



Assessor's Office

Residential and Commercial Revaluation

2020 Tax Year Annual Report

**Lewis County Assessor's Office
Chehalis, Washington**



Dear Property Owners:

Property assessments for the 2020 tax year were completed by my appraisers throughout the year and change of value notices were mailed in July. Notices for value changes based on new construction were sent in September and October 2019.

We value property at fee simple, reflecting property at its highest and best use, and following the requirement of RCW 84.40.030 to appraise property at its true and fair market value.

The following report summarizes the results of the 2019 assessment for taxes payable in 2020 for the Adna, Napavine, Boistfort, and Pe Ell Areas (see map within report). In addition, summary data is included for the trended non-inspected areas of the county. This information is meant to provide you with helpful background information about the inspection and valuation process used and to give you the basis for property assessments in your area.

Fair and uniform assessments set the foundation for effective government. I am pleased that my office continues to implement new technologies and methodologies to make continuous and ongoing improvements to serve you.

The mission of the Lewis County Assessor's Office is to appraise all property equally and fairly, maintaining accurate assessment information for taxation purposes, while being courteous and professional to Lewis County taxpayers.

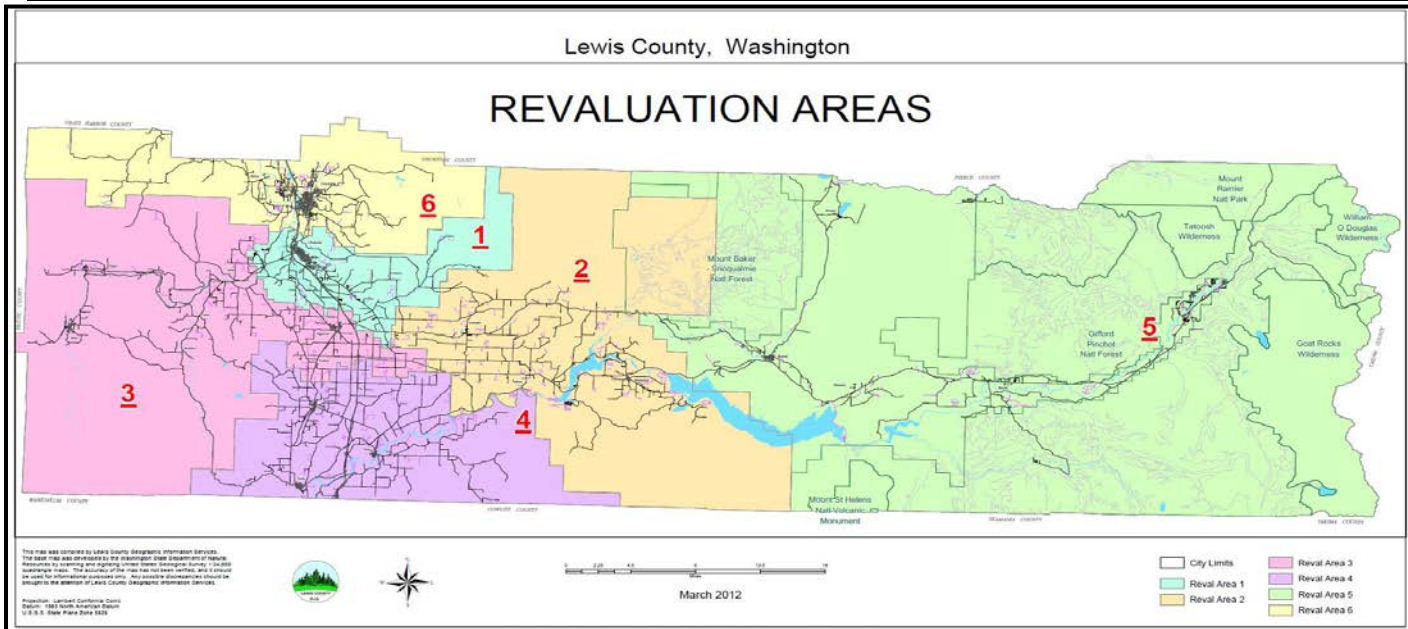
If you have questions about the property assessment process and how it relates to your property, please feel welcome to contact the Assessor's Office.

Respectfully,

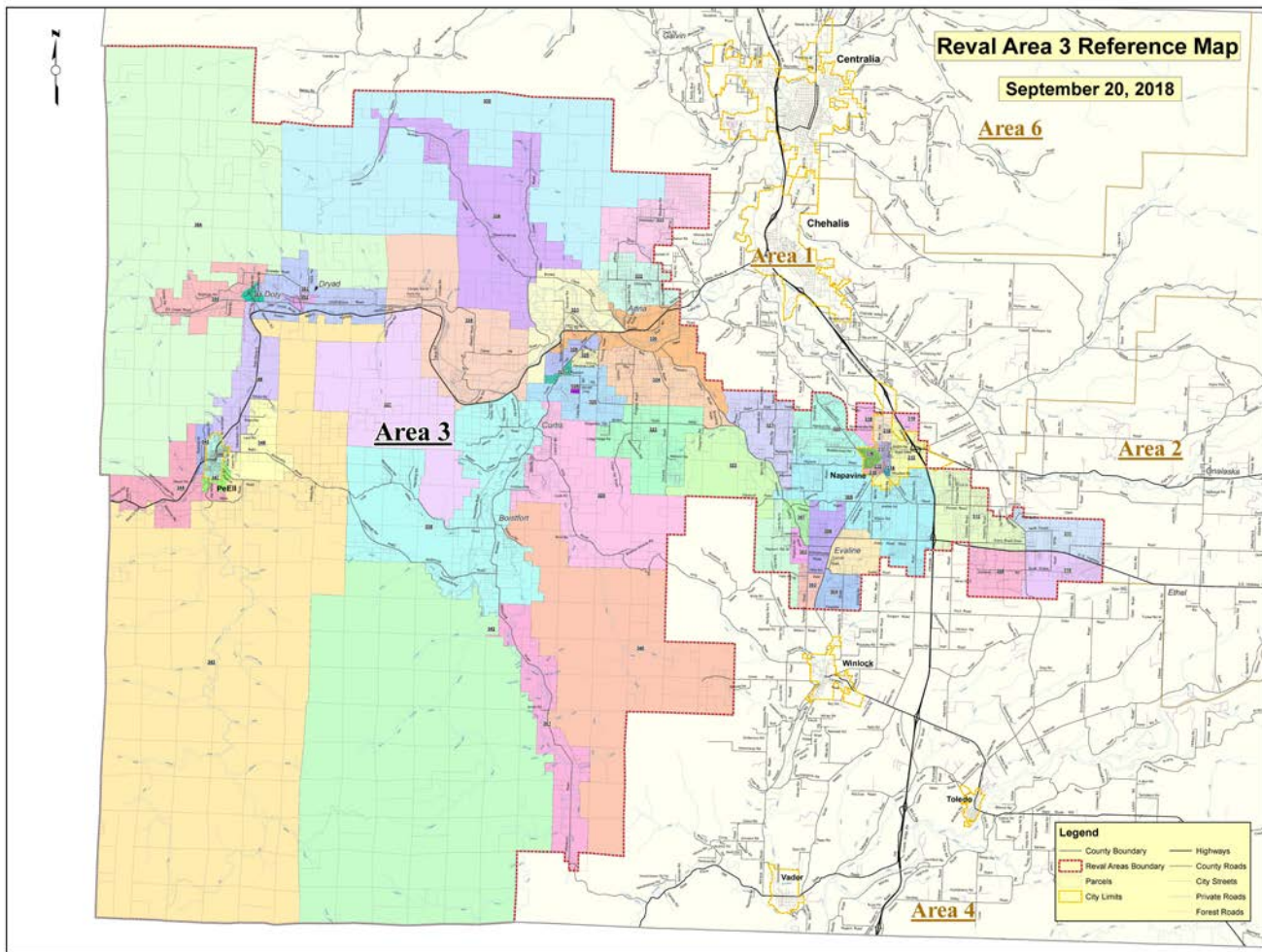
Dianne Dorey

Dianne Dorey,
Lewis County Assessor

COUNTY AREA MAP WITH REVAL AREAS INDICATED



COUNTY AREA MAP FOR CYCLE 3



SUMMARY OF RATIO ANALYSIS

A study of valid sales within the physical inspection cycle was used in the valuation of the Adna, Napavine, Boistfort, and Pe Ell areas. Below is our analysis of the sales used. Please refer to Page 7 in the report regarding the criteria used and for definitions. Below is the analysis of the sales before inspection:

Tax Year 2020

Cycle Trend Report

Cycle 2 (Mossy/Onalsk)

All Sales Before Trend

Lien Date:

1/1/2019

Report Date:

11/19/2019

Date Range of Sales:

1/1/2018-12/31/2018

SAMPLE STATISTICS

Sample size (n)

164

Mean Assessed Value

157,900

Mean Sales Price

195,200

Standard Deviation AV

101,619

Standard Deviation SP

114,891

ASSESSMENT LEVEL

Arithmetic mean ratio

0.814

Median Ratio

0.805

Weighted Mean Ratio

0.809

UNIFORMITY

Lowest ratio

0.4355

Highest ratio:

1.1486

Coefficient of Dispersion

16.69%

Standard Deviation

0.1645

Coefficient of Variation

20.21%

Price-related Differential

1.01

RELIABILITY

95% Confidence: Median

Lower limit

0.774

Upper limit

0.841

95% Confidence: Mean

Lower limit

0.789

Upper limit

0.839

SAMPLE SIZE EVALUATION

N (population size)

8772

B (acceptable error - in decimal)

0.1

S (estimated from this sample)

0.1645

Recommended minimum:

11

Actual sample size:

164

Conclusion:

OK

NORMALITY

Binomial Test

ratios below mean:

87

ratios above mean:

77

z:

0.702781928

Conclusion:

Normal*

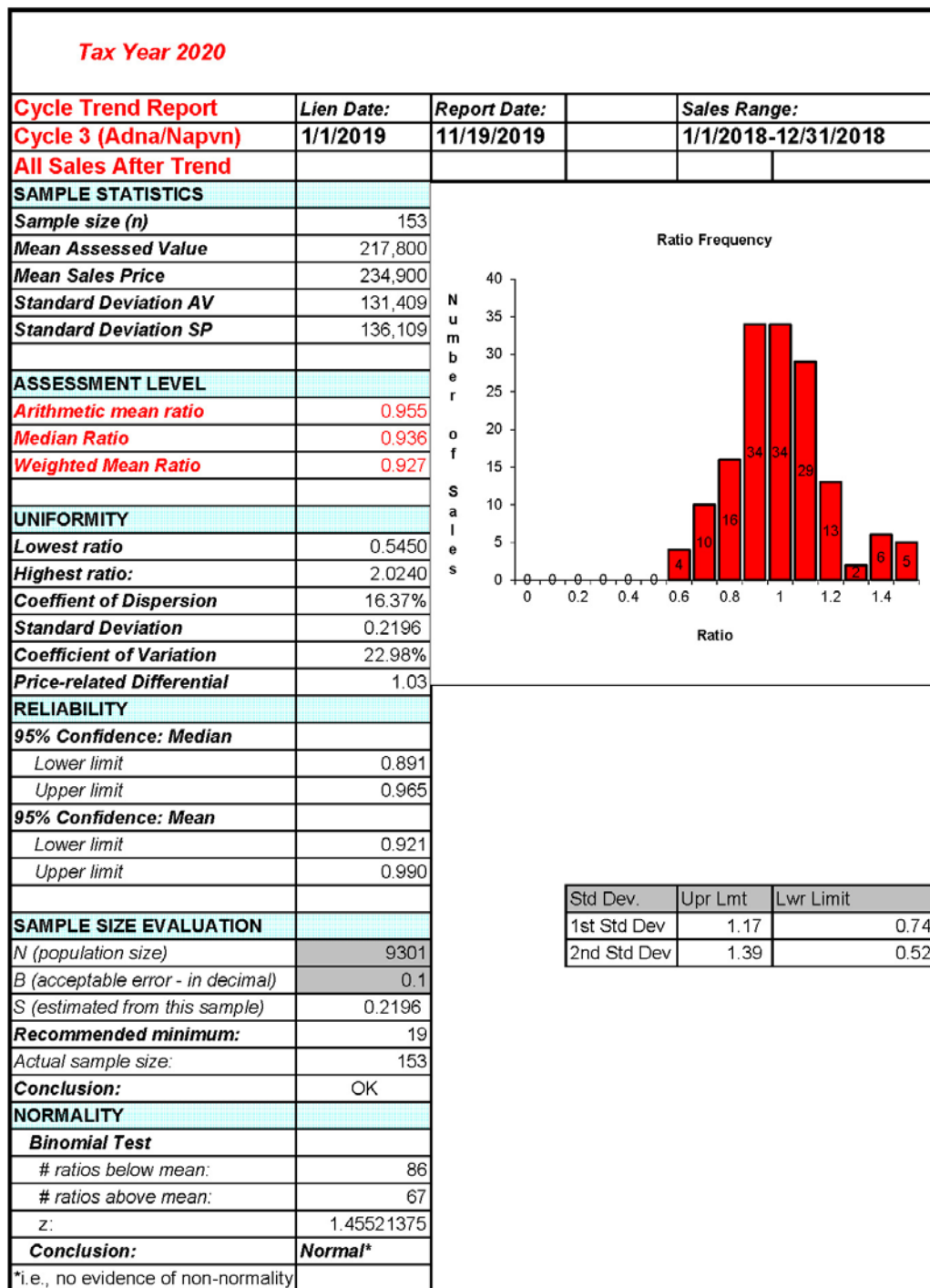
*i.e., no evidence of non-normality

Ratio Frequency

Ratio	Number of Sales
0.5-0.6	4
0.6-0.7	13
0.7-0.8	25
0.8-0.9	38
0.9-1.0	33
1.0-1.1	26
1.1-1.2	19
1.2-1.3	6

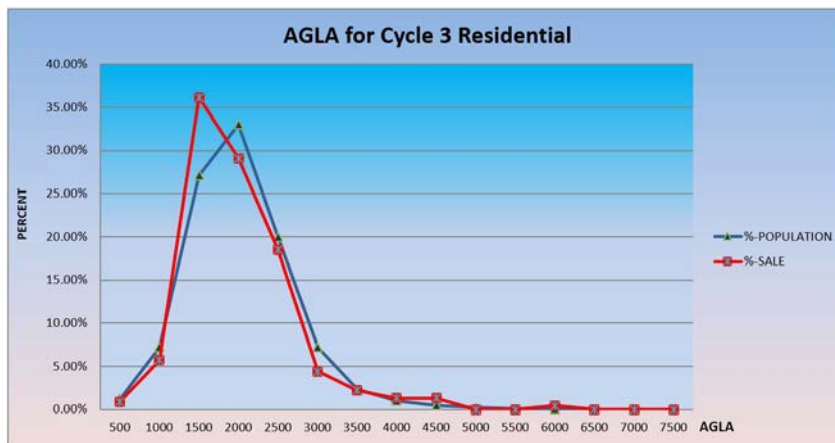
Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.98	0.65
2nd Std Dev	1.14	0.48

Below is the analysis after the revaluation:

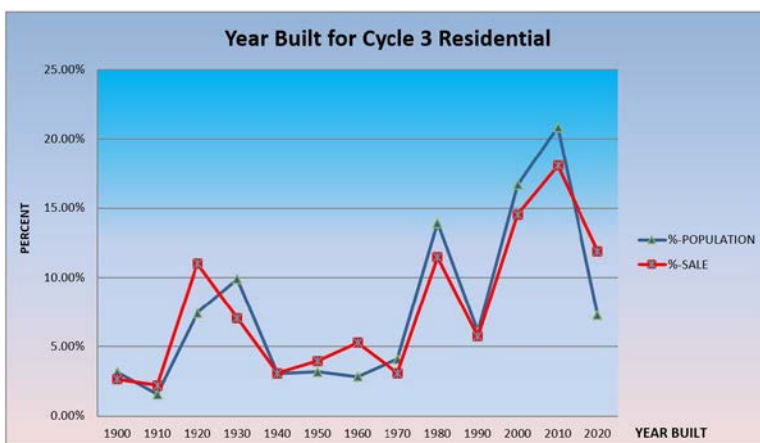


These analyses include multiple property types in multiple areas, and as such may have higher PRD, COV, and COD when compared to analyzing a single property type in a single area. For details see below in the body of this report.

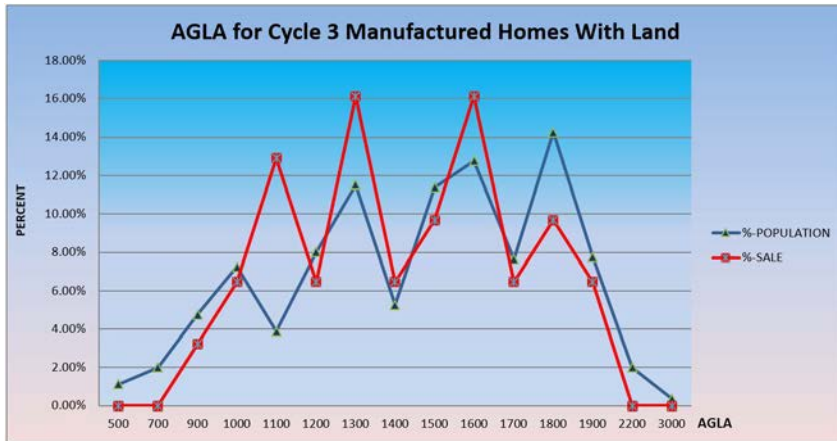
Below are charts and tables showing the population of parcels compared with sales of residential and manufactured homes in Cycle 2 reflecting above grade living area (AGLA) and year built (YB).



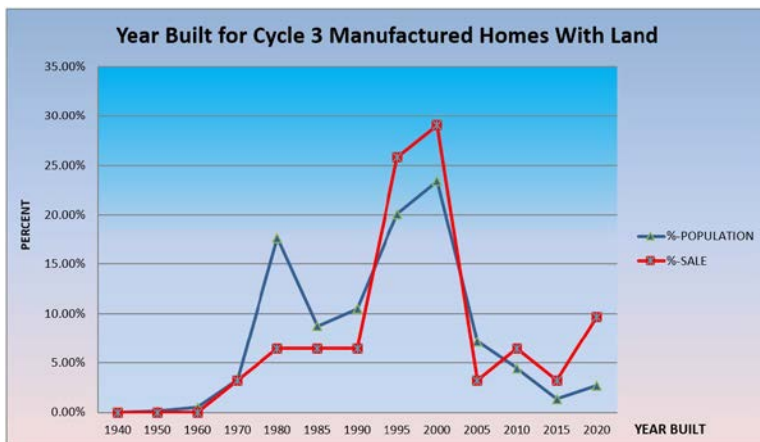
AGLA for Cycle 3 Residential				
AGLA-POPULATION	FREQ	%-POPULATION	FREQ	%-SALE
500	44	1.24%	2	0.88%
1000	257	7.25%	13	5.73%
1500	960	27.08%	82	36.12%
2000	1170	33.00%	66	29.07%
2500	709	20.00%	42	18.50%
3000	256	7.22%	10	4.41%
3500	82	2.31%	5	2.20%
4000	36	1.02%	3	1.32%
4500	17	0.48%	3	1.32%
5000	8	0.23%	0	0.00%
5500	3	0.08%	0	0.00%
6000	2	0.06%	1	0.44%
6500	0	0.00%	0	0.00%
7000	1	0.03%	0	0.00%
7500	0	0.00%	0	0.00%
Totals	3545	100.00%	227	100.00%



Year Built for Cycle 3 Residential				
YB-POPULATION	FREQ	%-POPULATION	FREQ	%-SALE
1900	112	3.16%	6	2.64%
1910	55	1.55%	5	2.20%
1920	263	7.42%	25	11.01%
1930	351	9.90%	16	7.05%
1940	108	3.05%	7	3.08%
1950	113	3.19%	9	3.96%
1960	100	2.82%	12	5.29%
1970	145	4.09%	7	3.08%
1980	494	13.94%	26	11.45%
1990	216	6.09%	13	5.73%
2000	591	16.67%	33	14.54%
2010	739	20.85%	41	18.06%
2020	258	7.28%	27	11.89%
Totals	3545	100.00%	227	100.00%



AGLA for Cycle 3 Manufactured Homes With Land				
AGLA-POPULATION	FREQ	%-POPULATION	FREQ	%-SALE
500	9	1.13%	0	0.00%
700	16	2.00%	0	0.00%
900	38	4.76%	1	3.23%
1000	58	7.26%	2	6.45%
1100	31	3.88%	4	12.90%
1200	64	8.01%	2	6.45%
1300	92	11.51%	5	16.13%
1400	42	5.26%	2	6.45%
1500	91	11.39%	3	9.68%
1600	102	12.77%	5	16.13%
1700	61	7.63%	2	6.45%
1800	114	14.27%	3	9.68%
1900	62	7.76%	2	6.45%
2200	16	2.00%	0	0.00%
3000	3	0.38%	0	0.00%
0	799	100.00%	31	100.00%



Year Built for Cycle 3 Manufactured Homes With Land				
YB-POPULATION	FREQ	%-POPULATION	FREQ	%-SALE
1940	0	0.00%	0	0.00%
1950	1	0.12%	0	0.00%
1960	4	0.49%	0	0.00%
1970	27	3.33%	1	3.23%
1980	143	17.63%	2	6.45%
1985	71	8.75%	2	6.45%
1990	85	10.48%	2	6.45%
1995	163	20.10%	8	25.81%
2000	190	23.43%	9	29.03%
2005	58	7.15%	1	3.23%
2010	36	4.44%	2	6.45%
2015	11	1.36%	1	3.23%
2020	22	2.71%	3	9.68%
Totals	811	100.00%	31	1

CRITERIA AND DEFINITIONS FOR THE RESIDENTIAL REVALUATION REPORT

Sales Criteria:

- Only valid sales are included
- Ratio equals assessed value divided by sale price
- Land sales that were improved after the sale are included using only current land value
- Improved residential and commercial sales including vacant land sales were used

Sales Excluded:

- Property types excluded from this report are as follows: Properties in forest, open space, and agricultural programs
- Sales with ratios below .40 and above 2.00 are generally excluded

Property Use Definitions:

- **Condominium:** individual ownership of a unit in a multi-unit structure (such as an apartment building) or on land owned in common (such as a town house complex)
- **Multi-Family:** 2-4 unit site-built housing
- **Single Family:** site-built & modular housing only, *not* mobile/manufactured
- **Mobile/Manufactured Home:** prefabricated or off-site built structures, often residences
- **Vacant land:** any real property with zero (0) improvement value
- **Commercial/Industrial:** properties typically engaged in commerce

Measures of Central Tendency:

- **Mean:** the average value or ratio, is computed by summing the values and dividing by sample size and is more affected by extreme values than the median
- **Median:** the midpoint or middle value or ratio (Note: If the number of data items is even, the median is the midpoint between the two middle values)
- **Weighted Mean:** an aggregate ratio, weighs each ratio in proportion to its sale price, and is the sum of assessed values divided by the sum of sale prices

Measures of Uniformity:

- **Standard Deviation:** square root of the variance, assuming a normal data distribution
Approx. 68% will lie within +/- 1 standard deviation of the mean
Approx. 95% will lie within +/- 2 standard deviation of the mean
Approx. 99% will lie within +/- 3 standard deviation of the mean
- **Price Related Differential (PRD):** calculated by dividing the *mean* by the *weighted mean*.
PRD > 1.03 indicates relative under appraisal of higher value parcels (**assessment regressivity**)
PRD < 0.98 indicates relative over appraisal of higher value parcels (**assessment progressivity**)
- **Coefficient of Dispersion (COD):** represents the average percent difference from the *median*
The most widely used measure of uniformity in ratio studies.
IAAO standards are:
10.0 or less for properties in newer relatively homogeneous areas
15.0 or less for properties in older, heterogeneous areas
20.0 or less for vacant land
* Please note that the cycle ratio studies included in this report may have higher COD and/or COV than typical, as multiple property types are included, i.e. manufactured homes, residential properties, bare land, and land with buildings included in the same report.

- **Coefficient of Variation (COV):** COV or CV is the ratio of the standard deviation (above) to the mean (above). This is determined by dividing the standard deviation by the mean. Generally speaking, the lower the value of the COV, the more precise the estimate or value. It expresses the standard deviation as a percentage, making comparison among groups easier.
 - Approx. 68% will lie within one COV of the mean ratio
 - Approx. 95% will lie within two COV of the mean ratio
 - Approx. 99% will lie within three COV of the mean ratio

Labels:

The letter **n** represents the number of cases reported in statistical reports.

Source: Pierce County Department of Assessments

From the IAAO Technical Standards:

- **14.2.2 Uniformity among Single-Family Residential Properties:** The COD for single-family homes and condominiums should be 15.0 or less. In areas of newer or somewhat similar residences, it should be 10.0 or less.
- **14.2.3 Uniformity among Income-Producing Properties:** The COD should be 20.0 or less. In larger, urban jurisdictions, it should be 15.0 or less.
- **14.2.4 Uniformity among Unimproved Properties:** The COD for vacant land should be 20.0 or less.
- **14.2.5 Uniformity among Rural Residential and Seasonal Properties:** The COD for heterogeneous rural residential property and seasonal homes should be 20.0 or less.
- **14.2.6 Uniformity among Other Properties:** Target CODs for special-purpose real property and personal property should reflect the nature of the properties involved, market conditions, and the availability of reliable market indicators.
- **14.2.7 Vertical Equity:** PRDs should be between 0.98 and 1.03. The reason this range is not centered on 1.00 relates to an inherent upward bias in the arithmetic mean (numerator in the PRD) that does not equally affect the weighted mean (denominator in the PRD). When samples are small, have high dispersion, or include properties with extreme values, the PRD may not provide an accurate indication of assessment regressivity or progressivity. Similar considerations apply to special-purpose real property and to personal property. It is good practice to perform an appropriate statistical test for price-related biases before concluding that they exist (see table 5). *Source: IAAO Technical Standards*

Certificate of Appraisal

- The appraisers are, at minimum, accredited by the State of Washington, Department of Revenue. By signing this report, the Assessor certifies she has the knowledgeable appraisers, experience, and expertise to complete this Assessor's Annual Report of Appraisal, with professional assistance, if required, and disclosed.
- To the best of the appraiser's knowledge and belief, all statements and information in this report are true and correct, and they have not knowingly withheld any significant information.
- The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and is the appraiser's personal, impartial and unbiased professional analysis, opinions and conclusions.
- The appraisers have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.
- The appraisers' engagement in this assignment was not contingent upon developing or reporting predetermined results.
- The appraisers' compensation for completing this assignment is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The appraisers' analyses, opinions, and conclusions were developed and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP).
- The inspections were performed by appraisers employed by the Lewis County Assessor's Office.

Type of Report – Mass Appraisal Report:

This is a report of the Lewis County Assessor's Mass Appraisal for the geographic area named as required under Standard 6-8, Uniform Standards of Professional Appraisal Practice (USPAP):

This document is not intended to be a self-contained document of the mass appraisal, but to summarize the methods and data used and to guide the reader to other documents or files, which were relied upon to perform the mass appraisal. These other documents may include the following:

- Individual Property Records - Contained in Assessor's Property System Database / Sigma
- Real Estate Sales File – Part of Assessor's Property System Database / Sigma
- Sales Review File (Returned Questionnaires)
- Cost Tables – Contained in Assessor's Property System Database / Sigma
- Depreciation Tables – Contained in the Assessor's Property System Database / Sigma
- Revised Code of Washington (RCW) - Title 84
- Washington Administrative Code (WAC) – WAC 458
- Uniform Standards of Professional Appraisal Practice (USPAP) published by the Appraisal Standards Board of the Appraisal Foundation
- Lewis County Assessor's Manual – Published by DOR, November 2011(also revised in October 2017)
- Mass Appraisal Report data extracts and sales files

Appraisal Staff

The appraisers of Lewis County have been involved with the Adna, Boistfort, Napavine, and Pe Ell physical revaluation including: physical inspections of properties, cost and depreciation adjustments, valuation of improved and non-improved properties, sales verification, and statistical analysis. This would also include any inspections and mass updates for the other five cycle areas not physically inspected.

Introduction:

This mass appraisal report is a post-revaluation report card of the physical inspection cycle. As noted previously, it is not a fully self-contained appraisal but rather a summary for the geographic areas identified in the report. The summary statistics apply to the population of sales used as a whole and are not appropriate to apply to any specific property. While property values in a general geographic area may, on average, change by a XX%, individual properties may increase or decrease at greater or lesser amounts due to changes in property characteristics or localized market factors that do not affect the broader geographic area that this report covers.

Client:

This residential mass appraisal report was prepared for the Lewis County Assessor as per the Assessor's instructions.

Assessor's Instructions to Appraisers:

- Appraise all properties in each Physical Inspection Cycle by the date specified according to the approved Lewis County revaluation calendar
- The appraisals are to be compliant with Washington State Law (RCW), Washington State Administrative Code (WAC), Washington State Department of Revenue (DOR) guidelines, International Association of Assessing Officers (IAAO) Standard on Ratio Studies (April 2013 edition), IAAO standard on Mass Appraisal of Real Property, and the Uniform Standards of Professional Appraisal Standards (USPAP) Standard 6: Mass Appraisal, Development and Reporting
- The appraisals are to be performed using industry standards mass appraisal techniques, including adjusting sales prices for time (when warranted)
- Physical inspections must comply with the revaluation plan approved by the Washington State Department of Revenue. Physical inspections will be, at a minimum, a curbside visit and review of the property characteristics

- An effort should be made to inspect and review all sales that occurred in the year prior to the assessment date. At a minimum, those qualified sales determined to be “outliers” should be examined or, in lieu of examination, a sales questionnaire mailed to the owner or an internet review performed via real estate websites
- A written mass appraisal report that is compliant with USPAP Standard 6 must be completed that includes each of Lewis County’s Physical Inspection Cycles
- The intended use of the appraisals and subsequent report is the administration of ad valorem property appraisals

Intended User(s):

Intended users include the Lewis County Assessor, the Lewis County Board of Equalization and/or the Washington State Board of Tax Appeals, and the Washington State Department of Revenue. No other users are intended or implied.

Use of This Report:

The use of this report, its analysis, and conclusions, is limited to the administration of appraisals for property tax purposes in accordance with Washington State law and administrative code. The information and conclusions contained in this report cannot be relied upon for any other purpose.

Assumptions and Limiting Conditions:

- This revaluation is a mass appraisal assignment resulting in conclusions of market value for ad valorem tax purposes and no one should rely on this study for any other purpose. **The opinion of value on any parcel may not be applicable for any use other than ad valorem taxation.**
- This is a retrospective analysis with an assumed data cut-off date as of the appraisal date specified in this report.
- Properties are appraised as if free and clear of any and all liens or encumbrances unless otherwise stated.
- No personal property is included in the value. Fixtures are generally accepted as real property. Business value is personal property and is exempt.
- Responsible ownership and competent property management are assumed.
- It is assumed there are no hidden conditions of the property, subsoil, or structures that render it more or less valuable, unless specifically noted in the property system database.
- The appraiser is not qualified to detect the existence of potentially hazardous material which may or may not be present on or near the property. The existence of such substances may have an effect on the value of the property. It is assumed there are no hazardous materials affecting the value of the property, unless specifically identified in the property system database.
- It is assumed there is full compliance with all applicable federal, state, and local environmental regulations and laws, unless noncompliance has been noted in the property system database.
- It is assumed all applicable zoning and use regulations and restrictions have been complied with, unless otherwise noted in the property system database.
- It is assumed all required licenses, permits, certificates, consents, easements, or other legislative or administrative authority from any local, state, or national government, or private entity or organization have been or can be obtained or renewed for any use on which the value estimate is based, unless otherwise noted in the property system database.
- It is assumed there are no adverse easements, encroachments, restrictions, encumbrances, leases, reservations, covenants, contracts, declarations, special assessments, ordinances, or other items of similar nature significantly affecting the value of the property, unless otherwise noted in the property system database.
- No responsibility is assumed for matters pertaining to legal or title considerations.
- Fiscal constraints may impact data completeness and accuracy, valuation methods, and valuation accuracy.
- The Assessor’s records are assumed to be correct for the properties appraised.
- Sales utilized are assumed to be arm’s-length market transactions based on initial validation review; fiscal constraints limit the Assessor’s ability to verify all transactions beyond this initial sales screening.

- Secondary sales validation is limited to the mailing of sales questionnaires, internet research, and/or inspection of sales selected by a reviewer (sales with extreme ratios) or sales from financial institutions where initial screening indicates the transfer to be a qualified sale.
- The subject property is assumed to be buildable, unless otherwise noted in the property system database.
- It is assumed the property is unaffected by sensitive or critical areas regulations (federal, state or local), unless otherwise noted in the property system database.
- Maps, aerials, and drawings may be included to assist the intended user in visualizing the property; however, no responsibility is assumed as to their exactness.
- The value conclusions contained in this report apply to the subject parcels only and are valid only for assessment purposes. No attempt has been made to relate the conclusions in this report to any other revaluation, past, present, or future.
- It is assumed exposure time for the properties appraised are typical for their market area.
- It is assumed the legal descriptions stored in the Assessor's property system database for the properties appraised are correct. No survey or search of title of the properties has been made for this report and no responsibility for legal matters is assumed.
- Rental rates, when employed, were calculated in accordance with generally accepted appraisal industry standards.
- The Lewis County Assessor's Office utilizes a limited sales database that captures property characteristics at the time of sale. Staffing resources limit the level of sales review required to support this activity.
- Exterior inspections were made of all properties in the physical inspection areas per the revaluation plan approved by the Washington State Department of Revenue. Due to lack of access, some properties did not receive walk around inspections nor did improved properties receive interior inspections. An effort was made to either inspect or validate the sales that were selected by the Sales Analyst.
- The values reported herein are only valid as of the date of this report. Values of individual properties may change through normal jurisdictional processes.

Inspection of Properties:

- **RCW 84.41.041** - Each county assessor shall cause taxable real property to be physically inspected and valued at least once every six years in accordance with RCW 84.41.030, and in accordance with a plan filed with and approved by the Department of Revenue.
- **Jurisdictional Exception** - The mass appraisal must be completed within the time constraints set by statute and with the work force and financial resources available. As these constraints limit the scope of work performed for the mass appraisal, limiting the ability to fully comply with USPAP Standards 6, the Jurisdictional Exception as provided for in Standard 6 is invoked.
- **RCW 84.40.025 – Access to property required.** For the purpose of assessment and valuation of all taxable property in each county, any real or personal property in each county shall be subject to visitation, investigation, examination, discovery, and listing at any reasonable time by the county assessor of the county or by any employee thereof designated for the purpose by the assessor. In any case of refusal to such access, the assessor shall request assistance from the Department of Revenue which may invoke the power granted by chapter 84.08 RCW.

Date of Appraisal: January 1, 2019:

The appraisal date for properties, other than new construction, is January 1, 2019.

RCW 84.40.020 Assessment date — average inventory basis may be used — public inspection of listing, documents, and records.

- All real property in this state subject to taxation shall be listed and assessed every year, with reference to its value on the first day of January of the year in which it is assessed.
- The appraisal date for new construction, that is those properties that were issued a building permit or should have been issued a building permit, is July 31, 2019.

RCW 36.21.080: New construction building permits: When property placed on assessment rolls.

- The county assessor is authorized to place any property that is increased in value due to construction or alteration for which a building permit was issued, or should have been issued, under chapter 19.27, 19.27A, or 19.28 RCW or other laws providing for building permits on the assessment rolls for the purposes of tax levy up to August 31st of each year. The assessed valuation of the property shall be considered as of July 31st of that year.

Type of Value – Market Value for Assessment Purposes:

- **Market Value:** The basis of all assessments is the true and fair market value of property. True and fair market value (Spokane etc. R. Company v. Spokane County, 75 Wash. 72 (1913); Mason County Overtaxed, Inc. v. Mason County, 62d (1963); AGO 57-58, No. 2, 1/8/57; AGO 65-66, No. 65 12/31/65) ... or amount of money a buyer is willing but not obligated to buy would pay for it to a seller willing but not obligated to sell. In arriving at a determination of such value, the assessing officer can consider only those factors that can within reason be said to affect the price in negotiations between a willing purchaser and willing seller, and he must consider all of such factors (AGO 65.66. No. 65, 12/31/65).

Property Rights Appraised – Fee Simple:

- Fee Simple Title: Fee simple title indicates ownership that is absolute and subject to no limitation other than eminent domain, police power, escheat and taxation. (International Association of Assessing Officers, *Glossary for Property Appraisal and Assessment*, (Chicago. IAAO 1997)).

Sales Source:

- The Lewis County Assessor's Office utilizes sales obtained from Real Estate Excise Tax Affidavits filed with the Lewis County Treasurer's Office.

Sales Review:

- Sales are assumed to be arm's length transactions based on initial screening in the sales verification process utilizing standards published by the Washington State Department of Revenue.
- The mass appraisal must be completed within the time constraints set by statute and with the work force and financial resources available. These constraints limit the amount of sales review that can occur.
- Sales located in the scheduled physical inspection review area receive, at a minimum, an external inspection.
- Whenever possible, sales located outside the scheduled physical inspection review area receive an inspection also, although some are reviewed in house via sales documents, online verification, or via contact with purchaser/seller/Realtor through phone call or mail/email.
- Sales identified as being an outlier may receive a sales questionnaire and/or be scheduled for sales review. The sales review may include a site visit and/or contact with either the buyer or seller of the property, or a review of published information on various real estate websites and/or county websites.
- The number of properties that actually receive a sales review and/or physical inspection is determined by the number of sales and the availability of staff to perform the task. The majority of the sales (not just outlier sales) were reviewed for accuracy for the 2020 tax year.

Sales used in Analysis: All improved sales which were verified as good that did not have characteristic changes between the date of sale and the date of appraisal were included in the analysis. Mathematical trimming may have occurred where noted.

Conclusion and Recommendation: Value changes in physically inspected area primarily were the result of changes in the improvement values when the sales calibrated cost approach was applied, changes in land value, data changes to building characteristics, and mass adjustments. Changes in land value were often due to adjustments as part of the land value equalization process. Since the values in this report improve uniformity and equity, we recommend posting these values for the 2020 tax year.

Highest and Best Use Analysis:

- **As if vacant:** Market analysis of this area, together with current zoning and current anticipated use patterns, indicate the highest and best use of the majority of the appraised parcels as residential. Any opinion not consistent with this is specifically noted in our records and considered in the valuation of the specific parcel.
- **As if improved:** Based on neighborhood trends, both demographic and current development patterns, the existing buildings represent the highest and best use of most sites. The existing use will continue until land value, in its highest and best use, exceeds the sum of the value of the entire property in its existing use and the cost to remove the improvements. We find that the current improvements do add value to the property, in most cases, and are therefore the highest and best use of the property as improved.
- **Interim Use:** In many instances a property's highest and best use may change in the foreseeable future. A tract of land at the edge of a city might not be ready for immediate development, but current growth trends may suggest that the land should be developed in a few years. The use to which the site is put until it is ready for its future highest and best use is called an interim use. Thus, interim uses are current highest and best uses that are likely to change in a relatively short time.

Standards and Measurement of Data Accuracy:

Each sale was verified with the buyer, seller, real estate agent, or tenant when possible. Current data was verified and corrected when necessary via field inspection.

REVALUATION REPORT FOR ADNA, BOISTFORT, NAPAVINE, AND PE ELL RESIDENTIAL AREA:

Cycle Number(s):	3
Previous Physical Inspection:	2013
Effective Date of Appraisal:	January 1, 2019
Date of Physical Inspections:	November 2018 – June 2019
Parcel Count:	9301
Valid Sales:	153
Overall Value Sale Price Ratio COD*:	16.37%

*COD is a measure of uniformity; the lower the number the better the uniformity. The COD listed above is higher than typical due to inclusion of a wide variety of property types, including: single family residential, manufactured homes (both with and without land), land with buildings, and bare land in a single report.

Cycle 3 Revaluation Area Description: Adna, Boistfort, Napavine, and Pe Ell Area

Overall Description:

Adna, Boistfort, Napavine, and Pe Ell are located to the west and southwest of the Centralia/Chehalis area. Boundaries for this area are: Lincoln Creek Road to the north, Mountview Lane to the east, Cowlitz County to the south, and Pacific County to the west. The Napavine area includes areas both east and west of Interstate 5 along Highway 12 to the east.

State Route 6 runs more or less in a westerly direction along the Chehalis River, beginning in Chehalis and the Interstate 5 junction to the east; the highway then continues west through the Adna area, the Boistfort/Curtis area, and on to Pe Ell and the far western boundary of the county. The Willapa Hills Trail also runs along highway 6 from Chehalis to Pacific County and eventually to the coast. This trail is primarily part of the abandoned railroad right of way, and is quite popular. There are quite a few parks and trailheads along this 56-mile long trail.

Highway 603 runs south from State Route 6 approximately 2 miles west of Interstate 5, running through West Chehalis, rural Adna, the Napavine area, and the Evaline area on the way to Winlock.

This area has adequate access to local schools, grocery stores, gas stations and health services, although most it is a semi-rural area, so greater than normal distances to these services is typical. Primary employment centers are Centralia/Chehalis, and to a further extent, the Tacoma/Olympia and Longview/Kelso areas. Some jobs (generally services and retail) are located locally, primarily in the Napavine and Pe Ell areas, with a few stores and businesses located along major roads.

Much of the area (based on percentage of actual area) is forestland or relatively unimproved. Many of the more rural residential parcels are larger acreage parcels, with many clusters of smaller lots and small subdivisions scattered about.

Homes in Napavine and Pe Ell have access to public services (water and sewer), along with some of the rural communities that have private combined services. Most of the rural area homes have private or shared wells and septic systems. Boistfort Valley Water provides water service to much of the Adna and Boistfort areas, with approximately 847 members/users.

Topography in the general area varies from level to very steep, with major roads typically following rivers and/or

connecting small cities and towns. Much of the rural area is comprised residential land interspersed with agricultural and farm land. Properties in this general area are comprised of a great variety of types, qualities, and sizes of homes and manufactured homes on greatly varying land qualities and sizes. Areas of good to very good views are located in this area, along with areas with no views. Areas along rivers can be desirable, but can also be problematic with regards to flooding or other issues noted around rivers and creeks.

There are quite a few recreational opportunities in this general area, with many parks, hiking trails, logging roads, and other activities.

Areas (by school district):

Adna is a small unincorporated community approximately five miles west of Interstate 5 and Chehalis. This is a small community, with its own church, general store, and schools. The area around Adna has several farms and creameries, along with parks and other recreational activities. The Adna area is generally considered to be a desirable area.

Boistfort is a small unincorporated community approximately 19 miles west of Interstate 5 and Chehalis. Boistfort is located along the north end of the South Fork of the Chehalis River, and it had the first school district in the Washington Territory. The school district now has an elementary and middle school with just over 100 pupils. Boistfort has a church, a post office, a cemetery, and a general store. This is primarily a farming community, with many farms close by.

Pe Ell is a small town approximately 20 miles west of Interstate 5 and Chehalis. The source of the name of the town is of some controversy, with numerous unverified stories explaining the name. Population is approximately 653 (as of 2017). Pe Ell has schools, some retail and other businesses, and is a trailhead for the Willapa Trail, with a park located along the trail.

Napavine is a small city just off Interstate 5, and is located a few miles south of Chehalis. Napavine is the third largest city in Lewis County, with a population of approximately 1893 (as of 2017). While the city limits cross Interstate 5, the downtown area of the city is located a short distance from the freeway. The area along the interstate is mostly commercial, with some restaurants, truck stops, and some industrial area. Two freeway interchanges are within the city limits, in addition to Highway 603 running through the downtown area. Downtown Napavine has some retail stores, restaurants, other businesses, and schools. This area has seen much growth recently. Napavine is generally considered to be a desirable area.

Evaline is a small unincorporated community located between Napavine and Winlock. The school here is a small elementary school with approximately 35 students typically. Students usually continue to Winlock or Napavine Schools upon graduation. The community is comprised mostly of rural type residences.

Area Values Summary:

Overall, land values trended upward moderately. Some land values were adjusted upward or downward in order to equalize the land values in the area. Residence and manufactured home values appear to be in an upward trend value-wise, with some properties having rather dramatic increases, which matches the trending sales in the area.

REVALUATION REPORT FOR ADNA, BOISTFORT, NAPA VINE, AND PE ELL COMMERCIAL AND INDUSTRIAL AREA:

Cycle Number(s):	3
Previous Physical Inspection:	2013
Effective Date of Appraisal:	January 1, 2019
Date of Physical Inspections:	October 2018 to June 2019
Sales – Total Sales Summary:	12
Land Sales:	6
Improved Sales:	6
Range of Sales Dates:	January 1, 2018 - January 1, 2019

Special Assumptions and Limiting Conditions:

- Sales from January 1, 2018 through January 1, 2019 were considered in all analyses.
- This report intends to meet the requirements of the Uniform Standards of Professional Appraisal Practice, Standard 6
- Time adjustments were not made to sales due to the lack of sales activity with which to consider for time trend analysis
- Weight was placed on sales when applicable but the predominant approaches were cost and income

Sales – Ratio Study Summary: There were 12 total arms-length transaction sales in cycle 3. Weight was placed on these sales when applicable but the predominant approaches were cost and income.

Analysis Process: Database search with analysis using excel spreadsheets.

Improved Value Sale Price Ratio COD: No meaningful Data Found.

The limited number of sales in each stratification did not provide meaningful results.

2020 Improved Property Value Total: \$110,687,700

2019 Average (mean) Assessed Value: \$573,890

2020 Average (mean) Assessed Value: \$628,900

Percent Change from Previous: 1.10%

2020 Land Value Total \$13,600,300

2019 Average (mean) Assessed Value: \$144,070

2020 Average (mean) Assessed Value: \$142,290

Percent Change: -1%

Conclusion and Recommendation:

Values in general were typically stable or slightly increased with some exceptions depending on property type, location and discrepancies or changes discovered in the existing data during the physical inspection.

Boundaries:

The physical boundaries of the subject area are defined by the school district boundaries as shown on the map. Generally, this area encompasses the areas approximately one mile west of Pe Ell at the Pacific County line, extending north to the Centralia School district then westerly just north of Adna dropping down to exit 72, then heading slightly to the southeast across Interstate 5 to just past North Prairie Road. Following back to the southwest about one mile south of US Hwy 12 beyond Interstate 5 and then south to meet up with the Cowlitz County and Pacific County lines. The area encompasses the towns of Pe Ell, Napavine, Adna, Boistfort, Curtis, and Doty.

Industry Detail:

The cycle 3 valuation area is predominantly rural and is comprised of very little industry. Curtis is the home to the Curtis Pole Yard, which currently is owned and operated by McFarland Cascade. Winlock and Evaline share one of the county's larger manufacturing plants, Cardinal Float Glass. Other small manufacturing is scattered throughout the area.

Commercial Detail:

Commercial areas within this cycle's boundaries are found mostly along the main corridors of US Hwy 12 and Interstate 5.

The city of Napavine, while limited in its number of commercial structures, does extend the city limits north and east to include the interchanges for exits 71 and 72 on Interstate 5. Development of this area continues to grow since the construction of Starbucks, Loves, and other fast food establishments.

The Pe Ell, Adna, and Doty areas have seen very limited growth over the past five years as demand for commercial space continues to be drawn more towards the I-5 corridor and more densely populated areas.

The rural commercial properties are predominantly scattered east to west along Hwy 12 and Hwy 6. With only few exceptions, growth in this area has been extremely limited due in part to residential zoning.

District Descriptions.

The commercial areas are scattered across the valuation area with limited concentrations found mostly within the towns and common thoroughfares.

Population - Parcel Summary Data:

City	2010 Census	2016 Estimated ▼	Growth	Growth Rate
Centralia	16553	16982	429	2.59%
Chehalis	7261	7498	237	3.26%
Napavine	1789	1868	79	4.42%
Winlock	1336	1337	1	0.07%
Morton	1122	1145	23	2.05%
Mossyrock	759	763	4	0.53%
Toledo	725	738	13	1.79%
Pe Ell	632	643	11	1.74%
Vader	620	629	9	1.45%

Source: Worldpopulationreview.com

Lewis County estimated median household income: \$46,387

Unemployment reported for 2019 in Lewis County has been held to single digits with the latest reports coming in at 6.3.

The following charts show statistical data for the county for the 2019 Revaluation/2020 tax year. The charts show data before and after trends were applied, and show both each inspection cycle separately, and the entire county as a whole. Below is a summary.

Cycle Trend Report	Mean Ratio Before	Mean Ratio After	Median Ratio Before	Median Ratio After	Sales Count	Parcel Count	
Cycle 1 (Chehalis)	0.826	0.946	0.821	0.941	245	8462	
Cycle 2 (Mossey/Onalsk)	0.814	0.943	0.805	0.932	164	8772	
Cycle 3 (Adna/Napvn)	0.803	0.955	0.795	0.936	153	9301	Reval Area
Cycle 4 (Tol/Win/Vad)	0.793	0.923	0.802	0.913	176	10386	
Cycle 5 (East County)	0.788	0.919	0.781	0.905	246	11467	
Cycle 6 (Centralia)	0.786	0.956	0.761	0.928	330	12074	
All Cycles	0.799	0.939	0.790	0.926	1314	60462	
							Tax Year 2020
Lien Date							1/1/2019
Report Date							11/19/2019
Sale Dates Range							1/1/2018-12/31/2018

Notes:

- This report includes residential parcels, manufactured homes (both with and without land), land with buildings, and bare land. This gives an overall snapshot of how trending has affected an entire area, but typically this leaves a broad range of indicators of accuracy (COD, COV) and ratios overall.
- The total parcel count listed for each cycle includes timber, commercial, industrial, government, and timber parcels.
- Ratios lower than .40 and higher than 2 were trimmed as outliers, as these numbers can skew data. Sometimes this is reflected in sales counts for each area together not equalling total sale counts.
- A total of 62 distinct trend groups, based on location, property types, and other criteria were used in trending; some areas were combined or valued together where appropriate. Much effort was made to avoid having drastically heterogeneous property types or areas in a trend group.
- For trending purposes, personal property mobile homes, mobile homes with land, and stick built residences were trended separately from each other to help focus the trending accuracy.
- Prior year sales are used during the current year to set values for the next year's taxes. For example, 2017 sales were used during 2018 to set values for 2019 taxes, with a lien date of 1/1/2018.
- The above numbers represent the mean and median ratios of assessed value to sale price. A number like .900 above would represent the assessed value is 90% of sale price. In this case, a property that sold for \$100,000 would be assessed at \$90,000.

Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:		Date Range of Sales:
All Cycles	1/1/2019	11/19/2019		1/1/2018-12/31/2018
All Sales Before Trend				

SAMPLE STATISTICS	
Sample size (n)	1311
Mean Assessed Value	166,400
Mean Sales Price	208,700
Standard Deviation AV	105,497
Standard Deviation SP	117,956

ASSESSMENT LEVEL	
Arithmetic mean ratio	0.799
Median Ratio	0.790
Weighted Mean Ratio	0.797

UNIFORMITY	
Lowest ratio	0.4043
Highest ratio:	1.2870
Coefficient of Dispersion	17.25%
Standard Deviation	0.1689
Coefficient of Variation	21.14%
Price-related Differential	1.00

RELIABILITY	
95% Confidence: Median	
Lower limit	0.780
Upper limit	0.803
95% Confidence: Mean	
Lower limit	0.790
Upper limit	0.808

SAMPLE SIZE EVALUATION	
N (population size)	60462
B (acceptable error - in decimal)	0.1
S (estimated from this sample)	0.1689
Recommended minimum:	11
Actual sample size:	1311
Conclusion:	OK

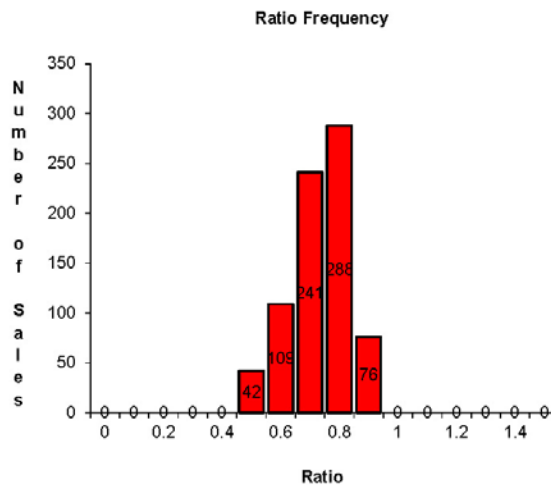
NORMALITY	
Binomial Test	
# ratios below mean:	679
# ratios above mean:	632
z:	1.270446806
Conclusion:	Normal*

*i.e., no evidence of non-normality

Ratio Frequency

Ratio Bin	Number of Sales
0.5 - 0.6	42
0.6 - 0.7	109
0.7 - 0.8	241
0.8 - 0.9	288
0.9 - 1.0	76

Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.97	0.63
2nd Std Dev	1.14	0.46



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.97	0.63
2nd Std Dev	1.14	0.46

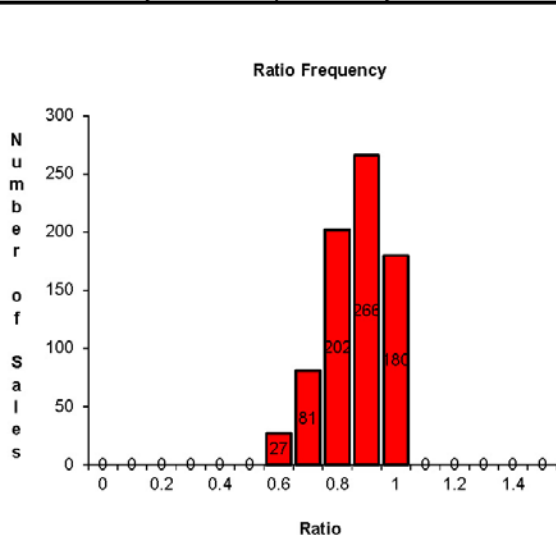
Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:	Date Range of Sales:	
All Cycles	1/1/2019	11/19/2019	1/1/2018-12/31/2018	
All Sales After Trend				
SAMPLE STATISTICS				
Sample size (n)	1311			
Mean Assessed Value	194,300			
Mean Sales Price	209,700			
Standard Deviation AV	116,090			
Standard Deviation SP	117,455			
ASSESSMENT LEVEL				
Arithmetic mean ratio	0.939			
Median Ratio	0.926			
Weighted Mean Ratio	0.927			
UNIFORMITY				
Lowest ratio	0.5075			
Highest ratio:	1.8400			
Coefficient of Dispersion	15.61%			
Standard Deviation	0.1893			
Coefficient of Variation	20.16%			
Price-related Differential	1.01			
RELIABILITY				
95% Confidence: Median				
Lower limit	0.915			
Upper limit	0.937			
95% Confidence: Mean				
Lower limit	0.929			
Upper limit	0.949			
SAMPLE SIZE EVALUATION				
N (population size)	60462			
B (acceptable error - in decimal)	0.1			
S (estimated from this sample)	0.1893			
Recommended minimum:	14			
Actual sample size:	1311			
Conclusion:	OK			
NORMALITY				
Binomial Test				
# ratios below mean:	705			
# ratios above mean:	606			
z:	2.706604066			
Conclusion:	Non-normal			
*i.e., no evidence of non-normality				

Ratio Frequency

Ratio	Number of Sales
0.65	27
0.75	81
0.85	202
0.95	266
1.05	180

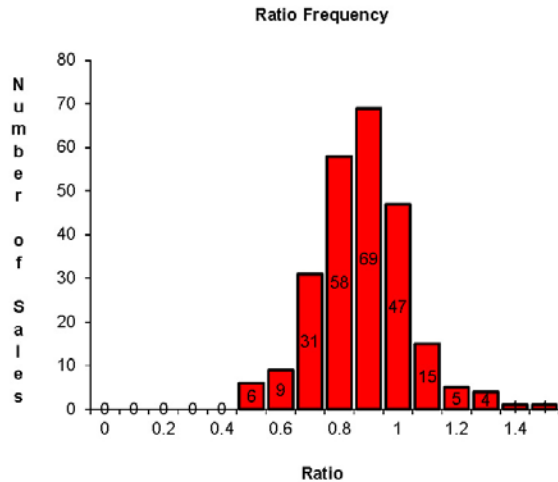
Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.13	0.75
2nd Std Dev	1.32	0.56



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.13	0.75
2nd Std Dev	1.32	0.56

Tax Year 2020

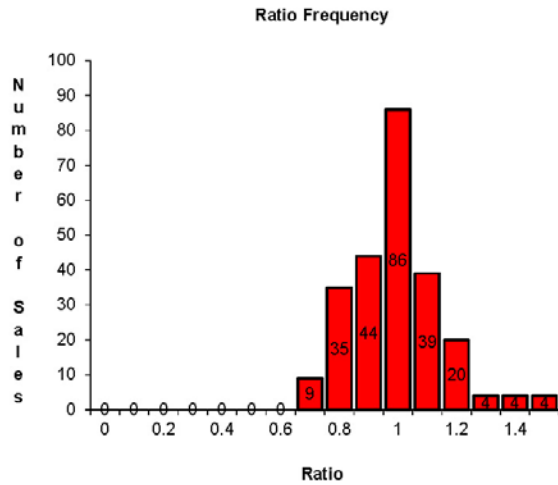
Cycle Trend Report	Lien Date:	Report Date:	Date Range of Sales:
Cycle 1 (Chehalis)	1/1/2019	11/19/2019	1/1/2018-12/31/2018
All Sales Before Trend			
SAMPLE STATISTICS			
Sample size (n)	246		
Mean Assessed Value	198,700		
Mean Sales Price	239,800		
Standard Deviation AV	115,408		
Standard Deviation SP	120,674		
ASSESSMENT LEVEL			
Arithmetic mean ratio	0.826		
Median Ratio	0.821		
Weighted Mean Ratio	0.829		
UNIFORMITY			
Lowest ratio	0.4063		
Highest ratio:	1.4240		
Coefficient of Dispersion	14.62%		
Standard Deviation	0.1606		
Coefficient of Variation	19.44%		
Price-related Differential	1.00		
RELIABILITY			
95% Confidence: Median			
Lower limit	0.802		
Upper limit	0.839		
95% Confidence: Mean			
Lower limit	0.806		
Upper limit	0.846		
SAMPLE SIZE EVALUATION			
N (population size)	8462		
B (acceptable error - in decimal)	0.1		
S (estimated from this sample)	0.1606		
Recommended minimum:	10		
Actual sample size:	246		
Conclusion:	OK		
NORMALITY			
Binomial Test			
# ratios below mean:	127		
# ratios above mean:	119		
z:	0.446303699		
Conclusion:	Normal*		
*i.e., no evidence of non-normality			



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.99	0.67
2nd Std Dev	1.15	0.51

Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:	Date Range of Sales:
Cycle 1 (Chehalis)	1/1/2019	11/19/2019	1/1/2018-12/31/2018
All Sales After Trend			
SAMPLE STATISTICS			
Sample size (n)	245		
Mean Assessed Value	226,300		
Mean Sales Price	240,600		
Standard Deviation AV	125,526		
Standard Deviation SP	120,435		
ASSESSMENT LEVEL			
Arithmetic mean ratio	0.946		
Median Ratio	0.941		
Weighted Mean Ratio	0.941		
UNIFORMITY			
Lowest ratio	0.6050		
Highest ratio:	1.7080		
Coefficient of Dispersion	12.33%		
Standard Deviation	0.1593		
Coefficient of Variation	16.85%		
Price-related Differential	1.01		
RELIABILITY			
95% Confidence: Median			
Lower limit	0.922		
Upper limit	0.962		
95% Confidence: Mean			
Lower limit	0.926		
Upper limit	0.966		
SAMPLE SIZE EVALUATION			
N (population size)	8462		
B (acceptable error - in decimal)	0.1		
S (estimated from this sample)	0.1593		
Recommended minimum:	10		
Actual sample size:	245		
Conclusion:	OK		
NORMALITY			
Binomial Test			
# ratios below mean:	127		
# ratios above mean:	118		
z:	0.511101252		
Conclusion:	Normal*		
*i.e., no evidence of non-normality			



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.11	0.79
2nd Std Dev	1.26	0.63

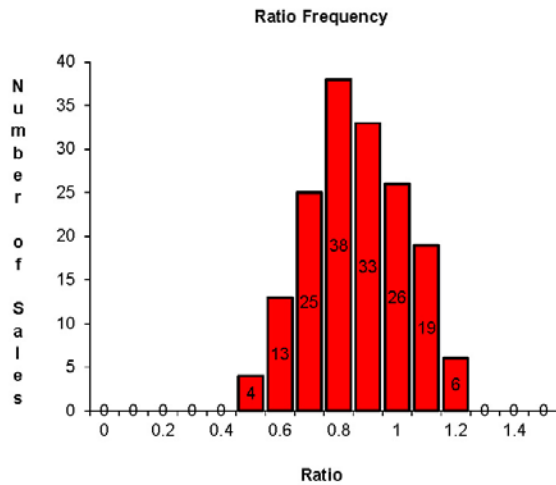
Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:		Date Range of Sales:
Cycle 2 (Mossey/Onalask)	1/1/2019	11/19/2019		1/1/2018-12/31/2018
All Sales Before Trend				
SAMPLE STATISTICS				
Sample size (n)	164			
Mean Assessed Value	157,900			
Mean Sales Price	195,200			
Standard Deviation AV	101,619			
Standard Deviation SP	114,891			
ASSESSMENT LEVEL				
Arithmetic mean ratio	0.814			
Median Ratio	0.805			
Weighted Mean Ratio	0.809			
UNIFORMITY				
Lowest ratio	0.4355			
Highest ratio:	1.1486			
Coefficient of Dispersion	16.69%			
Standard Deviation	0.1645			
Coefficient of Variation	20.21%			
Price-related Differential	1.01			
RELIABILITY				
95% Confidence: Median				
Lower limit	0.774			
Upper limit	0.841			
95% Confidence: Mean				
Lower limit	0.789			
Upper limit	0.839			
SAMPLE SIZE EVALUATION				
N (population size)	8772			
B (acceptable error - in decimal)	0.1			
S (estimated from this sample)	0.1645			
Recommended minimum:	11			
Actual sample size:	164			
Conclusion:	OK			
NORMALITY				
Binomial Test				
# ratios below mean:	87			
# ratios above mean:	77			
z:	0.702781928			
Conclusion:	Normal*			
*i.e., no evidence of non-normality				

Ratio Frequency

Ratio Bin	Number of Sales
0.4 - 0.5	4
0.5 - 0.6	13
0.6 - 0.7	25
0.7 - 0.8	38
0.8 - 0.9	33
0.9 - 1.0	26
1.0 - 1.1	19
1.1 - 1.2	6
1.2 - 1.3	0
1.3 - 1.4	0

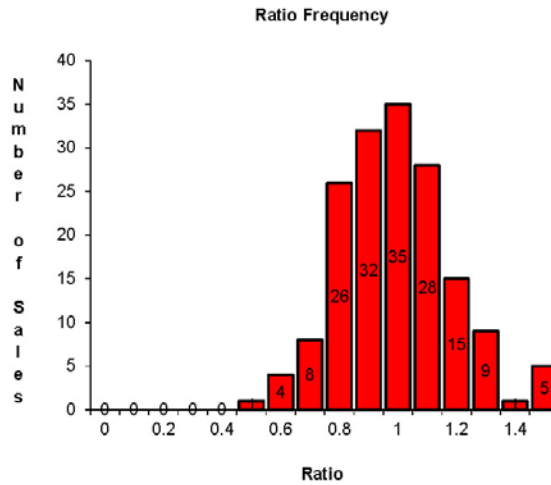
Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.98	0.65
2nd Std Dev	1.14	0.48



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.98	0.65
2nd Std Dev	1.14	0.48

Tax Year 2020

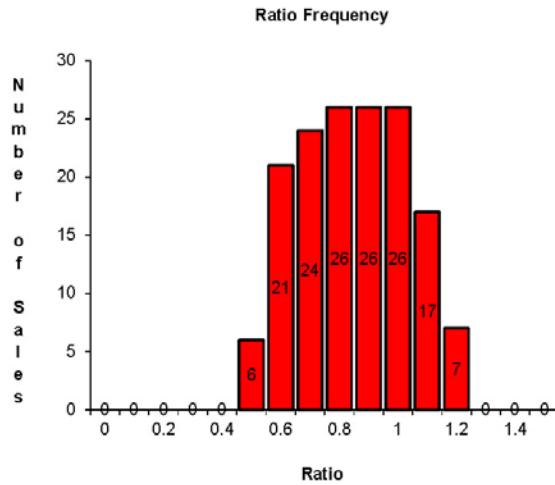
Cycle Trend Report	Lien Date:	Report Date:	Date Range of Sales:
Cycle 2 (Mossy/Onalsk)	1/1/2019	11/19/2019	1/1/2018-12/31/2018
All Sales After Trend			
SAMPLE STATISTICS			
Sample size (n)	164		
Mean Assessed Value	184,000		
Mean Sales Price	196,400		
Standard Deviation AV	117,241		
Standard Deviation SP	115,533		
ASSESSMENT LEVEL			
Arithmetic mean ratio	0.943		
Median Ratio	0.932		
Weighted Mean Ratio	0.937		
UNIFORMITY			
Lowest ratio	0.4968		
Highest ratio:	1.6576		
Coefficient of Dispersion	16.33%		
Standard Deviation	0.1945		
Coefficient of Variation	20.63%		
Price-related Differential	1.01		
RELIABILITY			
95% Confidence: Median			
Lower limit	0.893		
Upper limit	0.972		
95% Confidence: Mean			
Lower limit	0.913		
Upper limit	0.973		
SAMPLE SIZE EVALUATION			
N (population size)	8772		
B (acceptable error - in decimal)	0.1		
S (estimated from this sample)	0.1945		
Recommended minimum:	15		
Actual sample size:	164		
Conclusion:	OK		
NORMALITY			
Binomial Test			
# ratios below mean:	86		
# ratios above mean:	78		
z:	0.546608167		
Conclusion:	Normal*		
*i.e., no evidence of non-normality			



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.14	0.75
2nd Std Dev	1.33	0.55

Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:		Date Range of Sales:
Cycle 3 (Adna/Napvn)	1/1/2019	11/19/2019		1/1/2018-12/31/2018
All Sales Before Trend				
SAMPLE STATISTICS				
Sample size (n)	153			
Mean Assessed Value	190,900			
Mean Sales Price	236,800			
Standard Deviation AV	127,103			
Standard Deviation SP	135,710			
ASSESSMENT LEVEL				
Arithmetic mean ratio	0.803			
Median Ratio	0.795			
Weighted Mean Ratio	0.806			
UNIFORMITY				
Lowest ratio	0.4276			
Highest ratio:	1.1998			
Coefficient of Dispersion	19.54%			
Standard Deviation	0.1832			
Coefficient of Variation	22.83%			
Price-related Differential	1.00			
RELIABILITY				
95% Confidence: Median				
Lower limit	0.746			
Upper limit	0.861			
95% Confidence: Mean				
Lower limit	0.774			
Upper limit	0.832			
SAMPLE SIZE EVALUATION				
N (population size)	9301			
B (acceptable error - in decimal)	0.1			
S (estimated from this sample)	0.1832			
Recommended minimum:	13			
Actual sample size:	153			
Conclusion:	OK			
NORMALITY				
Binomial Test				
# ratios below mean:	77			
# ratios above mean:	76			
z:	0			
Conclusion:	Normal*			
*i.e., no evidence of non-normality				



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.99	0.62
2nd Std Dev	1.17	0.44

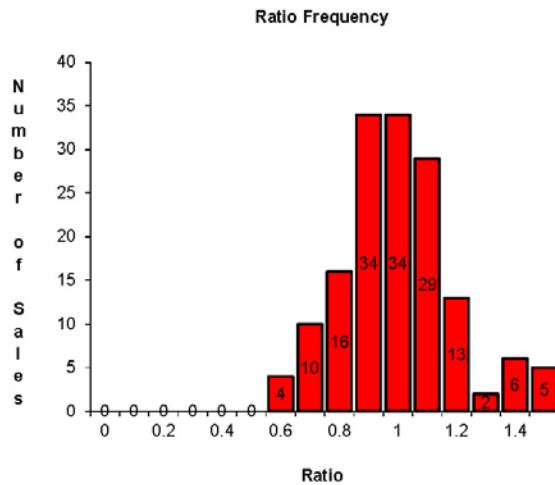
Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:	Sales Range:
Cycle 3 (Adna/Napvn)	1/1/2019	11/19/2019	1/1/2018-12/31/2018
All Sales After Trend			
SAMPLE STATISTICS			
Sample size (n)	153		
Mean Assessed Value	217,800		
Mean Sales Price	234,900		
Standard Deviation AV	131,409		
Standard Deviation SP	136,109		
ASSESSMENT LEVEL			
Arithmetic mean ratio	0.955		
Median Ratio	0.936		
Weighted Mean Ratio	0.927		
UNIFORMITY			
Lowest ratio	0.5450		
Highest ratio:	2.0240		
Coefficient of Dispersion	16.37%		
Standard Deviation	0.2196		
Coefficient of Variation	22.98%		
Price-related Differential	1.03		
RELIABILITY			
95% Confidence: Median			
Lower limit	0.891		
Upper limit	0.965		
95% Confidence: Mean			
Lower limit	0.921		
Upper limit	0.990		
SAMPLE SIZE EVALUATION			
N (population size)	9301		
B (acceptable error - in decimal)	0.1		
S (estimated from this sample)	0.2196		
Recommended minimum:	19		
Actual sample size:	153		
Conclusion:	OK		
NORMALITY			
Binomial Test			
# ratios below mean:	86		
# ratios above mean:	67		
z:	1.45521375		
Conclusion:	Normal*		
*i.e., no evidence of non-normality			

Ratio Frequency

Ratio	Number of Sales
0.6-0.7	4
0.7-0.8	10
0.8-0.9	16
0.9-1.0	34
1.0-1.1	34
1.1-1.2	29
1.2-1.3	13
1.3-1.4	2
1.4-1.5	6
1.5-1.6	5

Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.17	0.74
2nd Std Dev	1.39	0.52



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.17	0.74
2nd Std Dev	1.39	0.52

Tax Year 2020

Cycle Trend Report

Cycle 4 (Tol/Win/Vad)

All Sales Before Trend

Lien Date:

1/1/2019

Report Date:

11/19/2019

Date Range of Sales:

1/1/2018-12/31/2018

SAMPLE STATISTICS

Sample size (n)

176

Mean Assessed Value

165,200

Mean Sales Price

208,500

Standard Deviation AV

115,441

Standard Deviation SP

123,571

ASSESSMENT LEVEL

Arithmetic mean ratio

0.793

Median Ratio

0.802

Weighted Mean Ratio

0.792

UNIFORMITY

Lowest ratio

0.4438

Highest ratio:

1.2100

Coefficient of Dispersion

18.96%

Standard Deviation

0.1835

Coefficient of Variation

23.14%

Price-related Differential

1.00

RELIABILITY

95% Confidence: Median

Lower limit

0.749

Upper limit

0.828

95% Confidence: Mean

Lower limit

0.766

Upper limit

0.820

SAMPLE SIZE EVALUATION

N (population size)

10386

B (acceptable error - in decimal)

0.1

S (estimated from this sample)

0.1835

Recommended minimum:

13

Actual sample size:

176

Conclusion:

OK

NORMALITY

Binomial Test

ratios below mean:

85

ratios above mean:

91

z:

0.376889181

Conclusion:

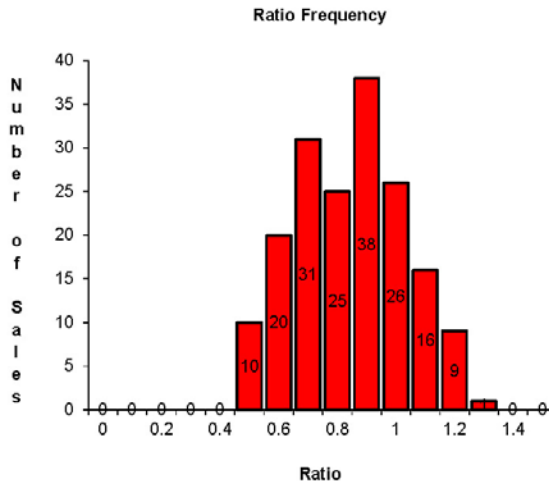
Normal*

*i.e., no evidence of non-normality

Ratio Frequency

Ratio	Number of Sales
0.5	10
0.6	20
0.7	31
0.8	25
0.9	38
1.0	26
1.1	16
1.2	9
1.3	1

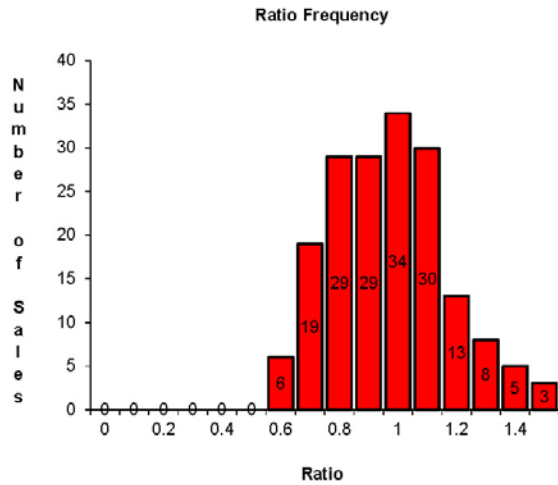
Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.98	0.61
2nd Std Dev	1.16	0.43



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.98	0.61
2nd Std Dev	1.16	0.43

Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:		Date Range of Sales:
Cycle 4 (Tol/Win/Vad)	1/1/2019	11/19/2019		1/1/2018-12/31/2018
All Sales After Trend				
SAMPLE STATISTICS				
Sample size (n)	176			
Mean Assessed Value	189,000			
Mean Sales Price	208,700			
Standard Deviation AV	120,718			
Standard Deviation SP	123,267			
ASSESSMENT LEVEL				
Arithmetic mean ratio	0.923			
Median Ratio	0.913			
Weighted Mean Ratio	0.906			
UNIFORMITY				
Lowest ratio	0.5140			
Highest ratio:	1.5346			
Coefficient of Dispersion	17.54%			
Standard Deviation	0.2007			
Coefficient of Variation	21.76%			
Price-related Differential	1.02			
RELIABILITY				
95% Confidence: Median				
Lower limit	0.888			
Upper limit	0.953			
95% Confidence: Mean				
Lower limit	0.893			
Upper limit	0.952			
SAMPLE SIZE EVALUATION				
N (population size)	10386			
B (acceptable error - in decimal)	0.1			
S (estimated from this sample)	0.2007			
Recommended minimum:	16			
Actual sample size:	176			
Conclusion:	OK			
NORMALITY				
Binomial Test				
# ratios below mean:	92			
# ratios above mean:	84			
z:	0.527644853			
Conclusion:	Normal*			
*i.e., no evidence of non-normality				



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.12	0.72
2nd Std Dev	1.32	0.52

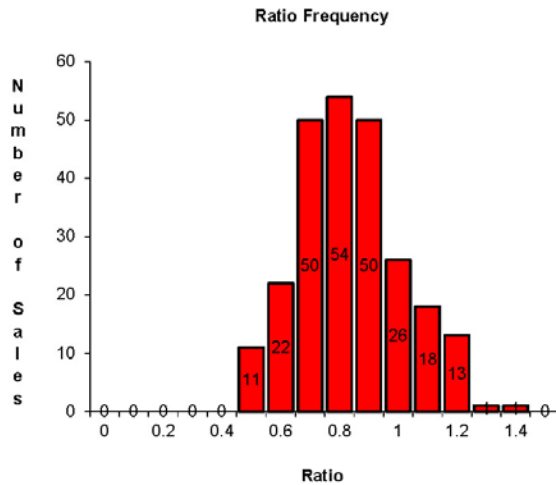
Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:	Date Range of Sales:
Cycle 5 (East County)	1/1/2019	11/19/2019	1/1/2018-12/31/2018
All Sales Before Trend			
SAMPLE STATISTICS			
Sample size (n)	246		
Mean Assessed Value	118,500		
Mean Sales Price	152,800		
Standard Deviation AV	87,213		
Standard Deviation SP	111,970		
ASSESSMENT LEVEL			
Arithmetic mean ratio	0.788		
Median Ratio	0.781		
Weighted Mean Ratio	0.776		
UNIFORMITY			
Lowest ratio	0.4069		
Highest ratio:	1.3150		
Coefficient of Dispersion	18.28%		
Standard Deviation	0.1787		
Coefficient of Variation	22.66%		
Price-related Differential	1.02		
RELIABILITY			
95% Confidence: Median			
Lower limit	0.752		
Upper limit	0.806		
95% Confidence: Mean			
Lower limit	0.766		
Upper limit	0.811		
SAMPLE SIZE EVALUATION			
N (population size)	11467		
B (acceptable error - in decimal)	0.1		
S (estimated from this sample)	0.1787		
Recommended minimum:	13		
Actual sample size:	246		
Conclusion:	OK		
NORMALITY			
Binomial Test			
# ratios below mean:	131		
# ratios above mean:	115		
z:	0.95636507		
Conclusion:	Normal*		
*i.e., no evidence of non-normality			

Ratio Frequency

Ratio	Number of Sales
0.5-0.6	11
0.6-0.7	22
0.7-0.8	50
0.8-0.9	54
0.9-1.0	50
1.0-1.1	26
1.1-1.2	18
1.2-1.3	13
1.3-1.4	1
1.4-1.5	1

Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.97	0.61
2nd Std Dev	1.15	0.43



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.97	0.61
2nd Std Dev	1.15	0.43

Tax Year 2020

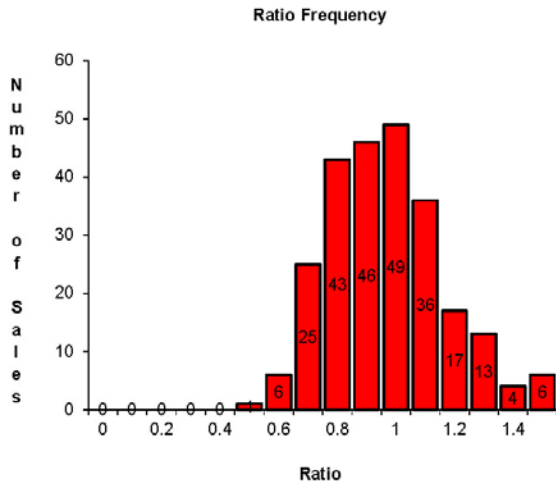
Cycle Trend Report	Lien Date:	Report Date:	Date Range of Sales:
Cycle 5 (East County)	1/1/2019	11/19/2019	1/1/2018-12/31/2018
All Sales After Trend			
SAMPLE STATISTICS			
Sample size (n)	246		
Mean Assessed Value	137,300		
Mean Sales Price	153,900		
Standard Deviation AV	100,152		
Standard Deviation SP	111,723		
ASSESSMENT LEVEL			
Arithmetic mean ratio	0.919		
Median Ratio	0.905		
Weighted Mean Ratio	0.892		
UNIFORMITY			
Lowest ratio	0.4922		
Highest ratio:	1.5840		
Coefficient of Dispersion	17.44%		
Standard Deviation	0.2006		
Coefficient of Variation	21.82%		
Price-related Differential	1.03		
RELIABILITY			
95% Confidence: Median			
Lower limit	0.870		
Upper limit	0.934		
95% Confidence: Mean			
Lower limit	0.894		
Upper limit	0.944		
SAMPLE SIZE EVALUATION			
N (population size)	11467		
B (acceptable error - in decimal)	0.1		
S (estimated from this sample)	0.2006		
Recommended minimum:	16		
Actual sample size:	246		
Conclusion:	OK		
NORMALITY			
Binomial Test			
# ratios below mean:	128		
# ratios above mean:	118		
z:	0.573819042		
Conclusion:	Normal*		
*i.e., no evidence of non-normality			

Ratio Frequency

Ratio	Number of Sales
0.5-0.6	6
0.6-0.7	25
0.7-0.8	43
0.8-0.9	46
0.9-1.0	49
1.0-1.1	36
1.1-1.2	17
1.2-1.3	13
1.3-1.4	4
1.4-1.5	6

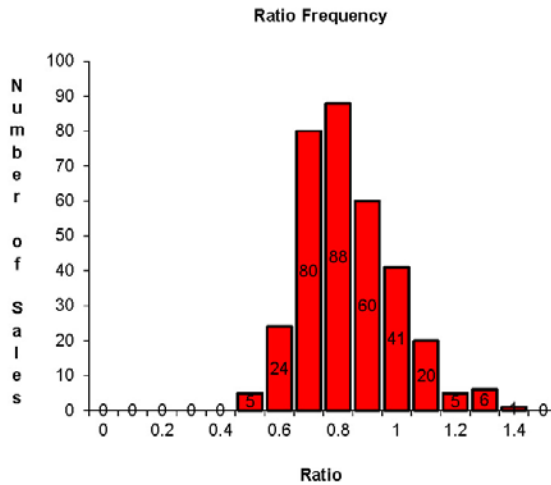
Ratio

Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.12	0.72
2nd Std Dev	1.32	0.52



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.12	0.72
2nd Std Dev	1.32	0.52

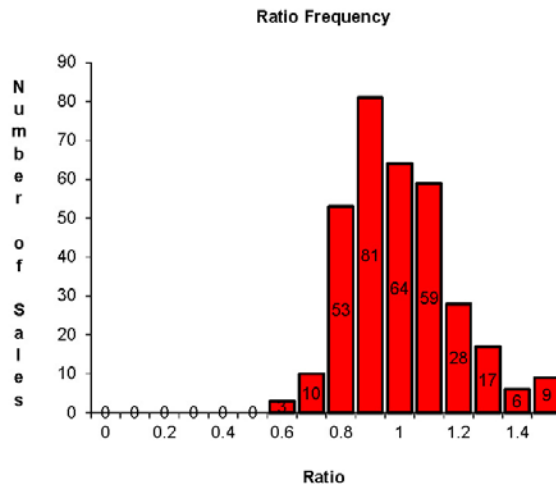
Tax Year 2020				
Cycle Trend Report	Lien Date:	Report Date:		Date Range of Sales:
Cycle 6 (Centralia)	1/1/2019	11/19/2019		1/1/2018-12/31/2018
All Sales Before Trend				
SAMPLE STATISTICS				
Sample size (n)	330			
Mean Assessed Value	170,800			
Mean Sales Price	219,800			
Standard Deviation AV	78,072			
Standard Deviation SP	91,988			
ASSESSMENT LEVEL				
Arithmetic mean ratio	0.786			
Median Ratio	0.761			
Weighted Mean Ratio	0.777			
UNIFORMITY				
Lowest ratio	0.4043			
Highest ratio:	1.3162			
Coefficient of Dispersion	16.46%			
Standard Deviation	0.1609			
Coefficient of Variation	20.47%			
Price-related Differential	1.01			
RELIABILITY				
95% Confidence: Median				
Lower limit	0.740			
Upper limit	0.781			
95% Confidence: Mean				
Lower limit	0.768			
Upper limit	0.803			
SAMPLE SIZE EVALUATION				
N (population size)	12074			
B (acceptable error - in decimal)	0.1			
S (estimated from this sample)	0.1609			
Recommended minimum:	10			
Actual sample size:	330			
Conclusion:	OK			
NORMALITY				
Binomial Test				
# ratios below mean:	185			
# ratios above mean:	145			
z:	2.146879342			
Conclusion:	Non-normal			
*i.e., no evidence of non-normality				



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	0.95	0.62
2nd Std Dev	1.11	0.46

Tax Year 2020

Cycle Trend Report	Lien Date:	Report Date:		Date Range of Sales
Cycle 6 (Centralia)	1/1/2019	11/19/2019		1/1/2018-12/31/2018
All Sales After Trend				
SAMPLE STATISTICS				
Sample size (n)	330			
Mean Assessed Value	208,600			
Mean Sales Price	221,000			
Standard Deviation AV	92,348			
Standard Deviation SP	91,776			
ASSESSMENT LEVEL				
Arithmetic mean ratio	0.956			
Median Ratio	0.928			
Weighted Mean Ratio	0.944			
UNIFORMITY				
Lowest ratio	0.5934			
Highest ratio:	1.6831			
Coefficient of Dispersion	15.21%			
Standard Deviation	0.1861			
Coefficient of Variation	19.47%			
Price-related Differential	1.01			
RELIABILITY				
95% Confidence: Median				
Lower limit	0.900			
Upper limit	0.949			
95% Confidence: Mean				
Lower limit	0.936			
Upper limit	0.976			
SAMPLE SIZE EVALUATION				
N (population size)	12074			
B (acceptable error - in decimal)	0.1			
S (estimated from this sample)	0.1861			
Recommended minimum:	14			
Actual sample size:	330			
Conclusion:	OK			
NORMALITY				
Binomial Test				
# ratios below mean:	184			
# ratios above mean:	146			
z:	2.036782965			
Conclusion:	Non-normal			
*i.e., no evidence of non-normality				



Std Dev.	Upr Lmt	Lwr Limit
1st Std Dev	1.14	0.77
2nd Std Dev	1.33	0.58