for each property. Properties in areas where taxable value exceeds market value can then be identified and the proper lump sum or percentage reduction applied to that market area.

Agricultural Parcels: There were six samples of agricultural parcels in this year's ratio study. All samples fell within required ratios. The assessor keeps excellent records for agricultural properties, including water rights. This is considered a best practice.

Appraisal Records: The information in the files is complete, correct and up to date, and new computerized sketches of improved properties are replacing old hand-drawn sketches as needed. All information is made available on-line to the general public on the Churchill County Assessor website.

Marshall & Swift: The Department recommends the Assessor utilize all adjustments ("Foundation", "Energy", "Hillside", and "Seismic") and unusual-conditions multipliers as stated in the Marshall & Swift cost manual as needed and deemed appropriate when valuing residential properties within the county. The correct "seismic" adjustment for Nevada is "Zone 3". It was determined from the Marshall & Swift Residential Estimator software that the "wind" adjustment was specific only to hurricane prone coastal areas and not applicable in Nevada. Upon review of the various single-family and multi-family samples in this year's study, it was determined that the Churchill County Assessor is applying the proper adjustments accurately and when necessary.

Personal Property: The Personal Property portion of the ratio study examined 28 accounts with a total of 197 records. There were 7 records out of ratio tolerance; however, all were the result of rounding issues or fully depreciated items with minimal values. Hard copy files were reviewed and determined to be well organized. Some of the older mobile home files (30 years and older) do not have the proper Dealer Report of Sale (DRS) documentation making verification of initial purchase price difficult to confirm although these accounts are fully depreciated and have minimal assessed value. Aircraft accounts revealed yearly declarations reported from the respective owners.

**CHURCHILL COUNTY
OUTLIER REPORT
2014-15 RATIO STUDY**

APN	L	I	T	ENTITY I.D.	COMMENTS
001-841-31	32.20%	36.41%	35.82%	SFR	DLGS Appraiser valued the subject property with the only physical change or difference from the Assessor valuation being a Composition Shingle roof vs. a Concrete Tile roof; however, there is a difference of \$4.93 per sq ft in the "Base Cost" (Assessor Base Cost was higher). Per discussion with Assessor, it was determined that the subject house has 10' ceilings and the DLGS appraiser had not made this adjustment. This was corrected on the DLGS Marshall & Swift sheet resulting in a new ratio of 36.41%. An appraisal team was sent to the subject property where the subject Composition Shingle roof was confirmed and corrected in the Assessor's records.
006-031-28	33.98%	31.18%	32.53%	SFR	DLGS Appraiser valued a 500 sq ft (est.) Carport (AWNWD) approximately 50% complete (date of construction: 2012 est.) vs. Assessor had not valued as yet. Per discussion with Assessor, she is aware of the new construction on the subject property. It was verified that two open permits exist for a detached garage and the carport, and that they are monitoring the construction status. An appraisal team was sent to the subject property for confirmation.
008-492-30	33.60%	29.94%	30.74%	SFR	DLGS Appraiser valued Quality Class 3.5 vs. Assessor valued Quality Class 3.0 / DLGS estimated and valued 280 linear ft of 6' chain-link fence w/privacy slats vs. Assessor: None / and DLGS estimated and valued 57 sq ft of retaining wall vs. Assessor: None. Per discussion with Assessor, she will stay with 3.0 quality class; however, an appraisal team was sent to the subject property where a total of 315 linear ft of 6' chain-link fence w/privacy slats was discovered along with 414 sq ft of retaining wall. Both improvements were added to the Assessor's records.
008-493-09	33.60%	31.45%	31.84%	SFR	DLGS Appraiser valued Quality Class 3.5 vs. Assessor valued Quality Class 3.0 / DLGS valued Warmed & Cooled Air vs. Assessor valued Forced Air Furnace + Refrigerated Air using heating ducts / DLGS valued a Direct-Vented Gas Fireplace vs Assessor: None / and DLGS valued 476 sq ft of Slab Porch w/Roof vs. Assessor valued 328 sq ft Slab Porch w/Roof + 148 sq ft "Raised" Slab Porch w/Roof. Per discussion with Assessor, an appraisal team was sent to the subject property for re-inspection. The county will change to 3.5 quality class; change to Warmed & Cooled Air rather than Forced Air Furnace + Refrigerated Air using heating ducts; add a Direct-Vented Gas Fireplace; and change 328 sq ft of Slab Porch w/Roof + 148 sq ft of "Raised" Slab Porch w/Roof to 476 sq ft of Slab Porch w/Roof.
001-653-18	34.01%	31.11%	31.83%	MFR	DLGS Appraiser valued 60 sq ft (4 - 5' x 3') of Slab Porch w/Roof vs. Assessor valued 54 sq ft of "Raised" Slab Porch (open) / DLGS discovered and valued a 500 sq ft Detached Garage approx. 75% (est.) complete (GARHB2) vs. Assessor's records of a 420 sq ft Flat Roof Carport with 56 sq ft Storage Walls / and Assessor valued 46 linear ft of 6' Solid Board Fencing vs. DLGS: None. Per discussion with Assessor, an appraisal team was sent to the subject property for re-inspection. It was agreed that the front porches of the subject property should be 30 sq ft of "Slab Porch w/Roof"; while the rear porches are in fact 30 sq ft of "Raised Slab Porch w/Roof". The Assessor indicated that the property owner did not obtain a building permit for the detached garage; however it was discovered on a new construction sweep and is being currently monitored for completion (72% complete). Also, the 46 linear ft of 6' Solid Board Fencing was determined to be on an adjacent parcel and will be removed from the Assessor records.

**ELKO COUNTY RATIO STUDY 2014-2015
NARRATIVE**

All land is reappraised each year in Elko County. The Nevada Tax Commission approved the Assessor's¹ request to reappraise all land, rather than apply a land factor in non-reappraisal areas, in 2006. Elko has conducted a full revaluation of all improvements throughout the county since 2009. The Assessor continues to physically inspect 1/5 of the county each year to capture any new improvements added without a permit within the previous 5 years. This is best practice.

NRS 361.333 requires the Department to determine the ratio of the assessed value of each type or class of property for which the county assessor has the responsibility of assessing in each county to the taxable value of that type or class of property within that county determined by the Department through appraisals of individual parcels. The ratio is in compliance with statute if the ratio of assessed value to taxable value is more than 32 percent or less than 36 percent. *See NRS 361.333(5)(c).*

Property Type	Sample Size	Samples in Compliance	Samples out of Compliance	Exception Rate
Vacant Land	21	21	0	0%
Single-Family Residential Land	29	29	0	0%
Multi-Family Residential Land	30	30	0	0%
Commercial and Industrial Land	16	16	0	0%
Agricultural Land	6	6	0	0%
Single Family Residential Improvements	29	24	5	17%
Multi-family Residential Improvements	30	27	3	10%
Commercial and Industrial Improvements	16	12	4	25%

¹ All references to the Assessor means the Assessor or the Assessor's staff.

Procedures, Issues, and Recommendations

Marshall & Swift: The Department recommends the Assessor utilize all adjustments (“Foundation”, “Energy”, “Hillside”, and “Seismic”) and unusual-conditions multipliers as stated in the Marshall & Swift cost manual as needed and deemed appropriate when valuing residential properties within the county. The correct “seismic” adjustment for Nevada is “Zone 3”. The Assessor is using the zip code default multipliers within the ADS system for Residential properties. These multipliers are verified correct by the Assessor prior to implementation and have been confirmed correct by the Department. Any local costs which differ from values in Marshall & Swift must be sent to the Department for approval prior to use.

Minor Improvements: Minor improvements are identified by the Assessor and valued from either the Marshall & Swift cost manuals or the Assessor’s Handbook of Rural Building Costs.

New Construction Valuation: The Assessor discovers and tracks the progress of new construction through building permits and the reappraisal process. All new construction is visited during various phases and valued in a timely manner. Building plans & specifications are used as back up for appraisers to use after an on-site inspection. New improvements are drawn on Apex providing a clear record and accurate estimate of size. Existing improvements are redrawn as time allows. The Assessor now has Pictometry to assist discovery of new construction and identify areas in need of a field review.

Obsolescence: The Assessor has not needed to apply any area wide obsolescence at this time due to the relatively stable market in Elko compared to other areas of the state.

Land: In order to properly adjust land for various positive or negative characteristics, all adjustments must be supported by market data and documented in the property record. The parcel numbering system in Elko County has been out of compliance for years and has still not been addressed.

Improvements: All of the commercial outliers in this year’s Ratio Study were the result of incorrect occupancy codes. Most of the outliers for residential improvements were due to an incorrect and inconsistent quality class being applied. In the Marshall & Swift costing system the most important factors effecting value are the occupancy code and quality class. The Department recommends all commercial parcels be reviewed for correct occupancy codes. During the reappraisal cycle, residential properties should be reviewed by neighborhood to ensure accurate and consistent quality classes are being applied. There has been a turnover in appraisal staff in the assessor’s office which may account for some of the inaccuracies. The Department can assist the Assessor in training on Marshall & Swift if requested.

The assessor's office has been updating property files with new Apex drawings and transferring data from the old property record cards to a digital format. There were several instances where data was transferred incorrectly due to clerical error. Care should be taken that property information is transferred accurately.

Agricultural Properties: The agricultural records are well maintained with maps and detailed descriptions of land classifications. There were no outliers for agricultural land in this year's ratio study.

Personal Property: Elko County maintains efficient records for Personal Property. The Department examined 33 accounts consisting of 348 records. There were no outliers other than those caused by rounding errors.

***ELKO COUNTY OUTLIER REPORT
2014-15 RATIO STUDY***

APN	Land	Imp	Total	Property Type	COMMENTS
001-131-012	34.54%	30.54%	32.27%	COM	Incorrect Occupancy
001-286-004	34.94%	12.64%	23.63%	COM	Incorrect Occupancy
001-334-003	34.82%	23.14%	24.54%	COM	Incorrect Occupancy, Number of Stories, Basement Sq. Ft.
001-343-004	34.06%	22.70%	24.92%	COM	Incorrect Occupancy
001-921-011	35.24%	28.01%	28.90%	SFR	Quality Class Incorrect
001-961-023	35.65%	27.11%	28.24%	SFR	Quality Class Incorrect
001-961-032	35.24%	30.26%	30.96%	SFR	Quality Class Incorrect
053-006-019	34.97%	24.79%	26.03%	SFR	Quality Class Incorrect, Large Deck, Fire Place
091-300-046	34.45%	38.03%	37.05%	SFR	Incorrect Sq. Ft. on Cost Sheet, Drawing is Correct
001-347-004	34.20%	25.79%	28.61%	MFR	Small Cottage priced as Bunkhouse, Recommend using Marshall Swift instead of Rural Bldg. Manual Costs
001-354-002	34.67%	27.23%	30.16%	MFR	Small Cottage priced as Bunkhouse, Recommend using Marshall Swift instead of Rural Bldg. Manual Costs
002-574-008	34.05%	37.93%	37.15%	MFR	Small Cottage priced as Bunkhouse, Recommend using Marshall Swift instead of Rural Bldg. Manual Costs. Bldg. was in disrepair, may still be used as storage. Department cost as Shed. Assessor should review.

**LANDER COUNTY NARRATIVE
2014-15 RATIO STUDY**

Lander County comprises 5 distinct Appraisal Groups which are defined by geography and township, range and section boundaries. Of the appraisal groups, four consist of 1 tax district each and the 5th consists of 4 separate tax districts (total of 8 distinct tax districts). Whereas all land is reappraised each year in the county, improved property is revalued according to an appraisal cycle which repeats every 5 years. This results in the application of an improvement factor approved by the Nevada Tax Commission in non-reappraisal areas. The Assessor will continue to “physically” re-inspect no less than one-fifth of the county each year (i.e. one “appraisal group” each year) based on the previous reappraisal area rotation. This is a best practice for discovery of new improvements where a permit may not have been required and to insure accurate records are maintained.

NRS 361.333 requires the Department to determine the ratio of the assessed value of each type or class of property for which the county assessor has the responsibility of assessing in each county to the taxable value of that type or class of property within that county determined by the Department through appraisals of individual parcels. The ratio is in compliance with statute if the ratio of assessed value to taxable value is more than 32 percent or less than 36 percent. *See NRS 361.333(5) (c)*

Property Type	Sample Size	Samples in Compliance	Samples out of Compliance	Exception Rate
Vacant Land	30	23	7	23%
Single-Family Residential Land	30	30	0	0%
Multi-Family Residential Land	15	15	0	0%
Commercial and Industrial Land	20	20	0	0%
Agricultural Land	6	6	0	0%
Single Family Residential Improvements (Note 1)	30	28	2	7%
Multi-family Residential Improvements (Note 2)	15	14	1	7%
Commercial and Industrial Improvements (Note 3)	20	29	1	5%

Note 1: Single Family Residential Improvements: The Outlier Report lists 6 additional residential properties in non-reappraisal areas that contain minor discrepancies or non-permitted new discoveries. These did not produce outliers. Assessor will follow up to make the appropriate updates.

Note 2: Multi-Family Residential Improvements: The Outlier Report lists 1 additional multi-family property in a non-reappraisal area that contained minor non-permitted new improvements. These did not produce an outlier. Assessor will follow up to make the appropriate updates.

Note 3: Commercial and Industrial Improvements: The Outlier Report lists 2 additional commercial properties in non-reappraisal areas that contain minor discrepancies or non-permitted new discoveries. These did not produce outliers. Assessor will follow up to make the appropriate updates. Also listed is one property in the re-appraisal area that had paperwork from a previous parcel split still in the file. The assessor will update the file, and it was not an outlier.

Procedures, Issues and Recommendations

Marshall & Swift: Assessor uses the ADS version of M&S for costing residential and commercial properties.

The Assessor is using zone 3 seismic adjustment and relies on the default values for the other adjustments in M&S. The Assessor manually enters multipliers within their residential M&S systems and does not rely on the ZIP code defaults.

We discussed the obvious decline in the number of slab foundations being costed as raised foundations. Assessor is very aware of this distinction and any past problem is resolved.

Minor Improvements: Minor improvements are identified by the Assessor and valued from either the Marshall Swift cost manuals, the Assessor's Handbook of Rural Building Costs and/or (most commonly) internally published appraisal categories and property appraisal value tables which are painstakingly updated annually. These costs are derived directly from the statutorily approved cost manuals (Marshall & Swift and the Rural Manual), with reference columns that include Unit of Measurement, Total Cost; Base Cost; Section & Page from the corresponding manual, and the proper multipliers assigned to Lander County. The assessor does not employ lump sum costing but instead values minor improvements individually. When practical, this is a best practice.

Improvement Factor: The minimal numbers of improvement outliers found among all 3 property types suggests that the improvement factor is working as intended.

New Construction Valuation: The Assessor discovers and tracks the progress of new construction through the building permit programs, periodic discussions with the building inspector and the reappraisal process. All new construction is visited during various phases; generally at completion or as late as practical prior to closing of the roll in order to capture the correct value. Visits to outlying rural areas are planned to coincide with scheduled visits to these

areas in order to conserve travel expenses. New construction that is discovered after the close of the roll, but before July 1st, is included on the roll log. However, many improvements in the outlying areas are put in place without a building permit and therefore are not discovered until physical reappraisal or incidental drive by. For this reason the assessor and her staff are always on the alert when driving throughout the county.

Obsolescence: Lander County has not suffered the wide ranging swings in real property valuation over the last few years experienced by many other counties. This is primarily the result of the relatively steady employment levels. As a result the assessor has not had an issue with significant appreciation followed by the need for economic obsolescence in the county. The issue is more related to lack of growth, stagnation and absence of sales.

Land Values: Land values continue to be a challenge in the southern half of Lander County due to a lack of vacant sales and the fact that many of the existing sales are unverified. Letters requesting information from buyer and seller are either not returned or there are discrepancies between buyer and seller versions of the sale. Also, many of the vacant land sales occur using a land contract where the actual sale date was (e.g.) 10 years ago but is recently recorded as a sale (i.e. the contract is recently paid off). Assessor is aware that land values need to be reviewed and the source of pertinent sales information broadened.

The Department appraiser brought up the suggestion to look at sales of large parcels in similar areas of Eureka County. In particular the County Assessor expanded that idea into studying the plausibility of Crescent Valley (Eureka Co.) residential sales as comps for the Kingston area which has almost no reliable sales data. Hopefully this will contribute additional data toward refining land value estimates in the southern half of Lander Co.

Calculating land values for improved parcel sales in southern Lander County is generally not possible using abstraction since in many instances the improvements on the more rural properties are quite old, sometimes 50 to 100 years old.

Agricultural Parcels: There were six agricultural parcels in the ratio study sample. All were within acceptable parameters.

There was one 320 acre parcel in the vacant land sample (non re-appraisal area) that recently changed hands and was converted to 1st class cultivated AG land without the assessor's knowledge. Assessor updating the parcel file immediately.

Appraisal Records: The information in the files is complete, correct and generally up to date. New computerized sketches of improved properties are replacing old hand-drawn sketches as needed. The number of these hand drawn sketches has declined significantly since the last ratio study.

Minor improvements are generally NOT included on the APEX sketch however the "Appraiser's Information" sheet provides enough detail to distinguish existing from new minor improvements. All information is made available on-line to the general public on the Lander County Assessor website and a "public access" terminal is maintained in the Recorder's office that provides access to the public access menu within ADS. This is considered a best practice.

Personal Property: Lander County maintains complete records for Personal Property. Thirty three accounts containing 267 items of personal property were examined for this ratio study. There were a total of 29 rounding errors. These occur when the calculated assessed value of an item gets into the lower single digits (e.g. \$1 - \$5) where rounding to the nearest dollar can produce significant error in the ratio calculation. There were also a few instances of assessed value being less than \$1 in which case the excel spread sheet cannot calculate a ratio and places blanks in the Ratio field.

One outlier was documented among the 33 accounts and that was for a MH that did not have any cost justification documentation.

Results were reviewed with the county's personal property appraiser.

**LANDER COUNTY OUTLIER REPORT
2014-15 RATIO STUDY**

VACANT

<i>APN</i>	<i>Land</i>	<i>Imp</i>	<i>Total</i>	<i>Property Type</i>	<i>COMMENTS</i>
001-089-04	20.79%		20.79%	VAC	Based on the sale of nearby similar size vacant parcels the assessor's value is low. Assessor agrees.
002-330-16	8.90%		8.90%	VAC	Based on the sale of nearby similar size vacant parcels the assessor's value is low. Assessor agrees.
003-072-11	38.15%		38.15%	VAC	Based on the sale of nearby similar size vacant parcels the assessor's value is high. Assessor agrees
003-081-18	98.94%		98.94%	VAC	Based on the sale of nearby similar size vacant parcels the assessor's value is high. Assessor agrees
003-202-17	86.74%		86.74%	VAC	Based on the sale of nearby similar size vacant parcels the assessor's value is high. Assessor agrees
007-500-04	18.38%		18.38%	VAC	Based on the sale of nearby similar size vacant parcels the assessor's value is low. Assessor agrees.
007-520-15	14.61%		14.61%	VAC	Valued as vacant. Land is class 1 AG. Assessor will revalue as AG. Current value is low. Assessor agrees.

**LANDER COUNTY OUTLIER REPORT
2014-15 RATIO STUDY**

SFR

<i>APN</i>	<i>L</i>	<i>I</i>	<i>T</i>	<i>ENTITY I. D.</i>	<i>COMMENTS</i>
011-050-35	34.42%	31.96%	32.14%	SFR	Value is slightly out but left as IOL since assessor valued off the plans vs. onsite inspection which revealed minor changes to CFW and patio structures. Property is in this year's re-appraisal area.
011-210-28	35.23%	31.87%	33.32%	SFR	Value is slightly out but left as IOL since property is in this year's re-appraisal area and (older) minor improvements had not been picked up.
					COMMENTS <i>Non-reappraisal area new discoveries</i> <i>Assessor to review</i> (NOT OUTLIERS)
001-066-04	35.77%	34.76%	35.12%	SFR	Minor discrepancies in M&S re. roof materials. Assessor will correct.
002-430-15	35.29%	34.93%	34.95%	SFR	Paper file not updated with current M&S copies. Minor discrepancies in siding material. Assessor will update.
002-430-18	35.29%	34.29%	34.38%	SFR	Paper file not updated with current M&S copies. Minor discrepancies in siding material. Assessor will update.
002-473-04	35.29%	34.95%	34.98%	SFR	Paper file not updated with current M&S copies. Minor discrepancies in siding material. Assessor will update.
002-437-06	35.29%	35.13%	35.15%	SFR	Paper file not updated with current M&S copies. Minor discrepancies in siding material. Assessor will update.
003-182-11	34.25%	35.08%	34.93%	SFR	Minor discrepancy in roof materials. Assessor to update.

**LANDER COUNTY OUTLIER REPORT
2014-15 RATIO STUDY**

MFR

APN	L	I	T	ENTITY I. D.	COMMENTS
002-076-12	33.65 %	36.80%	35.76%	MFR	Quality level high. Assessor will lower to Fair.
					COMMENTS <i>Non-reappraisal area new discoveries</i> <i>Assessor to review</i> (NOT OUTLIERS)
002-76-12	34.2%	34.5%	34.33%	MFR	Assessor will visit property to pick up new improvements

COM

APN	L	I	T	ENTITY I. D.	COMMENTS
002-180-86	32.20%	31.75%	31.80%	COM	Values in M&S as a school. Should be valued as a bank. Assessor agrees and will change occupancy.
					COMMENTS <i>Non-reappraisal area new discoveries</i> <i>Assessor to review</i> (NOT OUTLIERS)
001-011-09	34.10%	33.27%	33.35%	COM	Assessor will visit property to pick up new improvements installed without permits since last re-appraisal
002-310-06	34.2%	34.5%	34.33%	COM	Assessor will visit property to pick up 2 connex boxes acquired without permits since last re-appraisal
011-170-30	35.10%	32.71%	32.97%	COM	Paper files from this property and adjacent property were mixed up due to a recent split. Files straightened out. Note this occurred with a re-appraisal area property but did not cause an outlier.

**PERSHING COUNTY NARRATIVE
2014-15 RATIO STUDY**

Pershing County comprises 5 appraisal areas which are defined by geography, township, range and section boundaries. The Pershing County Assessor’s Office appraises all land within the County each year¹ whereas improved property is revalued according to an appraisal cycle which occurs every 5 years. This results in the application of an improvement factor approved by the Nevada Tax Commission in non-reappraisal areas.

The Assessor continues to physically inspect 1/5 of the county each year to capture any new improvements added without a permit within the previous 5 years. The Assessor’s Office is currently implementing annual re-appraisal of all property within the County and anticipates that this will occur in 2016.

Department Findings: NRS 361.333 requires a comparison of the assessed value of each type or class of property determined by the county assessor to the taxable value of that type or class of property within that county determined by the Department through appraisals of individual parcels. The comparison, or “ratio,” is in compliance with statutory requirements if the ratio of assessed value to taxable value is 35%. Ratios less than 32% or more than 36% are considered to be under-or-over assessed. *See NRS 361.333(5)(c).*

Property Type	Sample Size	Samples in Compliance	Samples out of Compliance	Exception Rate
Vacant Land	9	9	0	0%
Single-Family Residential Land	6	6	0	0%
Multi-Family Residential Land	0	0	0	0%
Commercial and Industrial Land	0	0	0	0%
Agricultural Land	6	6	0	0%
Single Family Residential Improvements	30	23	7	23%
Multi-family Residential Improvements	20	15	5	25%
Commercial and Industrial Improvements	20	15	5	25%

¹ All references to the Assessor means the Assessor or the Assessor’s staff.

Procedures, Issues and Recommendations

Marshall & Swift: The Assessor values real property using software developed by Advanced Data Systems, a Computer Assisted Mass Appraisal (CAMA) application that incorporates Marshall & Swift Valuation Service (Marshall Swift) cost tables, pursuant to NAC 361.128. This system uses “current cost” and “local conditions” multipliers that trend the published costs to a current date and adjust the costs by location.

These location multipliers vary by area and are based upon the United States Postal Service, Zone Improvement Plan (ZIP) Codes. The Assessor is using the zip code multipliers within the CAMA system for all classes of improved property. These multipliers have been confirmed correct by the Department.

There are also multipliers within the CAMA system that adjust the base cost of a structure to account for climate, hillside location, foundation and proximity to areas of seismic activity.

The proper seismic category for the State of Nevada is Zone 3. A review of the Assessor’s files indicates that the seismic adjustment is currently being used in the valuation of single family and multi-family residential properties. By default commercial properties are not modified with a seismic adjustment multiplier. Pursuant to NRS 360.215(2), the Department issued each County Assessor Guidance Letter 10-003 dated July 14, 2010. This letter served to assist the Assessor with the correct application the of seismic cost adjustment when using the Marshall and Swift Residential Cost Handbook or Marshall Valuation Service.

Foundation Issues: Both the Department and Pershing County value improvements via Marshall & Swift by using the Square Foot Method. This is described within the Marshall & Swift Residential Cost Handbook on page 1 as follows: “The Square Foot Method is a simple cost estimating system. Based on the square footage of the residence, and with a minimal number of adjustments from a basic residence cost table, an accurate replacement cost can be estimated. Because this cost estimating system requires few calculations, it can significantly reduce the amount of time spent per report. Square Foot Method costs are provided for most types of single and multifamily residences.”

The Department values residential property via computer software known as Marshall & Swift Residential Estimator 7. A review of the component assumptions screen within the help topics states: “Raised Subfloor and Slab on Grade (Site-Built Housing only): Enter the percentage of the residence that has a raised subfloor. Residential Estimator automatically adjusts the percentage for slab on grade.” It further states: “These assumptions are based on the type and quality of the residence, using the defaults in Section A of the *Residential Cost Handbook*”.

Section A, page 8 of the Residential Cost Handbook states: “Floor Structure: Unless otherwise indicated, the floor structure for all Square Foot Method basic residence costs is a wood subfloor. The raised wood subfloor allows for a crawl space. At all types and qualities of residences, a concrete slab on grade costs less than a wood subfloor, and a deduction should be made from the basic residence cost. The deduction should be applied to only that floor area with a slab on grade. Neither the wood subfloor in the base nor the deduction for slab on grade includes floor cover.”

Pershing County has stated that foundation costs are included in their software system, by reference to page 8 of The Marshall & Swift Residential Cost Handbook. This contradicts what the Department discovered when reviewing APN 007-530-08 which clearly lists a raised subfloor foundation as a line item cost, whereas APN 001-071-11 does not indicate any foundation cost as a line item.

The Department also discovered that a major difference exists between printed report formats. Marshall & Swift Residential Estimator 7 provides five choices of printable reports; the Standard Report, Short Report, Input Data Listing, Form 1007 and Depreciation Report. Of these reports, only two indicate a foundation cost as a line item, the Standard Report and Depreciation Report. Since the improvements are depreciated independently of the estimating software, the Standard Report is the preferred choice of printable reports. Although the other reports do not include as much detailed data as the Standard and Depreciation reports, they are still accurate in their total cost valuations.

The Department recommends that Pershing County determine if their ADS system does include foundation costs in their single and multi-family, site-built computer software costing system. The Department also requests that Pershing County provide their printed reports in the Standard Report format.

Minor Improvements: Pershing County utilizes a comprehensive list of various minor improvements referred to as computer cost additives which include but are not limited to: flatwork, curbs, outdoor lighting, porches, decks and awnings. A variance study was conducted to determine whether the computer additive costs were comparable to similar component costs published in the Marshall Swift cost manuals, and the Department has validated these additive costs.

Certain minor improvements are published within cost tables that indicate a unit cost based on a specific area that is usually expressed in square footage. These tables typically require interpolation to derive a proper unit cost for the area being valued. Interpolation is the process of finding the value that lies between two other values. When the area of the subject falls between two areas in the cost tables, the cost for the subject area is interpolated from the known data. A review of the County’s appraisal records reveals that interpolation is being properly applied to certain properties. While Pershing County has begun to use interpolation since it was recommended in the previous ratio study, several minor improvements were found to be valued without interpolation. The Department recommends that Pershing County continue to use interpolation where applicable.

New Construction Improvement Valuation: The Assessor discovers and follows the progress of new construction using a system developed by the Pershing County Assessor's Office. Construction permits are received from the Pershing County Planning and Building Department. The progress of property under construction is physically examined at a minimum of once per year. Certain higher quality properties are visited more frequently.

The Assessor attempts to view new construction prior to the lien date so that all of the existing improvements are discovered and valued accordingly. These parcels are then placed on the proper tax roll by using the re-opened roll log option that is available to the assessor.

Improvement Factor: Pershing County has implemented re-appraisal of all major improvements within the county since 2013 and anticipates that full re-appraisal will occur in 2016. Improvements that are not updated annually have a State-wide improvement factor applied to them that is approved by the Nevada Tax Commission. The minor improvements are re-cost annually.

NRS 361.260 (6.) states "the county assessor shall re-appraise all real and secured personal property at least once every 5 years". While Pershing County is transitioning to full-reappraisal of all major improvements throughout the County, the Department recommends that once implemented, complete re-appraisal takes place annually so that the improvements being valued are up to date with the costs published in the Marshall Swift manuals. Reliance on factors is less accurate than re-appraisal.

Improvement Discovery/Identification: Since physical re-inspection of property is no longer mandatory, Pershing County relies on its in-house permit tracking system to capture new improvements.

Although the Assessor has elected to annually appraise all land and improvements throughout the County, the Department recommends that the appraisal staff continue to perform some type of physical re-inspection on a rotating basis in order to minimize property escaping taxation.

Appraisal Records: The information contained within the Assessor's files is complete, correct and up to date. Most improved property files having sketches have been scanned and are available via computer imaging. The remaining hand-drawn sketches will be digitally converted in the future. All assessment and tax information is made available on-line to the general public via the Pershing County Assessor's Office website.

Mining Claims: The Assessor's Office has begun the process of identifying patented mining claims on their parcel maps. This is in response to Department Performance Audit #1001 – Land Valuation, published March 9, 2012. This audit outlined the responsibilities of the County Assessor pursuant to NRS 362.020 through 362.095, and NAC 362.410 when assessing the surface of patented mines and mining claims.

Personal Property: The personal property portion of the ratio study examined 33 accounts comprising 325 records. Pershing County currently has one computer system that is used for personal property valuation.

**PERSHING COUNTY
OUTLIER REPORT
2014-15 RATIO STUDY**

APN	LAND	IMP	TOTAL	TYPE	COMMENTS
001-018-01	33.31%	30.40%	31.02%	SFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-032-04	34.56%	31.26%	32.08%	MFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-066-08	35.75%	31.33%	32.66%	MFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-071-11	33.89%	25.93%	28.23%	SFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-098-07	35.10%	30.65%	31.15%	MFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-111-01	34.00%	36.99%	35.39%	COM	Improvement outlier the result of differing values between the Department and Pershing County when using identical cost data.
001-124-01	34.49%	46.71%	41.73%	COM	Improvement outlier the result of differing values between the Department and Pershing County when using identical cost data.
001-126-13	35.65%	31.60%	32.98%	SFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-135-06	32.89%	37.77%	37.69%	COM	Improvement outlier the result of differing values between the Department and Pershing County when using identical cost data.
001-184-15	33.33%	31.01%	31.35%	MFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
001-212-01	34.51%	24.71%	26.30%	SFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
006-037-08	32.04%	29.82%	30.19%	SFR	Improvement outlier the result of Pershing County not including a raised subfloor foundation in Marshall Swift.
006-117-01	34.84%	41.14%	39.01%	COM	Improvement outlier the result of incorrect factor applied to improvements by Pershing County.
008-430-06	33.47%	36.21%	36.18%	COM	Improvement outlier the result of incorrect factor applied to improvements by Pershing County.
008-510-13	34.44%	37.73%	37.16%	MFR	Improvement outlier the result of assessed value difference between value published by Pershing County and value taken from ADS program used by Department in cost estimation.
009-060-02	35.55%	38.50%	38.20%	SFR	Improvement outlier the result of Pershing County using a quarter quality class. The Marshall & Swift software used by the Department does not allow this.
009-130-25	33.13%	40.79%	37.08%	SFR	Improvement outlier the result of Pershing County not using interpolation on minor improvements.

WHITE PINE COUNTY RATIO STUDY 2014-2015

All land is reappraised each year in White Pine County. The Nevada Tax Commission approved the Assessor's¹ request to reappraise all land, rather than apply a land factor in non-reappraisal areas, on October 2, 2006.

Department Findings:

NRS 361.333 requires the Department to determine the ratio of the assessed value of each type or class of property for which the county assessor has the responsibility of assessing in each county to the taxable value of that type or class of property within that county determined by the Department through appraisals of individual parcels. The ratio is in compliance with statute if the ratio of assessed value to taxable value is more than 32 percent or less than 36 percent. *See NRS 361.333(5)(c).*

(a) Property Type	(b) Sample Size	(c) Observations in Compliance	(d) Observations out of Compliance	(e) Exception Rate
Vacant Land	30	29	1	3%
Single-Family Residential Land	30	25	5	17%
Multi-Family Residential Land	15	15	0	0%
Commercial and Industrial Land (Note 1)	30	26	4	13%
Agricultural Land	6	6	0	0%
Single Family Residential Improvements (Note 2)	30	14	16	53%
Multi-family Residential Improvements (Note 3)	15	15	0	0%
Commercial and Industrial Improvements	30	18	12	40%
Agricultural Improvements	6	6	0	0%

Note 1: Single-family Residential Improvements: 19 observations were located in the re-appraisal area and 11 in the non-reappraisal area. Eleven properties were found to be out of compliance in the non-reappraisal area.

Note 2: Multi-family Residential Improvements: There were 7 observations located in the re-appraisal area and eight in the non-reappraisal area. None were out of compliance in the non-reappraisal area.

¹ All references to the Assessor means the Assessor or the Assessor's staff.

Note 3: Commercial and Industrial Improvements: 4 observations located in the re-appraisal area and twenty-six in the non-reappraisal area. Twelve were found out of compliance.

Note 4: Agricultural Improvements: All Six observations were located in the reappraisal area. None were out of compliance.

Issues and Recommendations

Minor Improvements: Minor improvements were identified by the assessor and valued from either the Marshall & Swift cost manuals or the Rural Building Cost Manual. The preferred method is to value all improvements by what is actually on the parcel.

Use of Rural Building Manual: Costs from the Rural Building Manual were inappropriately used. The Rural Building Manual is limited to the valuation of structures where unprofessional or unskilled labor was used to build the improvement; however, the costs were applied to certain improvements which were built by professional labor, resulting in the under valuation of improvements. After these observations were made, the Assessor addressed the issue and corrections were implemented.

New Construction Valuation: The Assessor discovers nearly all new construction using the county building permits. New construction that is discovered before the close of the roll in December is included at that time. New construction that is discovered after the close of the roll, but before July 1st, is included on the supplemental roll. However, many improvements are put in place by property owners without the need or use of a county permit and therefore are not discovered until reappraisal. The Assessor is correctly valuing and depreciating new improvements once discovered. A review of several properties with new construction revealed that the improvements are being captured and when measured and valued, are done so correctly, with the exception of those stated in the minor improvement section above.

Marshall & Swift:

- (1) Occupancy type in the Marshall & Swift manual needs to be more closely reviewed when determining quality class. Quality classes are not consistently being used to accurately classify commercial buildings resulting in undervaluation. Lack of commercial sales for the county is a problem Marshall & Swift retired some of the occupancy classifications used by the assessor. Care needs to be taken when substituting occupancy. The Department recommends the Assessor review the quality class and occupancy of all commercial properties during reappraisal to make accurate identifications, using the information provided in Marshall & Swift.

Single Family Residence: issues. This year's ratio study covers the most rural parts of White Pine County, roughly speaking Books 10, 3, 5 and AG. It depends on the address of the property if it is the ratio study. Most of the 16 properties are out of ratio by the 10ths of a percentile in the improvement values. Fourteen were found to be in compliance in the non-reappraisal area. It is recommended that the Assessor create a database or spreadsheet of those parcels or areas which were given obsolescence and how much was applied during each given year in order to keep a running history for defense of values and future trending.

Appraisal Records: White Pine County's files are efficiently maintained and a minimum of one prior reappraisal cycle can be found for comparison. AG records are in general good order, but care should be taken with land be taken in and out of AG. These must be noted more clearly on files. Continued Ag use must be documented. One parcel map did not have the correct land size. The map should be corrected.

Land Sales coding: Internet sales should be coded for validity but not excluded. In addition, some parcels in the same book have electricity and others do not. The Department recommends coding should be added to reference "utilities available" for vacant land. The Assessor has done a good job compiling sales data.

Exempt Properties: All properties need to be valued by statute, Land and Improvements. This has been done on government, state or county properties.

All outliers have been corrected or addressed by the Assessor .

Personal Property:

The Assessor organizes Personal Property records very efficiently. 35 Accounts with a total of 260 records were examined. After adjusting for rounding there were 7 outliers. All were out do to age/life.

Aircraft and large equipment have questionable purchase values. It is recommended that the Assessor require better documentation to support these values.

ⁱ Please see Outlier Report for details.

**WHITE PINE COUNTY
OUTLIER REPORT
2014-1215 RATIO STUDY**

NON= Non Reappraisal Area A.O. Assessor's Office

<i>APN</i>	<i>Land</i>	<i>Imp</i>	<i>Total</i>	<i>Property Type</i>	<i>COMMENTS</i>
010-290-29	33.6	26.82	30.96	Non Reap SFR	Below acceptable range-current cost Vs. Improvement factor
010-281-43	27.7	35.4	35.0	Non Reap COM	LAND Increase to 32%
010-470-26	33.08	31.25	31.40	Non Reap COM	Below acceptable range Current cost V improvement factor
010-470-32	35.01	31.25	31.90	Non Reap COM	Below acceptable range Current cost V improvement factor
010-690-02	32.1	36.4	35.7	Non Reap COM	Above acceptable range .4%
003-016-08	33.87	31.58	31.84	Non Reap SFR	LAND and Imps below acceptable range
003-071-13	35.95	25.99	27.22	Non Reap SFR	Improvements below acceptable range
004-033-09	33.94	31.44	31.87	Non Reap SFR	Improvements below acceptable range
001-129-01	34.4	36.3	35.7	Non Reap COM	Improvements above acceptable by .3%
002-069-02	34.5	36.6	36.2	Non Reap COM	Improvements above acceptable by.6%
002-042-02	34.7	24.9	26.3	Non Reap COM	Improvements below acceptable range
001-176-02	34.4	31.7	31.9	Non Reap COM	Improvements above acceptable by.7%
004-111-22	31.9	36.4	34.9	Non Reap COM	LAND below- Improvements above acceptable range
010-281-43	27.7	35.4	35	Non Reap COM	LAND 27.7% land value should be raised to 32%
004-054-02	32.5	36.8	35.2	Non Reap COM	Improvements above acceptable range by .8%
001-281-02	36.1	35.2	35.3	Non Reap COM	LAND decrease by .1%
004-161-05	35.0	31.4	32.1	Non Reap SFR	Improvements below acceptable range by
004-042-07	35.3	31.3	32.1	Non Reap SFR	Improvements below acceptable range
002-056-07	34.1	31.7	32.3	Non Reap SFR	Improvements below acceptable range
004-141-02	36.3	31.2	32.4	Non Reap SFR	LAND decrease by .3%
002-092-05	34.4	31.6	32.7	Non Reap SFR	Improvements below acceptable range
002-095-11	36.6	34.3	34.8	Non Reap SFR	LAND decrease by.6%
001-123-05	34.5	31.7	32.2	Non Reap SFR	Improvements below acceptable range
002-055-02	36.3	31.2	32.4	Non Reap SFR	LAND decrease by .3%
002-092-05	34.3	31.6	32.7	Non Reap SFR	Improvements below acceptable range
002-095-11	36.6	34.3	34.8	Non Reap SFR	LAND decrease by .6%
001-051-01	33.3	36.1	35.4	Non Reap SFR	Improvements above acceptable
004-111-17	34.9	36.1	35.5	Non Reap SFR	Improvements above acceptable
011-230-05	36.03		36.03	Non Reap VAC	LAND decrease by .03%

2014-2015

REPORT OF ASSESSMENT RATIO STUDY

ASSESSOR RESPONSES
