MINNESOTA · REVENUE

2011 PROPERTY VALUES AND ASSESSMENT PRACTICES REPORT

(ASSESSMENT YEAR 2010)

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, 2011

MINNESOTA · REVENUE

March 1, 2011

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

I am pleased to present to you the ninth 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,

Daniel A. Salomone,
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 $3,000.

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EXECUTIVE SUMMARY

This report analyzes the assessment of six types of property: Residential/Seasonal, Apartments, Commercial-Industrial, Resorts, Agricultural 2a, and Rural Vacant Land 2b. The real estate market continued to slow down throughout Minnesota with the number of sales declining for all property classes through the fall of 2009. These trends have continued beyond the reporting period into 2010.

Effective for the 2009 assessment, the agricultural classification system was changed by distinguishing between agricultural 2a and rural vacant 2b lands[1]. This new distinction caused some property to change classification among agricultural, residential and seasonal recreational classes. Statewide, assessors had to modify the property classification of approximately 214,000 of the 2,724,500 taxable parcels. Agricultural and rural vacant land parcels made up 165,000 of the reclassified parcels. The agricultural reclassification and review is complete in most counties.

The classification changes to 2a agricultural, 2b rural vacant land, seasonal residential and residential properties have made it difficult to use the traditional measures of assessment performance for the 2010 assessment year. Changes in the level of assessment are mingled with class shifts so that the 2009 and 2010 classes do not contain the same properties. Starting in 2009, the Minnesota Department of Revenue 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 2010 market value by parcel files which were matched with the 2009 sales data. The resulting sales ratios were used to judge the quality of assessment. The transition should be completed for the 2011 assessment.

Assessment quality remained relatively consistent between the 2009 and 2010 assessments. This is reflected in both the sales ratio and the coefficient of dispersion, the two primary measures of assessment quality. As a general rule, both sales ratios and coefficients of dispersion are more accurate in classes with more sales activity which means that the sales sample reflects the range of values for all properties in the jurisdiction. In the 2010 assessment, the focus of assessment reviews was moving away from level of assessment towards assessment uniformity. Assessors have tracked the changing real estate markets, improved their overall levels of assessment and are working on improving uniformity. This is a challenge in areas with smaller numbers of sales since each sale has a larger impact on the statistics than in areas with large samples.

The coefficient of dispersion (COD) measures the uniformity of assessments. For the 2010 assessment, the coefficients generally were within the International Association of Assessing Officers' (IAAO) acceptable ranges in counties that had an adequate sample of sales. This is an area of concern in places with smaller sales samples. The IAAO ranges are shown on page 8, in Table 4.

[1] Please see the Minnesota Department of Revenue's assessment and classification practices report, "The Agricultural Property Tax Program, Class 2a Agricultural Property and Class 2b Rural Vacant Land Property" available at http://www.taxes.state.mn.us.

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 2009 as assessors reacted to the weakening market in many areas.

Assessors made small value changes again in 2010, following a trend that began in 2008. The estimated market value for the farm classes and 'other' class were the only ones that experienced positive growth in aggregate statewide. Still, agricultural and rural vacant values declined in 42 counties between 2009 and 2010. The counties with increases were in the south (agricultural) and northwest (rural vacant) regions of the state. 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.

The State Board of Equalization issues corrective orders when the median sales ratio for a property type is outside the 90% to 105% acceptable range. In 2010, State Board orders were issued in 10 counties. In 2009, State Board orders were issued in 13 counties. The Minnesota Department of Revenue's appraisal staff works with assessors to identify areas of concern for future assessments to help avoid State Board orders. In 2010, the issues to watch fell into three watch indicator categories:

1. low ratios in areas with a history of few sales,
2. sales ratios near the 90 to 105 range boundaries, and
3. areas with uniformity concerns.

There are 28 counties which have jurisdictions with at least two of the indicators. Most of them involve areas with fewer sales.

Between 2009 and 2010, many counties reported market value decreases in a number of property types, as shown in Table 1.

TYPE	NUMBER OF COUNTIES WITH DECREASED VALUE	STATEWIDE CHANGE IN VALUE
Residential	64	-5.8%
Apartment	44	-3.9%
Seasonal	47	-3.2%
Agricultural 2a / Rural Vacant 2b / Managed Forest 2c	42	+1.2%
Commercial/Industrial	43	-5.7%
Other*	33	+12.4%

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

Table 1

INTRODUCTION

During the 2001 special legislative session, the state legislature mandated an annual report from the Minnesota Department of Revenue on property tax values and assessment practices within the state of Minnesota. This year, 2011, is the ninth 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;
- 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 Minnesota 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 Minnesota, including counties, cities, townships, school districts and special taxing districts. The primary responsibility of the Minnesota Department of Revenue's Property Tax Division is to ensure fair and uniform administration of, and compliance with, Minnesota's property tax laws.

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

- 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;
- 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;
- Delivery of accurate and timely aid calculations, certifications, and actual aid payments;

- 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.

The 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 other considerations, such as special financing. 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 Minnesota Department of Revenue 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 Disabled Veterans Homestead Valuation Exclusion programs. The market value after these reductions are applied is referred to as the Taxable Market Value (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
2010 FOR TAXES PAYABLE IN 2011

		AY 2010
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[2]. 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.

[2] Section 04.11 of the *Auditor/Treasurer Manual* is available at http://taxes.state.mn.us/property_tax_administrators/Documents/AT_manual/04_11.pdf.

SALES RATIO STUDIES

There are 87 counties, 854 cities and 1,786 townships in the state, which encompass 2,724,500 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 65% of taxable parcels having value decreases from 2009 to 2010 and 15% having value increases.

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 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:

- ¬ Define the purpose and scope of the study
- ¬ Collect and prepare appraisal and sales data
- ¬ Match appraisal and sales data
- ¬ Group the data by property types and geographic areas
- ¬ Perform statistical analysis
- ¬ 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 Minnesota Department of Revenue conducts three sales ratio studies annually. The nine-month and 12-month studies are used to ensure the quality of assessment practices. A 21-month study is used for levy and aid purposes as discussed in Appendix 3.

There were approximately 70,000 Certificates of Real Estate Value (CRV) received in the 2009 study for the 2010 State Board of Equalization. Of these, 42,600 were considered good, current-year, open-market sales. These 42,600 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 following 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 2nd 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 3 percent (.25 percent monthly), if a house were purchased in August 2009 for $200,000, it would be adjusted back to a January 2008 value of $196,500, or the sales price would be adjusted downward by 1.75 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.

2009 AND 2010 ASSESSMENT YEAR RESULTS						
PROPERTY TYPE	**FINAL ADJUSTED MEDIAN RATIO**		**COEFFICIENT OF DISPERSION**		**SAMPLE SIZE**	
State Board Year	**2009**	**2010**	**2009**	**2010**	**2009**	**2010**
Residential/Seasonal	94.1	93.7	10.6	9.8	40,537	34,900
Apartment	95.0	96.0	12.2	10.8	302	188
Commercial/Industrial	94.4	93.8	18.2	14.8	1,225	823
Resorts	92.5	90.7	16.2	22.6	16	8
Agricultural 2a / Rural Vacant 2b	96.4	92.3	19.2	16.8	2,416	2,099

Table 3

Table 3 shows median sales ratios and coefficients of dispersion (COD) by property type for 2009 and 2010. 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 (IAAO) 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 IAAO, the acceptable ranges for the COD are as follows:

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, but excludes sales from the October, November and December. 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.

FIGURE 1 shows the statewide growth in estimated market and property value exclusions from 2004 through 2010.

FIGURE 2 shows the statewide growth in estimated market value by major property types from 2004 through 2010.

MAP 1, "Percent Change in Total Estimated Market Value," displays the percent change from assessment years 2009 to 2010 in estimated market value for each county.

MAP 2, "New Construction as a Percentage of Total Estimated Market Value," displays the average percentage that new construction composes of estimated market value for each county from assessment years 2009 to 2010.

MAPS 3 AND 4 show the 2010 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.

FIGURE 1:
GROWTH IN TOTAL EMV, TMV AND EXCLUDED VALUE, 2004-2010

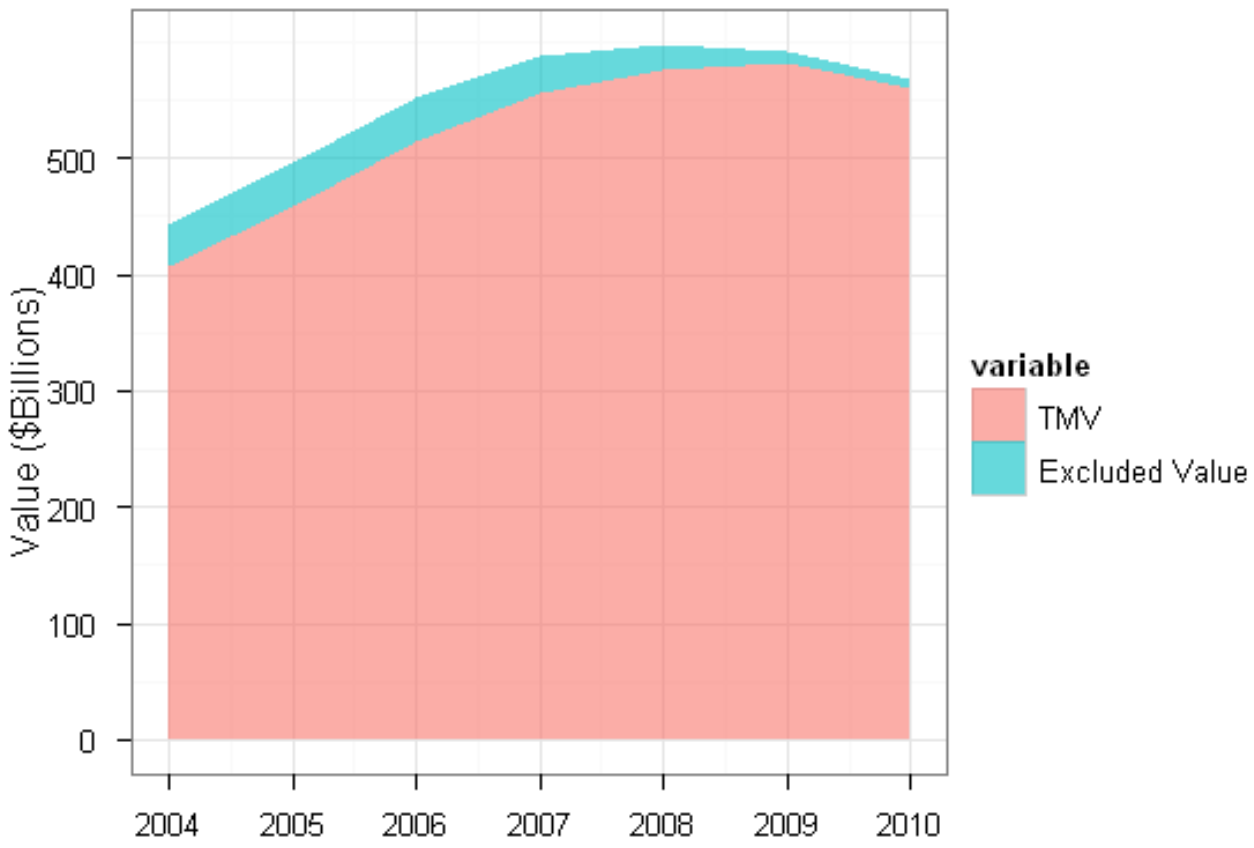
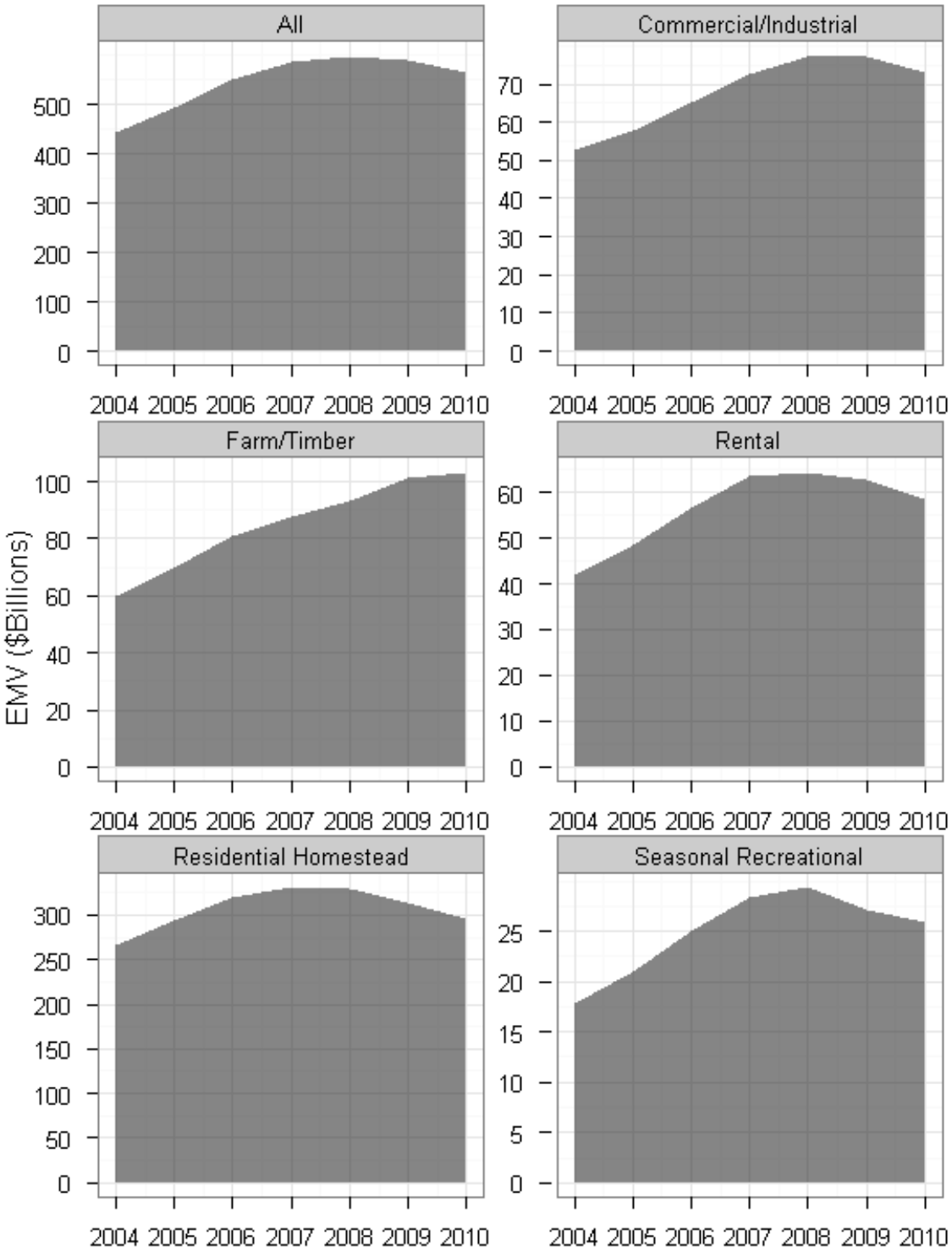
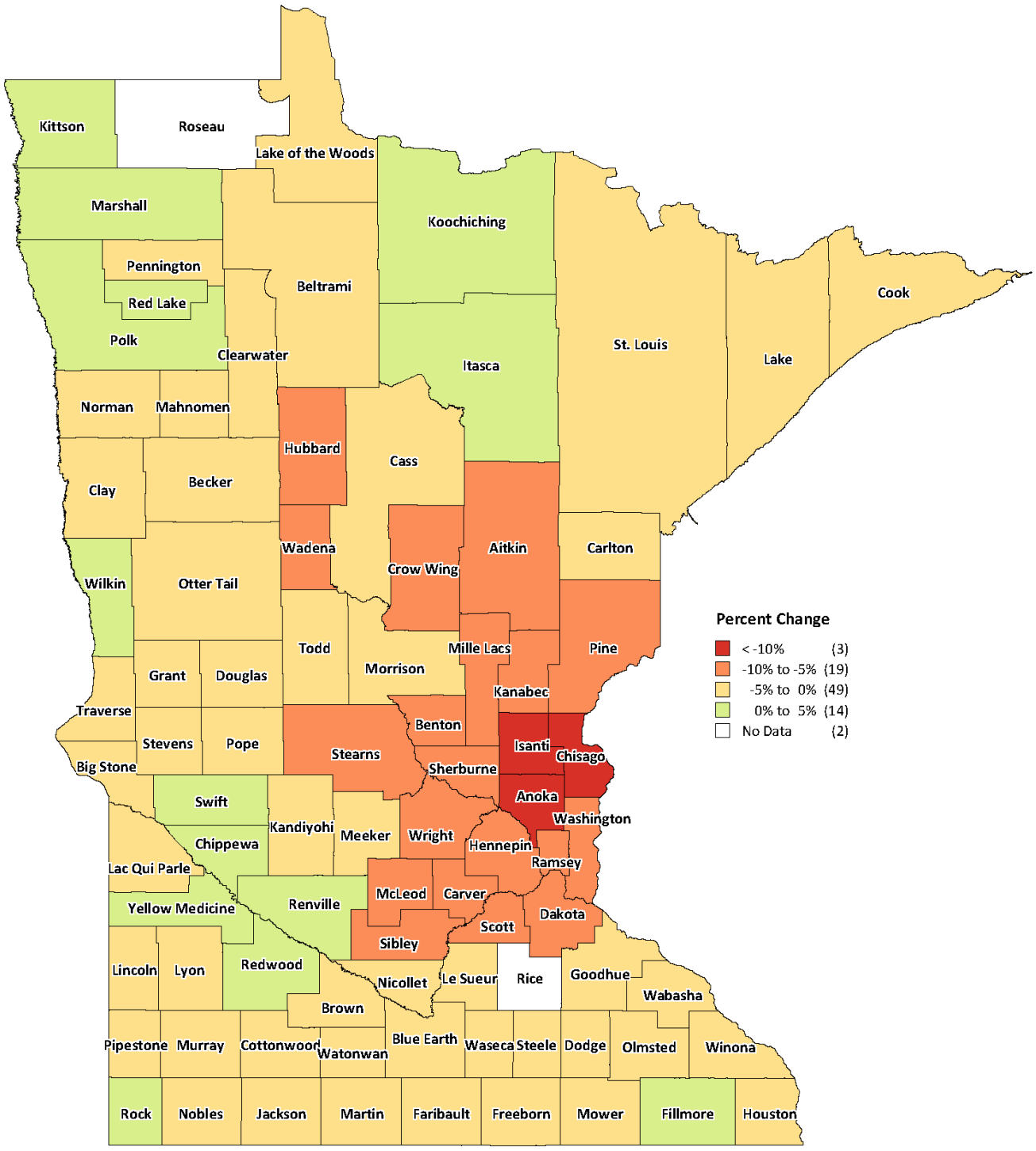


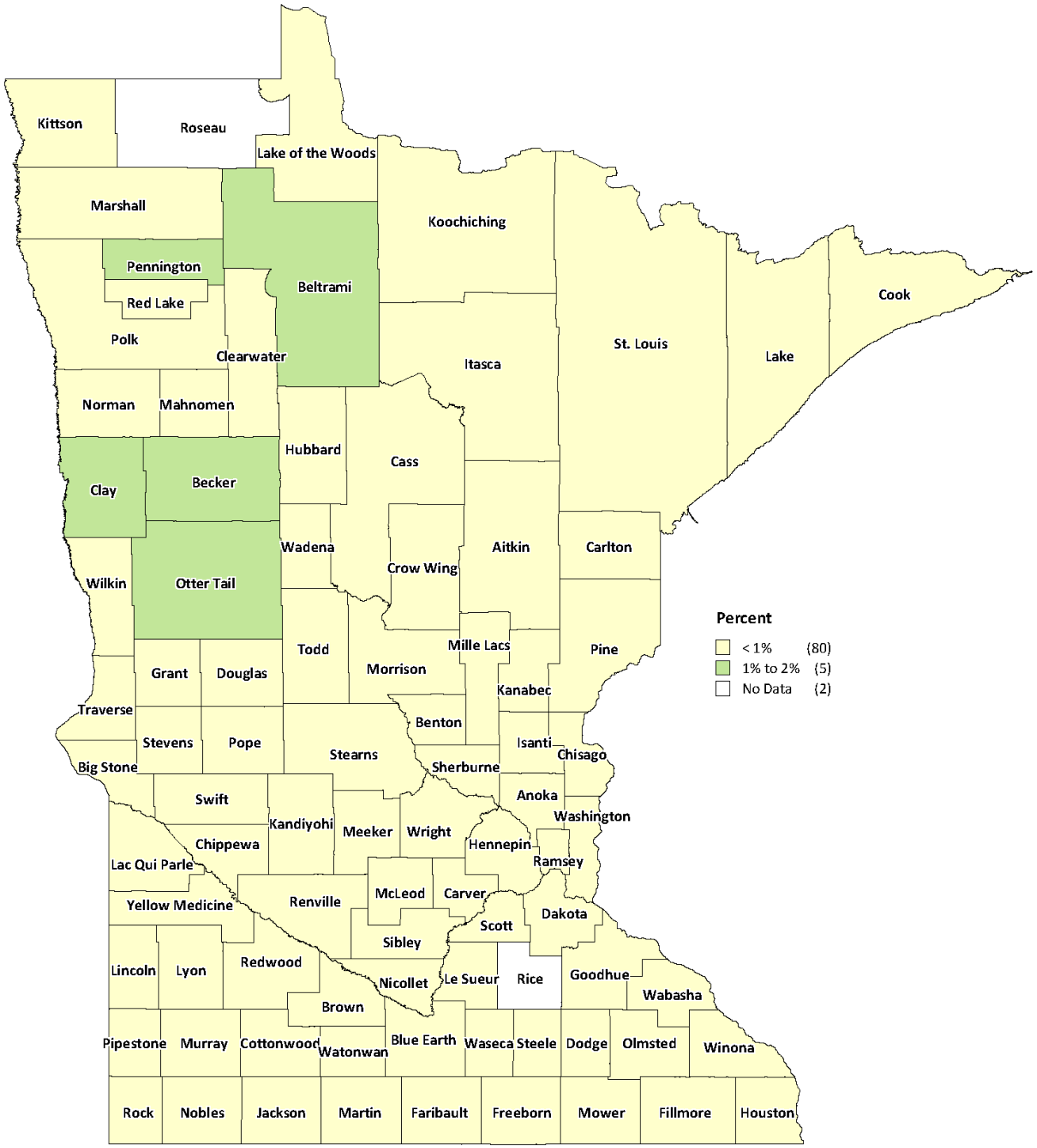
FIGURE 2:
STATEWIDE TOTAL ESTIMATED MARKET VALUE BY PROPERTY TYPE



MAP 1:
PERCENT CHANGE IN TOTAL ESTIMATED MARKET VALUE 2009-2010

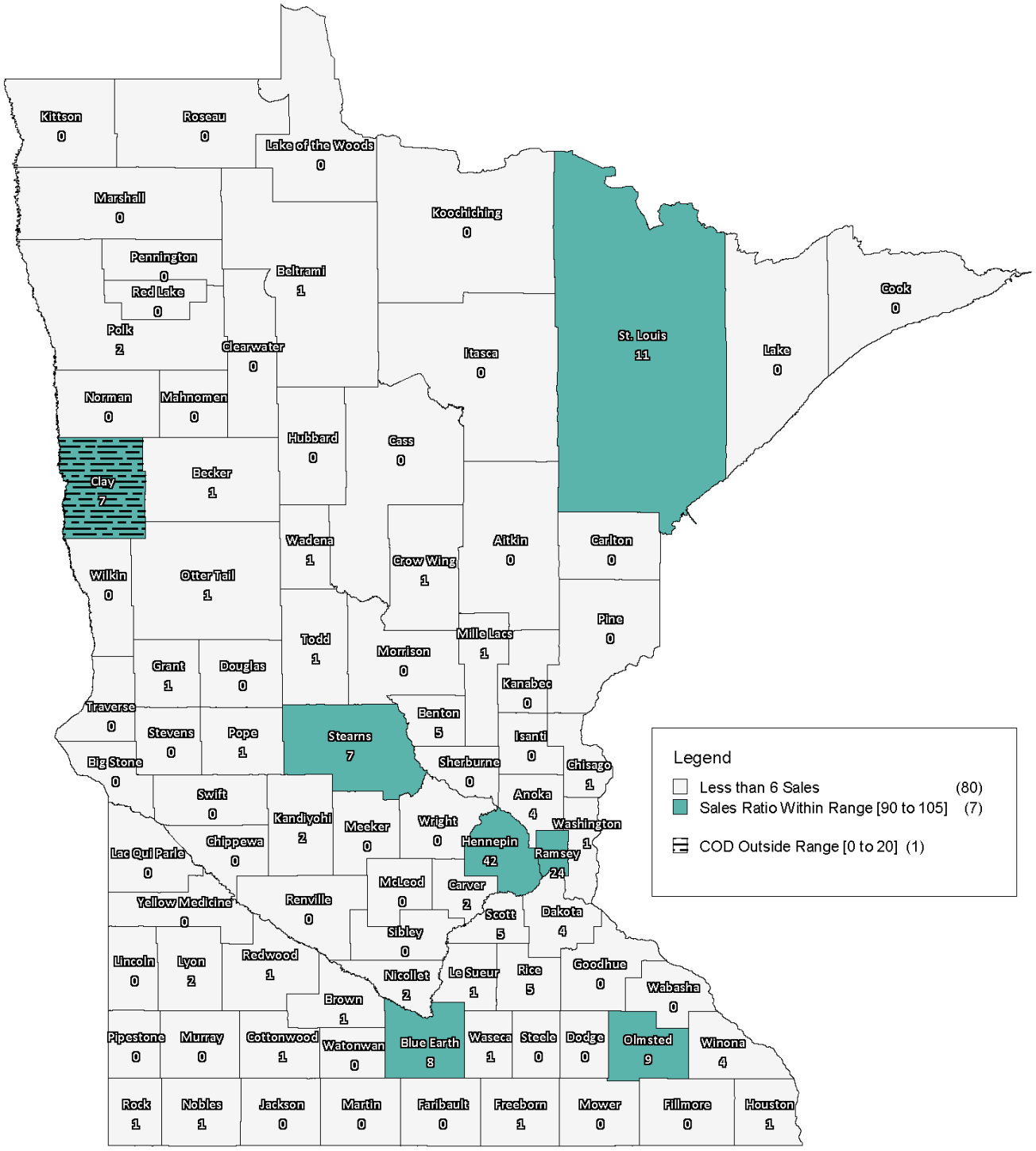


MAP 2:
NEW CONSTRUCTION AS A PERCENT OF TOTAL ESTIMATED MARKET VALUE 2010



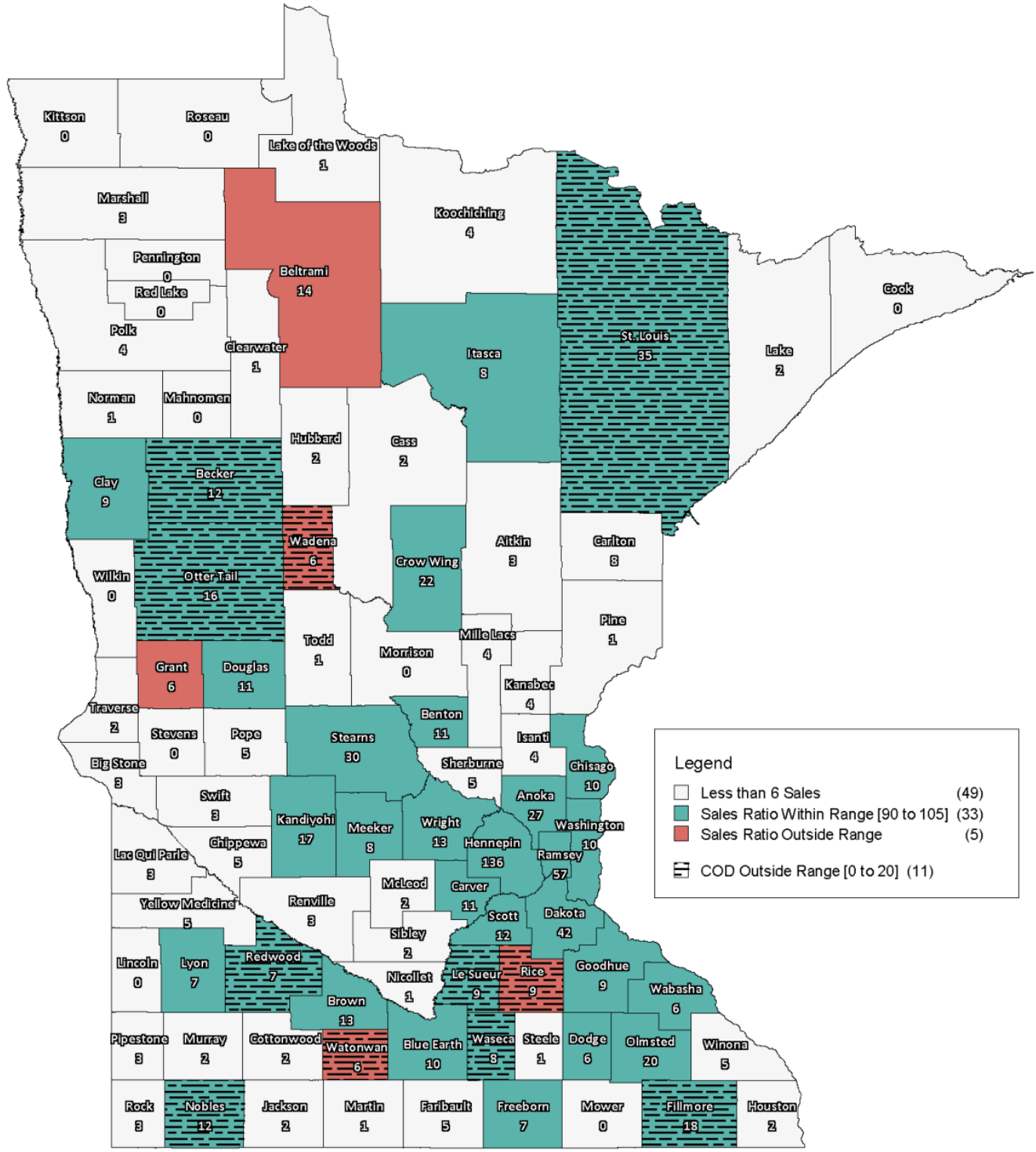
MAP 3:
APARTMENTS – ASSESSMENT YEAR 2010
MEDIAN SALES RATIO AND COEFFICIENT OF DISPERSION (COD)

COUNTIES LABELED WITH NUMBER OF SALES



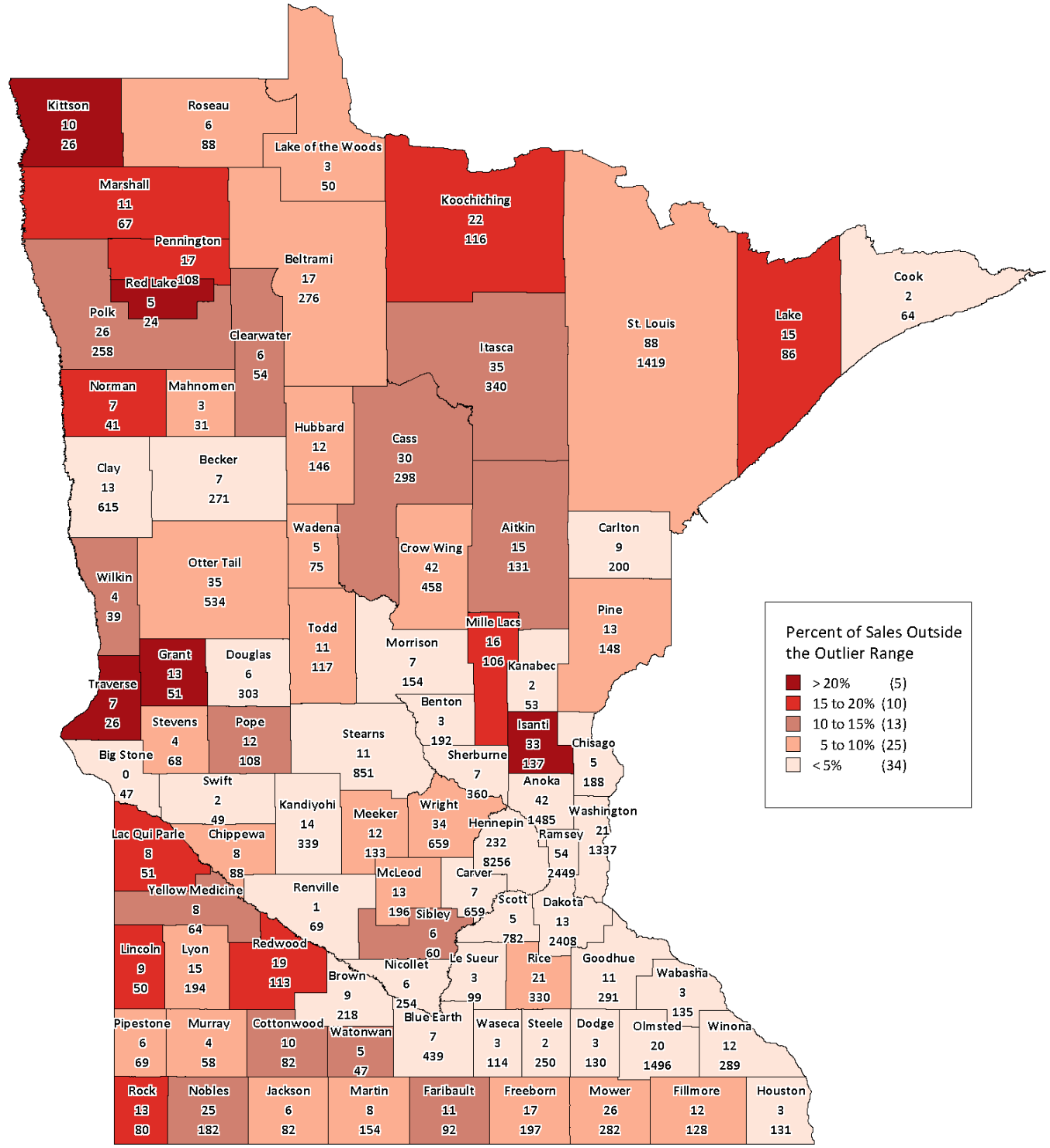
MAP 4:
COMMERCIAL / INDUSTRIAL – ASSESSMENT YEAR 2010
MEDIAN SALES RATIO AND COEFFICIENT OF DISPERSION (COD)

COUNTIES LABELED WITH NUMBER OF SALES



MAP 5:
RESIDENTIAL FIXED OUTLIER INDEX – 65% TO 135%
PERCENT OF SALES OUTSIDE FIXED OUTLIER RANGE, ASSESSMENT YEAR 2010

COUNTIES LABELED WITH NUMBER OF TRIMMED AND TOTAL SALES



FREQUENCY OF 2010 (FOR THE 2011 ASSESSMENT)
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%	+5%	+10%	+15%	+20%	+25%	-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	Rural-V	Com-L	Com-S	Com-LS	Ind-I	Ind-S	Ind-LS	NUMBER
Statewide	2	1	0	0	0	0	1	3	2	3	4	2	0	0	15.0	2,779	1%																		
15 CLEARWATER										1	1				2	26	8%						■	●										2
24 FREEBORN		1													0	34	0%	■																1
36 KOOCHICHING												2			2	11	18%							●			●							2
45 MARSHALL								1							1	59	2%										■							1
53 NOBLES							1								1	26	4%										■							1
57 PENNINGTON											2				2	29	7%							●										1
59 PIPESTONE										1					1	17	6%						●											1
60 POLK									1		1				2	41	5%							●			●							2
66 RICE								2							2	19	11%							●			●							1
68 ROSEAU	2								1	1					2	24	8%	●						●			●	●						6
TOTALS	2	1	0	0	0	0	1	3	2	3	4	2	0	0	15	2,779	1%																	18

Res-L	Residential Land Only
Res-S	Residential Structures Only
Res-LS	Residential Land and Structures
SRR-L	Seasonal Recreational Residential Land Only
SRR-S	Seasonal Rec. Residential Structures Only
SRR-LS	Seasonal Rec. Residential Land and Structures
Tim-L	Timber Land Only
Ind-LS	Industrial Land and Structures
Ind-L	Industrial Land Only
Ind-S	Industrial Structures Only
●	At least one of the orders was all parcels of this property type.
■	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.

***Example Interpretation**

Roseau County had multiple board order adjustments ranging from 5% to5% affecting agricultural land, residential land , seasonal recreational land. The orders affected 2 (or 8%) of the jurisdictions in Roseau County. (See page A5 & A6 for additional details.)

SUMMARY OF 2010 (FOR THE 2011 ASSESSMENT)
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**	**5**	**15**	**65.2%**
	+20				0	0.0%
	+15		2		2	8.7%
	+10		1	3	4	17.4%
	+5		2	1	3	13.0%
	-5		2		2	8.7%
	-10		2	1	3	13.0%
	-15		1		1	4.3%
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**	**4**	**1**	**5**	**21.7%**
	+40				0	0.0%
	+20				0	0.0%
	+15		2		2	8.7%
	+10				0	0.0%
	+5			1	1	4.3%
	-5		2		2	8.7%
	-10				0	0.0%
Agricultural	**Subtotal**	**2**	**0**	**0**	**2**	**8.7%**
	+25				0	0.0%
	+20				0	0.0%
	+15				0	0.0%
	+10				0	0.0%
	+5	1			1	4.3%
	-5	1			1	4.3%
Rural Vacant	**Subtotal**	**1**	**0**	**0**	**1**	**4.3%**
	+20				0	0.0%
	+15				0	0.0%
	+10				0	0.0%
	+5				0	0.0%
	-5	1			0	0.0%
Totals		**3**	**14**	**6**	**23**	**100.0%**

***Example Interpretation**
Four (or 17.4%) of the 23 State Board Orders issued in 2009 were + 10% adjustments to residential property.

APPENDICIES

SUMMARY OF STATE BOARD ORDERS

COUNTY	ASSESSMENT DISTRICT	TYPE OF PROPERTY	STATE BOARD CHANGES PERCENT INCREASE	STATE BOARD CHANGES PERCENT DECREASE
Clearwater	City of:			
	Clearbrook	Residential Structures Only On Property Equal to or Greater than $50,000 Total EMV	+10	
	Shevlin	Residential Land and Structures	+5	
Freeborn	Countywide	Agricultural 2a Land Only 100% CER at $5,335 Per Acre Instead of $5,100.	+5	
Koochiching	Cities of:			
	Little Fork	Residential Land and Structures Seasonal Residential Recreational Land and Structures	+15 +15	
	Northome	Residential Land and Structures Seasonal Residential Recreational Land and Structures	+15 +15	
Marshall	City of:			
	Stephen	Residential Structures Only On Property Equal to or Less than $40,000 Total EMV		-10
Nobles	City of:			
	Adrian	Residential Structures Only		-15
Pennington	Township of:			
	Sanders	Residential Land and Structures	+10	
	Smiley	Residential Land and Structures	+10	
Pipestone	City of:			
	Pipestone	Residential Land Only	+5	
Polk	City of:			
	Erskine	Residential Structures Only Seasonal Residential Recreational Structures Only		-5 -5
	Township of:			
	Bygland	Residential Structures Only	+10	
Rice	City of:			
	Lonsdale	Residential Land and Structures		-10
	Township of:			
	Wells	Residential Land and Structures		-10
Roseau	Countywide	Agricultural Land Only Rural Vacant Land Only		-5 -5
	City of:			
	Warroad	Residential Land Only Seasonal Residential Recreational Land Only		-5 -5
	Township of:			
	Cedarbend	Residential Land and Structures Seasonal Residential Recreational Land and Structures	+5 +5	

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.

Adjusted median ratio= Median ratio x (1+local effort).

Equation 2

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.

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 2nd of each 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.

GLOSSARY

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.

The 21-month study is different from the nine-month and 12-month 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, which 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 (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 meant 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
Agricultural 2a / Rural Vacant 2b / Managed Forest 2c	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
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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