

MINNESOTA • REVENUE

**2009 Property Values and
Assessment Practices Report**
(Assessment Year 2008)

A report submitted to the Minnesota State Legislature
pursuant to
Laws 2001, First Special Session, Chapter 5, Article 3, Section 92

Property Tax Division
Minnesota Department of Revenue
March 2, 2009

MINNESOTA • REVENUE

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To the members of the Legislature of the State of Minnesota:

I am pleased to present to you the seventh annual Property Values and Assessment Practices Report undertaken by the Department of Revenue in response to Minnesota Laws 2001, First Special Session, Chapter 5, Article 3, Section 92.

This report provides a summary of assessed property values and assessment practices within the state of Minnesota. This year's report does not include summaries of market value trends by county. However, this information is available on request to the Property Tax Division.

Sincerely,



Ward L. Einess
Commissioner

Per Minnesota Statute 3.197, any report to the legislature must contain at the beginning of the report the cost of preparing the report, including any costs incurred by another agency or another level of government.

The estimated cost to prepare this report was \$2,500.

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Executive Summary

This report analyzes the assessment of 6 types of property: Residential/Seasonal, Apartments, Commercial-Industrial, Resorts, Farms, and Timber. In 2008 the real estate market continued to slow down throughout Minnesota with the number of sales declining for all property classes except timber. These trends have continued beyond the reporting period into 2009.

Assessment quality remained relatively consistent between the 2007 and 2008 assessments. This is reflected in both of the primary measures of assessment quality, the *sales ratio* and the *coefficient of dispersion*. As a general rule, both sales ratios and coefficients of dispersion are better in classes with more sales activity.

The *coefficient of dispersion* (COD) measures the uniformity of assessments. The coefficients generally were within the International Association of Assessing Officers' (IAAO) acceptable ranges in counties that had an adequate sample of sales. The IAAO ranges are shown on page 7, in Table 4.

A *sales ratio* measures how close assessors' values are to the ultimate sales price of property. The statewide *median sales ratios* for the 6 property types were all in the targeted 90% to 105% range. The residential ratios were down from 2007 as assessors reacted to the weakening market in most areas. For agricultural properties, the median in 2008 was slightly lower than in 2007, possibly due to a continuation of a strong farm real estate market.

Assessors made smaller value increases for 2008 than in any year since 1994. The estimated market values for the commercial, agricultural, and timber classes were the only ones that grew by more than 5%. In the period from 2000 through 2006 all values increased by at least 10% annually, but the statewide values for residential property declined between 2007 and 2008 and have continued to decline in the period following the end of this study.

Between 2007 and 2008, many counties reported market value decreases in a number of property types. See Table 1.

<u>Type</u>	<u>Number of counties with decreased value</u>	<u>Statewide change in value</u>
Residential	11	-0.7%
Apartment	15	2.0%
Seasonal	16	3.8%
Farm	15	6.3%
Comm/ Industrial	4	6.7%
Other	19	3.1%

Table 1

2009 PROPERTY VALUES AND ASSESSMENT PRACTICES REPORT (ASSESSMENT YEAR 2008)

INTRODUCTION

During the 2001 special legislative session, the state legislature mandated an annual report from the Department of Revenue on property tax values and assessment practices within the state of Minnesota. This year, 2009, is the seventh annual report on such data and practices to the legislature.

As outlined in Laws 2001, First Special Session, Chapter 5, Article 3, Section 92, the report contains information by major types of property on a statewide basis and at various jurisdictional levels. In accordance with that law, this report consists of:

- recent market value trends, including projections;
- trend analysis of excluded market value;
- shift in share analysis detailing the impact of market value trends on the proportional tax burden of major classes of property;
- assessment quality indicators, including sales ratios and coefficients of dispersion for counties;
- a summary of State Board Orders.

The purpose of this report is to provide the legislature with an accurate snapshot of the current state of property tax assessment, as well as an overview of the Department of Revenue's responsibility to oversee the state's property tax assessment process. This report provides a vehicle for an ongoing, systematic collection of property value data for the purpose of monitoring and analyzing underlying value trends and assessment quality indicators. This information and analysis is used to satisfy the Department's responsibility to inform government officials and the public about the valuation side of the property tax system.

Overview of the Revenue Department's Role

Property taxes are an important source of revenue for all local units of government in the state (such as cities, townships, school districts, special taxing districts, and counties). As such, the responsibility that it be administered fairly and uniformly is a paramount responsibility of the Department of Revenue. This responsibility is reflected in the primary objective of the Property Tax Division at the Department of Revenue: To ensure the proper administration of, and compliance with, property tax laws.

The Property Tax Division measures compliance with property tax laws through:

1. The State Board of Equalization, which ensures that property taxpayers pay their fair share – no more and no less. The Commissioner of Revenue, acting as the State Board of Equalization, has the authority to issue orders increasing or decreasing assessed market values in order to bring about equalization;

2. Promotion of uniformity of administration among the counties, thereby ensuring that each taxpayer will be treated in the same manner regardless of where the taxpayer lives;
3. Delivery of accurate and timely aid calculations, certifications, and actual aid payments;
4. Education and information supplied to county officials, including technical manuals, bulletins, answers to specific questions, and courses taught by Division personnel. These offerings provide county officials the support and training necessary to administer the property tax laws equitably and uniformly. In addition, education and information that the Division provides to taxpayers helps ensure they pay no more and no less than the law requires.

System Basics

In Minnesota, property tax is an ad valorem tax (a tax in proportion to value). For most property, it is levied in one year, based on the property assessment as of January 2nd, and becomes payable in the following calendar year. For manufactured homes classed as personal property, the tax is levied and payable in the same year. The tax on a parcel of property is based primarily on its Estimated Market Value (EMV), property class, the total value of all property within the taxing areas, and the budgets of all local governmental units located within the taxing area.

Estimated Market Value (EMV) is an assessor's estimate of the property's sales price if it were to be sold on the open market in a normal arms-length transaction; i.e., in an environment in which the buyer and seller are typically motivated and without influence from special financing considerations or the like. Assessors determine the EMV of all taxable property within their jurisdiction as of January 2nd of each year, except properties of public utilities, railroads, air-flight property and minerals, which are instead assessed by Property Tax Division personnel.

The EMV is not necessarily the value on which the property is taxed. The legislature has provided various programs which may reduce the market value for certain types of property for purposes of taxation. These reductions are made by deferment, limitation or exclusion, such as the Limited Market Value, Green Acres, or This Old House programs. The market value after these reductions are applied is referred to as the Taxable Market Value, or TMV. The example in Table 2 on page 4 shows a possible transition from Estimated Market Value to Taxable Market Value.

The Limited Market Value law limits how much in value certain property may increase from year to year. The Limited Market Value law does not apply to increases in value due to improvements, and is scheduled to phase out by assessment year 2009. A more comprehensive picture and analysis of Limited Market Value may be found in the Department of Revenue's *Annual Report on Limited Market Value*, which is due each March 1st to the legislature.

Market Value Calculation Example 2008 for taxes payable in 2009

		(a) AY 2007	(b) AY 2008
1.	Market Value Irrespective of Contaminants	\$450,000	\$480,000
2.	Contamination Value	120,000	120,000
3.	Estimated Market Value (EMV) [1b – 2b]	330,000	360,000
4.	Green Acres Deferment	50,000	50,000
5.	Open Space Deferment	NA	NA
6.	Aggregate Resource Preservation Deferment	NA	NA
7.	Market Value Subject To Limitation [3b-4b-5b-6b-9b]		305,000
8.	Limited Market Value Reduction [7b – (the greater of 10a x 115% or (7b-10a) x 50% + 10a)]		7,400 [305,000-(258,800x115%)]
9.	Additional Value: (new construction)		5,000
10.	Limited Market Value (LMV) [7b-8b+9b]	258,800	302,600
11.	Platted Vacant Land Exclusion	NA	NA
12.	“This Old House” Exclusion	12,000	9,000
13.	“This Old Business” Exclusion	15,000	15,000
14.	Disabled Veterans Exclusion	NA	NA
15.	Mold Damage Reduction	NA	NA
16.	Lead Hazard Reduction	NA	NA
17.	Taxable Market Value (TMV) [10b-11b-12b-13b-14b-15b-16b]	\$231,800	\$278,600

Note: The example can be found in Section 04.11 of the Auditor/Treasurer Manual along with other examples and further explanation. This rather extreme scenario assumes that the parcel:

- (1) Is a split class farm homestead/commercial parcel;
- (2) Is contaminated and subject to the contamination tax;
- (3) Qualifies for the Green Acres Deferment;
- (4) Qualifies for the limited market value reduction;
- (5) Has qualifying improvements under “This Old House”; and
- (6) Has qualifying improvements under “This Old Business.”

Table 2

Sales Ratio Studies

There are 87 counties, 854 cities and 1,807 townships in the state, which encompass 2,708,487 taxable real property parcels. Minnesota Statutes require all property to be assessed at fair market value annually. Compliance efforts by individual taxing jurisdictions have resulted in a combined total of nearly 90% of taxable parcels which changed in value from 2007 to 2008.

In order to evaluate the accuracy and uniformity of assessments within the state (and thus to ensure compliance with property tax laws), the Property Tax Division conducts annual sales ratio studies which measure the relationship between appraised values and market values or the actual sales price. As a mathematical expression, a sales ratio is the assessor's estimated market value of a property divided by its actual sales price, as seen in the following illustration, Equation 1:

$$\text{SALES RATIO} = \frac{\text{Assessor's Estimated Market Value}}{\text{Sales Price}}$$

Equation 1

The sales ratio study provides an indication of the level of assessment (how close appraisals are to market value on an overall basis), as well as the uniformity of assessment (how close individual appraisals are to the median ratio and each other).

The results from the studies are then used to assist the equalizing of values within the state. The State Board of Equalization directly equalizes property by ordering jurisdictions to raise or lower values by a certain percentage for a given property type; This is known as a State Board Order.

The ratios are also used in calculating state aids and levies to achieve fair distributions to schools and local governments. The ratio studies may also be used in Tax Court proceedings to support a claim that property is either fairly or unfairly assessed in a certain region.

In addition, county and city assessors are able to use the results from the Division's annual studies to monitor their own jurisdictions' appraisal performances, establish reappraisal priorities, identify any appraisal procedural problems, and/or adjust values between reappraisals.

What is involved in a sales ratio study? The basic steps are as follows:

1. Define the purpose and scope of the study
2. Collect and prepare appraisal and sales data
3. Match appraisal and sales data
4. Group the data by property types and geographic areas
5. Perform statistical analysis
6. Evaluate and apply results

In order for the study to be accurate, there are certain considerations that must be addressed: To ensure that the study is statistically precise, the sample should be of sufficient size and representative of the population, the market data (or actual sales) must be verified and screened,

and sales price may need to be adjusted for such conditions as seller-provided financing, inflation, or deflation.

The Department of Revenue conducts three sales ratio studies annually: 9- and 12-month studies are used to ensure the quality of assessment practices, and a 21-month study is used for levy and aid purposes as discussed in Appendix 3.

There were approximately 131,000 Certificates of Real estate Value (CRV) received in 2008 of which 60,000 were considered good, current-year, open-market sales. These 60,000 sales provide the basis for the sales ratio studies.

TWELVE-MONTH STUDY

The 12-month study is used mainly to determine State Board of Equalization Orders. The 12 months encompass the period from October 1 of one year through September 30 of the next year. The dates are based on the dates of sale as indicated on the Certificate of Real Estate Value (CRV). These certificates are filled out by the buyer or seller whenever property is sold or conveyed and filed with the county. The certificates include the sales price of the property, disclosure of any special financial terms associated with the sale, and whether the sale included personal property. The actual sales price from the CRV is then compared to what the county has reported as the market value.

The data contained in the report is based upon the 12-month study using sales from October 1, 2007, through September 30, 2008. These sales are compared with values from assessment year 2008, taxes payable 2009. The sale prices are adjusted for time and financial terms back to the date of the assessment, which is January 2 of each year. For this study, the sales are adjusted to January 2, 2008. In areas with few sales, it is very difficult to adjust for inflation or deflation because the sales samples are used to develop time trends. For example, based on an annual inflation rate of 6 percent (.5 percent monthly), if a house were purchased in August 2008 for \$200,000, it would be adjusted back to a January 2008 value of \$193,000, or the sales price would be adjusted downward by 3.5 percent for the seven-month timeframe back to January.

The State Board of Equalization Orders assessment changes when the level of assessment (as measured by the median sales ratio) is below 90 percent, or above 105 percent. The Orders are usually on a county-, city-, or township-wide basis for a particular classification of property. All State Board Orders must be implemented by the county. The changes will be made to the current assessment under consideration, for taxes payable the following year.

The equalization process (including issuing State Board Orders) is designed not only to equalize values on a county-, town-, or city-wide basis, but also to equalize values across county lines to ensure a fair valuation process across taxing districts, county lines, and property types. State Board Orders are implemented only after a review of values and sales ratios and discussions with the county assessors in the county affected by the State Board Orders, county assessors in adjacent counties, and the commissioner.

2007 and 2008 Assessment Year Results

PROPERTY TYPE	FINAL ADJUSTED MEDIAN RATIO		COEFFICIENT OF DISPERSION		SAMPLE SIZE	
	2007	2008	2007	2008	2007	2008
State Board Year						
Residential/Seasonal	104.7	95.9	9.9	10.0	71,973	56,889
Apartment	95.6	96.4	14.5	13.8	555	413
Commercial/Industrial	100.9	98.6	19.6	18.1	1,710	1,550
Resorts	93.5	91.1	28.5	26.5	24	16
Farm	99.1	93.1	19.1	18.4	2,439	2,261
Timber	95.3	95.7	31.1	33.3	256	266

Table 3

Table 3 shows median sales ratios and coefficients of dispersion (COD) by property type for 2007 and 2008. The lower the COD, the more uniform are the assessments. A high coefficient suggests a lack of equality among individual assessments, with some parcels being assessed at a considerably higher ratio than others. Note that property types with smaller sample sizes tend to have lower sales ratios and higher CODs.

The International Association of Assessing Officers recommends trimming the most extreme outliers from the sample before calculating the COD. The trimming method is to exclude sales that are outside 1.5 times the interquartile range. This eliminates a few extreme sales that would distort the COD. Per the International Association of Assessing Officers, the acceptable ranges for the COD are as follows in Table 4:

Newer, homogenous residential properties	10.0 or less
Older residential areas	15.0 or less
Rural residential and seasonal properties	20.0 or less
Income producing: larger, urban area	15.0 or less
smaller, rural area	20.0 or less
Vacant land	20.0 or less
Depressed markets	25.0 or less

Table 4

The Property Tax Division is working collaboratively with the local assessment community to explore alternatives in bringing the actual COD to within the acceptable ranges displayed above.

NINE-MONTH STUDY

The nine-month study is a subset of the 12-month study and is used primarily by the Minnesota Tax Court. It is exactly the same as the 12-month study except for the sales during the fall months (October, November and December) are excluded from the study. Therefore, the latest nine-month study examines sales from January 1, 2007, through September 30, 2007. The Tax Court uses the sales ratio from the nine-month study when determining disputed market values.

STATEWIDE VALUES AND ASSESSMENT PRACTICES INDICATORS

The following pages contain statewide charts and maps showing information regarding property values sales ratio measures in Minnesota.

Chart 1 shows the statewide growth in estimated market and property value exclusions from 1994 through 2008.

Charts 2 through 6 show the statewide growth in estimated market value by major property types from 2003 through 2008.

Map 1, "Growth in Estimated Market Value," displays the percent change from assessment years 2007 to 2008 in estimated market value for each county.

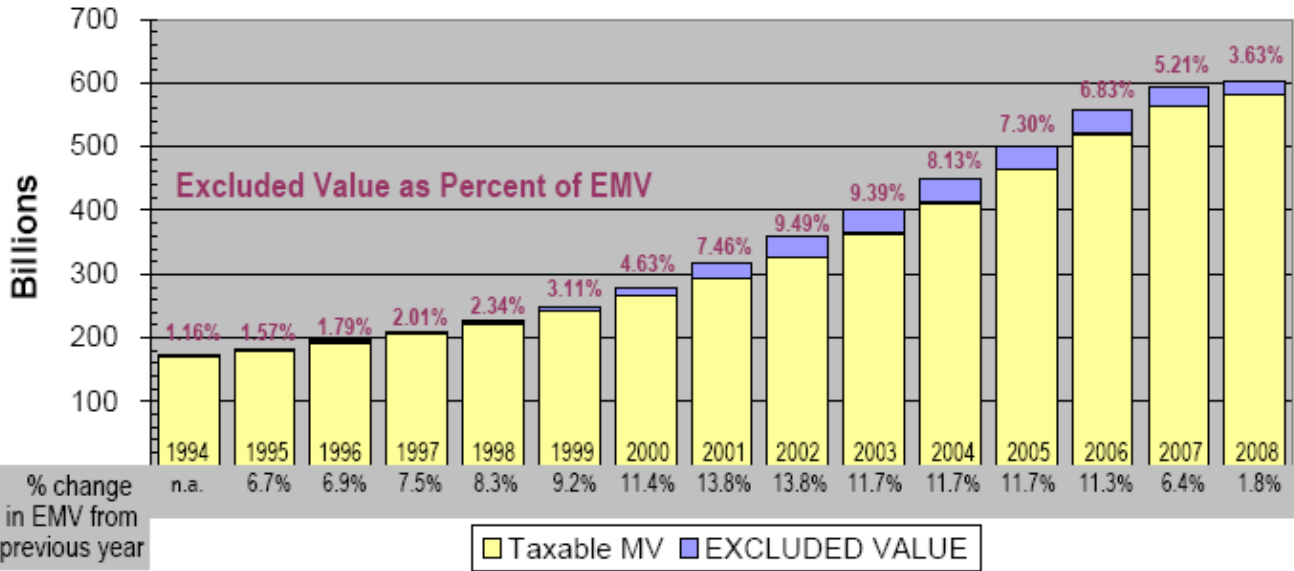
Map 2, "New Construction Percentage of Total Estimated Market Value," displays the average percentage that new construction composes of estimated market value for each county from assessment years 2007 to 2008.

Maps 3 to 6 show the 2008 State Board sales ratios and coefficients of dispersion (COD) for residential, apartment, farm, and commercial industrial property. The maps show the number of sales for the county and the shading indicates whether the median countywide sales ratio and COD were within the targeted ranges. The COD is smaller when there are more sales in a property type or when the properties are more similar. Residential CODs are within the standard range when they are between 0 percent and 15 percent. Other property types are within the standard range when they have CODs between 0 percent and 20 percent. It is important to remember that countywide ratios and CODs are more stable within areas that have larger samples and similar real estate markets. In counties with fewer sales spread out over large areas, different market forces may be moving sales prices in opposite directions so that it is harder to uniformly value property. In areas with small sales samples or lower priced properties the COD may be large due to a few outlier sales. For example, if an assessor is off by \$5,000 on a property, the error would be 2 percent on a \$250,000 sale, but 20 percent on a \$25,000 sale. If most of the properties in the sales sample were higher priced properties, the average difference would be small and the COD would be within the standard range. If most of the properties were lower priced it becomes more likely that the COD would be outside the standard range.

Map 7 shows the residential outlier index or percent of residential or seasonal sales that are considered outliers. Outliers are defined as sales that have ratios less than 65% or greater than 135%. The counties with darker shading have a higher percent of outliers. Counties with few sales or with sales in areas with very different markets tend to have a higher percentage of outliers than counties with large sales samples.

Map 8 shows the distributions of 2008 state board orders by county. Map 9 shows the percent of cities or townships within a county that received a state board order. State board orders are blanket adjustments to values in a property type to get the level of assessment within the 90% to 105% acceptable range.

Growth in Total EMV, TMV and Excluded Value 1994-2008



Note: Most of the excluded value is Limited Market Value (LMV). In 2006, for example, LMV accounted for approximately 75% of the total excluded value.

Chart 1

Statewide Total and Residential Homestead Percent Change in Estimated Market Value

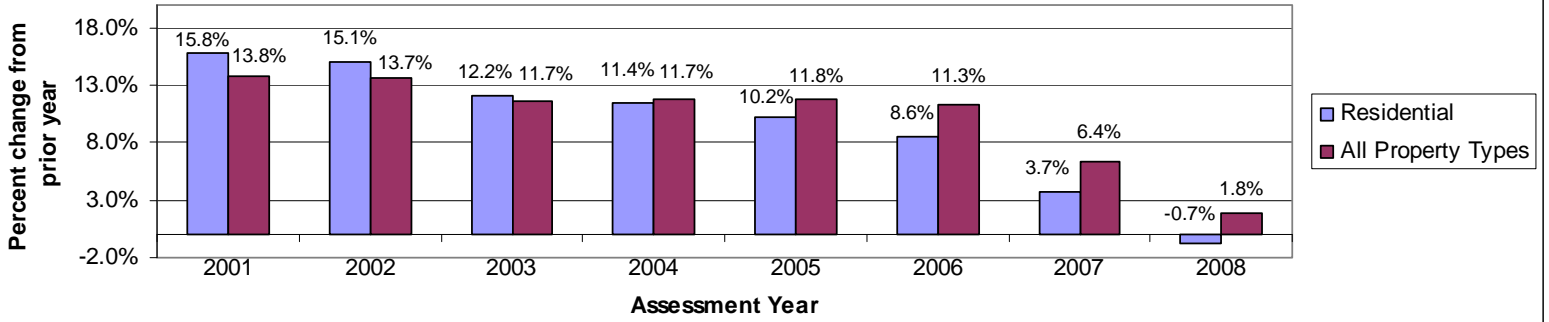


Chart 2

Statewide Commercial-Industrial Percent Change in Estimated Market Value

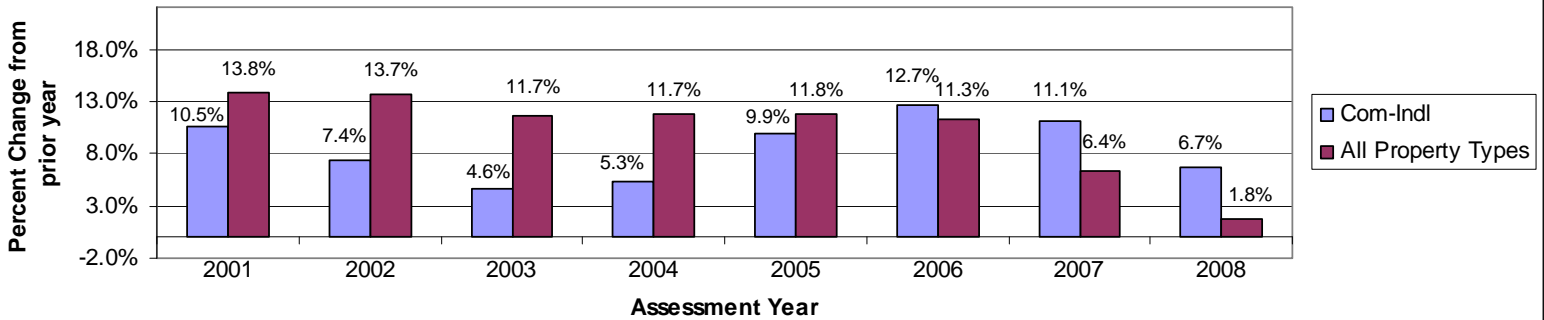


Chart 3

Statewide Farm and Timber Percent Change in Estimated Market Value

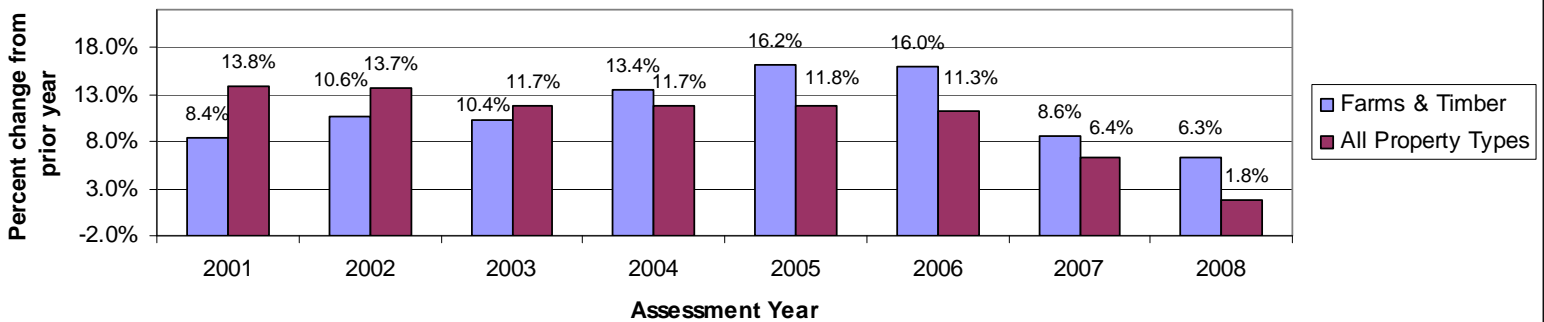


Chart 4

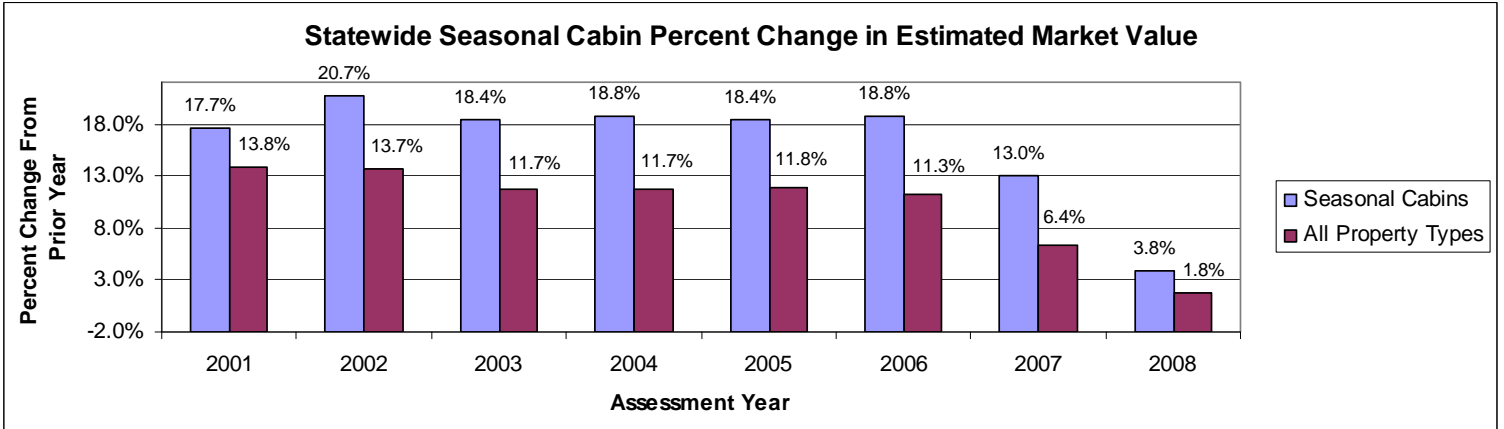


Chart 5

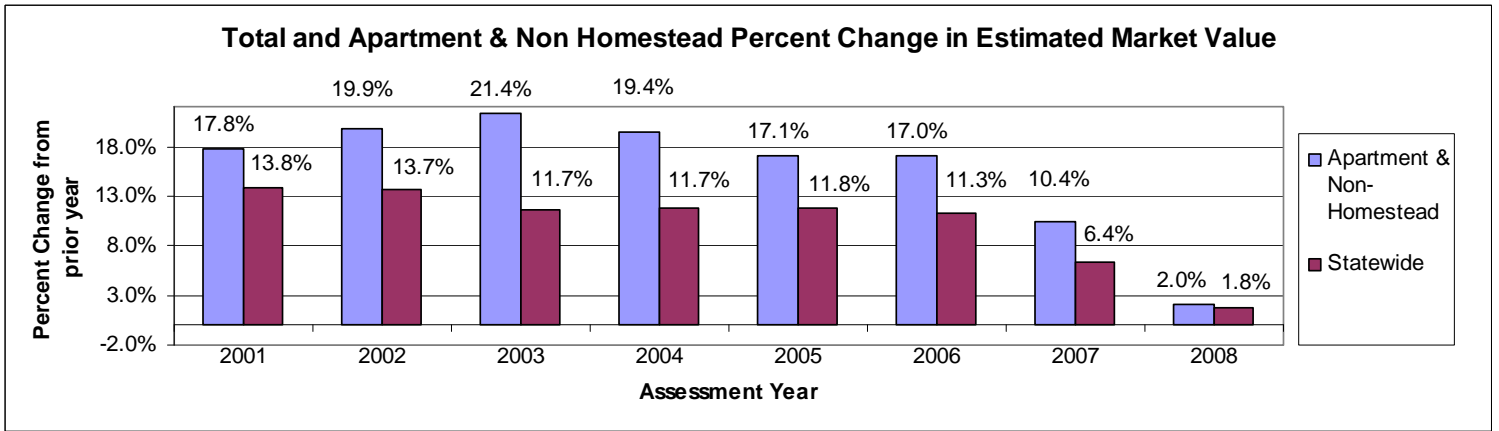
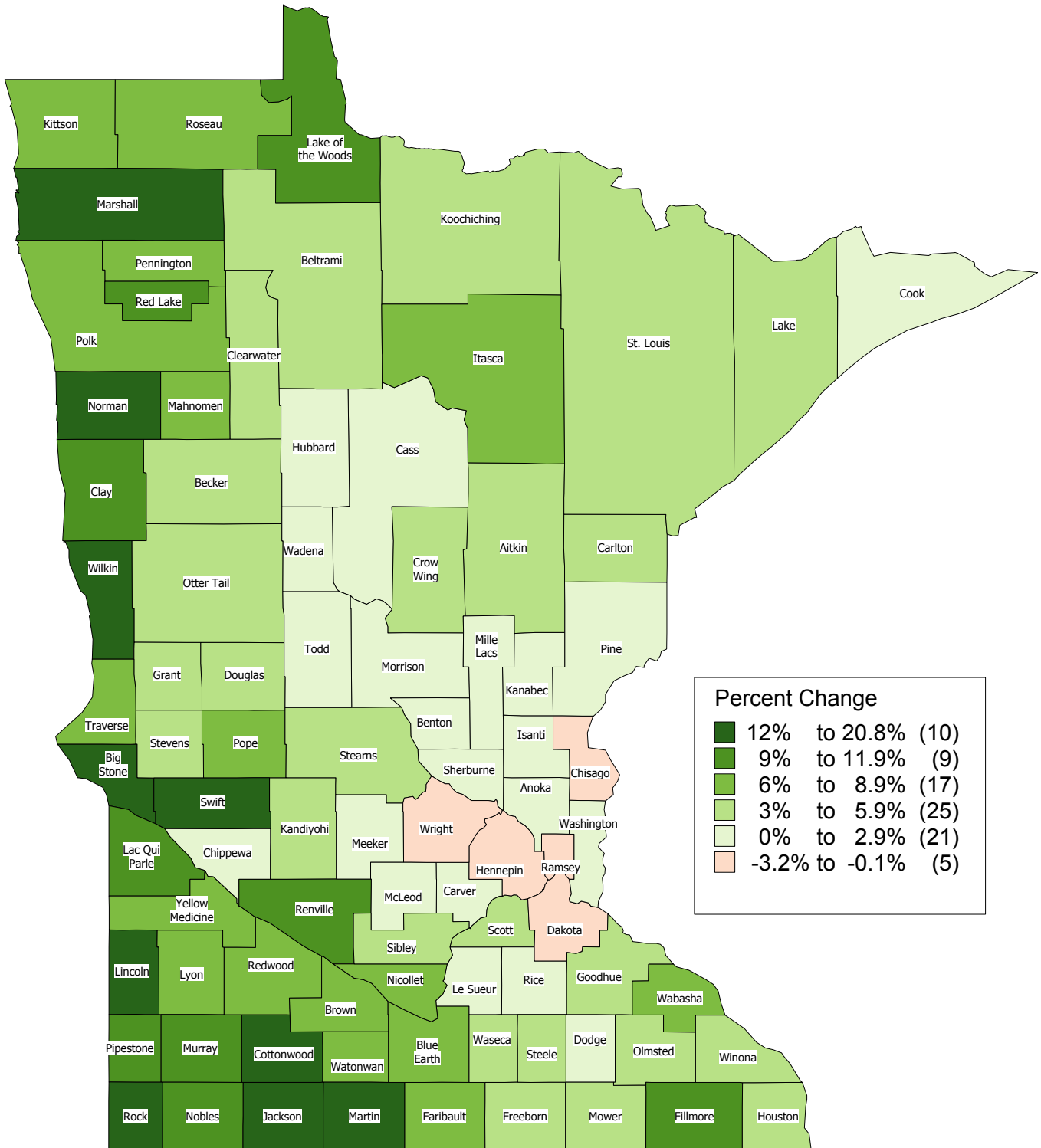


Chart 6

Growth in Estimated Market Value 2007-2008



Source: Minnesota Revenue Property Tax Division

Market Value by Parcel File

Date Prepared: February 19, 2009

Map colors based on www.ColorBrewer.org

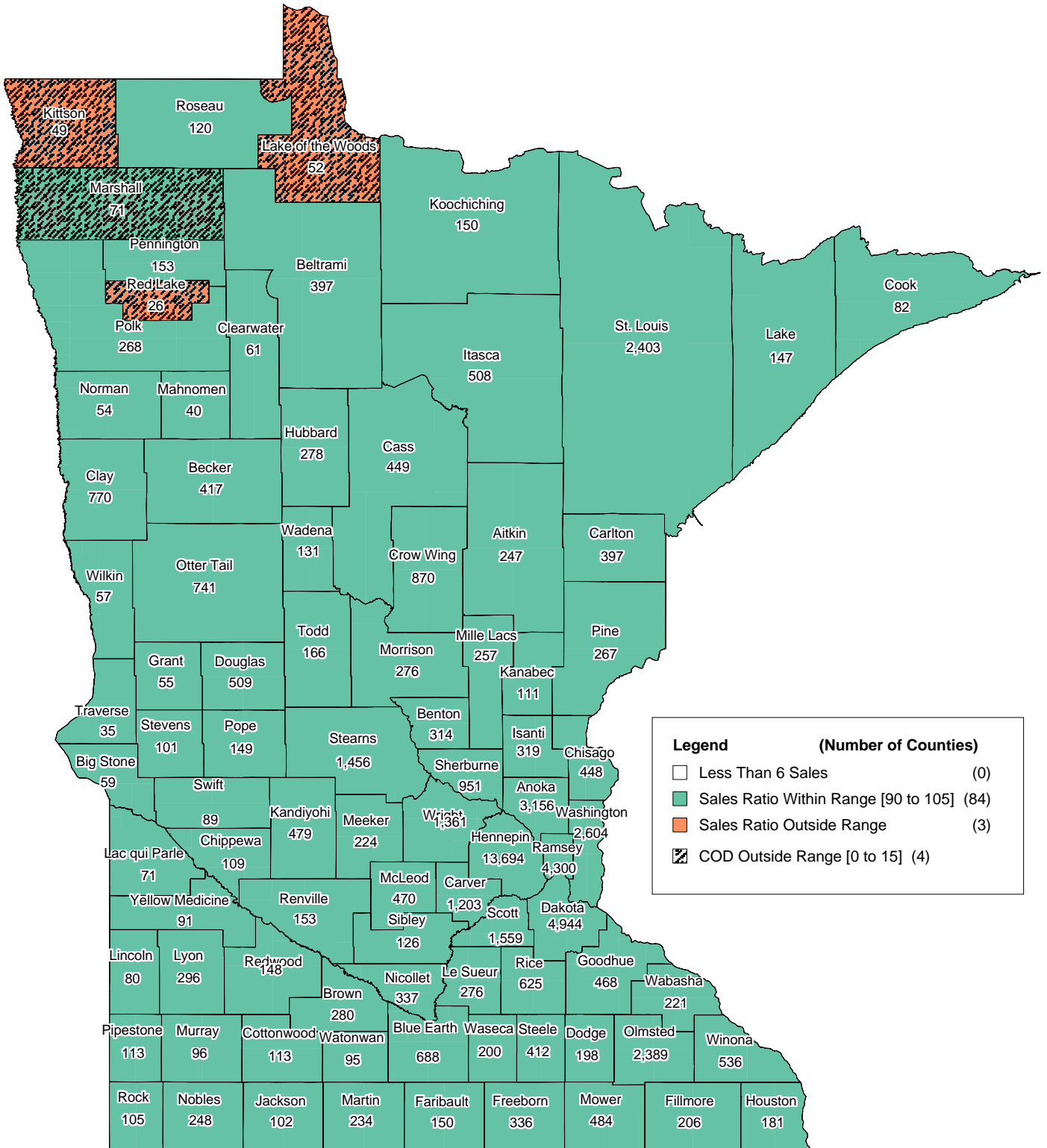
Map 1

MINNESOTA • REVENUE

Residential/Cabin - Assessment Year 2008

Median Sales Ratio and Trimmed Coefficient of Dispersion (COD)

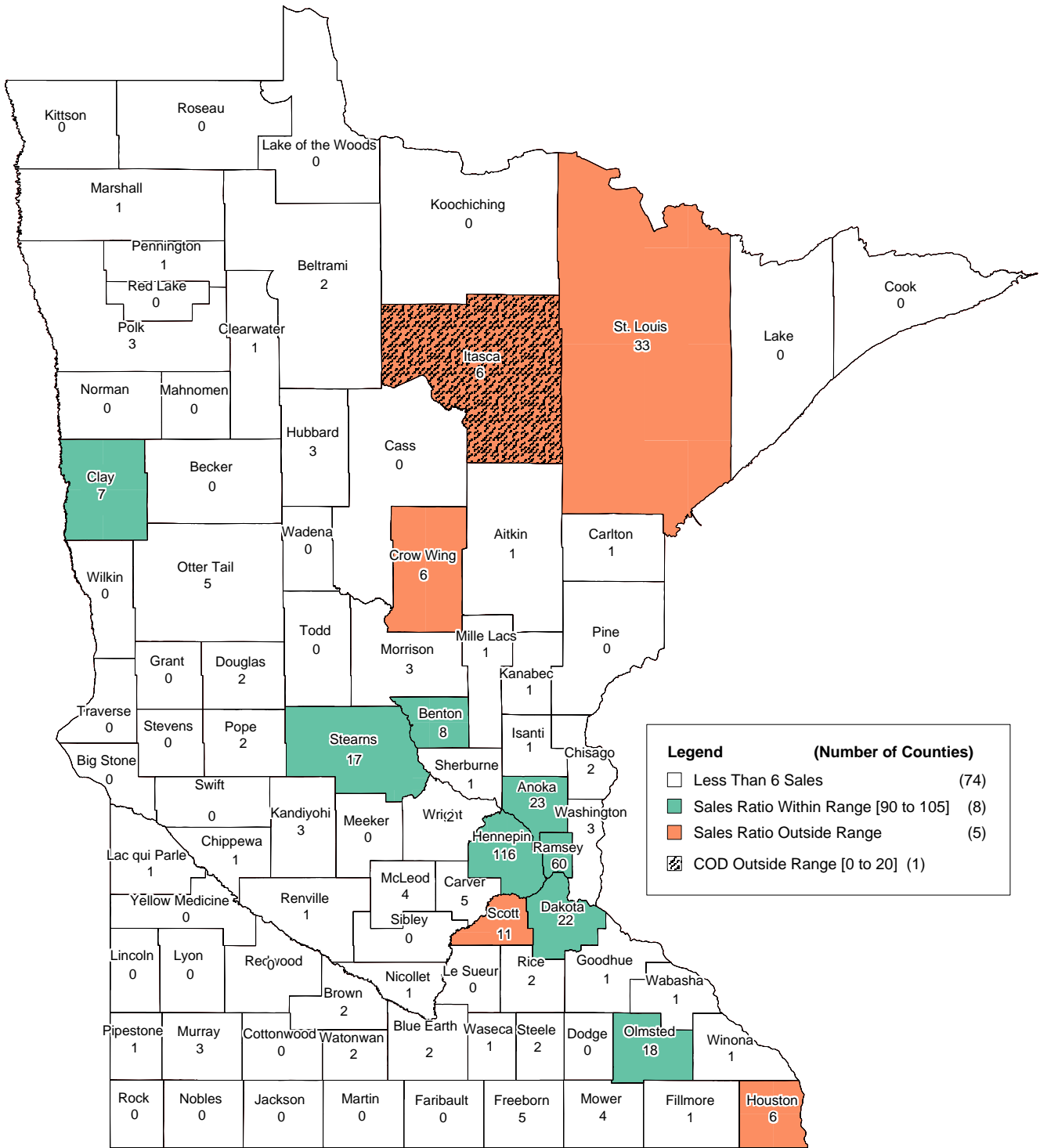
Counties labeled with number of sales



Apartments - Assessment Year 2008

Median Sales Ratio and Trimmed Coefficient of Dispersion (COD)

Counties labled with number of sales

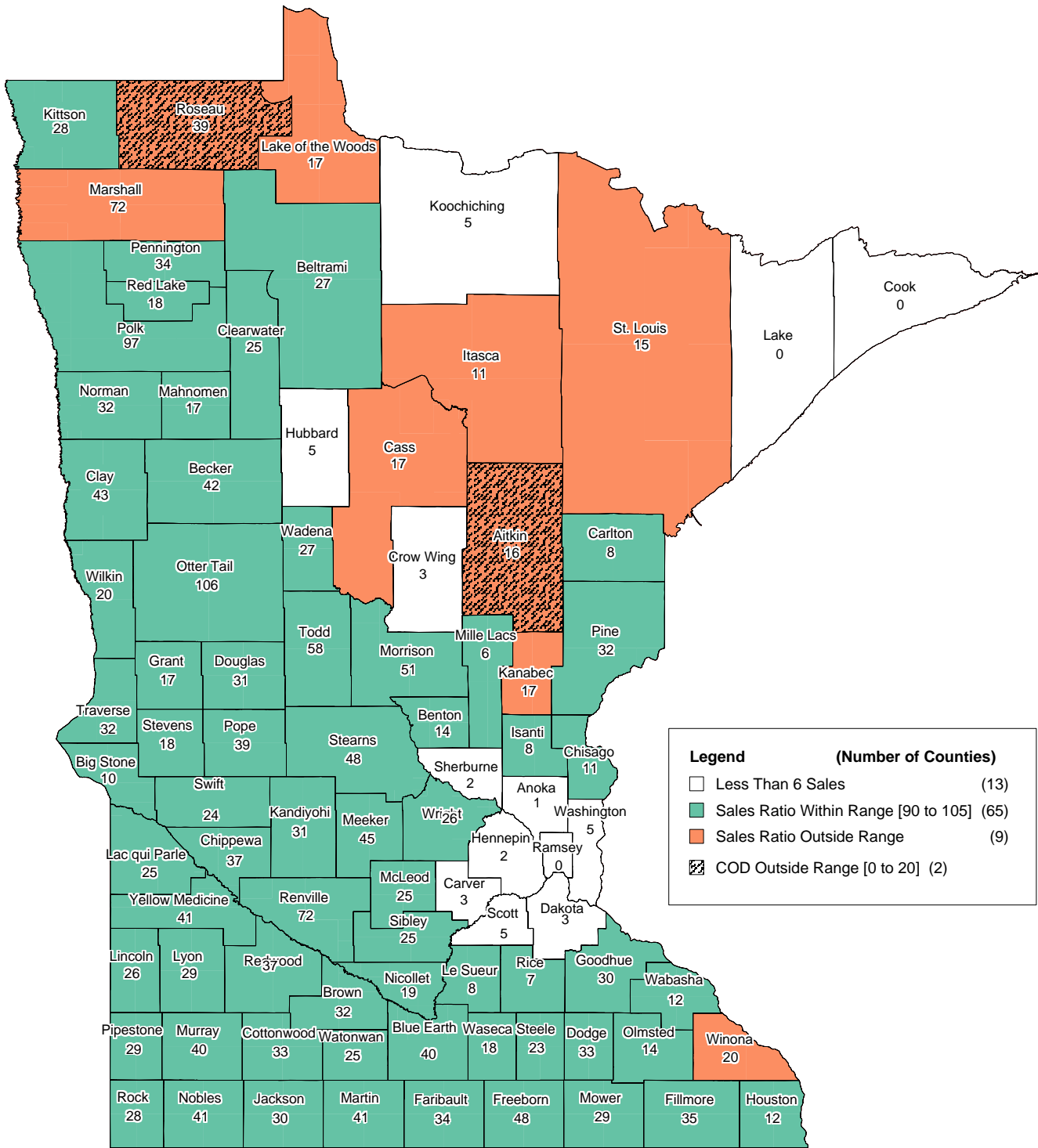


Map 4

May 13, 2008 | Minnesota Revenue Property Tax Division

Farm - Assessment Year 2008 Median Sales Ratio and Trimmed Coefficient of Dispersion (COD)

Counties labeled with number of sales

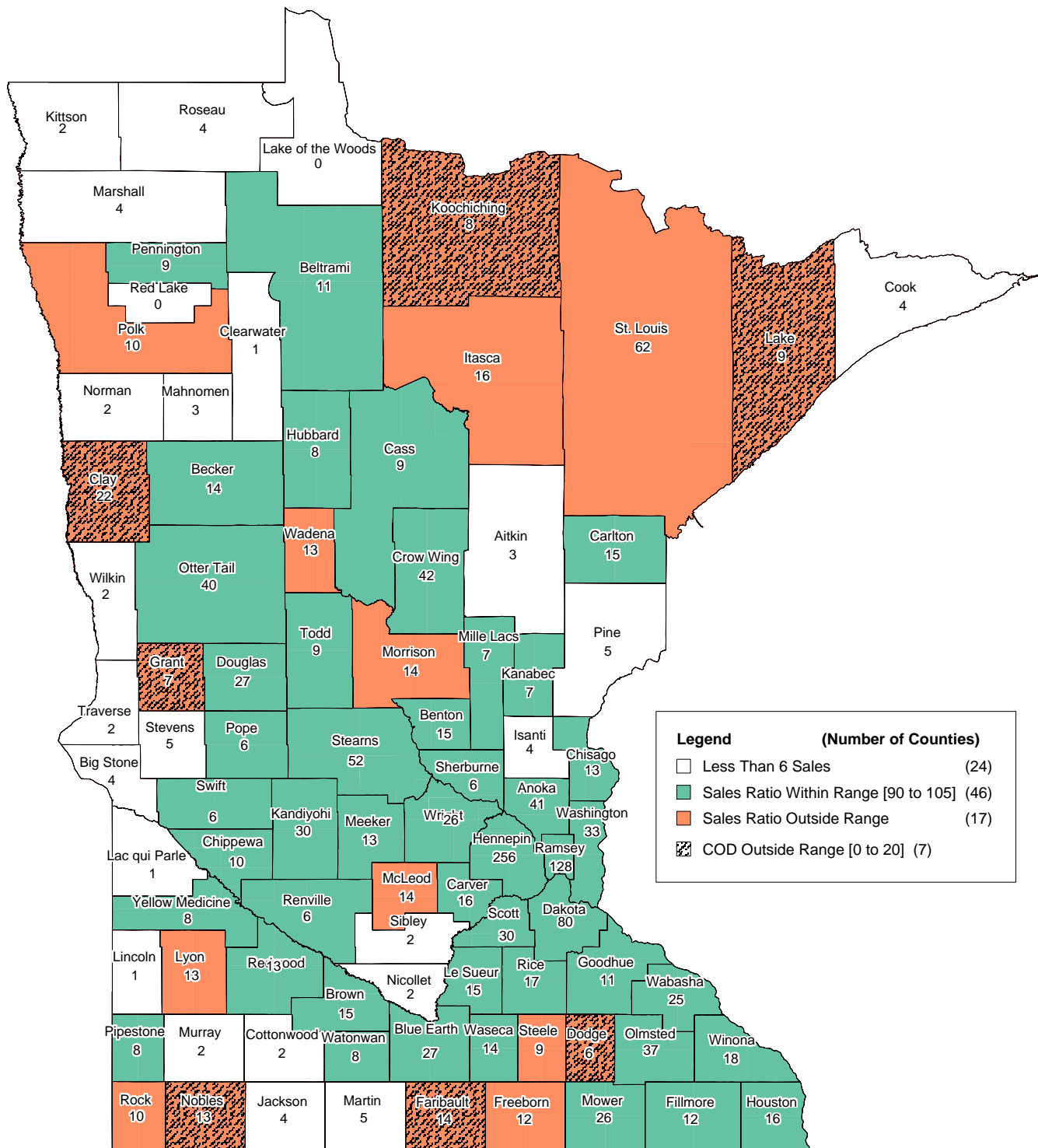


Map 5

May 13, 2008 | Minnesota Revenue Property Tax Division

Commercial/Industrial - Assessment Year 2008 Median Sales Ratio and Trimmed Coefficient of Dispersion (COD)

Counties labeled with number of sales

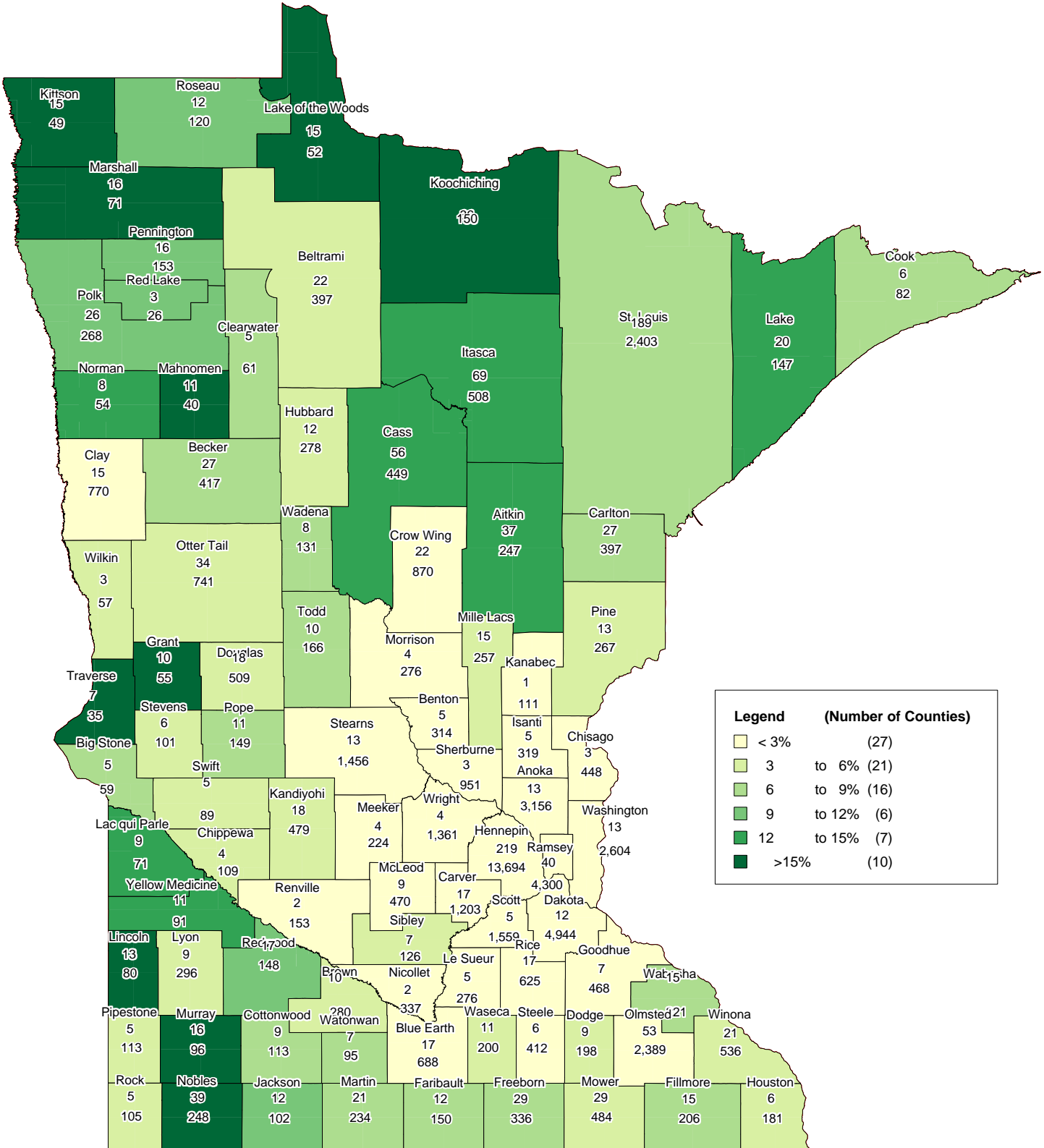


Map 6

May 13, 2008 | Minnesota Revenue Property Tax Division

Residential Fixed Outlier Index - 65% to 135% Percent of Sales Outside Fixed Outlier Range

Counties labeled with number of outliers above number of sales



Map 7

May 13, 2008 | Minnesota Revenue Property Tax Division

Frequency of 2008 State Board Orders by Percent Adjustment by County *

County	Number with a class of property adjusted by: (%)											Type of orders																									
	Countywide orders						City/Town orders					Affected cities/towns		Type of orders																							
	+5%	+10%	15%	20%	25%	40%	-15%	-10%	-5%	+5%	+10%	+15%	+20%	+25%	Total # affected ¹	Total # of cities/towns ²	% Affected (excluding countywide)	Ag-L	Ag-S	Ag-LS	Apt-LS	Res-L	Res-S	Res-LS	SRR-L	SRR-S	SRR-LS	Tim-L	Com-L	Com-S	Com-LS	Ind-L	Ind-S	Ind-LS			
Statewide	1	4	0	1	0	3	0	0	2	35	58	4	8	0	107.0	2,609	4%																				
2 ANOKA											1				1	21	5%																				
4 BELTRAMI											9				9	60	15%																				
6 BIG STONE									1						1	22	5%																				
9 CARLTON										1					1	34	3%																				
15 CLEARWATER	1								1	19					20	26	77%																				
18 CROW WING									2			1			3	33	9%																				
22 FARIBAUT									1	2					3	31	10%																				
24 FREEBORN									1						1	34	3%																				
25 GOODHUE									1						1	31	3%																				
26 GRANT									2						2	23	9%																				
30 ISANTI									2	2					4	32	13%																				
36 KOOCHICHING ³	2	1				3			2			4			6	11	55%																				
39 LAKEWOODS															3	31	10%																				
41 LINCOLN									1						1	19	5%																				
43 MC LEOD									1						1	30	3%																				
44 MAHONMEN										1					1	26	4%																				
45 MARSHALL									3						3	19	16%																				
47 MEEKER ⁵	1								1	1					2	47	4%																				
52 NICOLLET									1						1	31	3%																				
53 NOBLES										1					1	26	4%																				
57 PENNINGTON									4	13					17	29	59%																				
58 PINE									1	1					2	16	13%																				
60 POLK									2	1					3	41	7%																				
61 POPE										2					2	21	10%																				
63 RED LAKE	1								1						1	19	5%																				
67 ROCK												1			1	17	6%																				
69 ST LOUIS									5	2	2				9	65	14%																				
79 WABASHA									1	2					3	31	10%																				
80 WADENA									1						2	30	7%																				
82 WASHINGTON										1					1	33	3%																				
83 WATONWAN												1			1	20	5%																				
TOTALS	1	4	0	1	0	3	0	0	2	35	58	4	8	0	107	2,609	4%																				

Key

Ag-L	Agricultural Land Only	Com-L	Commercial Land Only
Ag-LS	Agricultural Land and Structures	Com-S	Commercial Structures Only
Apt-LS	Apartment Land and Structures	Com-LS	Commercial Land and Structures
Res-L	Residential Land Only	Ind-LS	Industrial Land and Structures
Res-S	Residential Structures Only	Ind-L	Industrial Land Only
Res-LS	Residential Land and Structures	Ind-S	Industrial Structures Only
SRR-L	Seasonal Recreational Residential Land Only	♦	At least one of the orders was all parcels of this property type.
SRR-S	Seasonal Rec. Residential Structures Only	■	An order applied only to a subset of this property type -- includes or excludes certain plats, areas, parcels, lakes, lakeshore, property type codes, value ranges, parcel sizes, etc.
SRR-LS	Seasonal Rec. Residential Land and Structures		
Tim-L	Timber Land Only		

***Example Interpretation**

Marshall County had multiple board order adjustments ranging from 5% to 15% affecting timber land, residential, seasonal recreational residential, and agricultural properties. The orders affected 38 (or 63% of the jurisdictions in Marshall County. (See page A5 & A6 for additional details.)

² Total includes counties without orders (not shown).
³ \$100 per acre on base values outside land value zone one
⁴ No changes to Green Acre (low) value
⁵ Excluding some cities and townships

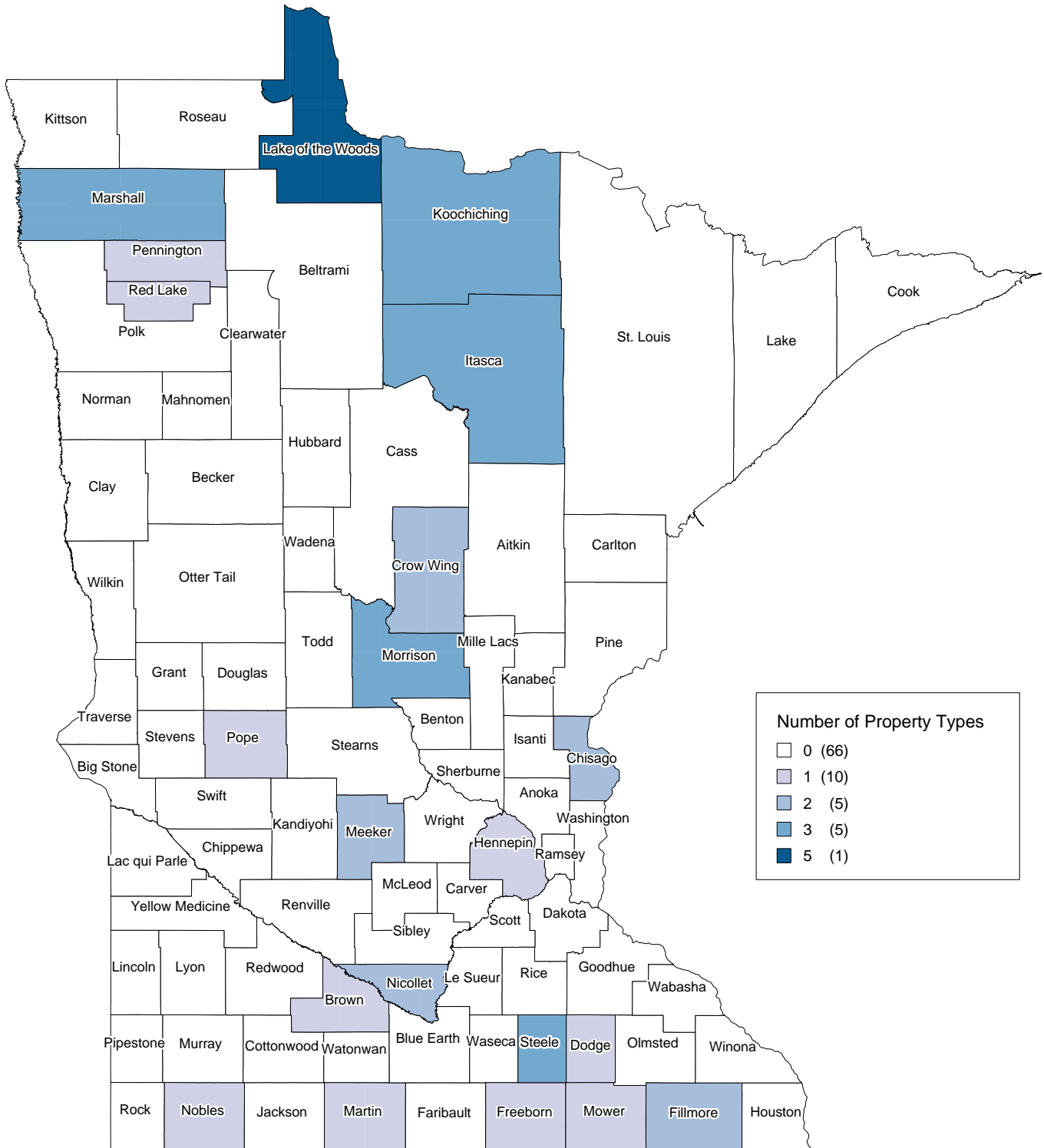
Summary of 2008 State Board Orders by Property Classification and Jurisdictions*

PROPERTY CLASSIFICATION	BOARD ORDER <i>% increase or decrease</i>	JURISDICTIONS AFFECTED BY ORDER				Percent of Total
		Countywide	City	Township	Total	
Residential	Subtotal	1	16	8	25	25.3%
	+40				0	0.0%
	+20		1	1	2	2.0%
	+15				0	0.0%
	+10		1		1	1.0%
	+5	1	12	6	19	19.2%
	-5		2		2	2.0%
	-15			1	1	1.0%
Apartment	Subtotal	1	0	0	1	1.0%
	+10	1			1	1.0%
	+5				0	0.0%
Commercial-Industrial	Subtotal	0	4	0	4	4.0%
	+20				0	0.0%
	+15				0	0.0%
	+10		3		3	3.0%
	+5		1		1	1.0%
	-5				0	0.0%
Seasonal-Recreational	Subtotal	2	8	4	14	14.1%
	+40				0	0.0%
	+20		1	1	2	2.0%
	+15				0	0.0%
	+10	1	1		2	2.0%
	+5	1	6	3	10	10.1%
	-5				0	0.0%
	-10				0	0.0%
Agricultural	Subtotal	2	0	52	54	54.5%
	+40				0	0.0%
	+25				0	0.0%
	+20				0	0.0%
	+15			15	15	15.2%
	+10	1		17	18	18.2%
	+5	1		20	21	21.2%
Timberland	Subtotal	1	0	0	1	1.0%
	+40				0	0.0%
	+20				0	0.0%
	+15				0	0.0%
	+10	1			1	1.0%
	+5				0	0.0%
Totals		7	28	64	99	100.0%

***Example Interpretation**

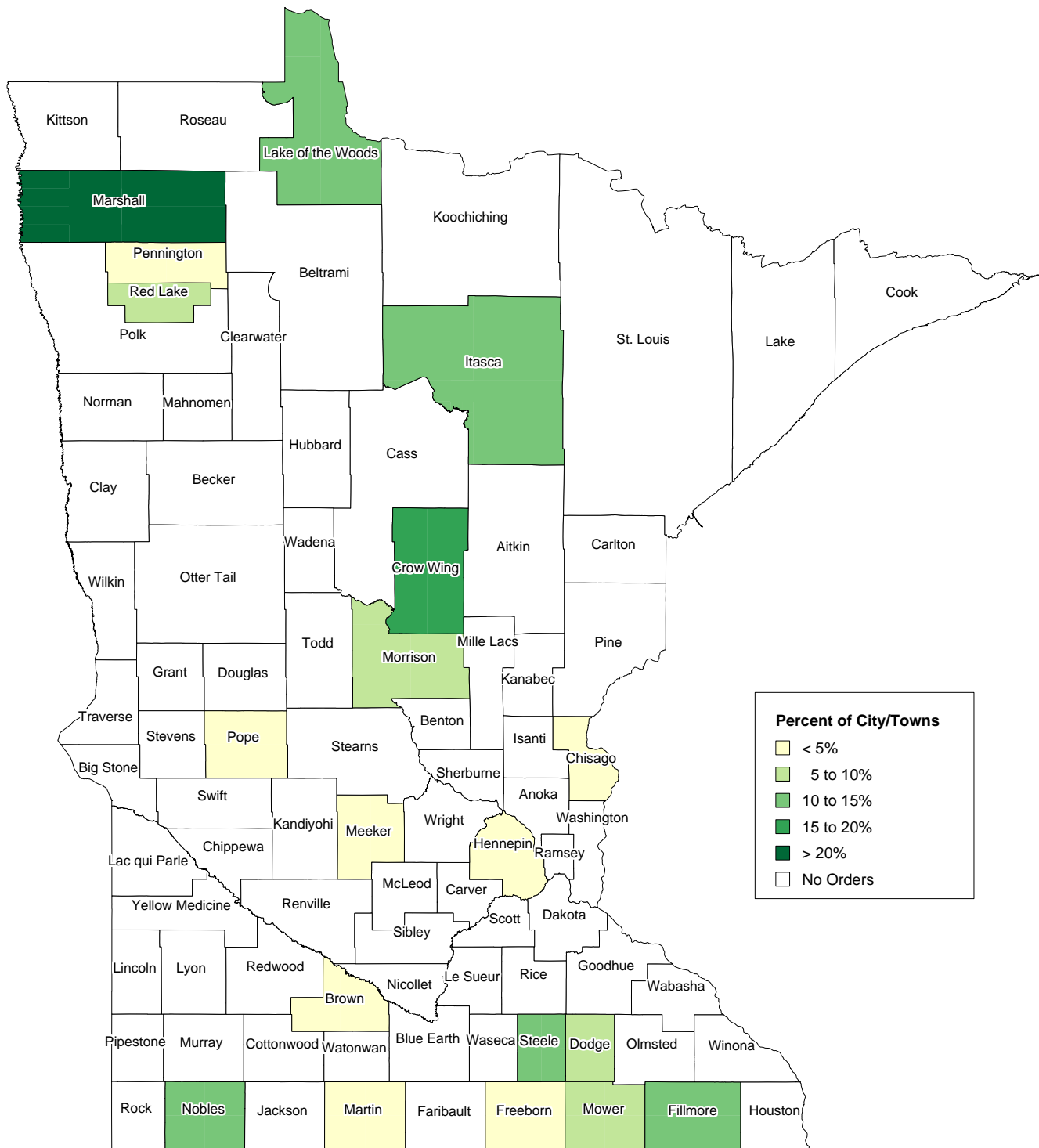
Nineteen (or 19.4%) of the 98 State Board Orders issued in 2008 were +5% adjustments to residential property.

Number of Property Types in Counties Affected by 2008 Board Orders



Percent of City/Town Jurisdictions in Counties Affected by 2008 Board Orders

(Excludes Countywide Orders)



APPENDIX I
SUMMARY OF 2008 STATE BOARD ORDERS

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Aitkin		No Changes		
Anoka		No Changes		
Becker		No Changes		
Beltrami		No Changes		
Benton		No Changes		
Big Stone		No Changes		
Blue Earth		No Changes		
Brown	City of: Springfield	Residential Land Only	+10	
Carlton		No Changes		
Carver		No Changes		
Cass		No Changes		
Chippewa		No Changes		
Chisago	City of: Rush City	Residential Land Only Seasonal Residential Recreational Land Only	+5 +5	
Clay		No Changes		

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Clearwater		No Changes		
Cook		No Changes		
Cottonwood		No Changes		
Crow Wing	Cities of: Deerwood	Residential Land Only	+5	
		Seasonal Residential Recreational Land Only	+5	
	Ironton	Residential Land Only	+5	
		Seasonal Residential Recreational Land Only	+5	
	Township of: Jenkins	Residential Land Only	+5	
		Seasonal Residential Recreational Land Only	+5	
Dakota		No Changes		
Dodge	Townships of: Canisteo	Residential Structures Only	+10	
		Residential Structures Only	+10	
Douglas		No Changes		
Faribault		No Changes		
Fillmore	Townships of: Canton	Residential Land Only	+20	
		On First Acre Building Site Only		
		Seasonal Residential Recreational Land Only On First Acre Building Site Only	+20	
	Jordan	Residential Land Only	+10	
		On First Acre Building Site Only		
		Seasonal Residential Recreational Land Only On First Acre Building Site Only	+10	

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Freeborn	City of: Albert Lea	Commercial Land and Structures	+10	
Goodhue		No Changes		
Grant		No Changes		
Hennepin		No Changes		
Minneapolis	Nokomis Community of the Southeast Quadrant	Residential Structures Only	+5	
	University Community of the Northeast Quadrant	Residential Structures Only	+5	
Houston		No Changes		
Hubbard		No Changes		
Isanti		No Changes		
Itasca	City of: Deer River	Commercial Land and Structures	+10	
	Township of: Unorg 60-24	Residential Land and Structures	+5	
		Seasonal Residential Recreational Land and Structures	+5	

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Jackson		No Changes		
Kanabec		No Changes		
Kandiyohi		No Changes		
Kittson		No Changes		
Koochiching	Countywide	Agricultural Land Only	+5	
		Seasonal Residential Recreational Land Only On Parcels Greater than 34.5 Acres Only	+5	
		Timber Land Only	+5	
Lac qui Parle		No Changes		
Lake		No Changes		
Lake of the Woods	Countywide	Agricultural Land and Structures	+10	
		Timber Land Only	+10	
	Countywide Excluding Angle Twp "On" Water Parcels	Seasonal Residential Recreational Land Only Over 34.5 Acres Only	+10	
	City of: Baudette	Residential Land and Structures	+5	
		Seasonal Residential Recreational Land and Structures	+5	
	Township of: Angle	Residential Land and Structures	+20	
		Seasonal Residential Recreational Land and Structures On Water Front Parcels Only	+20	

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
LeSueur		No Changes		
Lincoln		No Changes		
Lyon		No Changes		
Mahnomen		No Changes		
Marshall	Townships of:			
	Agder	Agricultural Land Only	+15	
	Alma	Agricultural Land Only	+10	
	Augsburg	Agricultural Land Only	+10	
	Big Woods	Agricultural Land Only	+10	
	Bloomer	Agricultural Land Only	+10	
	Boxville	Agricultural Land Only	+10	
	Cedar	Agricultural Land Only	+15	
	Como	Agricultural Land Only	+15	
	Comstock	Agricultural Land Only	+5	
	Donnelly	Agricultural Land Only	+10	
	Eagle Point	Agricultural Land Only	+10	
	East Park	Agricultural Land Only	+5	
	East Valley	Agricultural Land Only	+15	
	Eckvoll	Agricultural Land Only	+15	
	Espelie	Agricultural Land Only	+15	

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>		
			<u>Percent Increase</u>	<u>Percent Decrease</u>	
Marshall	Townships of: Excel	Agricultural Land Only	+5		
		Residential Land and Structures	+5		
		Seasonal Residential Recreational Land and Structures	+5		
		Foldahl	Agricultural Land Only	+5	
		Fork	Agricultural Land Only	+10	
		Grand Plain	Agricultural Land Only	+15	
		Holt	Agricultural Land Only	+5	
		Huntly	Agricultural Land Only	+5	
		Lincoln	Agricultural Land Only	+5	
		Linsell	Agricultural Land Only	+15	
		Marsh Grove	Agricultural Land Only	+5	
		McCrea	Agricultural Land Only	+10	
		Middle River	Agricultural Land Only	+10	
		Moose River	Agricultural Land Only	+15	
		Moylan	Agricultural Land Only	+15	
		Nelson Park	Agricultural Land Only	+5	
		New Maine	Agricultural Land Only	+5	
		New Solum	Agricultural Land Only	+5	
		Newfolden	Agricultural Land Only	+5	
		Oak Park	Agricultural Land Only	+10	
		Parker	Agricultural Land Only	+10	
		Rollis	Agricultural Land Only	+15	
		Sinnott	Agricultural Land Only	+10	
		Spruce Valley	Agricultural Land Only	+5	

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Marshall	Townships of:			
	Tamarac	Agricultural Land Only	+10	
	Thief Lake	Agricultural Land Only	+15	
	Valley	Agricultural Land Only	+15	
	Vega	Agricultural Land Only Residential Land and Structures	+10 +5	
	Veldt	Agricultural Land Only	+15	
	Viking	Agricultural Land Only	+5	
	Wanger	Agricultural Land Only	+10	
	Warrenton	Agricultural Land Only	+10	
	West Valley	Agricultural Land Only	+5	
	Whiteford	Agricultural Land Only	+15	
Wright	Agricultural Land Only	+5		
Martin	City of: Welcome	Residential Land and Structures	+5	
McLeod		No Changes		
Meeker	City of: Dassel	Residential Land Only	+5	
		Seasonal Residential Recreational Land Only	+5	
Mille Lacs		No Changes		

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Morrison	Countywide	Apartments Land and Structures	+10	
	Township of: Pulaski	Residential Structures Only	+5	
		On Sullivan Lake "On Water" Only		
		Seasonal Residential Recreational Structures Only	+5	
		On Sullivan Lake "On Water" Only		
Mower	Cities of: Adams	Residential Land Only	+5	
	Racine	Residential Land Only		-5
Murray		No Changes		
Nicollet	Countywide Parcel Specific	Change Classification From Agricultural to Residential Parcels on Attachment Only		
Nobles	Cities of: Adrian	Residential Land and Structures		-5
	Bigelow	Residential Land and Structures	+5	
	Unincorporated Leota	Residential Land and Structures		-15
Norman		No Changes		
Olmsted		No Changes		
Otter Tail		No Changes		
Pennington	Township of: North	Residential Land and Structures	+10	

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Pine		No Changes		
Pipestone		No Changes		
Polk		No Changes		
Pope	Township of: Chippewa Falls	Agricultural Land Only On Market Value Only	+10	
Ramsey		No Changes		
Red Lake	City of: Oklee	Residential Land and Structures	+5	
Redwood		No Changes		
Renville		No Changes		
Rice		No Changes		
Rock		No Changes		
Roseau		No Changes		
St. Louis		No Changes		
Scott		No Changes		
Sherburne		No Changes		

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Sibley		No Changes		
Stearns		No Changes		
Steele	City of: Owatonna	Commercial Land Only	+10	
		Commercial Structures Only	+5	
	Townships of: Berlin	Residential Land and Structures		+5
		Deerfield	Residential Land and Structures	
Stevens		No Changes		
Swift		No Changes		
Todd		No Changes		
Traverse		No Changes		
Wabasha		No Changes		
Wadena		No Changes		
Waseca		No Changes		
Washington		No Changes		
Watonwan		No Changes		
Wilkin		No Changes		

**2008 State Board of Equalization
Summary of Board Orders**

<u>County</u>	<u>Assessment District</u>	<u>Type of Property</u>	<u>State Board Changes</u>	
			<u>Percent Increase</u>	<u>Percent Decrease</u>
Winona		No Changes		
Wright		No Changes		
Yellow Medicine		No Changes		

APPENDIX II

GLOSSARY

Estimated Market Value (EMV) The estimated market value is the assessor's estimate of what a property would sell for on the open market with a typically motivated buyer and seller without special financial terms. This is the most probable price, in terms of money, that a property would bring in an open and competitive market. The EMV for a property is finalized on the assessment date, which is January 2 of each year.

Certificate of Real Estate Value (CRV) A certificate of real estate value must be filed with the county auditor whenever real property is sold or conveyed in Minnesota. Information reported on the CRV includes the sales price, the value of any personal property, if any, included in the sale, and the financial terms of the sale. The CRV is eventually filed with the Property Tax Division of the Department of Revenue.

Coefficient of Dispersion (COD) The coefficient of dispersion is a measurement of variability (the spread or dispersion) and provides a simple numerical value to describe the distribution of sales ratios in relationship to the median ratio of a group of properties sold. The COD is also known as the "index of assessment inequality" and is the percentage by which the various sales ratios differ, on average, from the median ratio.

Limited Market Value (LMV) The limited market value is the market value of a property after statutory limits are imposed on the value of the property. The law surrounding the LMV is meant to limit how much the value of a property may increase from year to year.

Median Ratio The median ratio is a measure of central tendency. It is the sales ratio that is the midpoint of all ratios. Half of the ratios fall above this point and the other half fall below this point. The median ratio is used for the State Board of Equalization and the Minnesota Tax Court studies after all final adjustments.

Sales Ratio A sales ratio is the ratio comparing the market value of a property with the actual sales price of the property. The market value is determined by the county assessor and reported annually to the Department of Revenue. The actual sales price is reported on the Certificate of Real Estate Value (CRV).

State Board of Equalization The State Board of Equalization consists of the Commissioner of Revenue, who has the power to review sales ratios for counties and make adjustments in order to bring estimated market values within the accepted range of 90 to 105 percent.

State Board Order A state board order is issued by the State Board of Equalization to adjust the market values of certain property within certain jurisdictions.

Taxable Market Value (TMV) The taxable market value is the value that a property is actually taxed on after all limits, deferrals, and exclusions are calculated. It may or may not be the same as the property's estimated market value or limited market value.

Trimming Method The trimming method used here is to exclude sales that are outside 1.5 times the inter-quartile range. This method starts by sorting the sample by ascending ratio then dividing the sample into quarters (quartiles). The first quarter is at the 25% point of sample. The second quartile is the 50% or median point. The third quartile is at the 75% point. The fourth quartile includes the highest ratios. The inter quartile range is the difference between the values at the first and third quartiles. This number is multiplied by 1.5 to calculate the trimming point for the upper and lower bounds when calculating the COD.

Adjusted Median Ratio The adjusted median ratio is calculated by multiplying the median ratio by one plus the overall percent change in value made by the local assessor between the prior and current assessment year (as seen in Equation 2.) The change in assessor's value is also called local effort.

$$\text{Adjusted median ratio} = \text{Median ratio} \times (1 + \text{local effort}).$$

Equation 2

APPENDIX III

TWENTY-ONE-MONTH STUDY

The 21-month study is completely different from the other two studies. Its purpose is to adjust values used for state aid calculations so that all jurisdictions across the state are equalized. In order to build stability into the system, a longer term of 21 months is used. This allows for a greater number of sales. While the nine- and 12-month studies compare the actual sales to the assessor's *estimated* market value, the 21-month study compares actual sales to the assessor's *taxable* market value. As with the nine- and 12-month studies, the sale prices are adjusted for time and terms of financing.

The 21-month study is used to calculate adjusted net tax capacities that are used in the foundation aid formula for school funding. It is also used to calculate tax capacities for local government aid (commonly referred to as LGA) and various smaller aids such as library aid. This study is also utilized by bonding companies to rate the fiscal capacity of different governmental jurisdictions.

The adjusted net tax capacity is used to eliminate differences in levels of assessment between taxing jurisdictions for state aid distributions. All property is supposed to be valued at its selling price in an open market, but many factors make that goal hard to achieve. The sales ratio study can be used to eliminate differences caused by local markets or assessment practices.

The adjusted net tax capacity is calculated by dividing the net tax capacity of a class of property by the sales ratio for the class. In the example below, the residential net tax capacity would be divided by the residential sales ratio to produce the residential adjusted net tax capacity. The process would be repeated for all of the property types. The total adjusted net tax capacity would be used in state aid calculations. Table 5 shows the calculation of adjusted net tax capacity in a school district.

PROPERTY TYPE NAME	TAXABLE NET TAX CAPACITY	SALES RATIO	ADJUSTED NET TAX CAPACITY
Residential	46,907,743	0.914	51,321,929
Apartment	1,318,862	0.916	1,439,884
Seasonal/Recreational	63,969	0.675	94,821
Farms	2,897,256	0.560	5,170,714
Commercial Only	12,929,619	0.806	16,039,526
Industrial Only	7,173,236	0.766	9,360,114
Timber	000	0	000
Public Utility	725,291	1.000	725,291
Railroad	58,374	1.000	58,374
Mineral	000	1.000	000
Personal	966,946	1.000	966,946
TOTAL	73,041,296	0.858	85,177,599

Table 5

REFERENCES

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