



Ratio Study

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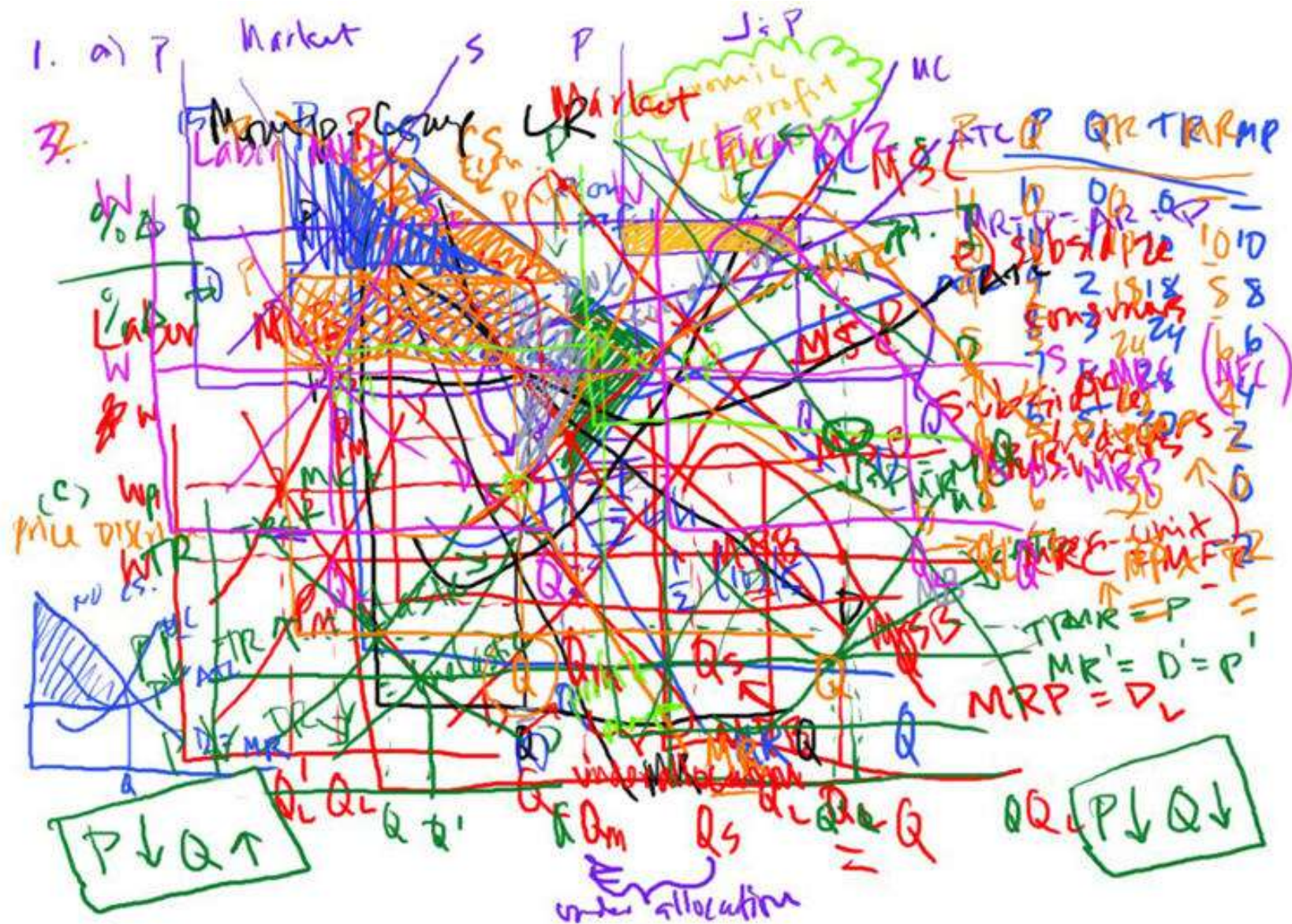
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April 9, 2025





- A ratio study looks at the level of assessment
- It is called a ratio study because it starts by determining the ratio between the assessed value to market value **Assessed Value ÷ Market Value**



- At the state level a ratio study is used to equalize the state school levy
- Used in the 1% levy limit which Diann Locke will discuss Thursday
- It is used by the Superintendent of Public Instruction to distribute state funds to schools
- Also used to equalize state assessed utilities and transportation companies which Kevin Hill will spoke of earlier.

Real Property



Personal Property



- The Department completes two ratio studies in each county yearly
- The Real Property study is based mostly on market value sales
- The Personal Property study is randomly selected parcels audited
- The ratio is based on comparing the assessed value to the appraised value
- Both ratio studies have the same purpose but are developed differently

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
1		Insert Row into County List	\$	13,705								Refresh Formulas			Insert Row into Taxpayer List	\$	9,405								
3	#	County List Asset Description	Asset #	Trend	Purchase Year	Original Cost	Cost Adjust	Adjusted Cost	Ref	Omit or Del	Difference	#	Taxpayer List Asset Description	Asset #	Trend	Purchase Year	Original Cost	Cost Adjust	Adjusted Cost	Ref	Omit or Del	Comments			
4	1	TOOLS/POWER EQUIP		16	1998	1,538		1,538			0		TOOLS/POWER EQUIP.	1		1998	1,538		1,538						
5	2	POWER TOOLS		16	1999	550		550			0		POWER TOOLS	2		1999	550		550						
6	3	TRACTOR		12	2000	4,300		4,300	CL		4,300														
7	4	SAWZALLSAW		16	2000	215		215			0		SAWZALL SAW	4		2000	215		215						
8	5	GAS TORCHES		12	2000	321		321			0		GAS TORCHES	5		2000	321		321						
9	6	WELDING HELMET/RESP		12	2001	769		769			0		WELDING HELMET/RESP	6		2001	769		769						
10	7	PRESSURE WASHER		16	2001	430		430			0		PRESSURE WASHER	7		2001	430		430						
11	8	AUGER		16	2003	239		239			0		AUGER	9		2003	239		239						
12	9	PLASMA CUTTER		12	2005	1,659		1,659			0		PLASMA CUTTER	10		2005	1,659		1,659						
13	10	HONDA GENERATOR		16	2005	969		969			0		HONDA GENERATOR	11		2005	969		969						
14	11	AIR COMPRESSOR		16	2005	904		904			0		AIR COMPRESSOR	12		2005	904		904						
15	12	WELDER		12	2006	737		737			0		WELDER	13		2006	737		737						
16	13	COMPUTER		C	2006	974		974			0		COMPUTER	14		2006	974		974						
17		Supplies		0	2017	50	50	100	ADJ		0		Supplies			2017	100		100						
18								0			0								0						
19								0			0		TRAILER	8		2003	1,705	-1,705	0	V		V - Vehicle			
20								0			0								0						

- Personal Property audits of accounts are selected randomly
- County listing and taxpayer asset list are compared
- Assessed value is \$2,213 & the appraised value is determined to be \$2,262
- The ratio is 97.8% ($2,213 \div 2,262$)



- A ratio study will look at the uniformity between classes of property as well. The assessed value of these two properties will likely be extremely different, but the level of assessment should be similar.
- These properties have a market value of \$200,000 and a levy rate of \$15 per \$1,000

Property	Assessed Value	Taxes Owed	
	\$100,000	\$1,500	"A"
	\$220,000	\$3,300	"B"

Straifacation Report

Category	Stratum	Total parcels in Strat	# of samples given	Total strat value
SFR	1,000 - 149,999	3,359	340	248,005,300
SFR	150,000 - Over	1,469	447	319,851,700
MFR/Comm/Mfg	1,000 - Over	646	646	336,986,200
Ag/Other	1,000 - Over	1,306	362	227,023,200
TOTAL		6,780		1,131,866,400

Real Property Ratio Report

CATEGORY STRATUM	ACTUAL COUNTY REAL PROPERTY ASSESSED VALUE	RATIO	COUNTY MARKET VALUE RELATED TO ACTUAL ASSESSED VALUE
SENIOR FREEZE			
0 & OVER	8,790,600	100.0	8,790,600
TIMBERLAND			
0 & OVER	0	100.0	0
FORESTLAND			
0 & OVER	0	100.0	0
AGRICULTURAL CURRENT USE, OPEN SPACE IMPROVEMENT			
0 & OVER	175,266,929	72.4	242,037,447
AGRICULTURAL CURRENT USE, OPEN SPACE LAND			
0 & OVER	0	100.0	0
AGRICULTURAL, OTHER			
1,000 & OVER	227,023,200	98.0	231,622,202
MULTIPLE FAMILY RESIDENCE, COMMERCIAL, MANUFACTURING			
1,000 & OVER	338,986,200	98.4	342,306,451
MULTIPLE FAMILY RESIDENCE, COMMERCIAL, MANUFACTURING, AGRICULTURAL, AGRICULTURAL CURRENT USE, OPEN SPACE, OTHER			
1,000-99,999	0	100.0	0
OTHER			
0 & OVER	0	100.0	0
SINGLE FAMILY RESIDENCE			
1,000-149,999	248,005,300	80.9	306,526,848
SINGLE FAMILY RESIDENCE			
150,000 & OVER	319,851,700	63.8	501,008,898
AGRICULTURAL CURRENT USE, OPEN SPACE LAND, AUDIT			
0 & OVER	399,241,900	100.0	399,241,900
	1,715,165,829		2,031,534,346

Board of Equalization Certification

	Assessed Value
1. Forest Land Assessed Value (chapter 84.33 RCW)	\$0
2. Current Use Land Assessed Value (chapter 84.34 RCW)	\$399,241,900
3. Improvement Value on Current Use Lands	\$175,266,929
4. Taxable Senior Freeze Assessed Value	\$8,790,600
5. Real Property Assessed Value (excluding Items 1 thru 4)	\$1,087,378,268
6. Total Taxable Assessed Value of Real Property (Total of Items 1 thru 5)	\$1,670,677,697
7. Personal Property Assessed Value	\$207,193,912
8. Total County Locally Assessed Value (Total of items 6-7)	\$1,877,871,609

Valid Sales Report

	# of Sales	AV	Adj. SP	Avg AV	AV Adj. SP	Ratio
SFR 1,000 - 149,999	121	11,842,300	14,636,715	97,870	120,965	80.91%
SFR 150,000 - Over	95	14,636,715	22,926,639	154,071	241,333	63.84%
MFR/Comm/Mfg	17	3,246,300	3,206,337	190,959	188,608	101.25%
Ag/Other	13	1,367,200	1,416,789	105,169	108,984	96.50%

RATIO= 84.4%

Real Property Computation Report

CATEGORY STRATUM	# of SAMPLES	AVERAGE ASSESSED	AVERAGE MARKET	STRATUM RATIO	
SENIOR FREEZE					
0 & OVER	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0%</u>	
TIMBERLAND					
0 & OVER	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0%</u>	
FORESTLAND					
0 & OVER	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0%</u>	
AGRICULTURAL CURRENT USE, OPEN SPACE IMPROVEMENT					
0 & OVER	APPRAISALS	12	96,400	133,125	72.4
		<u>12</u>	<u>96,400</u>	<u>133,125</u>	<u>72.4%</u>
AGRICULTURAL CURRENT USE, OPEN SPACE LAND					
0 & OVER	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0%</u>	
AGRICULTURAL, OTHER					
1,000 & OVER	SALES	13	105,169	108,984	96.5
	APPRAISALS	5	186,520	185,920	100.3
		<u>18</u>	<u>127,767</u>	<u>130,355</u>	<u>98.0%</u>
MULTIPLE FAMILY RESIDENCE, COMMERCIAL, MANUFACTURING					
1,000 & OVER	SALES	17	190,959	188,608	101.2
	APPRAISALS	15	202,627	211,907	95.6
		<u>32</u>	<u>196,428</u>	<u>199,529</u>	<u>98.4%</u>
MULTIPLE FAMILY RESIDENCE, COMMERCIAL, MANUFACTURING, AGRICULTURAL, AGRICULTURAL CURRENT USE, OPEN SPACE, OTHER					
1,000-99,999	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0%</u>	

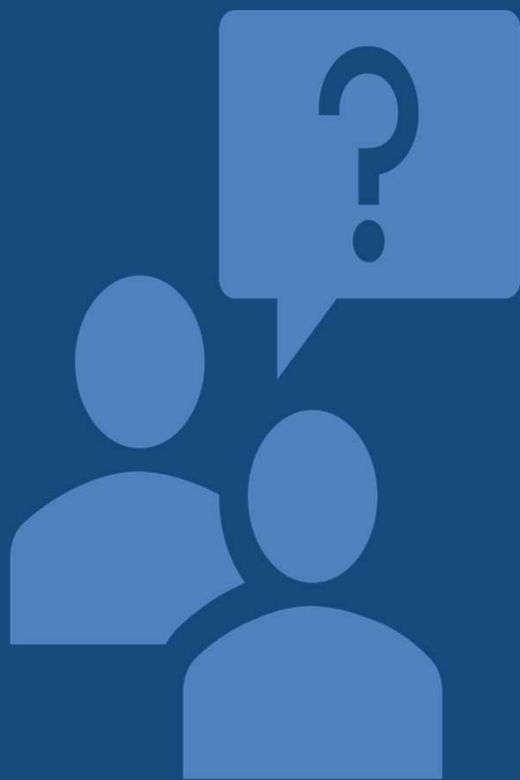
SINGLE FAMILY RESIDENCE					
1,000-149,999					
	SALES	121	97,870	120,965	80.9
		<u>121</u>	<u>97,870</u>	<u>120,965</u>	<u>80.9%</u>
SINGLE FAMILY RESIDENCE					
150,000 & OVER					
	SALES	95	154,071	241,333	63.8
		<u>95</u>	<u>154,071</u>	<u>241,333</u>	<u>63.8%</u>
AGRICULTURAL CURRENT USE, OPEN SPACE LAND, AUDIT					
0 & OVER	<u>0</u>	<u>0</u>	<u>0</u>	<u>100.0%</u>	

COUNTY	PRELIMINARY RATIO		FINAL RATIO	
	REAL %	PERSONAL %	REAL %	PERSONAL %
ADAMS	85.6	100.5	85.6	100.0
ASOTIN	88.8	88.4	88.8	88.4
BENTON	87.9	93.5	87.9	93.5
CHELAN	87.3	95.2	87.3	95.2
CLALLAM	88.6	94.7	88.6	94.7
CLARK	95.9	93.2	95.9	93.2
COLUMBIA	98.4	97.2	98.4	97.2
COWLITZ	91.8	97.8	91.8	97.8
DOUGLAS	92.8	97.2	92.8	97.2
FERRY	92.7	97.1	92.7	97.1
FRANKLIN	94.4	92.7	94.4	92.7
GARFIELD	98.7	95.2	98.7	95.2
GRANT	84.9	92.5	84.9	92.5
GRAYS HARBOR	92.7	96.1	92.7	96.1
ISLAND	94.3	100.6	94.3	100.0
JEFFERSON	93.6	92.1	93.6	92.1
KING	92.1	96.7	92.1	96.7
KITSAP	90.3	97.8	90.3	97.8
KITTITAS	85.3	100.1	85.3	100.0
KLICKITAT	92.2	97.6	92.2	97.6
LEWIS	88.7	96.7	88.7	96.7
LINCOLN	85.9	94.1	85.9	94.1
MASON	95.6	84.6	95.6	84.6
OKANOGAN	83.9	90.2	83.9	90.2
PACIFIC	92.0	96.8	92.0	96.8
PEND OREILLE	89.8	93.0	89.8	93.0
PIERCE	91.5	95.3	91.5	95.3
SAN JUAN	90.5	96.9	90.5	96.9
SKAGIT	92.4	93.6	92.4	93.6
SKAMANIA	89.2	95.0	89.2	95.0
SNOHOMISH	93.5	98.4	93.5	98.4
SPOKANE	95.1	97.9	95.1	97.9
STEVENS	89.9	87.6	89.9	87.6
THURSTON	94.5	96.1	94.5	96.1
WAHKIAKUM	87.9	97.0	87.9	97.0
WALLA WALLA	85.9	96.3	85.9	96.3
WHATCOM	86.1	95.9	86.1	95.9
WHITMAN	79.4	82.7	79.4	82.7
YAKIMA	89.4	95.3	89.4	95.3

- WAC 458-53 Ratio Study
- Personal Property ratio is determined through the audit process
- The audits are completed and value is determined
- Real Property is determined through sales data, stratification report and possibly audits of parcels
- With both Personal Property and Real Property a preliminary ratio is sent to each county
- If a ratio is greater than 100%, the final ratio will not be issued at that greater than 100%
- Next a final ratio is sent to the county



- Why is this important? **→** MONEY
- So everyone pays their fair share!
- For this to happen, assessed values need to represent market value and be uniform across a county and across the state



Questions?