

# **Snohomish County Assessor's Office**

## **Residential Mass Appraisal Report**

### **Residential Appraisal Management Region: Agriculture**

**Appraisal Date:**        **January 1, 2010 for 2011 Property Taxes**

**Report Date:**         **June 9, 2010**

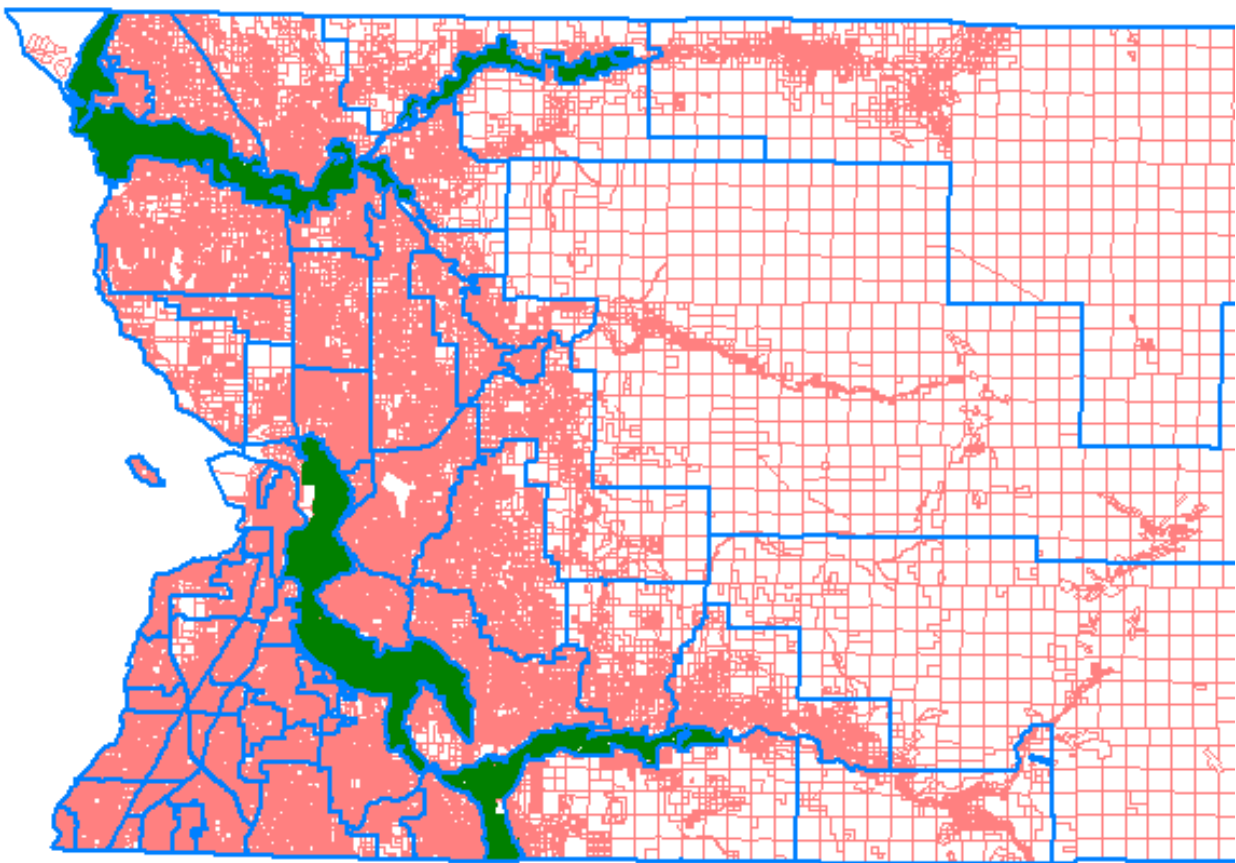
**Prepared For:**        **Cindy Portmann, Snohomish County Assessor**



**Properties Appraised**

All parcels located within the boundaries of Residential Appraisal Management Region Agriculture

**Member Parcels - Residential Appraisal Management Region Agriculture**



**Legend:**

- Red:** Regions 1, 2, 3 and 4
- Green:** Member Parcels - Residential Management Region Agriculture
- Blue:** Neighborhood Boundaries

The map above shows the economic residential appraisal management area known as Residential Region Agriculture. The residential division of the Snohomish County Assessor's Office is responsible



for the annual revaluation of all of the parcels denoted in 'green'. Red parcels lying with the boundaries of Residential Management Region Agriculture are appraised by the commercial division Assessor's Office.

Residential Management Region Agriculture is a large geographic area that consists of the Ag 10 zoned lands that lie within the Stillaguamish, Snohomish and Skykomish River basins. These three river basins are represented by three sub regions (Benchmarks) within the land valuation model.

Residential Management Region Agriculture is a diverse area, containing large commercial farms, smaller 5 to 10 acre residential hobby farms, smaller residential lots, and areas of riverfront residential properties.

Smaller 5 to 10 acre residential hobby farms, smaller residential lots, and areas of riverfront residential properties values are influenced by location, topography and river access.

Large commercial farms values are influenced by agricultural viability. Soil type, crop yield and long term financial return are the greatest influence to market value of the land.

Stanwood, Snohomish and Monroe are the main centers of population bordering the Agriculture region.

Residential Management Region Agriculture is accessed via State Route 530, State Route 203 and Highway 2.

**Pre 2010 Revaluation Market Analysis:**

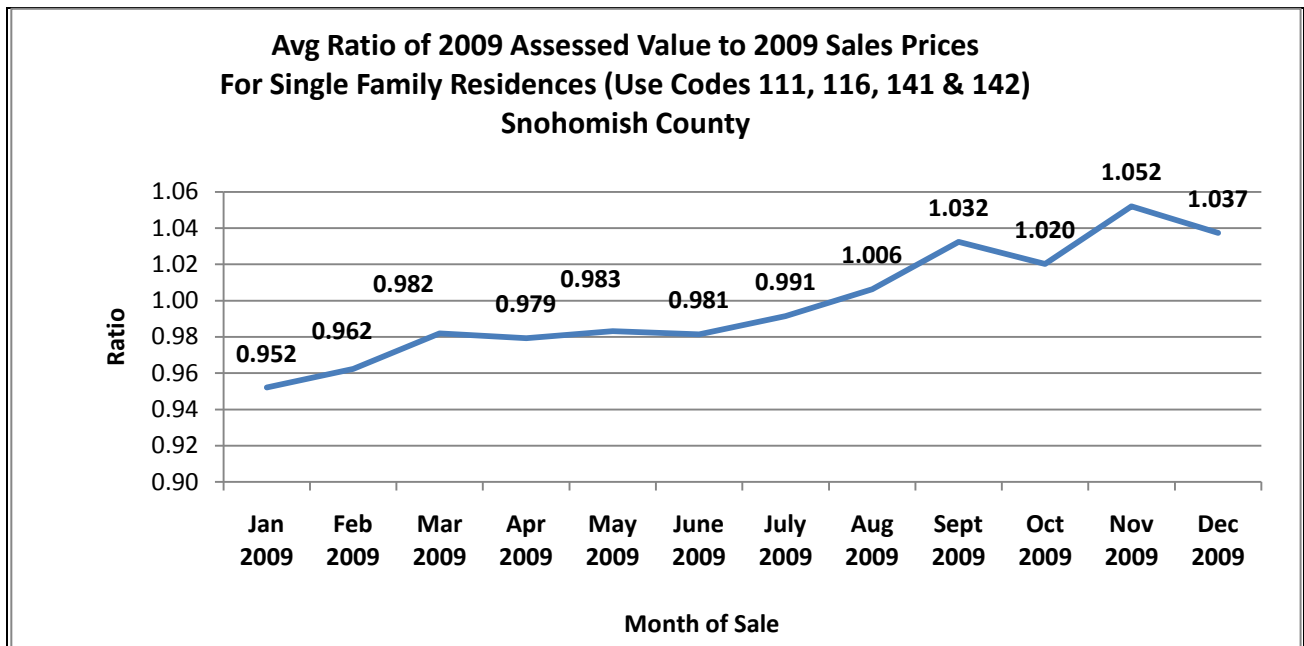
Preliminary to the initiation of the 2010 revaluation, ratio studies were conducted to measure the relationship of current assessed values (January 1, 2009 Assessments) to 2009 sales prices and to determine if property values were changing over time.

The following chart summarizes both ratio and the change in ratio over time for single family residences county wide. If no revaluation occurred, on average, single family residences would be assessed at **103.7%** (December 2009 Sales Ratio) indicating that a revaluation is warranted.

**2009 Assessed Value**

**Compared to 2009 Sales Prices**

**Entire County (Single Family Residences)**



A rising ratio over time indicates declining sales prices.

**Note:** The study above and the two following include only single family residences (Use code 111, 116, 141 and 142) as this is the predominant property type in the residential appraisal management region and to only those sales that met the criteria listed section "Appraisal Performance – Mass appraisal reports- sales." It is felt that these sales represent the market and overall residential market trend for the Snohomish County.

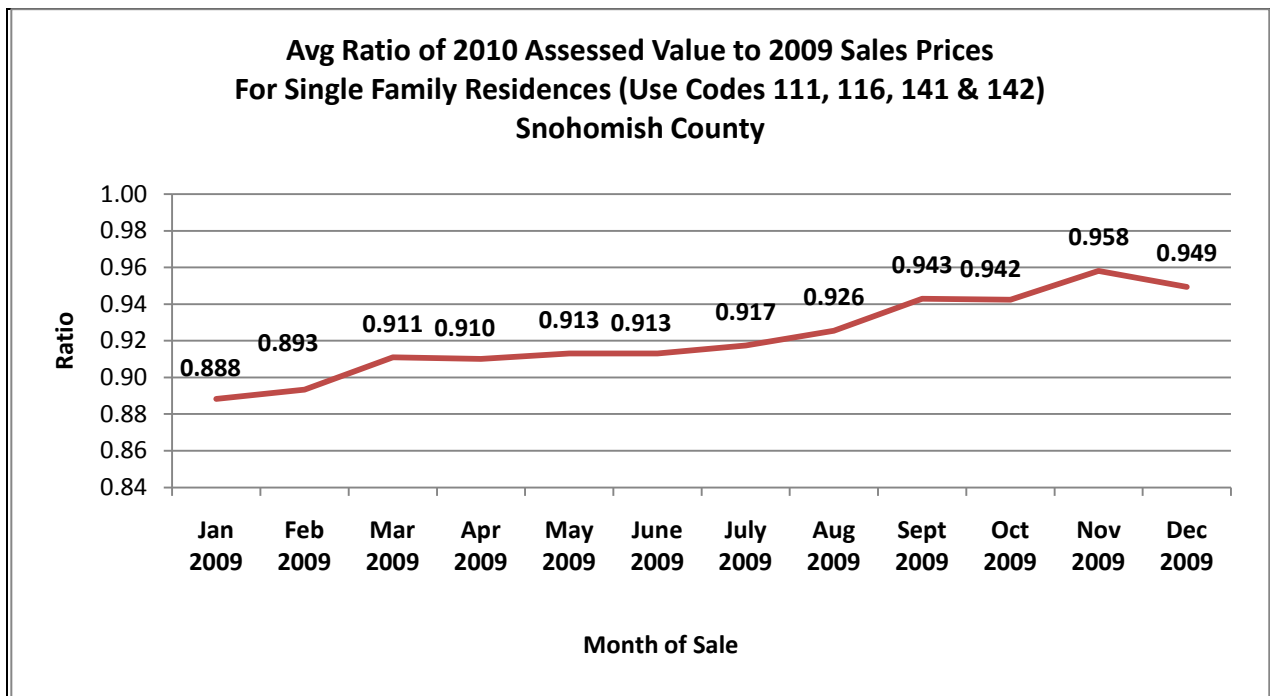
**Post Revaluation Ratio Study**

The following chart summarizes the post revaluation ratio and the change in ratio over time for single family residences county wide. From the chart we can see that as a result of the revaluation, on average, single family residences are assessed at **94.9%** (December 2009 Sales Ratio).

**2010 Assessed Value**

**Compared to 2009 Sales Prices**

**Entire County (Single Family Residences)**



A rising ratio over time indicates declining sales prices.

**Adjusting For Market Changes Over Time**

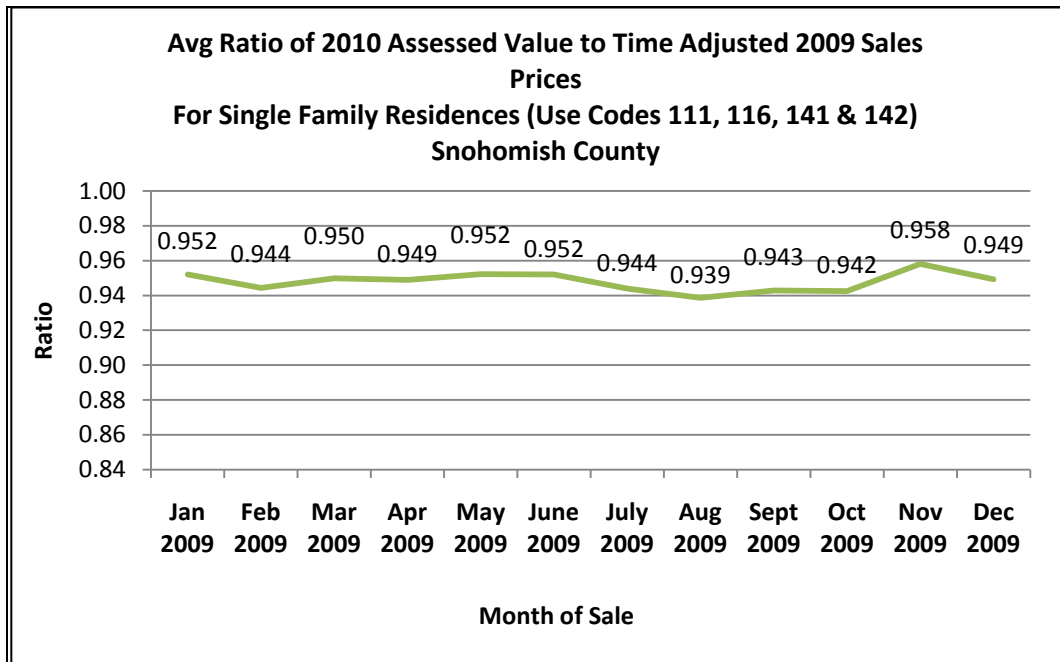
The purpose of time adjusting sales prices is to better represent the market changes over time. This allows sales occurring earlier in the year (or prior years) to be used in the analysis to determine the fair market value as of the assessment date. For example, one home January 1, 2009 for \$100,000 and identical homes sold January 1, 2010 for \$88,000 this would indicate the market has declined 12% over that one year time period. The Time Adjusted Sale Price (TASP) of the first house would be \$88,000 (\$100,000 less 12%). Both houses would be assessed at \$88,000 and the Time Adjusted Sales Ratio (TASP ratio) for both would be 1.00. Without the TASP adjustments the ratios would be .88 for the earlier sale and 1.00 for the later sale.

The following chart summarizes 2010 assessed values to 2009 sales prices adjusted for market changes in 2009. This change is often referred to as 'time trend'.

**2010 Assessed Value**

**Compared to 2009 Time Adjusted Sales Prices**

**Entire County (Single Family Residences)**



**Summary of Value Change:**

**Parcels Appraised: 3,278**

	<b>Land</b>	<b>Improvements</b>	<b>Total</b>
<b>2009 Assessment Year</b>	267,996,200	164,452,000	432,448,200
<b>2010 Assessment Year</b>	305,090,100	161,219,500	466,309,600
<b>Value Change</b>	37,042,500	-3,771,300	33,271,200
<b>% Change</b>	13.8%	-2.3%	7.7%

The **Summary of Value Change** table above reflects the aggregate change in value for ALL parcels that existed in the study area at the time the study was conducted. Value Change and % Change include the value for new parcels that were created and assessed for the first time in the current assessment year but that did not exist in the prior assessment year.

**Data Sources:** All data in this report was summarized from pre-certification Residential Characteristics extracts and/or Abstract Reports dated: **05/20/2010**



**Appraisal Level and Uniformity:**

**Non Time Adjusted Sales Ratio Study:**

**Study Period: January 1, 2009 through December 31, 2009**

**Number of Sales: 17**

**Pre Revaluation Ratio -1/1/2009 Certified Value Compared to 2009 Sales Prices**

Mean	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
.887	1.007	.962	.923	.210

**Post Revaluation Ratio – 1/1/2010 Worksheet Values Compared to 2009 Sales Prices**

Mean	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
.849	.927	.924	.919	.141

The above ratio study only includes sales where the property existed both in the prior assessment year and in the current assessment year, must be 100% complete at the time of the analysis, must have sold for more than \$1,000 and the post revaluation ratio must not be an 'outlier' (< 0.25% or > 1.75%).

The pre appraisal ratio is calculated by dividing the **2009** certified value by the **2009** sales price.

The post appraisal ratio is calculated by dividing the **2010** pre certification appraised (worksheet) value by the **2009** sales price (report data is extracted just prior to value certification).

The sales prices used in the above ratio study **have not** been adjusted for changes in market conditions that occurred throughout the year.





A direct comparison of the pre appraisal ratio and the post appraisal ratio is inappropriate as the values used are from different points in time and the ratios, which are an average over the entire year of sales, do not reflect changes in market conditions over time. **Appraisal Level and Uniformity:**

**Time Adjusted Sales Ratio Study: (Single Family Residences):**

**Study Period: January 1, 2009 Through December 31, 2009**

**Number of Sales: 17**

**Pre Revaluation Ratio -01/01/2009 Certified Value Compared to 2009 Sales Prices**

Mean	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
1.031	1.055	1.024	1.008	.061

**Post Revaluation Ratio – 01/01/2010 Worksheet Values Compared to 2009 Sales Prices**

Mean	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
.977	.965	.970	1.007	.032

The above ratio study only includes sales where the property existed both in the prior assessment year and in the current assessment year.

The pre appraisal ratio is calculated by dividing the **2009 certified** value by the **2009** time adjusted sales price.

The post appraisal ratio is calculated by dividing the **2010** pre certification appraised (worksheet) value by the **2009** time adjusted sales price (report data is extracted just prior to value certification).

The ratio study **ONLY** includes Single Family Residences, Property Class Codes 111, 116, 141 and 142 (the most frequently occurring property types).

The sales prices used in the above ratio study have been adjusted for time.



Residential Management Region: Agriculture – Value Change Summary

Property Class	Number of Parcels		2009 Certified Total Value	2010 Calculated Total Value	Value Change	% Change
<b>Agricultural</b>	1612	L:	156,241,400	200,350,400	44,057,600	28.2%
		B:	74,481,800	74,328,900	-152,900	-0.2%
		T:	230,723,200	274,679,300	43,904,700	19.0%
<b>Industrial</b>	4	L:	314,200	280,500	-33,700	-10.7%
		B:	513,000	383,400	-129,600	-25.3%
		T:	827,200	663,900	-163,300	-19.7%
<b>Commercial</b>	77	L:	2,292,400	2,078,500	-213,900	-9.3%
		B:	4,389,300	4,016,500	-372,800	-8.5%
		T:	6,681,700	6,095,000	-586,700	-8.8%
<b>Residential</b>	743	L:	78,444,400	72,466,200	-5,978,200	-7.6%
		B:	82,689,900	80,277,700	-2,951,000	-3.6%
		T:	161,134,300	152,743,900	-8,929,200	-5.5%
<b>Multifamily</b>	4	L:	434,500	447,500	13,000	3.0%
		B:	658,900	593,600	-65,300	-9.9%
		T:	1,093,400	1,041,100	-52,300	-4.8%
<b>Forest</b>	10	L:	386,400	340,800	-45,600	-11.8%
		B:	474,100	540,600	66,500	14.0%
		T:	860,500	881,400	20,900	2.4%
<b>Other</b>	828	L:	29,882,900	29,126,200	-756,700	-2.5%
		B:	1,245,000	1,078,800	-166,200	-13.3%
		T:	31,127,900	30,205,000	-922,900	-3.0%
<b>Totals</b>	3278	L:	267,996,200	305,090,100	37,042,500	13.8%
		B:	164,452,000	161,219,500	-3,771,300	-2.3%
		T:	432,448,200	466,309,600	33,271,200	7.7%

Categories are groups by Property Class Code as Follows:

Agriculture: Farms General, Open Space Ag, Open Space General

Industrial: Manufacturing Facilities

Commercial: Retail, Schools and Churches

Residential: Single Family Residences, Condominiums and Manufactured Homes

Multifamily: All Multiple Family Parcels Including Duplexes and Triplexes

Forest: Designated Forest Land and Open Space Timber

Other: All Remaining Categories Including Vacant Land



**Certificate of Appraisal**

- The appraiser is (at minimum) Accredited by the State of Washington, Department of Revenue. By signing this report, the appraiser certifies that he or she has the appropriate knowledge and experience to complete this Assessor's Report of the Mass 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 the appraiser has 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 appraiser has no present or prospective interest in the property that is the subject of this report with the exception of the property listed below, and has no personal interest with respect to the parties involved.

**Residential Appraisal Management Region Agriculture**

Properties owned by the preparer(s) within the scope of this report:

Snohomish County Parcel ID:           None

- All employees of the Assessor's Office have completed declarations listing all properties within Snohomish County in which they have a financial interest. Those declarations are on file in the Assessor's office.
- The appraiser has no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.
- The appraiser's engagement in this assignment was not contingent upon developing or reporting predetermined results.
- The appraiser's 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 appraiser's analyses, opinions, and conclusions were developed and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP)
- Inspections were performed by members of the Snohomish County Assessor's Office Residential Appraisal Team in accordance with the 2010 – 2015 revaluation plan approved by the Washington State Department of Revenue, June 10, 2009.

Residential appraisal neighborhoods are identified with a seven (7) digit number. The first character of the neighborhood codes identifies the region in which the property is located. The second digit identifies the inspection year of the approved revaluation plan. Properties located in Residential Appraisal Management Region Agriculture, inspection year inspection year one (1), were inspected for the appraisal period covered by this report.

- Assessor's Office mass appraisal is a team effort. Significant participants and tasks are listed below:

**Property Inspections and Data Collection**

Residential Physical Inspection Region Agriculture Team Members

Rowdy Radke, Residential Appraisal Crew Supervisor  
Larry Donk, Residential Appraisal Crew Supervisor  
Robert Kitchner, Appraiser  
Richard Cleary, Appraiser  
Don Griffin, Appraiser  
Lori Owens, Appraiser  
Evelina Shtiui, Appraiser  
Jason Tourtellot, Appraiser  
Keri Grafe, Appraiser  
Matt Terwilliger, Appraiser

**Land Value**

Residential Modeling Team Members

Kelly Stevens, Residential Appraisal Crew Supervisor  
Brad Cone, Residential Appraiser Analyst / Open Space  
Tom O'Brien, Residential Appraiser Analyst  
Quinten Schmit, Residential Appraiser Analyst



**Model Specification:**

Manatron – ProVal implementation of Marshall & Swift<sup>®</sup> cost approach.

ProVal is a licensed re-distributor of the Marshall & Swift<sup>®</sup> cost data.  
Snohomish County is a licensed user of the Marshall & Swift<sup>®</sup> cost data.

**Model Calibration / Analysis and Statistics:**

Kelly Stevens, Residential Appraisal Crew Supervisor  
Brad Cone, Residential Appraiser Analyst / Open Space  
Laura Washabaugh, Assessment Systems Manager  
John Moore, Property Assessment Program Analyst

**Preliminary Valuation Review**

Kelly Stevens, Residential Appraisal Crew Supervisor

**Final Valuation Review**

Stephen Lightle, Residential Appraisal Manager

**Mass Appraisal Report Preparation**

Laura Washabaugh, Assessment Systems Manager – Data Extracts  
John Moore, Property Assessment Program Analyst – Data Extracts  
Brad Cone, Residential Appraiser Analyst (Open Space)

This mass appraisal report was prepared by:

*Brad Cone*

Date: 06/09/2010

Brad Cone, Residential Appraiser Analyst



**Type of Report – Mass Appraisal Report**

Report of the Snohomish County Assessor's Mass Appraisal for the geographic area named in this report as required under Standard 6-8, Uniform Standards of Professional Appraisal Practice (USPAP).

This document is not intended to be a self contained documentation 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 / ProVal
- Real Estate Sales File – Part of Assessor's Property System Database / ProVal
- Sales Review File (Returned Questionnaires)
- Land Sales and Model Calibration Spreadsheets including published 'Benchmark' tables
- Residential Cost Tables – Contained in Assessor's Property System Database / ProVal
- Residential Depreciation Tables – Contained in the Assessor's Property System Database / ProVal
- Residential Time Trend Study Spreadsheet
- 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
- 2010 – 2015 Snohomish County Revaluation plan as approved by the Washington State Department of Revenue
- Mass Appraisal Report data extracts and sales files
- Measuring Real Property Appraisal Performance in Washington's Property Tax System – Office of Program Research, Washington House of Representatives (Accessed at <http://www.leg.wa.gov/House/Committees/FIN/archivedreports.htm>).
- Glossary Mass Appraisal Report (Separate Document)



**Introduction**

This mass appraisal report is a 'post revaluation' 'report card' on the performance of the valuation model(s) used. As noted previously it is not a fully self contained appraisal but rather a summary of the performance of the model for the geographic area 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. For example, this report may show that on average, properties increased or decreased XX%. This cannot be construed to mean that all properties increased / decreased XX%. While property values in a general geographic area may on average change by 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 Snohomish County Assessor as per the client's instructions.

**Client Instructions To Appraisers:**

- Appraise all properties in each Residential Appraisal Management Region by the date specified in the approved Snohomish 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, July 2007 edition 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.
- Physical inspections must comply with the 2010 – 2015 revaluation plan approved by the Washington State Department of Revenue June 10, 2009. Physical inspections will at a minimum be a curbside visit and review of the property characteristics.
- An effort should be made to inspect and review all qualified 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 them.
- A written mass appraisal report that is compliant with USPAP Standard 6 must be completed for each of Snohomish County's Residential Appraisal Management Regions.



- The intended use of the appraisals and subsequent report is the administration of ad valorem property appraisals.
- The intended users include the Assessor (Client), the Snohomish County Board of Equalization, the Washington State Board of Tax Appeals and the Washington State Department of Revenue.





**Intended User(s)**

Intended users include the Snohomish County Assessor, the Snohomish County Board of Equalization and/or the Washington State Board of Tax Appeals and 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**

1. 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.
2. This is a retrospective analysis with an assumed data cut-off date as of the appraisal date specified in this report.
3. Properties are appraised as if free and clear of any and all liens or encumbrances unless otherwise stated.
4. No personal property is included in the value. Fixtures are generally accepted as real property. Business value is personal property and exempt.
5. Responsible ownership and competent property management are assumed.
6. It is assumed that 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.
7. 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 that there are no hazardous materials affecting the value of the property, unless specifically identified in the property system database.
8. It is assumed that 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.
9. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless otherwise noted in the property system database.



10. It is assumed that 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.
11. It is assumed that 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.
12. No responsibility is assumed for matters pertaining to legal or title considerations.
13. Fiscal constraints may impact data completeness and accuracy, valuation methods and valuation accuracy.
14. The Assessor's records are assumed to be correct for the properties appraised.
15. Sales utilized are assumed to be "arm's-length" market transactions; fiscal constraints limit the Assessor's ability to verify the transactions beyond initial sales screening. Secondary screening is limited to the mailing of sales questionnaires and/or inspection of 'outlier' sales.
16. The subject property is assumed to be buildable unless otherwise noted in the property system database.
17. It is assumed that the property is unaffected by "sensitive or critical areas" regulations (federal, state or local) unless otherwise noted in the property system database.
18. 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.
19. 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.
20. It is assumed that 'exposure time' for the properties appraised is typical for their market area.
21. It is assumed that 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.
22. Rental rates, when employed, were calculated in accord with generally accepted appraisal industry standards.



23. The Snohomish County Assessor's office does not employ a sales database that captures property characteristics at the time of sale. Staffing resources preclude the level of sales review required to support this activity. Not employing a static sales database may bias the mass appraisal results when there are few sales with which to calibrate the market model.
24. The use of valuation models for residential properties other than the sales adjusted cost approach is generally precluded or difficult to employ due to limitation of the appraisal software used by the Assessor's office.
25. Exterior inspections were made of all properties in the physical inspection areas per the revaluation plan approved by the Washington State Department of Revenue dated Jun 10, 2009. Due to lack of staff, time and access, few properties received 'walk around' inspections nor did improved properties receive interior inspections. An effort was made to either inspect or contact by mailed questionnaire 'outlier' sales.

### **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.

### **Date of Appraisal: January 1, 2010**

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

#### **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<sup>st</sup> 2010.

**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).

**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region Ag**



**Regional Profile by Property Class / Use Code:**

The first 2 digits of the property class code conform to the 2 digit land use code standards published in the Washington state department of revenue ratio procedures manual, April 1997.

Property Class	Parcel Count	Sold Parcels	% Sold
110-Sr Cit Exemption Residual	7		
111-Single Family Residence	491	11	2.2%
112-2 Single Family Residences	23		
113-3 Single Family Residences	2		
115-5+ Single Family Residence	1		
117-Manufac Home (Leased Site)	22		
118-Manufac Home (Owned Site)	101		
122-Duplex	3		
124-Four Plex	1		
182-Houseboat	1		
183-Non Residential Structure	54	1	1.9%
184-Septic System	2		
185-Well	1		
186-Septic & Well	6		
198-Vacation Cabins	32		
211-Meat Products	2		
241-Logging Camps & Contractor	1		
344-Transportation Equipment	1		
411-Railroad Transportation	13		
422-Motor Freight Transport.	1		
441-Marine Terminals	1		
451-Freeways	3		
456-Local Access Streets	8		
459-Other Highway NEC	4		
471-Telephone Communication	1		
473-Radio Communication	1		
481-Electric Utility	10		
482-Gas Utility	3		
483-Water Util & Irrig & Stg	2		

# Snohomish County Assessor's Office

## Residential Appraisal Management Region Ag



### Regional Profiles

Property Class	Parcel Count	Sold Parcels	% Sold
484-Sewage Disposal	1		
519-Other Wholesale Trade NEC	1		
639-Other Business Services	2		
672-Protective Functions	1		
681-Nursery,Primary,Second Sch	1		
691-Religious Activities	1		
742-Playgrounds/Athletic Areas	1		
745-Trails (Centennial, etal)	15		
749-Other Recreation	1		
751-Resorts	1		
752-Group & Organized camps	1		
761-Parks, General Recreation	3		
769-Other Parks, NEC	1		
816-Farms & Ranches	1		
818-Farms General	37		
819-Other Agricultural	5		
829-Other Ag Related	1		
830-Open Space Agriculture	1483		
841-Fisheries & Marine Product	1		
842-Fishery Services	1		
849-Other Fishery Activities	3		
850-Mine Claims Mineral Rights	5		
854-Mining & Quarrying	1		
880-DF Timber Acres Only	4		
881-DF Timber Ac w/ ImpAcBldg	1		
889-DF Timber Ac w/ImpAcNoBldg	1		
890-Other Resource Production	3		
910-Undeveloped Land	751	5	0.7%
916-Water Retention Area	1		
921-Forest Reserve	1		
931-Rivers,Streams,Creeks	1		
933-Bays or Lagoons	2		
935-Saltwater Tidelands	1		

**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region Ag**



Property Class	Parcel Count	Sold Parcels	% Sold
939-Other Water Areas	56		
940-Open Space General	59		
941-Open Space General Ag Cons	27		
950-Open Space Timber	4		
<b>Total</b>	<b>3278</b>	<b>17</b>	<b>0.5%</b>

**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region Ag**



**Regional Profile by Land Type:**

Land Type	Parcel Count	Sold Parcels	% Sold
N/A	87		
21 Designated Forest	2		
22 Open Space Forest	1		
23 Open Space General	13		
24 Open Space Ag	585		
25 Designated Forest	1		
65 Topo Problems I	249	1	0.4%
86 Utility Easement (P/L)	4		
88 Contiguous-less than 1 acre	5		
AG AG-10 FHZ	1087	3	0.3%
LF Land detail not used	4		
O1 Poor Location	36		
O2 Fair Location	252	4	1.6%
O3 Avg Location	750	7	0.9%
O4 Good Location	78	2	2.6%
SC SrCit Residual Contiguous	2		
UD Undevelopable Land	122		
<b>Total</b>	<b>3278</b>	<b>17</b>	<b>0.5%</b>

N/A: Building Only Accounts (Parcels With No Land)



**Regional Profile By House Type (Stories):**

House Type / Stories	Parcel Count	Sold Parcels	% Sold
11 - 1 Story	306	3	1.0%
12 - 1 Story Bsmt	83		
14 - 1 1/2 Story	202	3	1.5%
15 - 1 1/2 Story Bsmt	73	2	2.7%
17 - 2 Story	176	2	1.1%
18 - 2 Story Bsmt	30		
23 - Split Entry	13		
24 - Tri Level	11	1	9.1%
71 - DW Manuf. Home	93		
74 - SW Manuf. Home	54		
77 - TW Manuf. Home	1		
96 - Geodesic Dome	1		
N/A	2,235	6	0.3%
<b>Total</b>	<b>3,278</b>	<b>17</b>	<b>0.5%</b>

N/A: Land Only Accounts Or Non Single Family Structures

**Regional Profile By House Quality / Grade:**

Quality	Parcel Count	Sold Parcels	% Sold
15 Sub Std	14		
25 Low	49		
35 Fair	158		
41 Avg Minus	8		
45 Average	631	7	1.1%
49 Avg Plus	62	1	1.6%
55 Good	99	3	3.0%
65 Very Good	21		
75 Excellent	1		
N/A	2,235	6	0.3%
<b>Total</b>	<b>3,278</b>	<b>17</b>	<b>0.5%</b>

Includes Detached and Attached Single Family Residences Condominiums, Townhomes, Duplexes, Triplexes, and Manufactured Homes

N/A: Land Only Accounts Or Miscellaneous Structures (Barns, Sheds, etc).

**Regional Profile By Year Built Range:**

Year Built Range	Parcel Count	Sold Parcels	% Sold
1899 & older	53		
1900 - 1909	105		
1910 - 1919	123	1	0.8%
1920 - 1929	98	1	1.0%
1930 - 1939	62	3	4.8%
1940 - 1949	60		
1950 - 1959	73	1	1.4%
1960 - 1969	91		
1970 - 1979	149	2	1.3%
1980 - 1989	70	1	1.4%
1990 - 1999	90	1	1.1%
2000 - 2009	68	1	1.5%
N/A	2236	6	0.3%
<b>Total</b>	<b>3278</b>	<b>17</b>	<b>0.5%</b>

Includes Detached and Attached Single Family Residences Condominiums, Townhomes, Duplexes, Triplexes, and Manufactured Homes

N/A: Land Only Accounts Or Miscellaneous Structures (Barns, Sheds, etc).

**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region Ag**



**Regional Profiles**

**Regional Profile By Total Living Area Range:**

Total Living Area	Parcel Count	Sold Parcels	% Sold
N/A	2235	6	0.3%
1 - 499	25		
500 - 749	45		
750 - 999	90		
1000 - 1249	117		
1250 - 1499	164	1	0.6%
1500 - 1749	158	2	1.3%
1750 - 1999	132	3	2.3%
2000 - 2249	90	2	2.2%
2250 - 2499	65	2	3.1%
2500 - 2749	48	1	2.1%
2750 - 2999	33		
3000 - 3249	20		
3250 - 3499	18		
3500 - 3749	12		
3750 - 3999	9		
4000 - 4249	5		
4250 - 4499	4		
4500 - 4749	2		
4750 - 4999	1		
5000 - Over	5		
<b>Total</b>	<b>3278</b>	<b>17</b>	<b>0.5%</b>

Includes Detached and Attached Single Family Residences Condominiums, Townhomes, Duplexes, Triplexes, and Manufactured Homes.

N/A: Land Only Accounts Or Miscellaneous Structures (Barns, Sheds, etc).

## **Scope of Work**

### **Inspection of Property**

The modeling process relies on the physical inspections performed by the Residential Physical Inspection Team members and the data contained in the Assessor's property system database (ProVal).

All land sales were investigated and site visits performed to verify the physical characteristics of the parcel unless precluded from doing so due to lack of access or lack of time that coincided with an extreme weather condition such as snow or flooding in which case aerial photographs and Parcel Analyst maps were utilized.

### **Sales Source**

The Snohomish County Assessor's office utilizes sales obtained from Real Estate Excise Tax Affidavits filed with the Snohomish 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.

Sales identified by Residential Appraisal Crew Supervisor, Kelly Stevens, as being an 'outlier' may receive a sales questionnaire and/or be scheduled for sales review. The sale review may include a site visit and/or contact with either the buyer or seller of the property. The number of properties that actually receive a sales review is determined by the number of 'outliers' and the availability of staff to perform the task.

The majority of the sales (not just outlier sales) in Residential Management Region Agriculture were reviewed for accuracy for 2011 tax.

All sales of duplexes and triplexes in the residential neighborhoods receive a sales questionnaire. There were no sales of duplexes or triplexes in management region Agriculture.

## **Model Specification & Data Requirements**

### **Model Specification**

Time constraints, staffing level and lack of funding preclude the investigation of value models other than the following:

- Sales adjusted cost approach where the base model is specified by Manatron / ProVal. The Manatron / ProVal cost model is a derivative of the Marshall & Swift® valuation service cost approach. This approach is often referred to by ProVal as a Market Calibrated Stratified Cost Approach.
- Gross Rent Multiplier (GRM) market based valuation model for duplexes and triplex.

The income approach is not applicable to the appraisal of land, single family residences or manufactured homes, the predominant property types in the residential appraisal management areas and therefore were not considered.

CAMA system limitations, time constraints, staffing and lack of funding preclude utilization of multiple regression based direct market value models or 'comparable sales' value applications.

### **Data Requirements**

The data requirements for the Manatron specified Market Calibrated Stratified Cost Approach reside in the ProVal database and are maintained by Assessor staff.

### **Data Collection**

The appraisal staff relies on a number of tools to collect and verify property characteristics including:

- Physical Inspection of Properties
- Maps including but not limited to:

Aerials  
Topographic Maps,  
Wetland and Stream Maps  
Easement Maps  
Utility Maps  
Zoning Maps  
Comprehensive Plan Maps  
UGA Maps

Any map that conveys property characteristic data

- Blueprints
- Real Estate Flyers & Brochures
- Real Estate Web Sites

Property characteristics data is maintained annually from the various maps, through sales review and property re-inspections per the approved revaluation plan. Property characteristics may also be verified and updated in the course of re-inspection of a property in the course of perfecting the Assessor's answer to an appeal or in response to a value review initiated by a taxpayer.

Data is captured in ProVal.

Sales review notes are contained in the analysis spreadsheets and in the Assessor's Property System Database / ProVal.

Sales questionnaire results are contained in the sales questionnaire file (cabinet).

### **Model Chosen**

Sales Adjusted Cost Approach for all residential properties (SFR's, Manufactured Homes, SFR style condominiums).

Cost Approach for outbuildings and miscellaneous structures.

Market Approach / GRM and/or Sales Adjusted Cost Approach for Duplexes and Triplexes.

## **Value Model Calibration**

Model calibration is conducted using ratio studies. The standards applied are those published by the IAAO, July 2007. The level of appraisal is set by RCW.

In 2009, preliminary initial ratio studies indicated a need to recalibrate the valuation model(s). The following steps were employed:

1. Recalibration of the base SFR improvement model

For the 2010 revaluation for 2011 tax, model calibration was performed using “house type models”. House type models are percentage factors applied to the calculated improvement value on a neighborhood wide basis.

- A. Prior to 2010 Residential Management Region Agriculture used 2 House type models for the 3 individual benchmark neighborhoods. This number of individual house type models was reduced to 1 for 2011 tax by adopting the base House Type Model - #27 in the area 4 neighborhood which previously used a unique House Type Model.

- B. House Type Model #27 remained the same from the 2010 tax year to the 2011 tax year with the following exceptions: Manufactured Homes (except Triple Wides) and Geodesic dome factors were reduced.

2. Update of the land value model / land tables

The July 31<sup>st</sup> New Construction Study indicated that land in East Snohomish County did not lose as much value as other neighborhoods in the county. This was confirmed by the year end analysis.

Home site land values were reduced by 20% in the Stanwood area 2 benchmark but only reduced by 5% in the Monroe/Sultan area 4 Benchmark based on improved sales. The most notable change to the land tables were an increase to the Agriculture market land rates from \$3,000 per acre to \$5,500 per acre for superior tillable soils. This resulted in an overall increase to the land value for larger acreage farms. The remaining land values were adjusted as necessary to achieve market value.

3. Recalibration of the whole property value model.

Depreciation schedule for fair, poor and very poor condition SFR was reviewed. Due to high ratios a new depreciation model was created which increased depreciation rates for these conditions.





**Land**

When sufficient land sales exist, the land calibration is based wholly on land sales. When there are insufficient land sales, land values are abstracted from improved property sales.

Land sales were inspected and their property characteristics verified. The sales were entered on a spreadsheet and stratified by land type, size and other property characteristics. A preliminary land table was developed and ratio study performed to determine how effective the land model is in predicting the sales prices. The number and type of land sales available were insufficient to construct the entire land model so a combination of land sales and residuals were used.

**Single Family Residences (AKA SFR's), Manufactured Homes (not in parks) & Condominiums**

Initial ratio analysis indicated the need to recalibrate the base SFR value model.

The initial calibration of the base single family residential model was based upon the sales of new homes in new subdivisions where land value can be determined by recent land sales either from within the subdivision itself or nearby competitive subdivisions. The cost model was adjusted until the ratio studies produced acceptable performance statistics for both level of appraisal (ratio) and uniformity (see tables later in this document). Base cost model adjustments include adjusting the base rate cost tables and setting the base house type model.

The performance of the base cost model was evaluated on a neighborhood by neighborhood basis; house type by house type; and by year built and specific location (as examples) and the base cost model refined until it produces acceptable performance statistics. Refinements to the base cost model were made using house type factor models (applied universally by neighborhood by house style), the application of improvement modifiers (AKA Market Modifiers or Relative Desirability Factors (RDF)), lump sum or percentage land factors and modifications to depreciation tables. Refer to the model performance summary analysis tables for details.

**Manufactured Homes (AKA MFG) – In Parks**

Initial ratio analysis indicated the need to recalibrate the Manufactured Home value model. The analysis was performed county wide, with sales stratified by manufactured home park. Individual grade, style (SW vs. DW) and age/condition adjustments were made.

The final model was applied to all manufactured homes located in parks. For Manufactured Homes, values are created in Excel and then written back to the CAMA system.



**Residential Neighborhoods Multi Family (Primarily Duplexes & Triplexes)**

Initial ratio analysis indicated the need to adjust the value of duplexes as triplexes. Rental and GRM information was obtained by site inspection, questionnaires or published studies of the Snohomish County rental market. A new rent schedule / GRM table was constructed, applied to the sold properties and performance ratio studies performed until the results met standards.

In some instances, and for some types of duplexes, the residential sales adjusted cost model performed better than the GRM market model and was therefore employed in those instances.

The new appraised values for properties valued by the GRM market model are created in Excel and then written back to the CAMA system. Which properties were valued by which model is noted in the certification code of each individual property in ProVal.

**Outbuildings & Miscellaneous Improvements**

Outbuildings and miscellaneous improvements are valued using the ProVal cost model.

- a. There was no change to the Outbuilding model for 2011 tax.

**Time Adjustments**

Time adjustments were determined by performing a sales ratio trend analysis as described in the *Mass Appraisal of Real Property*, IAAO, 1999. When sales prices are compared to assessed values (S/A Ratio) and arrayed against sale year / month of sale, the average change in market value for the sample can be determined. Increasing S/A ratio values indicate increasing market values over time where as decreasing S/A ratios indicate a declining market.

The sales ratio trend analysis was not performed until the majority of the prior year's sales have been entered into the CAMA database in order to have sufficient data to make an informed decision.

The study was performed using average S/A ratio vs. month of sale as opposed to using median S/A ratios as the analysis was performed Excel® using pivot tables which do not calculate medians.



**Value Conclusions**

The ratio analysis was done in Excel and IBM® SPSS® Statistics (previously known as PASW Statistics or SPSS). The sold properties are stratified by neighborhood, plat, grade, age, style, land type, sale month/year, etc. and performance statistics generated, including, Mean Ratio, Median Ratio and COD.

The ratio results were reviewed by Kelly Stevens, Residential Appraisal Crew Supervisor and finally by Stephen Lightle, Residential Appraisal Manager. Upon approval the summary statistics were published for reference.

**Highest and Best Use**

**RCW 84.40.030**

All property shall be valued at one hundred percent of its true and fair value in money and assessed on the same basis unless specifically provided otherwise by law.

(1) ...The appraisal shall be consistent with the comprehensive land use plan, development regulations under chapter 36.70A RCW, zoning and any other governmental policies or practices in effect at the time of the appraisal that affect the use of property as well as physical and environmental influences. An assessment may not be determined by a method that assumes a land usage or highest and best use not permitted, for that property being appraised, under existing zoning or land use planning ordinances or statutes or other government restrictions....

**WAC 458-07-030 (3) True and fair value -- Highest and best use.**

Unless specifically provided otherwise by statute, all property shall be valued on the basis of its highest and best use for assessment purposes. Highest and best use is the most profitable, likely use to which a property can be put. It is the use which will yield the highest return on the owner's investment. Any reasonable use to which the property may be put may be taken into consideration and if it is peculiarly adapted to some particular use, that fact may be taken into consideration. Uses that are within the realm of possibility, but not reasonably probable of occurrence, shall not be considered in valuing property at its highest and best use.

This mass appraisal relies on the determinations of Highest and Best Use made by the Assessor's appraisal staff as part of Physical Inspection and/or Sales Review.



**Current Use Properties** – The appraised values of parcels in a 'current use' or 'designated forest' category are set according to RCW and WAC, not on Highest and Best Use.

- a. Current Use Agriculture land values are calculated based on the parameters set by RCW 84.34.065 and WAC 458-30-262 along with the advice of the Agriculture Advisory Committee to the assessor. Agriculture land leases and cash rentals indicated that the current use land rates should remain unchanged from 2009 rates.
- b. Current Use, Designated Forest and Open Space Timber values are provided to the assessor by the Department of Revenue via WAC 458-40-540. The rates are unchanged from 2009.

**Appraisal Performance**

**Mass Appraisal Reports – Sales:**

Sales meeting the following criteria are included in the ratio analysis:

Sales within the Date Range of:.....01/01/2009 – 12/31/2009

- Due to limited sales activity in Residential Management area Agriculture, 5 years of sales were used in the initial analysis.

- 

Sales Qualification Code: .....Q (qualified)

Properties with multiple sales in the selected date range:.....Only the most current sale used

- In a letter dated June 30, 2009, the Department of Revenue instructed the Snohomish County Assessor to assume Short Sales and Bank Sales were qualified sales, unless the appraiser could determine they were invalid due to another reason, i.e. Family Sale, Divorce, etc.
- 'Short Sales' and 'REO Sales' which meet the DOR ratio study standards are included as 'Q' sales. Auction sales are not.

Based on Washington State Department of Revenue Ratio Procedures Manual – April 1997, the following sales were excluded from the ratio analysis:

Outliers - Sales which do not meet DOR ratio study standards, that is, sales whose ratio is below 0.25 or greater than 1.75

- Sales that are less than \$1,000.



- Sales with a DOR ratio study invalid code (any sales whose qualification code is not 'Q').
- Sales that are not transferred by either a Warranty Deed or Real Estate Contract, with the exception of manufactured homes where the deed type is generally other than a Warranty Deed.

Additional sales excluded:

- Sales involving multiple parcels.
- Sales where the prior year's appraised value did not include an improvement value by the sales price included improvements i.e. new construction that has not yet be appraised for the current assessment year.
- Sales where the improvements were appraised at less than 100% as of July 31st of the prior assessment year but the sales price was for a 100% complete home.
- A sale that included an appraised improvement value and the improvement was subsequently torn down or moved and the current appraised value does not include any improvement value.
- A sale on a parcel that did not exist for the prior assessment year but exists for the current assessment year (new plats, short plats, condominiums, etc). These parcels are excluded from the ratio report as their inclusion would distort the before and after ratio.
- Sales, which meet the DOR ratio study standard, but which investigation reveals to be non-market transactions. These sales are denoted as such in the appraisal spreadsheets and in the ProVal database sales file, field 'transaction type' as 'NM' (not market).



**Valuation Model Performance Statistics – Adjusted For Changes In Market Conditions Over Time**

- Use Code 111 – Single Family Detached**
- Use Code 116 – Single Family Attached**
- Use Code 141 – Single Family Detached / Condominium**
- Use Code 142 – Single Family Attached / Condominium (Row House Style),**

Ratio is pre certification certified values divided by non time trended sales price. Tasp\_Ratio is revaluation assessed value divided by time trended sales price. The table below compares the two on a month by month basis.

An increasing non time adjusted ratio indicates a decline in sales prices.

**Mean**

<u>Trans Yr Mo</u>	<u>Ratio</u>	<u>TASP Ratio</u>
<b>2009/05</b>	0.908	0.947
<b>2009/06</b>	0.944	0.985
<b>2009/08</b>	0.952	0.965
<b>2009/09</b>	0.973	0.973
<b>2009/10</b>	0.955	0.955
<b>2009/11</b>	1.097	1.097
<b>Total</b>	0.964	0.977

**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region 1**



**Performance Statistics**

**Valuation Model Performance Statistics Use Code All Sales / Use Codes 111, 116, 141, & 142\*:**

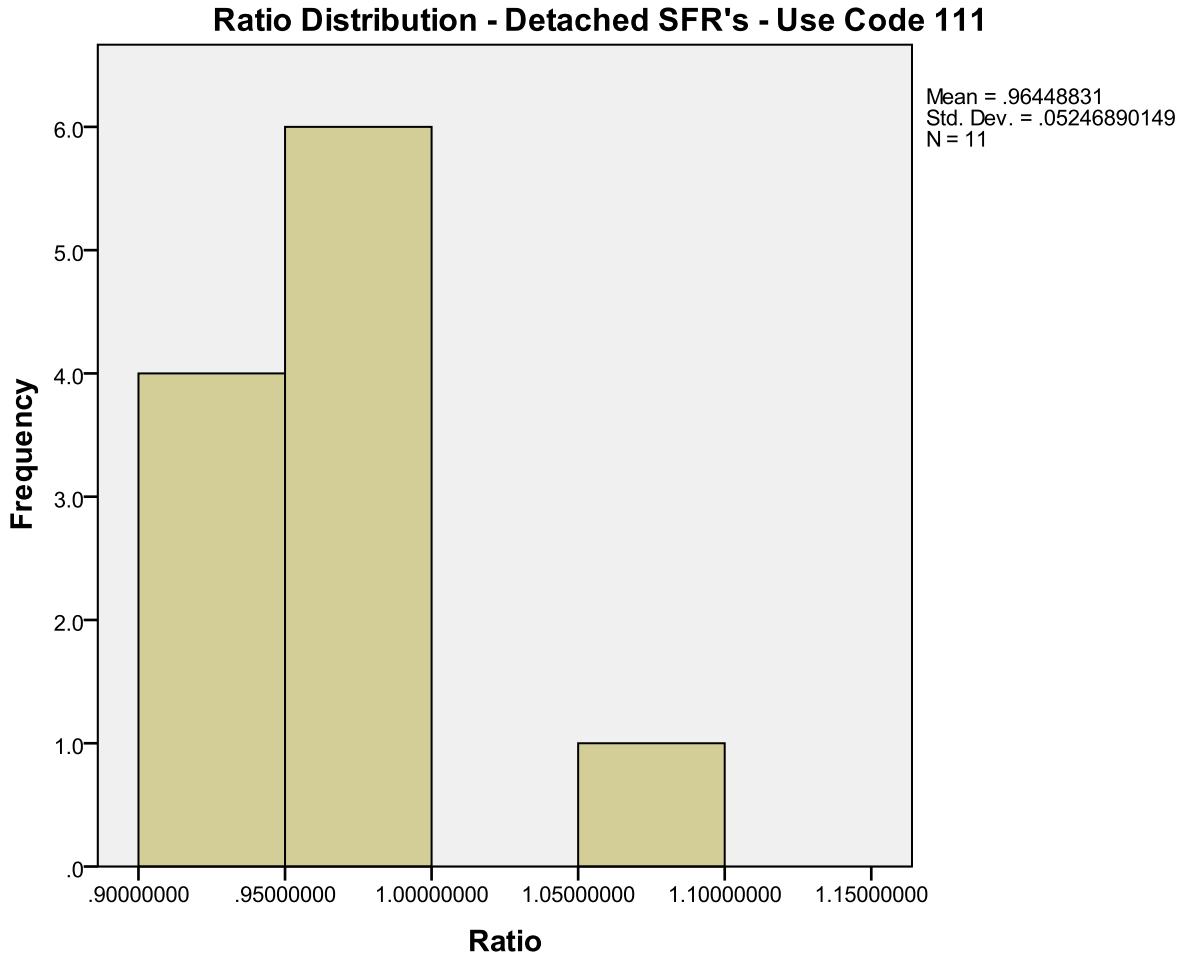
Note: The sales used for this ratio study **are not** adjusted for time.

<b>Group</b>	<b>Count</b>	<b>Mean</b>	<b>Median</b>	<b>Weighted Mean</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>
<b>2191</b>	8	.982	.970	.975	1.007	.032
<b>3191</b>	1	.908	.908	.908	1.000	.000
<b>4191</b>	2	.923	.923	.920	1.003	.011
<b>Overall</b>	11	.964	.961	.956	1.009	.036

\*No population of 116, 141, or 142 Use Codes.



**Valuation Model Performance Frequency Distribution –  
All Sales / Use codes 111, 116, 141, & 142:**





**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region 1**



**Performance Statistics**

**Valuation Model Performance Statistics By Neighborhood - All Sales / All Use Codes:  
 (Except Manufactured Homes In Parks):**

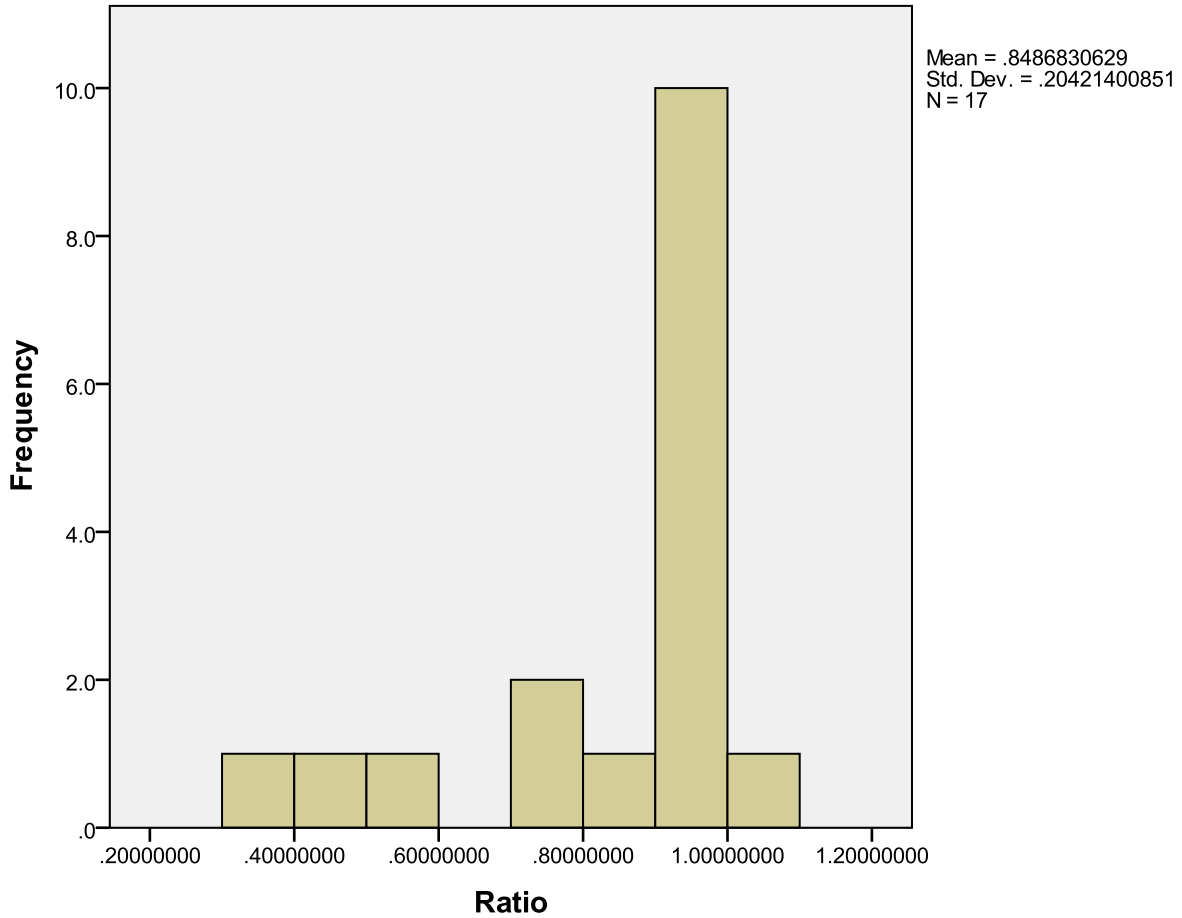
Note: The sales used for this ratio study **are not** adjusted for time.

<b>Group</b>	<b>Count</b>	<b>Mean</b>	<b>Median</b>	<b>Weighted Mean</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>
<b>2191</b>	10	.939	.963	.959	.979	.066
<b>3191</b>	5	.638	.562	.760	.840	.347
<b>4191</b>	2	.923	.923	.920	1.003	.011
<b>Overall</b>	17	.849	.927	.924	.919	.141



**Valuation Model Performance Frequency Distribution – All Sales / All Use Codes:  
Except Manufactured Homes Located In Manufactured Home Parks**

**Ratio Distribution - All Sales (Except Those In Manufactured Home Parks)**



Mean = .8486830629  
Std. Dev. = .20421400851  
N = 17

**Snohomish County Assessor's Office**  
**Residential Appraisal Management Region 1**



**Performance Statistics**

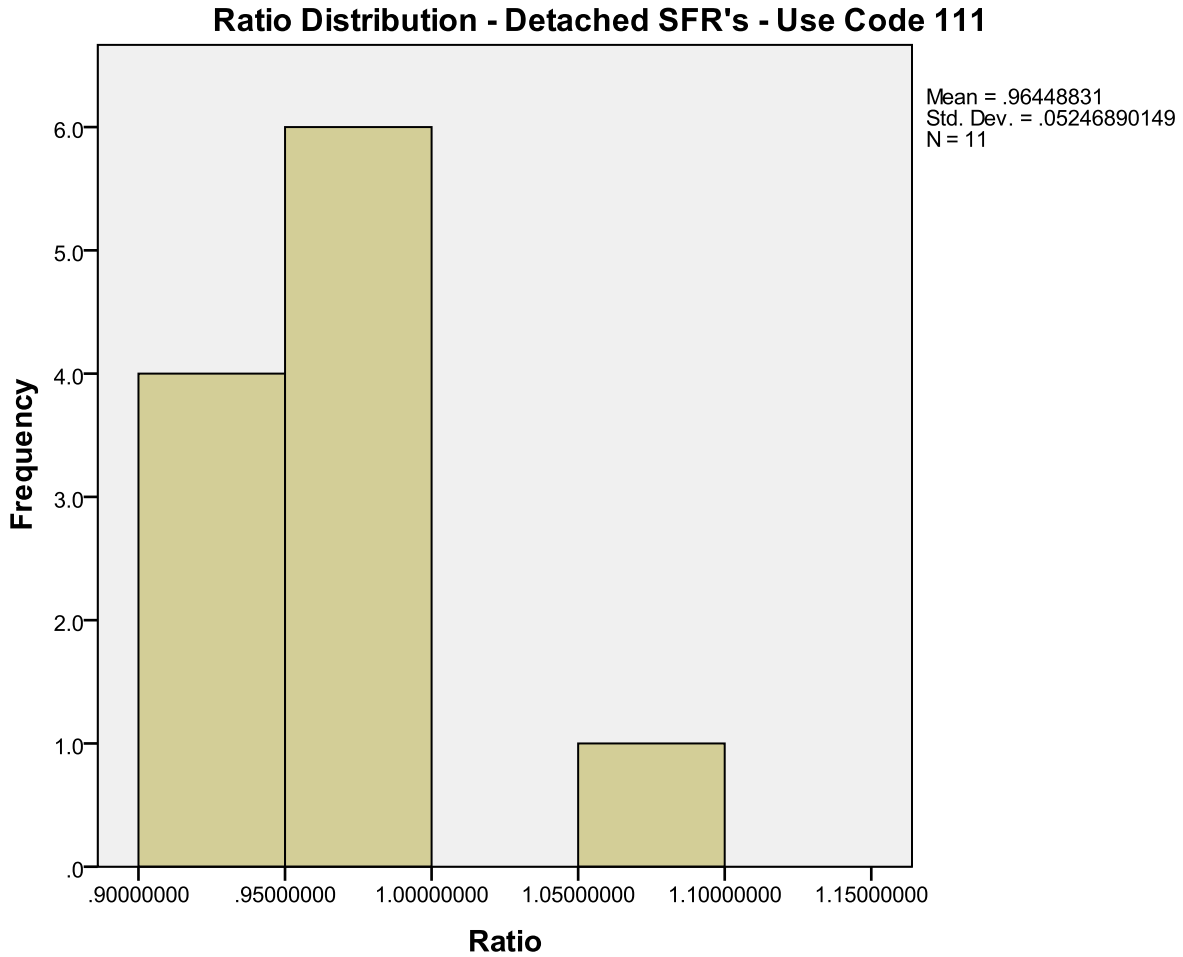
**Valuation Model Performance Statistics Use Code 111:**

Note: The sales used for this ratio study **are not** adjusted for time.

<b>Group</b>	<b>Count</b>	<b>Mean</b>	<b>Median</b>	<b>Weighted Mean</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>
<b>2191</b>	8	.982	.970	.975	1.007	.032
<b>3191</b>	1	.908	.908	.908	1.000	.000
<b>4191</b>	2	.923	.923	.920	1.003	.011
<b>Overall</b>	11	.964	.961	.956	1.009	.036



**Valuation Model Performance Frequency of Ratio Distribution – Use Codes 111:**





**Valuation Model Performance Statistics Use Code 116:**

Note: The sales used for this ratio study **are not** adjusted for time.

**No Population**



**Valuation Model Performance Frequency Distribution – Use Codes 116:**

**No Population**



**Valuation Model Performance Statistics Use Code 141:**

Note: The sales used for this ratio study **are not** adjusted for time.

**No Population**



**Valuation Model Performance Frequency Distribution – Use Codes 141:**

**No Population**





**Valuation Model Performance Statistics Use Code 142:**

Note: The sales used for this ratio study **are not** adjusted for time.

**No Population**



**Valuation Model Performance Frequency Distribution – Use Codes 142:**

**No Population**



**Valuation Model Performance Statistics By Neighborhood – Manufactured Homes In Parks**  
**Property Class Code 119:**

The dispersion in sales prices for Manufactured homes located in manufactured home parks is considerably greater than that for other residential property types. Due to this disparity, the statistics for manufactured homes located in parks are reported separately from the region as a whole.

Note: The sales used for this ratio study **are not** adjusted for time.

**No Population**



**Valuation Model Performance Frequency Distribution – Manufactured Homes In Parks**  
**Use Codes 119:**

**No Population**



**Valuation Model Performance Statistics Use Code 122, 123, 124:**

Note: The sales used for this ratio study **are not** adjusted for time.

**No Population**



**Valuation Model Performance Frequency Distribution – Use Codes 122, 123, 124:**

**No Population**



**Valuation Model Performance Statistics Use Code 117 – 118 (Manufactured Homes Not In Parks):**

Note: The sales used for this ratio study **are not** adjusted for time.

**No Population**



**Valuation Model Performance Frequency Distribution – Use Codes 117 – 118:**

**No Population**





**Reconciliation and Conclusion**

The basic mass appraisal valuation models employed in this revaluation have been in place and utilized by the Assessor's office for a number of years. It has consistently produced reliable appraised values, as measured by ratio studies that meet or exceed the IAAO standards for ratio studies. Considering the quantity and quality of the data and the model performance results and documented here in, we conclude that the sales adjusted cost approach produces a reliable estimate of market value.



**Sales Used / Excluded:**

The sales used in the preparation of this report are found in the file named:

2010 ResRegionAg MassAppraisalRpt Sales.pdf

The file is presorted by neighborhood id number and then by parcel id number.

The sales excluded in the preparation of this report are found in the file named:

2010 ResRegionAg MassAppraisalRpt ExcludedSales.pdf