MINNESOTA · REVENUE

2010 Property Values and Assessment Practices Report

(Assessment Year 2009)

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 1, 2010

MINNESOTA · REVENUE

March 1, 2010

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

I am pleased to present to you the eighth 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 $2,800.

Table of Contents

Executive Summary

This report analyzes the assessment of 6 types of property: Residential/Seasonal, Apartments, Commercial-Industrial, Resorts, Farms, and Timber. The real estate market continued to slow down throughout Minnesota with the number of sales declining for all property classes through the fall of 2008 except for the agricultural class. These trends have continued beyond the reporting period, with the number of agricultural sales also slowing in calendar year 2009. Changes to the classification system became effective for the 2009 assessment. The change was away from the former agricultural classification system to 2a agricultural and 2b rural vacant land distinctions. The changes are described in a separate report to the legislature, *Assessment and Classification Practices Report: The Agricultural Property Tax Program, Class 2a Agricultural Property and Class 2b Rural Vacant Land Property*. The changes caused some property to change classification among agricultural, residential and seasonal recreational classes. Statewide assessor had to change the property classification on about 450,000 of the 2,726,507 taxable parcels. The reclassification and review is ongoing.

The classification changes to agricultural, timber, seasonal residential and residential properties made it impossible to use the traditional measures of assessment performance for the 2009 assessment year. Changes in level of assessment are mingled with class shifts so that the 2008 and 2009 classes do not contain the same properties. The Department requested special reporting from the counties in order to judge whether they met the requirements that the median ratio of agricultural properties were between 90% and 105%. Counties submitted preliminary market value by parcel files which were matched with the 2008 sales data. The resulting sales ratios were used to judge the quality of assessment. In counties that were not able to supply preliminary market value files, a review of sold and a sample of unsold properties was conducted. For the 2010 assessment the Department will require preliminary market value files from all counties.

Assessment quality remained relatively consistent between the 2008 and 2009 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 8, 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. Most ratios were down slightly from 2008 as assessors reacted to the weakening market in many areas. For agricultural, resort, and timber properties, the median in 2009 was slightly higher than in 2008 due to a continuation of strong real estate markets in those sectors. Assessors made smaller value changes for 2009 than in any year since 1994. The estimated market value for the farm and other classes was the only one that grew by more than 1%. 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 this study period and the period following the end of this study.

Between 2008 and 2009, many counties reported market value decreases in a number of property types. See Table 1.

Type	Number of counties with decreased value	Statewide change in value
Residential	42	-4.6%
Apartment	33	0.2%
Seasonal	31	-0.6%
Farm	27	7.9%
Comm/Industrial	20	-0.4%
Other*	32	+10.2%

Table 1

*The overall increase in the other type is mainly due changes in public utility valuations.

2010 PROPERTY VALUES AND ASSESSMENT PRACTICES REPORT (ASSESSMENT YEAR 2009)

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, 2010, is the eighth 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 valuation trends within 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 (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 2^{nd}, 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 2^{nd} 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 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 5 shows a possible transition from Estimated Market Value to Taxable Market Value.

Market Value Calculation Example
2009 for taxes payable in 2010

		AY 2009
1.	Market Value Irrespective of Contaminants	$480,000
2.	Contamination Value	120,000
3.	**Estimated Market Value (EMV)** [1 – 2]	360,000
4.	Green Acres Deferment	50,000
5.	Open Space Deferment	NA
6.	Aggregate Resource Preservation Deferment	NA
7.	Platted Vacant Land Exclusion	NA
8.	"This Old House" Exclusion	9,000
9.	"This Old Business" Exclusion	15,000
10.	Disabled Veterans Exclusion	NA
11.	Mold Damage Reduction	NA
12.	Lead Hazard Reduction	NA
13.	**Taxable Market Value (TMV)** [3-4-5-6-7-8-9-10-11-12]	$286,000

Table 2

Note: Additional examples can be found in Section 04.11 of the Auditor/Treasurer Manual. 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) Has qualifying improvements under "This Old House"; and
(5) Has qualifying improvements under "This Old Business."

Examples from previous years may also contain limited market value calculations as well, which expired in assessment year 2009.

Sales Ratio Studies

There are 87 counties, 854 cities and 1,807 townships in the state, which encompass 2,726,507 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 approximately 75% of taxable parcels which changed in value from 2008 to 2009.

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.

The basic steps involved in a sales ratio study 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 102,000 Certificates of Real estate Value (CRV) received in 2009 of which 58,000 were considered good, current-year, open-market sales. These 58,000 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, 2008, through September 30, 2009. These sales are compared with values from assessment year 2009, taxes payable 2010. 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, 2009. 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 2009 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.

2008 and 2009 Assessment Year Results

PROPERTY TYPE	FINAL ADJUSTED MEDIAN RATIO		COEFFICIENT OF DISPERSION		SAMPLE SIZE	
State Board Year	**2008**	**2009**	**2008**	**2009**	**2008**	**2009**
Residential/Seasonal	95.9	94.1	10.0	10.6	56,889	40,537
Apartment	96.4	95.0	13.8	12.2	413	302
Commercial/Industrial	98.6	94.4	18.1	18.2	1,550	1,225
Resorts	91.1	92.5	26.5	16.2	16	16
Farm	93.1	96.4	18.4	19.2	2,261	2,416
Timber	95.7	94.6	33.3	28.4	266	192

Table 3

Table 3 shows median sales ratios and coefficients of dispersion (COD) by property type for 2008 and 2009. 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 inter-quartile 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.

<u>NINE-MONTH STUDY</u>

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, 2009, through September 30, 2009. 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 2009.

Charts 2 through 6 show the statewide growth in estimated market value by major property types from 2001 through 2009.

Map 1, “Percent Change in Estimated Market Value,” displays the percent change from assessment years 2008 to 2009 in estimated market value for each county.

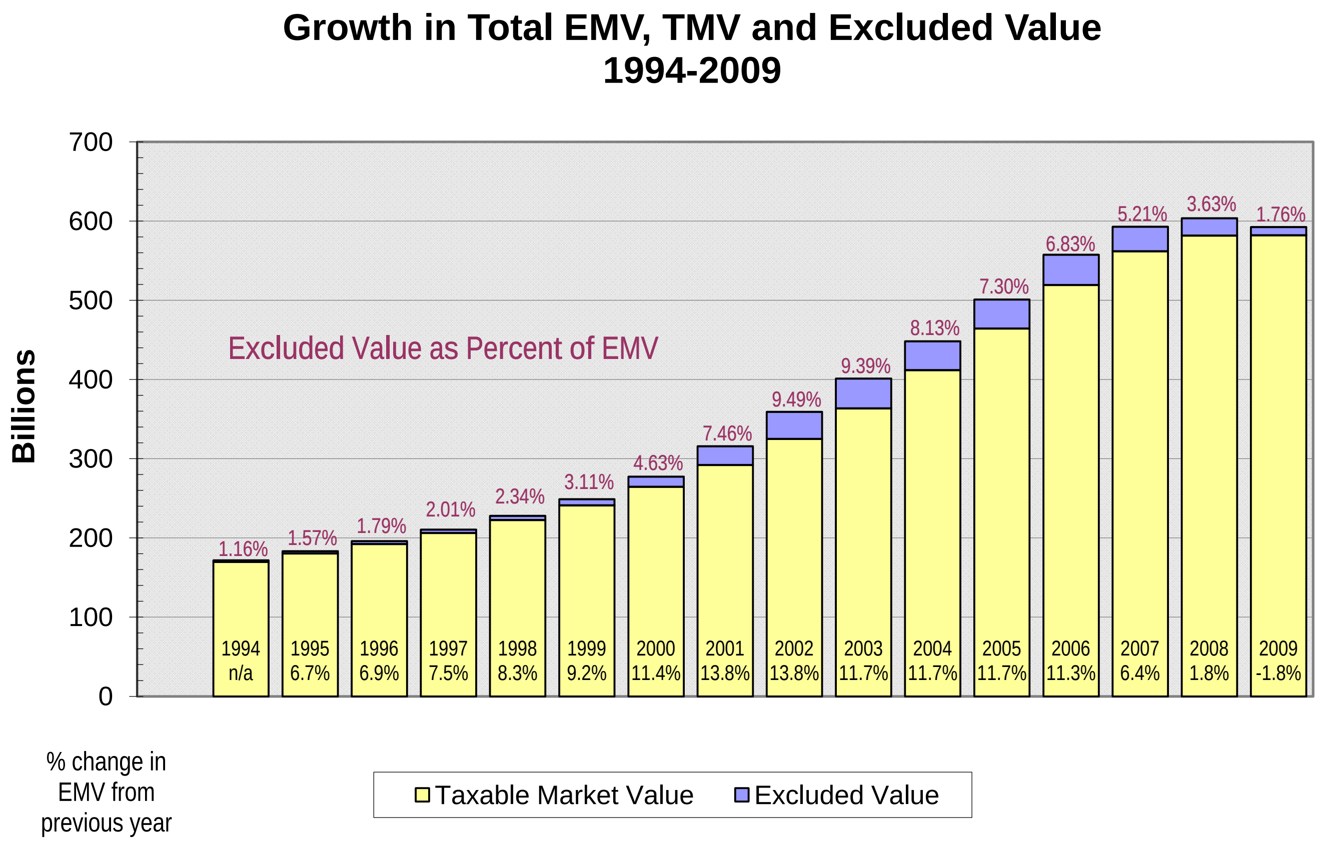
Map 2, “New Construction Percentage of Total Estimated Market Value,” displays the average percentage that new construction composes of estimated market value for each county from assessment years 2008 to 2009.

The residential and agricultural maps are not shown for the 2009 assessment because classification changes prevented local effort calculations for this study.

Maps 3 and 4 show the 2009 State Board sales ratios and coefficients of dispersion (COD) for, apartment 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. Apartment and commercial 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 5 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 6 shows the distributions of 2009 State Board Orders by county. Map 7 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
1994-2009
Billions
700
600
500
400
300
200
100
0
Excluded Value as Percent of EMV
1.16%
1.57%
1.79%
2.01%
2.34%
3.11%
4.63%
7.46%
9.49%
9.39%
8.13%
7.30%
6.83%
5.21%
3.63%
1.76%
1994 n/a
1995 6.7%
1996 6.9%
1997 7.5%
1998 8.3%
1999 9.2%
2000 11.4%
2001 13.8%
2002 13.8%
2003 11.7%
2004 11.7%
2005 11.7%
2006 11.3%
2007 6.4%
2008 1.8%
2009 -1.8%
% change in EMV from previous year
Taxable Market Value
Excluded Value

Chart 1

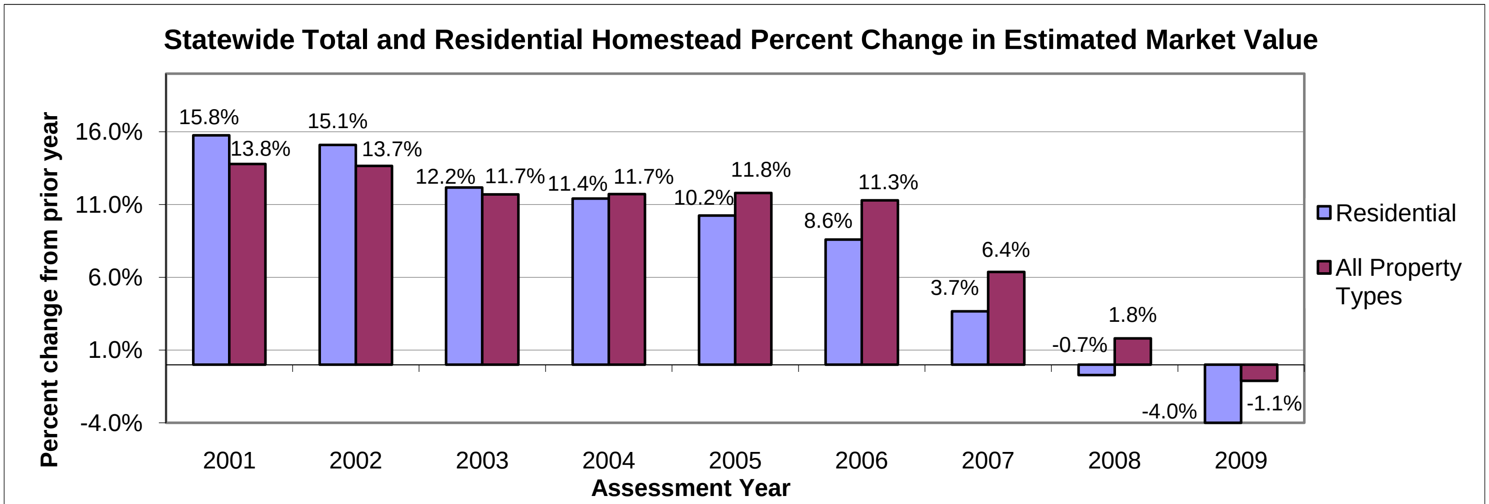


Chart 2

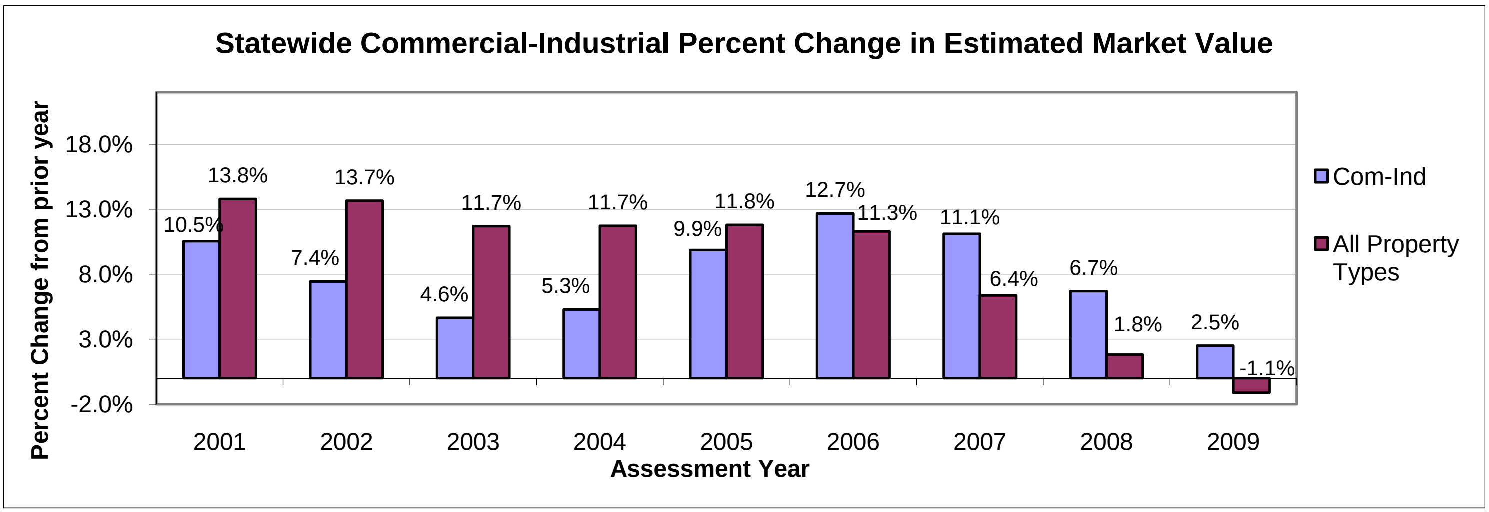


Chart 3

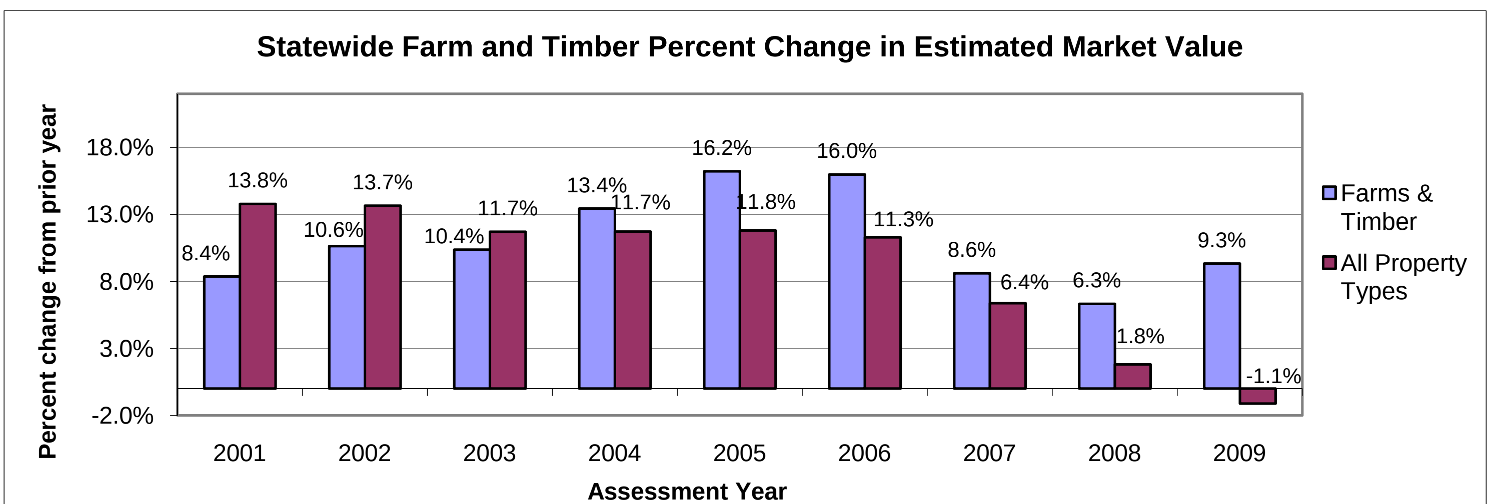


Chart 4

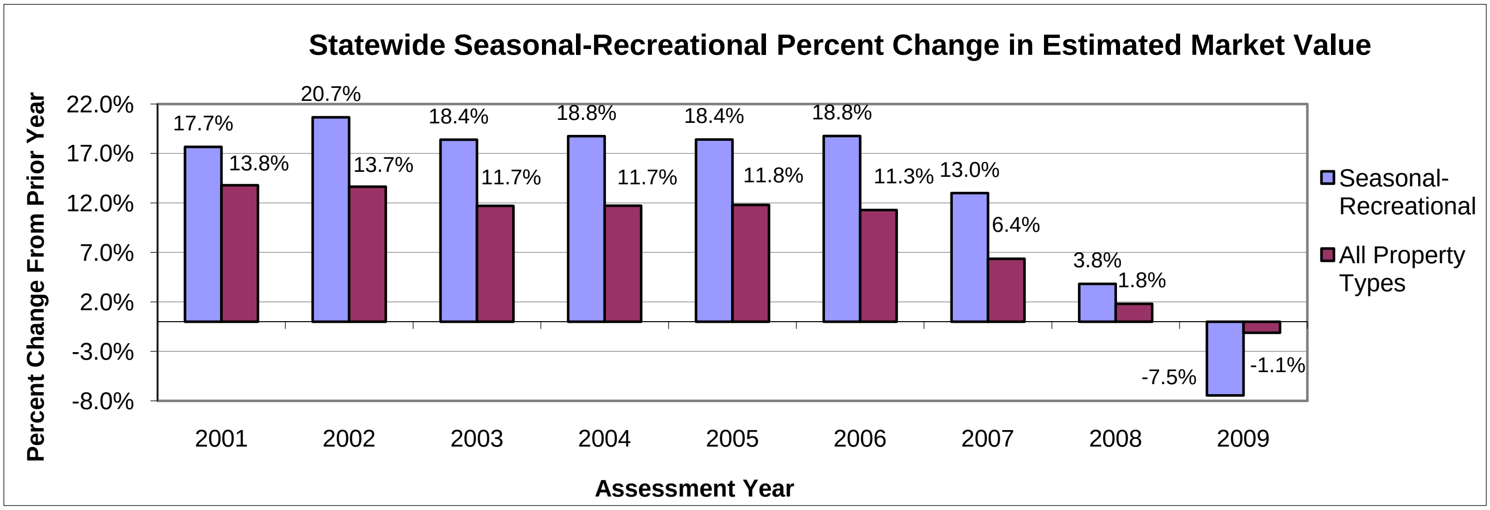


Chart 5

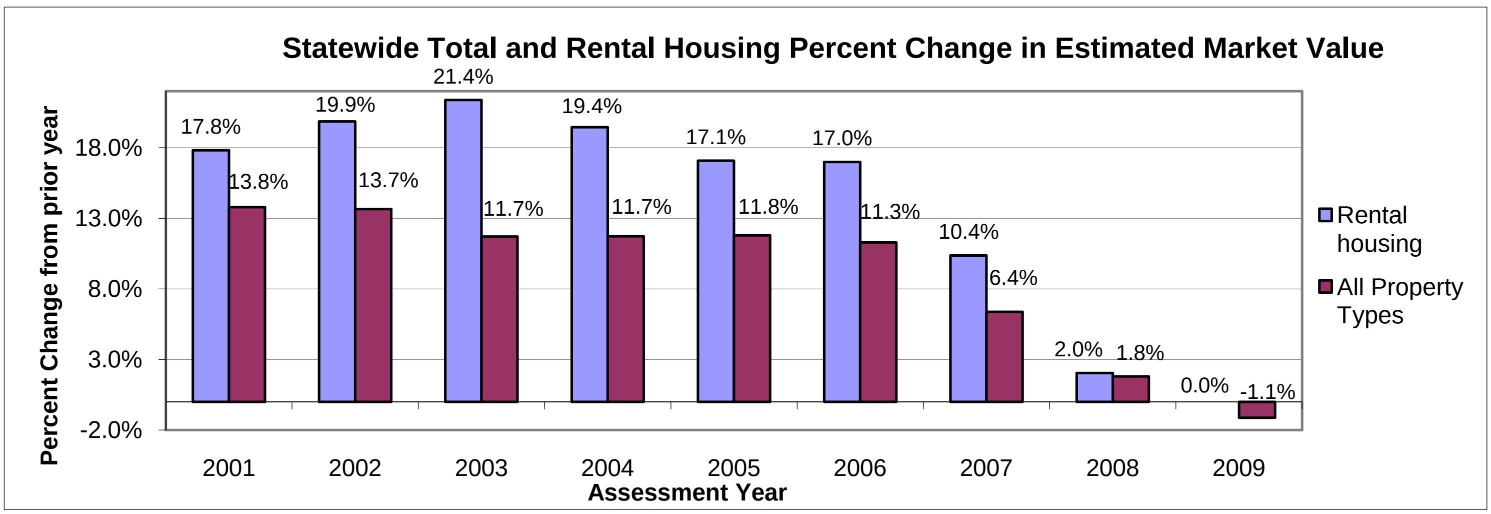
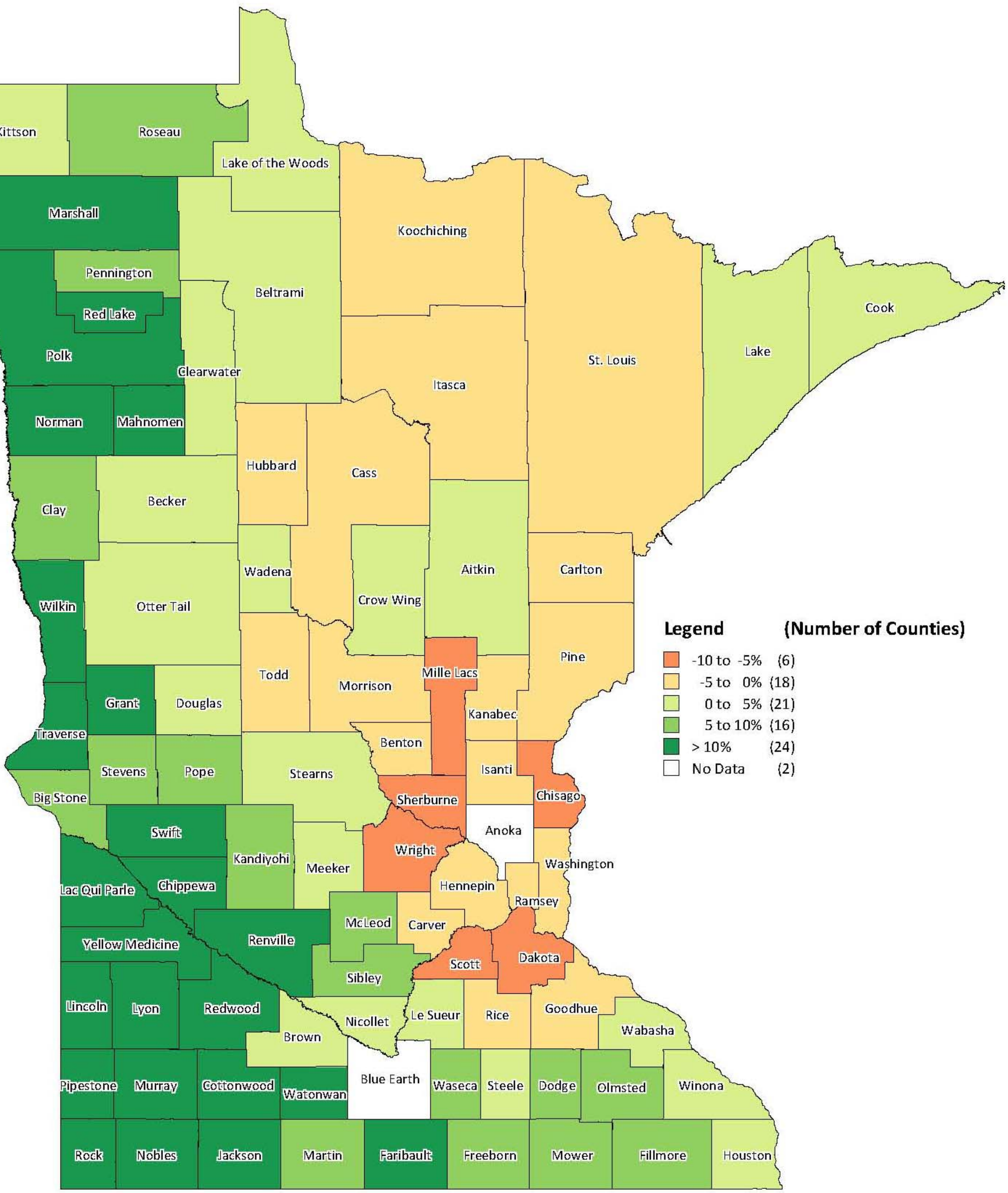


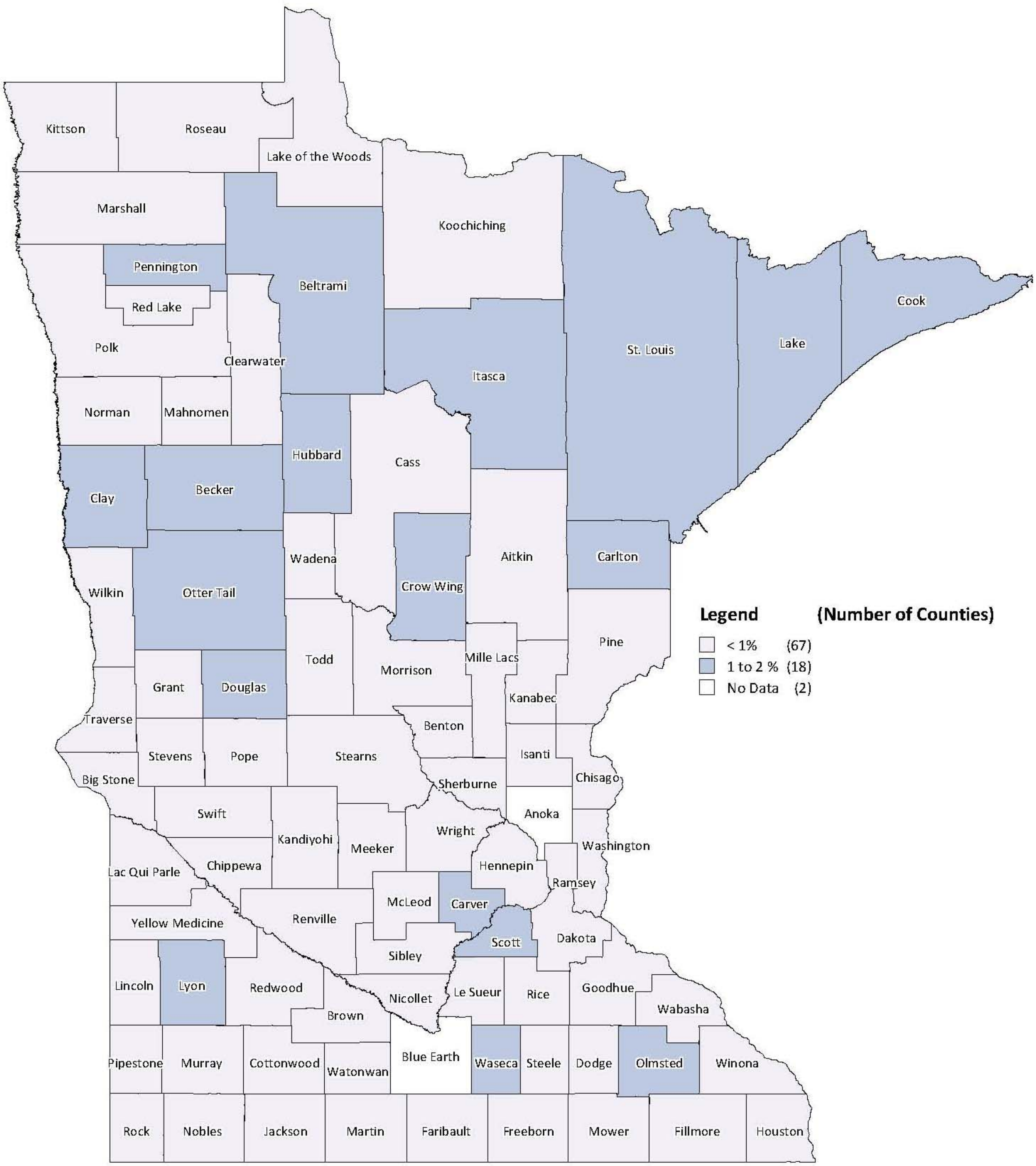
Chart 6

Percent Change in Estimated Market Value
2008 - 2009



June 4, 2009 | Minnesota Department of Revenue
Map 1

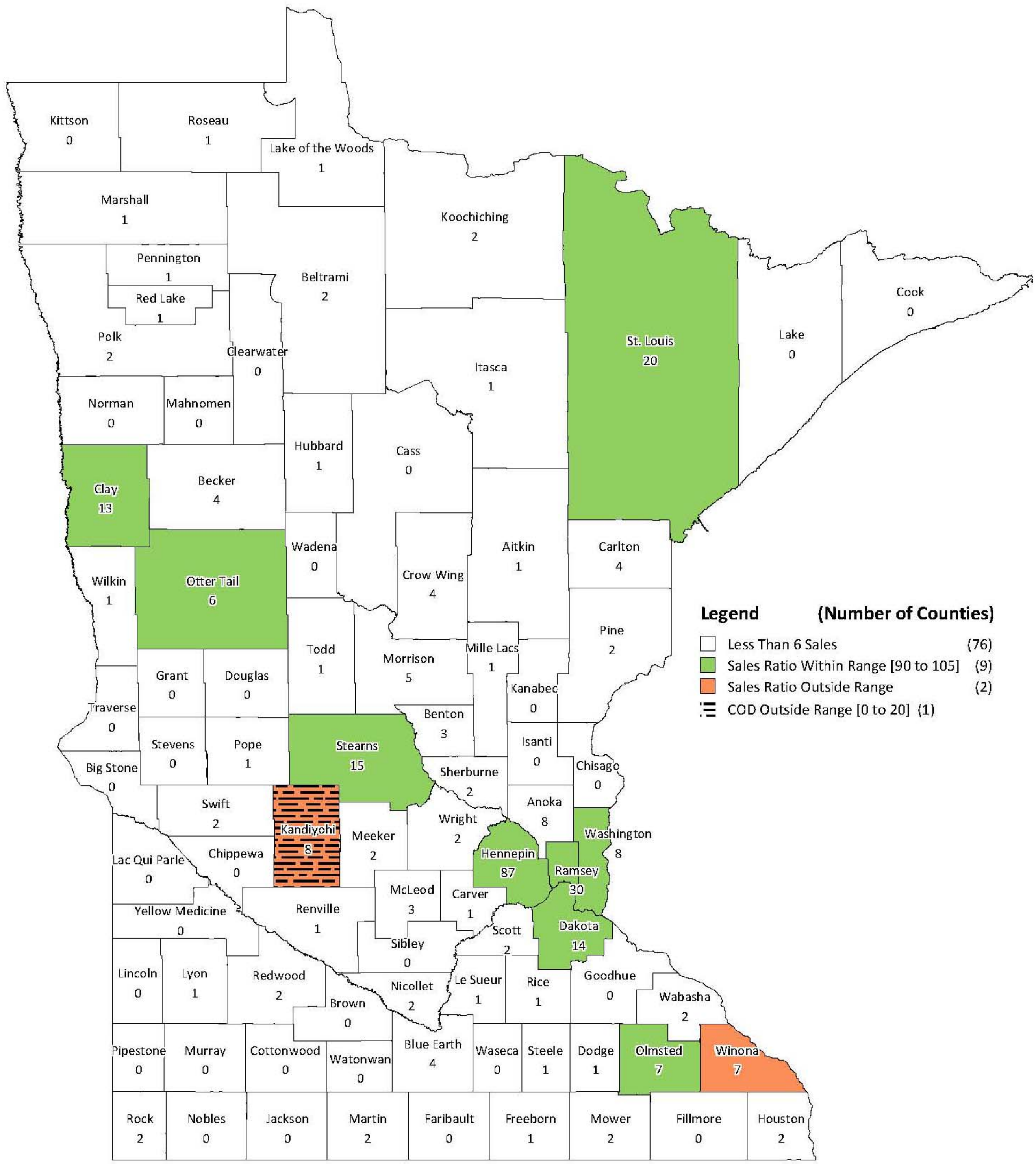
New Construction as a Percent of Total Estimated Market Value 2009



June 4, 2009 | Minnesota Department of Revenue
Map 2

Apartments - Assessment Year 2009
Median Sales Ratio and Trimmed Coefficient of Dispersion (COD)

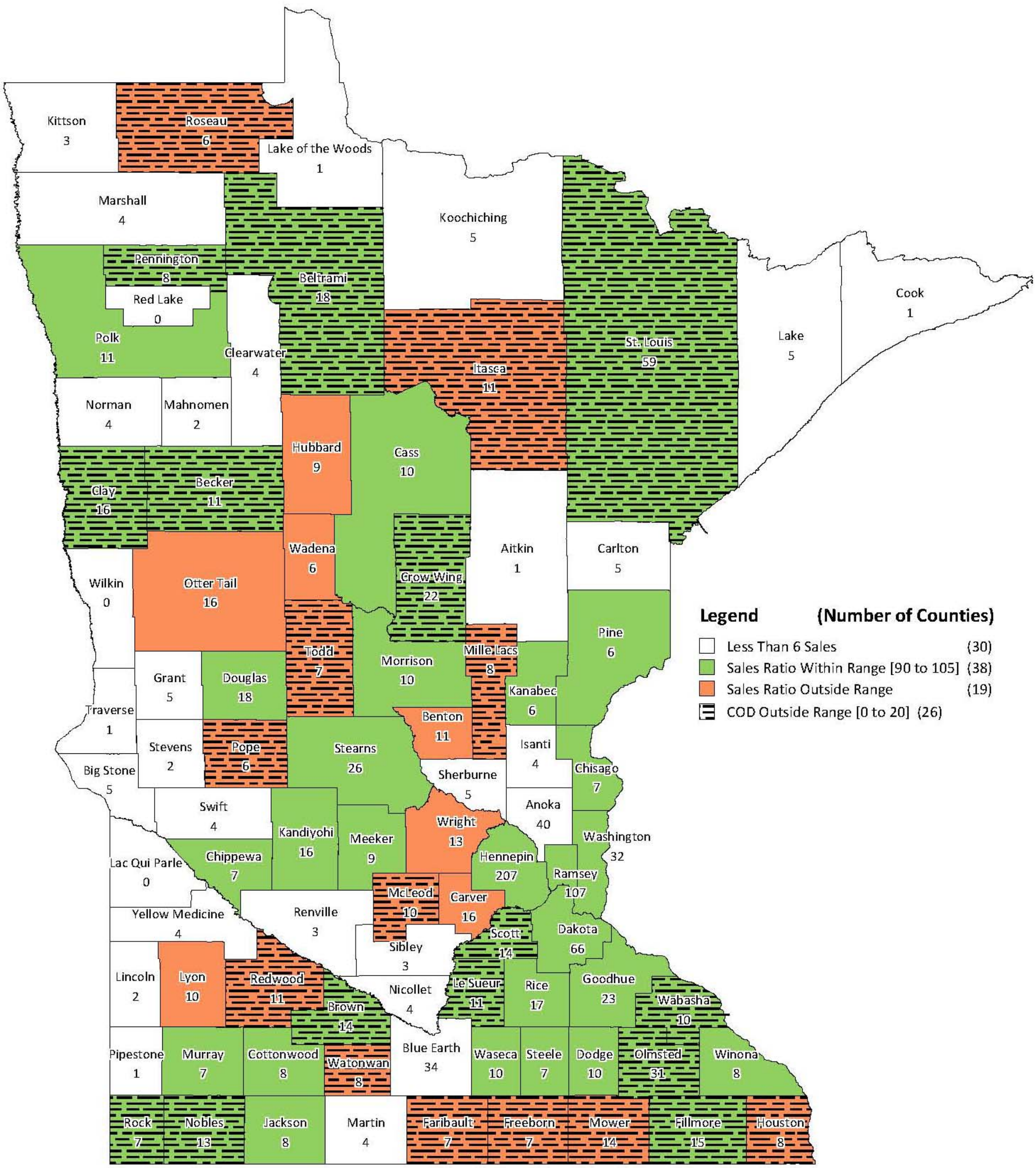
Counties labeled with number of sales



Map 3

Commercial/Industrial - Assessment Year 2009
Median Sales Ratio and Trimmed Coefficient of Dispersion (COD)

Counties labeled with number of sales

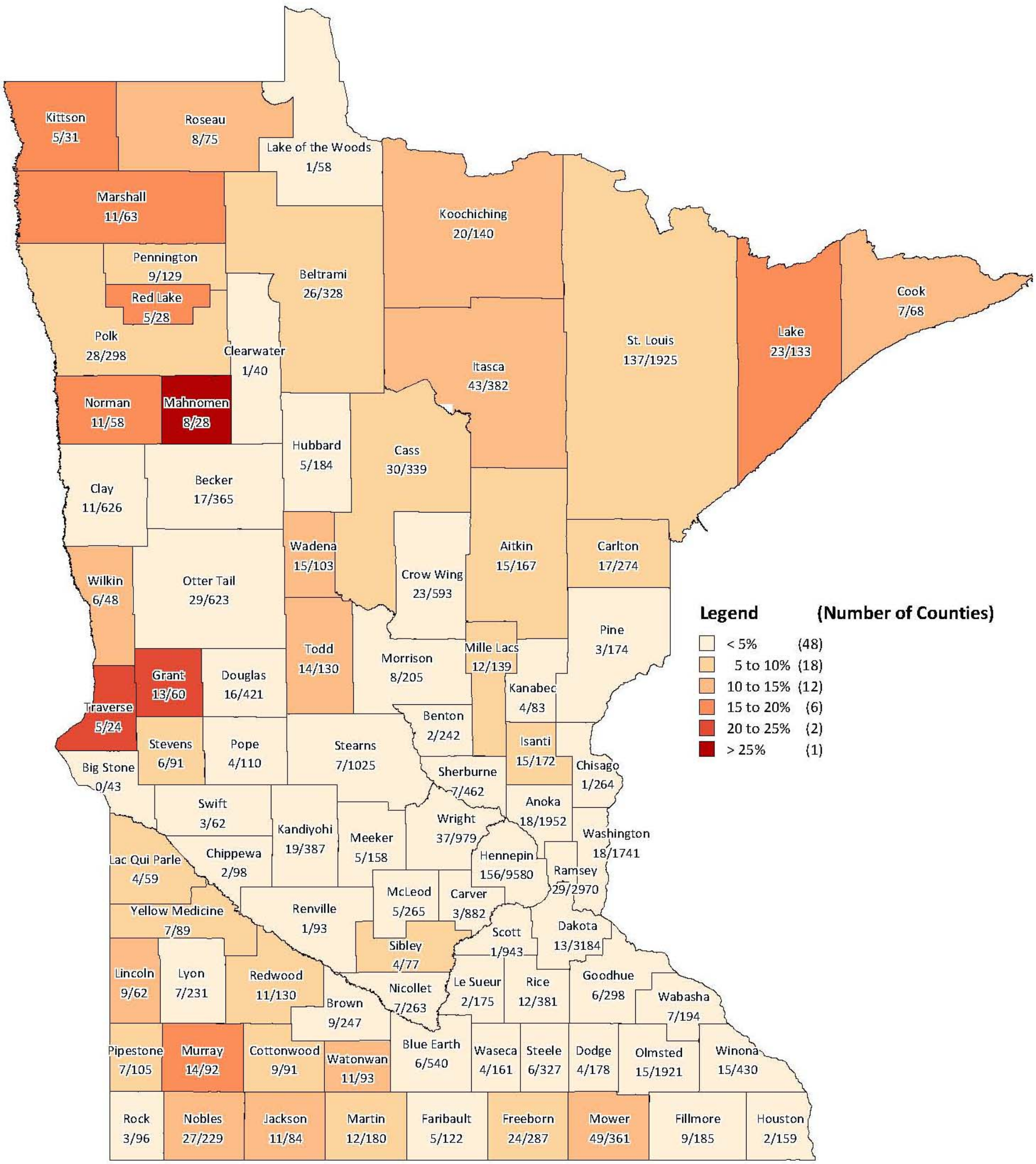


June 4, 2009 | Minnesota Department of Revenue

Map 4

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

Counties labeled with number of outliers / number of sales



June 4, 2009 | Minnesota Department of Revenue

Map 5

Frequency of 2009 State Board Orders by Percent Adjustment by County *

	Number with a class of property adjusted by: (%)														Affected cities/towns			Type of orders															
	Countywide orders						City/Town 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	0	0	0	0	0	0	0	0	2	22	6	2	0	0	32.0	2,779	1%																	
4 BELTRAMI										18	1				19	60	32%	●				■			■									
25 GOODHUE										1					1	31	3%						■											
36 KOOCHICHING											1				1	11	9%							●										
41 LINCOLN												1			1	19	5%							●										
45 MARSHALL											1				1	59	2%						●											
46 MARTIN										1	1				2	47	4%					●												
48 MILLE LACS										1					1	34	3%						●			●								
51 MURRAY									1						1	31	3%						●											
53 NOBLES												1			1	26	4%							●										
57 PENNINGTON											1				1	29	3%							●										
58 PINE									1						1	16	6%					●			●									
60 POLK											1				1	41	2%						■											
63 RED LAKE										1					1	19	5%							●										
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**22**	**6**	**2**	**0**	**0**	**32**	**2,779**	**1%**																	

[2] Total includes counties without orders (not shown).

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**

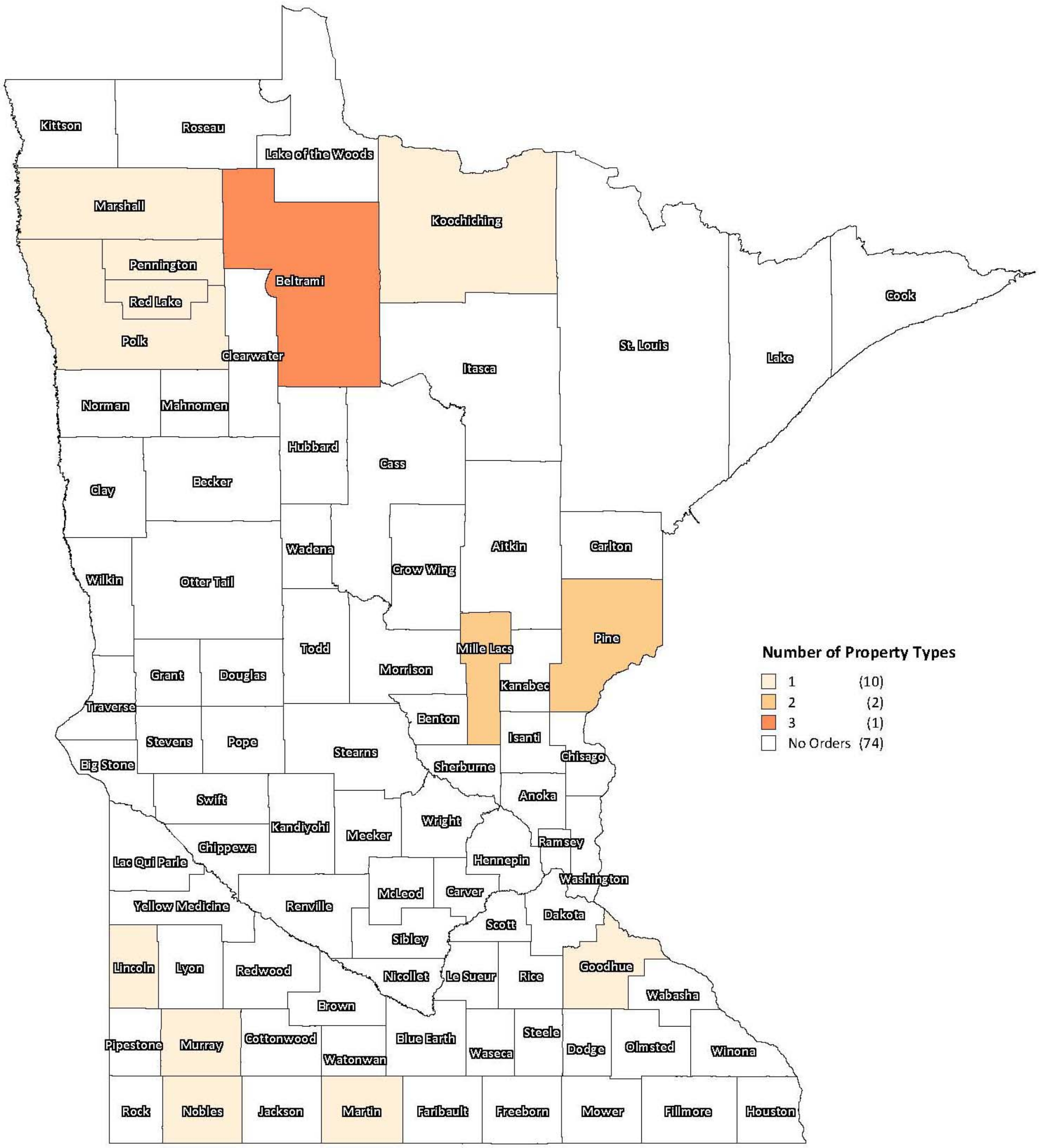
Beltrami County had multiple board order adjustments ranging from 5% to 10% affecting agricultural land, residential land , seasonal recreactional land. The orders affected 19 (or 32%) of the jurisdictions in Beltrami County. (See page A5 & A6 for additional details.)

Summary of 2009 State Board Orders by Property Classification and Jurisdictions*

PROPERTY CLASSIFICATION	BOARD ORDER (% increase or decrease)	JURISDICTIONS AFFECTED BY ORDER Countywide	City	Township	Total	Percent of Total
Residential	**Subtotal**	**0**	**10**	**4**	**14**	**40.0%**
	+40				0	0.0%
	+20				0	0.0%
	+15		2		2	5.7%
	+10		4	3	7	20.0%
	+5		3		3	8.6%
	-5		1	1	2	5.7%
	-15				0	0.0%
Apartment	**Subtotal**	**0**	**0**	**0**	**0**	**0.0%**
	+10				0	**0.0%**
	+5				0	0.0%
Commercial-Industrial	**Subtotal**	**0**	**0**	**0**	**0**	**0.0%**
	+20				0	
	+15				0	0.0%
	+10				0	0.0%
	+5				0	0.0%
	-5				0	0.0%
Seasonal-Recreational	**Subtotal**	**0**	**0**	**3**	**3**	**8.6%**
	+40				0	0.0%
	+20				0	0.0%
	+15				0	0.0%
	+10			2	2	5.7%
	+5				0	0.0%
	-5			1	1	2.9%
	-10				0	0.0%
Agricultural	**Subtotal**	**0**	**0**	**18**	**18**	**51.4%**
	+40				0	0.0%
	+25				0	0.0%
	+20				0	0.0%
	+15				0	0.0%
	+10				0	0.0%
	+5			18	18	51.4%
Timberland	**Subtotal**	**0**	**0**	**0**	**0**	**0.0%**
	+40				0	0.0%
	+20				0	0.0%
	+15				0	0.0%
	+10				0	0.0%
	+5				0	0.0%
Totals		**0**	**10**	**25**	**35**	**100.0%**

***Example Interpretation**
Eighteen (or 51.4%) of the 35 State Board Orders issued in 2009 were + 5% adjustments to agricultural property.

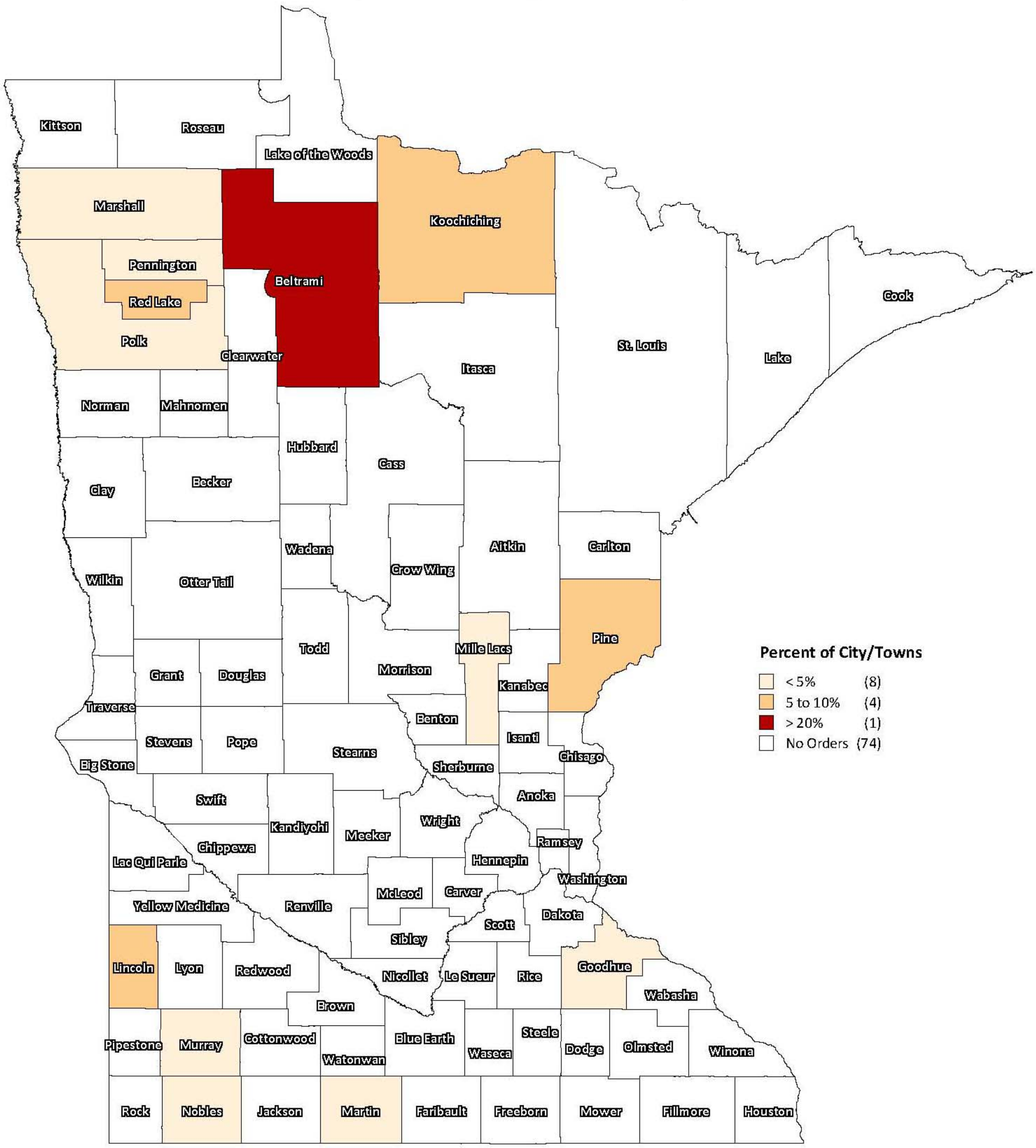
Number of Property Types in Counties Affected by 2009 Board Orders



Map 6

Percent of City/Town Jurisdictions in Counties Affected by 2009 Board Orders

(Excludes Countywide Orders)



Map 7

APPENDIX I

Summary of State Board Orders

County	Assessment District	Type of Property	State Board Changes Percent Increase	State Board Changes Percent Decrease
Aitkin		No Changes		
Anoka		No Changes		
Becker		No Changes		
Beltrami	Townships of:			
	Battle	Agricultural Land Only	+5	
	Birch	Residential Land On Water Front Parcels Only On Gilstad, Rabideau and Benjamin Lakes Only (See Attached Exhibit A)	+10	
		Seasonal Residential Recreational Land On Water Front Parcels Only On Gilstad, Rabideau and Benjamin Lakes Only (See Attached Exhibit A)	+10	
	Cormant	Agricultural Land Only	+5	
	Eland	Agricultural Land Only	+5	
	Hagali	Agricultural Land Only	+5	
	Hines	Agricultural Land Only	+5	
	Hornet	Agricultural Land Only	+5	
	Kelliher	Agricultural Land Only	+5	
	Langor	Agricultural Land Only	+5	
	Nebish	Agricultural Land Only	+5	
	O'Brien	Agricultural Land Only	+5	
	Port Hope	Agricultural Land Only	+5	
	Quiring	Agricultural Land Only	+5	
	Red Lake	Agricultural Land Only	+5	
	Shooks	Agricultural Land Only	+5	
	Shotley	Agricultural Land Only	+5	
	Summit	Agricultural Land Only	+5	

Summary of State Board Orders

County	Assessment District	Type of Property	State Board Changes Percent Increase	State Board Changes Percent Decrease
Beltrami (Continued)	Waskish	Agricultural Land Only	+5	
	Woodrow	Agricultural Land Only	+5	
Benton		No Changes		
Big Stone		No Changes		
Blue Earth		No Changes		
Brown		No Changes		
Carlton		No Changes		
Carver		No Changes		
Cass		No Changes		
Chippewa		No Changes		
Chisago		No Changes		
Clay		No Changes		
Clearwater		No Changes		
Cook		No Changes		
Cottonwood		No Changes		
Crow Wing		No Changes		
Dakota		No Changes		
Dodge		No Changes		
Douglas		No Changes		

Summary of State Board Orders

County	Assessment District	Type of Property	State Board Changes Percent Increase	State Board Changes Percent Decrease
Faribault		No Changes		
Fillmore		No Changes		
Freeborn		No Changes		
Goodhue	City of: Wanamingo	Residential Land and Structures Excluding Residential Vacant Land Parcels	+5	
Grant		No Changes		
Hennepin		No Changes		
Houston		No Changes		
Hubbard		No Changes		
Isanti		No Changes		
Itasca		No Changes		
Jackson		No Changes		
Kanabec		No Changes		
Kandiyohi		No Changes		
Kittson		No Changes		
Koochiching	City of: Northome	Residential Land and Structures	+10	
Lac Qui Parle		No Changes		
Lake		No Changes		

Summary of State Board Orders

County	Assessment District	Type of Property	State Board Changes Percent Increase	State Board Changes Percent Decrease
Lake of the Woods		No Changes		
LeSueur		No Changes		
Lincoln	City of: Lake Benton	Residential Land and Structures	+15	
Lyon		No Changes		
Mahnomen		No Changes		
Marshall	Township of: Excel	Residential Structures Only	+10	
Martin	Cities of: Sherburn	Residential Land Only	+5	
	Truman	Residential Land Only	+10	
McLeod		No Changes		
Meeker		No Changes		
Mille Lacs	Township of: Eastside	Residential Structures Only	+10	
		Seasonal Residential Recreational Structures Only	+10	
Morrison		No Changes		
Mower		No Changes		
Murray	City of: Chandler	Residential Structures Only		-5
Nicollet		No Changes		
Nobles	City of: Rushmore	Residential Land and Structures	+15	

Summary of State Board Orders

County	Assessment District	Type of Property	State Board Changes Percent Increase	State Board Changes Percent Decrease
Norman		No Changes		
Olmsted		No Changes		
Otter Tail		No Changes		
Pennington	City of: St. Hilaire	Residential Land and Structures	+10	
Pine	Township of: Pine City	Residential Land Only		-5
		Seasonal Residential Recreational Land Only		-5
Pipestone		No Changes		
Polk	City of: Fosston	Residential Structures Only On Properties With Total EMV of $60,000 or Greater	+10	
Pope		No Changes		
Ramsey		No Changes		
Red Lake	City of: Red Lake Falls	Residential Land and Structures	+5	
Redwood		No Changes		
Renville		No Changes		
Rice		No Changes		
Rock		No Changes		
Roseau		No Changes		
St. Louis		No Changes		

Summary of State Board Orders

County	Assessment District	Type of Property	State Board Changes Percent Increase	Percent Decrease
Scott		No Changes		
Sherburne		No Changes		
Sibley		No Changes		
Stearns		No Changes		
Steele		No Changes		
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		
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.

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

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

Dornfest, Alan S. 2001. Ratio Study Class. Course Manual used for the Minnesota Department of Revenue Sales Ratio Study Class, St. Paul, MN, Nov. 28-30, 2001.

International Association of Assessing Officers. 1999. *Standard on Ratio Studies.* Rev. ed., Chicago, IL: International Association of Assessing Officers.

Minnesota Department of Revenue. 2002. *Property Taxes Levied in Minnesota: 2000 Assessments Taxes Payable in 2001.* St. Paul, MN: Minnesota Department of Revenue.

Minnesota House of Representatives Research Department. 1993. *Property Tax Assessment and Sales Ratio Studies: Presentation to Property Tax Task Force.* St. Paul, MN: Minnesota House of Representatives.