

2021 Property Values and Assessment Practices Report

Assessment Year 2020

Property Tax Division

March 1, 2021

Per Minnesota Statutes, section 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.

This report cost \$8,100.



March 1, 2021

To Members of the Legislature of the State of Minnesota:

I am pleased to present to you this report on property values and assessment practices in Minnesota, the 19th annual version of this report. Since 2012, this report has been combined with the annual report related to agricultural properties and Green Acres, satisfying the requirements of both Minnesota Statutes, section 273.1108, and Minnesota Laws 2001, First Special Session, chapter 5, article 3, section 92.

This report provides a summary of assessed property values and assessment practices in Minnesota, with an emphasis on market values for 2a agricultural and 2b rural vacant land properties, and Green Acres value methodology and determinations.

This report covers the 2020 assessment year based on values set on January 2, 2020, and is therefore based on data from before the COVID-19 pandemic and subsequent economic challenges. We will have data on any changes that occurred between the 2020 and 2021 assessment years in next year's report.

While there is anecdotal evidence from within the assessment community that the pandemic is impacting the apartment market and other rental markets (such as office space), trends will not show up in our data until after the 2021 assessment is complete. Regardless, because of the many factors that are influencing property values, it is unlikely that we will be able to identify specific causes for various trends.

Sincerely,

Robert Doty
Commissioner
Minnesota Department of Revenue

600 N. Robert St., St. Paul, MN 55146
www.revenue.state.mn.us

An equal opportunity employer
This material is available in alternate formats.

Table of Contents

Commissioner’s Letter	i
Table of Contents	ii
Introduction	1
Overview of the Minnesota Department of Revenue’s Role.....	1
Estimated Market Values and the Sales Ratio Study	2
Sales Used for the 2020 Assessment Year.....	2
Analysis of Sales Impacting Market Value Changes.....	3
2020 Assessment Quality and Sales Ratio Studies on EMVs	3
Statewide Change in Value by Property Type	4
Taxable Market Value	11
Taxable Market Value Trends	11
Green Acres and Rural Preserve	13
Tax Distribution	14
Taxable Value	14
2020 Trends	14
Appendix A – Summary of 2020 State Board Orders	16
Sales Ratios and Coefficients of Dispersion.....	16
State Board Orders by County for 2020 Assessment Year	17
Appendix B – Sales Ratio Studies	19
Appendix C – Classification Rates (2020 Assessment)	21
Appendix D – Green Acres and Rural Preserve Values	23
Taxable Green Acres Value	23
Rural Preserve	25
County Average Value Per Acre – Assessment Year 2020	26
Appendix E – Maps: Statewide Market Values and Assessment Practices Indicators	29
Map 1: Percent Change in Total Estimated Market Value 2019-2020.....	30
Map 2: Real Property Sales Per 100 Parcels in 2020	31
Map 3: Taxable Tillable Green Acres/Rural Preserve Value (2020 Assessment)	32
Map 4: Taxable Non-Tillable Green Acres/Rural Preserve Value (2020 Assessment).....	33
Appendix F – Glossary	34

Introduction

This is the 18th annual report to the Minnesota Legislature on property tax values and assessment practices in the state. The Legislature mandated this report from the Minnesota Department of Revenue in 2001. Since 2012, this report has been combined with the annual report about agricultural properties and Green Acres, satisfying the requirements of both Minnesota Statutes, section 273.1108, and Minnesota Laws 2001, First Special Session, chapter 5, article 3, section 92.

As required by those mandates, this report contains:

- Information by major types of property on a statewide basis and at various jurisdictional levels
- Recent market value trends
- Trend analysis of excluded market value
- Assessment quality indicators, including sales ratios and coefficients of dispersion for counties
- A summary of State Board Orders issued in 2020
- Green Acres value methodology and determinations
- Assessment and classification practices for class 2a agricultural and 2b rural vacant land property

This report provides an accurate description of the current state of property tax assessment and an overview of the department's responsibility to oversee the state's property tax assessment process. This report collects property value data for the purpose of monitoring and analyzing underlying value trends and assessment quality. This information and analysis informs government officials and the public about valuation trends within the property tax system.

Data Sources

The data for the assessment practices report is gathered through data submissions from all 87 counties in Minnesota. The data used for this report (assessment year 2020) is from PRISM files submitted on September 1, 2020. On previous Assessment Practices Reports, the historical data was also taken from PRISM submission 2 to maintain uniformity.

Starting this year, we will report historical data gathered from PRISM submission 3, submitted on April 1 of the taxes-payable year. The April 1 file may reflect minor changes to taxable market value that occur between September 1 and December 31, such as properties that become exempt. This will result in small changes to the reported data for assessment years 2019 and prior in this report. The data for assessment year 2020 is still based on September 2020 data.

Overview of the Minnesota Department of Revenue's Role

Property taxes are an important source of revenue for all local units of government in Minnesota, including counties, cities, townships, and school districts. The primary responsibility of the department's Property Tax Division is to ensure fair and uniform administration of, and compliance with, state 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 Department of Revenue, acting as the State Board of Equalization, has the authority to increase or decrease assessed market values in order to bring about equalization.

- Promotion of uniformity of administration among the counties to ensure 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 for county officials, including technical manuals, bulletins, answers to specific questions, and courses taught by division staff. These offerings provide county officials the support and training necessary to administer property tax laws equitably and uniformly.

The classification system is another part of the Minnesota Department of Revenue’s efforts to measure assessment quality. The sales ratio study and State Board of Equalization use property classifications to study value trends and accuracy of assessors’ valuations. For the purposes of this report, the department has focused on the following major classification types:

- Residential
- Seasonal recreational residential (cabins)
- Apartments
- Commercial
- Industrial
- Agricultural and rural lands

Estimated Market Values and the Sales Ratio Study

Minnesota law requires that all property be valued at its market value. For property tax assessment purposes, the market value is rounded to the nearest \$100. Assessors are required to determine the value of the land, the value of the structures and improvements to the land, and the resulting total market value.

The “market value” used for property tax purposes is the “open market value,” which is the price a property would sell for under typical, normal, and competitive conditions. It is also called the estimated market value (EMV). The most common method to determine EMVs is the comparable sales approach.

To evaluate the accuracy and uniformity of assessments within the state (and to ensure compliance with property tax laws), the Minnesota Department of Revenue conducts annual **sales ratio studies**. These studies measure the relationship between appraised values and the actual sales price.

Sales Used for the 2020 Assessment Year

The number of total sales and the number of good sales decreased between the 2018 and 2019 sales ratio study years. The data comes from sales that occurred October 1, 2018 – September 30, 2019.

There were 136,343 Certificates of Real Estate Value (CRVs) received in the 2019 sales ratio study for the 2020 State Board of Equalization. Of these, 87,855 were considered good, current-year, open-market sales. Both numbers decreased from the 2019 assessment (139,887 sales; 89,406 of them “good” sales).

Estimated market values increased for all major property types except agricultural land. Overall estimated market values for all properties increased by 4.7%, a lower increase than in 2019.

Analysis of Sales Impacting Market Value Changes

Sales ratio studies measure the relationship between appraised values and the actual sales price. A sales ratio is the assessor's estimated market value of a property divided by its actual sales price, as seen here:

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

Equation 1

For example, assume a home was valued by the assessor at \$100,000. The home sold for \$105,000. The sales ratio would be calculated as follows:

$$\text{Sales Ratio} = \frac{\$100,000}{\$105,000} = 95\%$$

2020 Assessment Quality and Sales Ratio Studies on EMVs

The two primary measures of assessment quality are the sales ratio and the coefficient of dispersion (COD).¹ Assessment quality mostly improved between the 2018 and 2019 sales ratio studies (for assessment years 2019 and 2020). Sales ratios improved across the board; however, the COD worsened for some classes of property. (See Appendix A for the median sales ratios and CODs by property type.)

- Sales ratios measure the **level of assessment** (how close appraisals are to market value on an overall basis). For the 2019 sales ratio study (for the 2020 assessment), the statewide median sales ratios for all property types were in the acceptable targeted range of 90 to 105%.
- Coefficients of dispersion measure the **uniformity of assessment** (how close individual appraisals are to the median ratio and each other). For the 2019 sales ratio study, the statewide coefficients for most property classes except agricultural and resorts were within the International Association of Assessing Officers' (IAAO) acceptable ranges; a higher COD indicates a lack of uniformity in assessments.²

State Board Orders

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. Twelve counties were issued State Board Orders for the 2019 sales ratio study, compared to eight counties for the 2018 study.

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. These issues usually fall into three categories:

1. Low sales ratios in areas with a history of few sales
2. Sales ratios near the 90 to 105% range boundaries

¹ As a general rule, sales ratios and coefficients of dispersion are more accurate in classes with more sales activity because a larger sales sample is more likely to reflect the range of values for all properties in the jurisdiction.

² 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. This is an area of concern with smaller sales samples.

3. Areas with uniformity concerns

(See Appendix A for a list of State Board Orders by county for the 2020 assessment and Appendix B for a detailed explanation of sales ratio studies used for these board orders.)

Statewide Change in Value by Property Type

Recent Trends

The data in this section is an aggregate of how much EMV is classified and categorized as each property type. There may be multiple reasons a property type's EMV changed from prior years. For example:

- The same property could have increased or decreased in value
- Properties of a property type could have been newly constructed or destroyed
- Existing properties could have changed property type.

This information can still show broader trends within each property type and can educate us on the changing tax base in Minnesota.

All years mentioned are assessment years unless otherwise noted. Table 1 shows that for 2020, EMVs increased for all property classes except agricultural land. Chart 1 (next page) shows statewide EMV changes for 2011-2020.

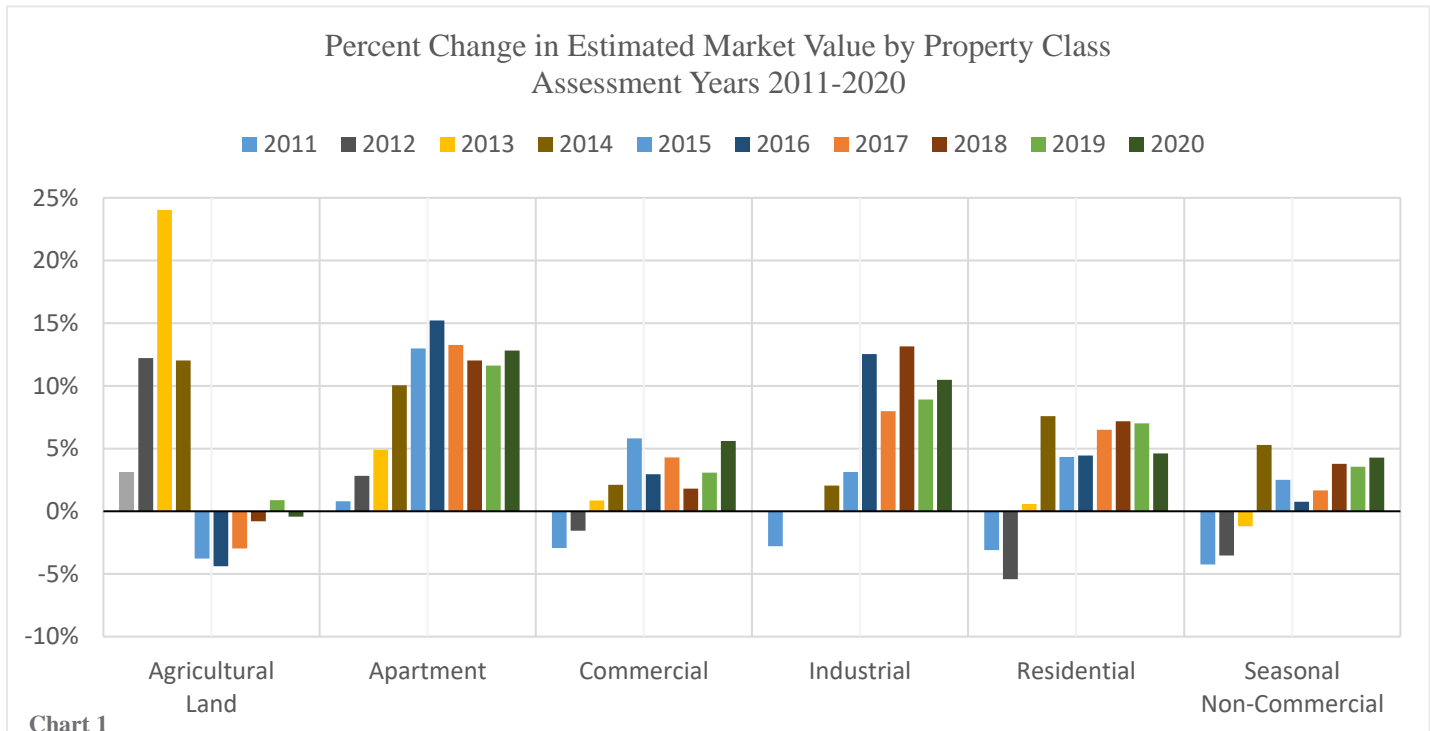
Statewide Change in Estimated Market Value by Property Type Assessment Years 2019 and 2020

Property Type ³	2019 Statewide Change in Value	2020 Statewide Change in Value
Agricultural / Rural Vacant Land ⁴	0.9%	-0.4%
Apartment	11.6%	12.8%
Commercial	3.1%	5.6%
Industrial	8.9%	10.5%
Residential (Non-Apartment)	7.0%	4.6%
Seasonal (Non-Commercial)	3.5%	4.3%
Other	0.1%	9.5%
All Property Types	5.4%	4.7%

Table 1

³ These property types are broad descriptions, and are based on statutory property tax classifications, which are described in detail in Appendix C.

⁴ This property type represents only agricultural and rural vacant land, and excludes the house, garage, and first acre. In previous reports this property type included values for parcels no smaller than 34.5 acres. Since the 2019 Assessment Practices report, all parcel acreages are included, except for the house, garage, and first acre.



To examine trends from the 2020 assessment, we again divided EMV data into three regions:

- Twin Cities Metro Area
- Non-Metro Cities
- Greater Minnesota

The Non-Metro Cities category now includes all cities of the first and second class outside the seven-county Metro area in (instead of only Duluth, Mankato, and St. Cloud). This change provides a clearer distinction between these cities and the rest of Greater Minnesota.⁵

Table 2 (next page) shows that while non-Metro cities have only about 10% the total EMV of the Metro area, their total EMV increased at about the same rate in 2020. Greater Minnesota, by contrast, has had smaller EMV increases over the past three assessment years.

⁵ The 11 non-Metro cities include: Rochester, Duluth, St. Cloud, Moorhead, Mankato, Winona, Owatonna, Austin, Elk River, Faribault, and Northfield. (Part of Northfield falls into Dakota County; this is included in EMV totals for the non-Metro cities category.)

Percent Change in Total EMV by Region <i>Total Yearly EMV (in millions)</i>			
Assessment	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
2018	7.4% \$382,908	6.1% \$39,963	2.7% \$307,776
2019	7.0% \$409,662	6.3% \$42,478	3.4% \$318,279
2020	5.8% \$433,328	5.9% \$44,997	3.2% \$328,423

Table 2

Agricultural Property

Percent Change in Agricultural Land EMV <i>Total Yearly EMV (in millions), Percent of Statewide Agricultural Land EMV</i>			
Assessment	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
2018	0.6% \$6,254 (4.8%)	0.2% \$198 (0.2%)	-0.9% \$124,143 (95.1%)
2019	0.5% \$6,285 (4.8%)	0.8% \$199 (0.2%)	0.9% \$125,273 (95.1%)
2020	2.2% \$6,426 (4.9%)	8.0% \$215 (0.2%)	-0.6% \$124,549 (94.9%)

Table 3

Statewide agricultural property EMV decreased by 0.4% after a slight increase in 2019. However, the EMV of non-homesteaded agricultural land increased by 6.9% while the EMV of homesteaded agricultural land decreased by 4.9%. For the fourth consecutive year, the EMV of non-homesteaded agricultural land increased more or decreased less compared to the EMV of homesteaded agricultural land. This may be partially explained by a decline in acreage. From 2019 to 2020, the amount of homesteaded agricultural land decreased from 19.8 to 18.1 million acres.

This is only the second time since at least 2004 when one category of agricultural land is increasing while the other is decreasing. In 2018, non-homesteaded land's EMV increased by 0.9% while homesteaded land's EMV decreased by 1.8%, a gap of 2.7% compared to the 11.8% in 2020. This difference between homesteaded and non-homesteaded agricultural land is the largest it has been since 2009,⁶ although in that year both EMV values were increasing.

⁶ In AY 2009, agricultural homestead land EMV increased by 9%, while non-homestead agricultural land increased by 34.6%.

The geographic distribution of agricultural EMV is almost entirely located in Greater Minnesota. Because the non-Metro cities geographical area solely comprises the cities themselves, there is minimal agricultural land within the city limits.

Apartments

Percent Change in Apartment EMV			
<i>Total Yearly EMV (in millions), Percent of Statewide Apartment EMV</i>			
Assessment	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
2018	13.0% \$33,980 (81.6%)	10.3% \$3,577 (8.6%)	6.2% \$4,094 (9.8%)
2019	11.8% \$38,004 (81.7%)	13.9% \$4,074 (8.8%)	7.8% \$4,413 (9.5%)
2020	13.8% \$43,264 (82.5%)	9.1% \$4,445 (8.5%)	7.4% \$4,739 (9.0%)

Table 4

For the sixth consecutive year, apartment statewide EMV grew faster than all other property categories, increasing by 12.8% in 2020. This continues a seven-year trend where apartment EMVs rose by 10% or more statewide.

This growth continues to be focused in the Metro, which contains the majority of statewide EMV for the classification. While there is a slightly larger proportion of apartment EMV in Greater Minnesota than the non-Metro cities, the gap between the two has been decreasing: the percentage increase in apartment EMV in non-Metro cities has been greater than that of Greater Minnesota every year since 2011.

Residential Property

Percent Change in Residential Non-Apartment EMV			
<i>Total Yearly EMV (in millions), Percent of Statewide Non-Apartment EMV</i>			
Assessment	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
2018	7.5% \$272,023 (66.0%)	6.4% \$26,973 (6.6%)	6.6% \$113,049 (27.4%)
2019	7.2% \$291,541 (66.1%)	6.6% \$28,764 (6.5%)	6.7% \$120,606 (27.4%)
2020	4.2% \$303,891 (65.9%)	4.9% \$30,184 (6.5%)	5.5% \$127,195 (27.6%)

Table 5

Statewide residential non-apartment EMV increased at a much lower rate than last year and the lowest since 2016. This was in large part due to statewide residential homestead EMV increasing by only 3.4%, the lowest increase since 2013. Meanwhile, residential non-homesteaded property EMV increased by 13.4% statewide, the highest increase since 2007.

This 10% gap, the largest since 2007, is unusual. In the last three years, there was less than a 2% difference between them. Comparing market conditions between 2007 and 2020 could yield some interesting similarities and differences, but is outside the scope of this report. Given that residential homesteads contain by far the largest proportion of EMV of all property in Minnesota,⁷ this lower EMV increase is reflected in the lower statewide change in EMV.

Percent Change in Statewide Residential Non-Apartment EMV by Property Type					
<i>Total Yearly EMV (in millions)</i>					
Assessment	2016	2017	2018	2019	2020
Homestead	5.4% — \$316,623	6.6% — \$337,674	7.1% — \$361,760	6.8% — \$386,456	3.4% — \$399,522
Non-Homestead	-2.0% — \$44,396	5.4% — \$46,793	7.5% — \$50,286	8.3% — \$54,456	13.4% — \$61,748

Table 6

Both the low increase of residential homestead EMV and high increase of non-homestead EMV are relatively uniform across geographic categories, with Greater Minnesota seeing slightly higher increases in both. This is reflected in the percent changes for all residential non-apartment EMV shown in Table 5.

There is not uniform distribution of residential property; residential non-apartment properties make up 70.1% of the total EMV located in the Metro area, but only 38.7% of all EMV located in Greater Minnesota. Additionally, non-Metro cities have the highest proportion of non-homestead EMV, making up 10.7% of all EMV compared to 9.7% and 4.6% for the Metro and Greater Minnesota respectively. This data is shown in Table 7. These are important considerations to keep in mind to determine how each geographic area's overall tax base is affected.

Residential Non-Apartment Proportion of Area's Total EMV by Property Type for Assessment 2020			
<i>Total EMV (in millions)</i>			
Property Type	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
Homestead	60.4% — \$261,910	56.4% — \$25,392	34.2% — \$112,220
Non-Homestead	9.7% — \$41,982	10.6% — \$4,792	4.6% — \$14,975

Table 7

⁷ Residential homesteads accounted for \$399.5 billion in EMV out of the state total of \$806.8 billion in 2021. The next highest property types are agricultural homestead land (\$78.0 billion) and commercial (\$69.7 billion). Residential non-homestead EMV was \$61.8 billion in 2021.

Seasonal Recreational Residential Property

Seasonal residential properties' market values continued to increase at a lower rate than residential values; however, this year they outpaced the EMV increase of residential homestead values. Seasonal properties still increased at a lower value than non-homestead properties, including in Greater Minnesota which contains over 95% of seasonal residential EMV.

Table 8 shows the increase in properties located on water versus off-water. On-water properties make up the majority of seasonal residential EMV, though EMV of off-water properties has increased at a higher rate over the past three years.

Percent Change in Seasonal Residential Recreational		
<i>Total Yearly EMV (in millions), Percent of Statewide Seasonal Residential Recreational EMV</i>		
Assessment	On-Water	Off-Water
2018	3.7% — \$23,751 (87.6%)	4.5% — \$3,357 (12.4%)
2019	2.5% — \$24,343 (86.7%)	11.1% — \$3,728 (13.3%)
2020	4.1% — \$25,330 (86.5%)	5.8% — \$3,943 (13.5%)

Table 8

Commercial/Industrial Property

Starting with the 2020 Assessment Practices report, commercial property has been reviewed independently from industrial property due to trends showing commercial property EMV is increasing at a much lower rate than industrial property EMV.

Properties that are considered commercial include office buildings, retail stores, malls, hotels, banks, restaurants, and service outlets. Industrial properties include property used for manufacturing, warehouses, and distribution facilities.

Commercial Property

Percent Change in Commercial EMV			
<i>Total Yearly EMV (in millions), Percent of Statewide Commercial EMV</i>			
Assessment	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
2018	2.2% \$44,993 (70.3%)	2.8% \$7,137 (11.1%)	-0.3% \$11,911 (18.6%)
2019	3.4% \$46,504 (70.5%)	1.8% \$7,267 (11.0%)	2.8% \$12,239 (18.5%)
2020	5.7% \$49,140 (70.5%)	7.0% \$7,776 (11.2%)	4.5% \$12,796 (18.4%)

Table 9

Commercial EMV increased at a higher rate than last year, continuing an increasing trend. For the first year since 2015, statewide commercial property EMV increased at a higher rate than residential-non apartment EMV. This is largely due to larger increases in the Metro area and non-Metro cities. In Greater Minnesota, commercial EMV increased less than residential values.

EMV growth in non-Metro cities increased the most of any region in 2020. Commercial properties have the second-largest proportion of total EMV in non-Metro cities, at 17.3%. This is larger than that of the Metro and Greater Minnesota (11.3% and 3.9%, respectively).

Industrial Property

Percent Change in Industrial EMV			
<i>Total Yearly EMV (in millions), Percent of Statewide Industrial EMV</i>			
Assessment	Twin Cities Metro Area	Non-Metro Cities	Greater Minnesota
2018	12.5% \$16,555 (75.7%)	13.3% \$1,260 (5.8%)	15.8% \$4,064 (18.6%)
2019	9.8% \$18,177 (76.3%)	7.5% \$1,355 (5.7%)	5.7% \$4,296 (18.0%)
2020	11.8% \$20,324 (77.2%)	10.4% \$1,495 (5.7%)	4.9% \$4,506 (17.1%)

Table 10

Industrial property EMV continued to increase at a high rate statewide, second only to apartments for the second consecutive year. This is primarily due to the large increase in the Metro area, as it contains over 75% of the statewide industrial EMV, though growth in non-Metro cities and Greater Minnesota has been high compared to other property types.

Industrial property continues to be the smallest category of EMV outlined in this report, representing only 3.3% of total statewide EMV. However, assuming similar increases in EMV to AY 2020, industrial EMV will be greater than seasonal recreational residential property EMV (currently 3.6% of statewide EMV) by 2022. This extrapolation does not factor in the many changes to markets since the beginning of 2020; however, there is still reason to believe that industrial EMV will continue to increase its share of the state's market value of all properties.

Open Space deferrals increased in 2020 after two years of minimal growth. While Open Space can also fluctuate due to reporting issues, ongoing development pressure may explain the increase, similar to the increase in Green Acres values and increases in EMV for all non-agricultural property types.

Green Acres deferrals increased in 2020. Those changes and Rural Preserve are discussed further in the next section.

Value Exclusions and Deferrals

<i>All Values in Millions</i>			
Exclusion/Deferral	2019 Value	2020 Value	% Change
Homestead Market Value Exclusion	\$23,396	\$22,078	-5.6%
Veterans with a Disability Exclusion	\$3,166	\$3,330	5.2%
Green Acres	\$2,682	\$2,799	4.4%
Open Space	\$635	\$740	16.5%
Rural Preserve	\$660	\$595	-9.8%
Plat Law	\$425	\$408	-4.0%

Table 11

After including the various exclusions, deferrals, and special valuations, taxable market values increased for all classes of property except agricultural from 2019-2020.

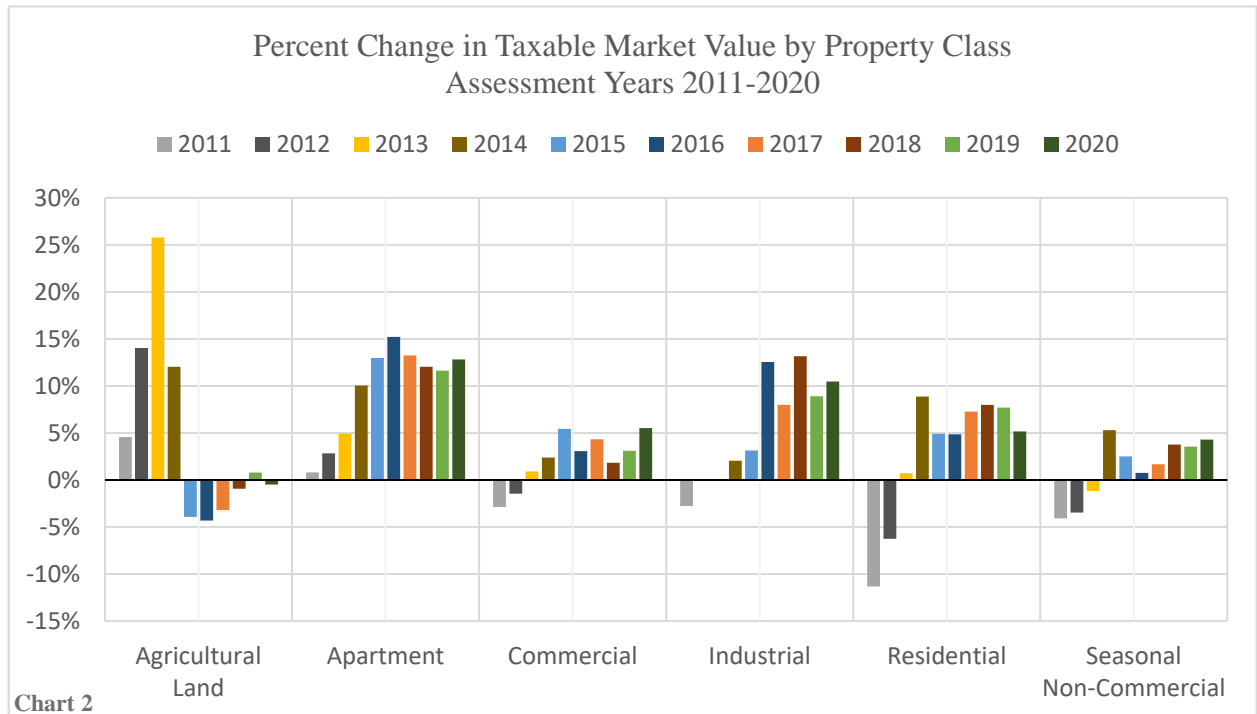


Chart 2

Green Acres and Rural Preserve

Green Acres and Rural Preserve are property tax deferral programs that help keep farm property values from increasing due to non-agricultural influences such as development or recreational uses on nearby properties. The taxable market value of qualifying farm land is based on its agricultural use, rather than its highest and best use (which may be impacted by sales of nearby land for development or speculation).

The Department of Revenue determines a Green Acres value for tillable and non-tillable class 2a agricultural land for each county to reflect market and agricultural conditions. Counties use the Green Acres value when calculating property taxes. Rural Preserve provides a similar benefit for class 2b rural vacant land that is part of a farm. (See Appendix D for details about Green Acres and Rural Preserve values for the 2020 assessment.)

Green Acres taxable value decreased from last year, which is expected given that agricultural land EMV decreased. The deferred value increased, reflecting the continued increase in value of other property types and development pressure on agricultural land. This resulted in an increase of less than 1% in the percentage deferred. This is less than in previous years when agricultural EMV has decreased and other property types have increased.

Total enrolled acres have decreased by around 18,600 acres (from approximately 3,067,700 to 3,049,000) between AY 2019 and AY 2020.⁸ The decrease in homesteaded agricultural land may be one possible reason for the decrease in enrolled Green Acres acreage.

Rural Preserve had an increase in taxable value and a sharp drop in deferred value, leading to the percentage of value deferred under the program to fall significantly. A small number of counties representing over a third of the percentage of all statewide deferred value in 2019 increased their base values for 2020, resulting in large decreases of deferred market value.

Green Acres and Rural Preserve Deferrals			
<i>All Values in Millions</i>			
Green Acres	2018	2019	2020
Taxable Value	\$11,915	\$12,009	\$11,961
Deferred Value	\$2,587	\$2,682	\$2,799
Percent Deferred*	17.8%	18.3%	19.0%
Rural Preserve	2018	2019	2020
Taxable Value	\$686	\$688	\$792
Deferred Value	\$610	\$660	\$595
Percent Deferred*	47.1%	48.9%	42.9%

* *Percent Deferred = Percentage of Total EMV (Deferred Value + Taxable Value) that received deferral*

Table 12

⁸ The acreage data is incomplete, but can still provide some insight into why the increase in percentage value of deferred land through green acres is lower than in previous years.

Of the 38 counties that have acreage enrolled in Rural Preserve, 26 counties' deferred market values did not change more than \$500,000 positively or negatively, nine counties' deferred values increased by more than \$500,000, and only three decreased by more than \$500,000.

Green Acres Values: 2020 Assessment Year Impact

For assessment year 2020 (taxes payable 2021), statewide taxable values of agricultural land decreased by 0.4%, while the amount of value deferred under Green Acres increased by 0.7%. Data from the last three years is shown in Table 12.

Tax Distribution

Minnesota's property tax system has several components including classification, valuation, and special programs that reduce taxable value, credits, and different levies. These components determine which properties will pay a greater or lesser share of taxes.

Taxable Value

The nature of Minnesota's property tax system is that if the taxable value of one class of property decreases, it pays a smaller share of the overall tax burden and other property classes pay a larger share.

For example, agricultural and homesteaded properties have typically received preferential property tax treatment through classification rates and programs – such as Green Acres and the Homestead Market Value Exclusion – and through homestead credits and school bonding credits,

Conversely, commercial/industrial properties typically pay a greater share of taxes than residential or agricultural properties of equal value due to a higher class rate, lesser eligibility for special programs, and being subject to additional levies such as the state general tax. (See Appendix C for details about the classification rates used for the 2020 assessment.)

The impact of these components is clear when reviewing tax liability and effective tax rates. Based on preliminary estimates from the 2020 assessment year (taxes payable 2021):

- Agricultural property and rural vacant land represent about 16% of taxable property value and pay about 6% of net property taxes statewide. (See Table 12, next page.)
- Commercial property accounts for about 9% of market value and pays about 20% of property taxes.
- Industrial property accounts for about 3% of market value and pays about 8% of property taxes.

These numbers are affected by where the majority of each property type is located and the surrounding tax base, but they still provide insight into how different classifications contribute to the tax base.

2020 Trends

Agricultural and Residential Property

The market value share of agricultural property continued to decrease, as it has since 2014. Agricultural property makes up 16.4% of the statewide market value share, down from 17.3% in 2019, 18.2% in 2018,

and 20.9% in 2017. This decrease is unsurprising, as agricultural EMV was the only EMV that decreased this year. This also corresponds with the decrease in net tax share of agricultural land by 0.2%.

While residential property market value increased, its net tax share decreased for the first time since 2017.⁹ In both occasions, the decrease in net tax share was taken up by apartments, commercial/industrial, and “other” property.

Commercial and Industrial Property

For commercial property, market value share stayed constant while net tax share continued to decrease. Industrial property market value share and net tax share increased after having dropped the year before. This year’s industrial property EMV increased at an even larger rate than last year while many other property types increased at a smaller rate than previous years.

Because of its classification rate and state general tax obligations, it is unsurprising that industrial property’s net tax share increased with its market value share. While commercial property has a similar obligations, its market share remaining constant and other property type market shares increasing resulted in a drop in net tax share.

Net Tax Liability

Table 13 shows the net tax and tax share for each major property class.

Net Tax Liability and Tax Share by Property Class
Assessment Year 2020, Taxes Payable 2021 (Preliminary Estimates)

Properties by Class	Market Value (Millions)	Net Tax (Millions)	Market Value Share	Net Tax Share
Agricultural/Rural Vacant	\$127,777	\$633	16.4%	5.6%
Residential	\$437,166	\$5,710	56.3%	50.8%
Apartment	\$52,447	\$814	6.8%	7.2%
Seasonal (Non-Commercial)	\$29,265	\$280	3.8%	2.5%
Commercial	\$69,036	\$2,197	8.9%	19.6%
Industrial	\$26,323	\$848	3.4%	7.6%
All Other	\$34,783	\$751	4.5%	6.7%
Total Real and Personal	\$776,798	\$11,232	100.0%	100.0%

Table 13 Please note that due to rounding, there may be some small differences between the listed totals and sums of all classes.

⁹ Net tax share dropped from 51.2% to 50.9% from AY 2019 to 2020, and dropped from 48.6% to 48.4% from AY 2016 to 2017

Appendix A – Summary of 2020 State Board Orders

Sales Ratios and Coefficients of Dispersion

Property Type	Final Adjusted Median Ratio		Coefficient of Dispersion		Sample Size	
	2018	2019	2018	2019	2018	2019
<i>State Board Year</i>	<i>2018</i>	<i>2019</i>	<i>2018</i>	<i>2019</i>	<i>2018</i>	<i>2019</i>
Residential/Seasonal	94.59	94.94	8.44	8.24	78,178	76,995
Apartment	93.62	95.08	11.59	11.63	568	553
Commercial/Industrial	95.00	95.27	16.87	15.32	1,674	1,696
Resorts	94.59	96.58	15.78	27.61	27	24
Agricultural 2a / Rural Vacant 2b	95.74	96.45	21.49	20.56	3,668	3,587

Table 14

The International Association of Assessing Officers (IAAO) recommends trimming the most extreme outliers from the sample before calculating the COD. The trimming method used by the Sales Ratio excludes sales outside of an interquartile range determined by jurisdiction. This eliminates a few extreme sales that would distort the COD. Per the IAAO, the acceptable ranges for the COD are as follows:

Coefficient of Dispersion (COD) Acceptable Ranges by Property Type

Property Type	Acceptable COD Range
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 15

State Board Orders by County for 2020 Assessment Year

County	Assessment District	Class	Percent Increase	Percent Decrease
Anoka	City of Blaine	Industrial Land and Structures	10%	
Becker	Township of Height of Land	Seasonal Residential Recreational Non-Commercial Land and Structures < \$200k Off-Water; Residential Land and Structures < \$200k Off-Water	10%	
	Township of Holmesville	Seasonal Residential Recreational Non-Commercial Land and Structures Off-Water; Residential Land and Structures Off-Water	5%	
	Township of Holmesville	Seasonal Residential Recreational Non-Commercial Land and Structures Buffalo Lake; Residential Land and Structures Buffalo Lake	10%	
	Township of Round Lake	Seasonal Residential Recreational Non-Commercial Land and Structures Off-Water; Residential Land and Structures Off-Water	5%	
	Township of Sugar Bush	Seasonal Residential Recreational Non-Commercial Land and Structures Off-Water; Seasonal Residential Recreational Non-Commercial Land and Structures Big Sugar Bush Lake; Residential Land and Structures Off-Water; Residential Land and Structures Big Sugar Bush Lake	10%	
	Township of Sugar Bush	Seasonal Residential Recreational Non-Commercial Land Only Strawberry Lake; Residential Land Only Strawberry Lake	15%	
Benton	City of St. Cloud	Apartment Land and Structures containing 16 or fewer units	5%	
Chippewa	City of Clara City	Residential Structures Only	10%	
	City of Montevideo	Residential Land and Structures	10%	
Clearwater	Countywide	2a Agricultural Structures only	5%	

County	Assessment District	Class	Percent Increase	Percent Decrease
	Township of Nora	Residential Structures Only Off-Water	5%	
Fillmore	City of Lanesboro	Residential Land Only; Seasonal Residential Recreational Non-Commercial Land Only	5%	
	City of Lanesboro	Residential Structures Only; Seasonal Residential Recreational Non-Commercial Structures Only	10%	
	City of Preston	Residential Land Only; Seasonal Residential Recreational Non-Commercial Land Only	10%	
	City of Preston	Residential Structures Only; Seasonal Residential Recreational Non-Commercial Structures Only	5%	
	Village of Rushford	Residential Structures Only; Seasonal Residential Recreational Non-Commercial Structures Only	5%	
Goodhue	Township of Stanton	Residential Land Only; Seasonal Residential Recreational Non-Commercial Land Only	5%	
Mahnomen	Township of Island Lake	Seasonal Residential Recreational Non-Commercial and Residential: Complete Reassessment of the Lake of Island Lake		
Meeker	City Dassel	Residential Land and Structures Off-Water; Seasonal Residential Recreational Non-Commercial Land and Structures Off-Water	5%	
	City of Watkins	Residential Land and Structures; Seasonal Residential Recreational Non-Commercial Land and Structures	5%	
Otter Tail	Township of Woodside	2a Agricultural Land Only	5%	
Sherburne	City of St. Cloud	Apartment Land and Structures containing 16 or fewer units	5%	
Stearns	City St. Cloud	Apartment Land and Structures containing 16 or fewer units	5%	

Appendix B – Sales Ratio Studies

12-Month Study

The 12-month study is mainly used 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).

CRVs 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, 2017, through September 30, 2018. These sales are compared with preliminary values for assessment year 2019, taxes payable 2020. The sale prices are adjusted for time and financial terms to the date of the assessment, which is January 2 of each year. For this study, the sales are adjusted to January 2, 2019.

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% (.25% monthly), if a house were purchased in August 2018 for \$200,000, it would be adjusted to a January 2019 value of \$202,500, or the sales price would be adjusted upward by 1.25% for the 5-month timeframe 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%, or above 105%. 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 department.

A separate 9-month study is used by the Tax Court and is based on sales occurring between January 1 and September 30 of a given year. (It is the same as the 12-month study, but excludes the sales from October, November, and December.)

21-Month Study

The purpose of the 21-month study 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 9- 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 9- 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. For example, the net tax capacity for residential properties is 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.

Appendix C – Classification Rates (2020 Assessment)

Class	Description	Tiers	Class Rate	State General Rate
1a	Residential Homestead	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
1b	Homestead of Persons who are Blind/Disabled [classified as 1a or 2a] [classified as 1a or 2a]	First \$50,000	0.45%	N/A
		\$50,000 - \$500,000 Over \$500,000	1.00% 1.25%	N/A
1c	Homestead Resort	First \$600,000	0.50%	N/A
		\$600,000 - \$2,300,000	1.00%	N/A
		Over \$2,300,000	1.25%	1.25%
1d	Housing for Seasonal Workers	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
2a	Agricultural Homestead - House, Garage, 1 Acre (HGA)	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
2a/2b	Agricultural Homestead - First Tier	First \$1,900,000	0.50%	N/A
2a/2b	Farm Entities Excess First Tier	Unused First Tier	0.50%	N/A
2a	Agricultural - Nonhomestead or Excess First Tier		1.00%	N/A
2b	Rural Vacant Land		1.00%	N/A
2c	Managed Forest Land		0.65%	N/A
2d	Private Airport		1.00%	N/A
2e	Commercial Aggregate Deposit		1.00%	N/A
3a	Commercial/Industrial/Utility (<i>not including utility machinery</i>)	First \$100,000	1.50%	N/A
		\$100,000 - \$150,000	1.50%	1.50%
		Over \$150,000	2.00%	2.00%
		Electric Generation Public Utility Machinery	2.00%	N/A
		All Other Public Utility Machinery	2.00%	2.00%
		Transmission Line Right-of-Way	2.00%	2.00%
4a	Residential Nonhomestead 4+ Units		1.25%	N/A
4b(1)	Residential Non-Homestead 1-3 Units		1.25%	N/A
4b(2)	Unclassified Manufactured Home		1.25%	N/A
4b(3)	Agricultural Non-Homestead Residence (2-3 units)		1.25%	N/A
4b(4)	Unimproved Residential Land		1.25%	N/A
4bb(1)	Residential Non-Homestead Single Unit	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
4bb(2)	Agricultural Non-Homestead Single Unit - (HGA)	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
4bb(3)	Condominium Storage Unit	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
4c(1)	Seasonal Residential Recreational Commercial (resort)	First \$500,000	1.00%	1.00%
		Over \$500,000	1.25%	1.25%

Class	Description	Tiers	Class Rate	State General Rate
4c(2)	Qualifying Golf Course		1.25%	N/A
4c(3)(i)	Non-Profit Community Service Org. (non-revenue)		1.50%	N/A
	Congressionally Chartered Veterans Organization (non-revenue)		1.00%	N/A
4c(3)(ii)	Non-Profit Community Service Org. (donations)		1.50%	1.50%
	Congressionally Chartered Veterans Organization (donations)		1.00%	1.00%
4c(4)	Post-Secondary Student Housing		1.00%	N/A
4c(5)(i)	Manufactured Home Park		1.25%	N/A
4c(5)(ii)	Manufactured Home Park (>50% owner-occupied)		0.75%	N/A
4c(5)(ii)	Manufactured Home Park (50% or less owner-occupied)		1.00%	N/A
4c(5)(iii)	Class I Manufactured Home Park		1.00%	N/A
4c(6)	Metro Non-Profit Recreational Property		1.25%	N/A
4c(7)	Certain Non-Comm. Aircraft Hangars and Land (leased land)		1.50%	N/A
4c(8)	Certain Non-Comm. Aircraft Hangars and Land (private land)		1.50%	N/A
4c(9)	Bed & Breakfast		1.25%	N/A
4c(10)	Seasonal Restaurant on a Lake		1.25%	N/A
4c(11)	Marina	First \$500,000	1.00%	N/A
		Over \$500,000	1.25%	N/A
4c(12)	Seasonal Residential Recreational Non-Commercial	First \$76,000	1.00%	0.40%
		\$76,000 - \$500,000	1.00%	1.00%
		Over \$500,000	1.25%	1.25%
4d	Low Income Rental Housing (Per Unit)	First \$162,000	0.75%	N/A
		Over \$162,000	0.25%	N/A
5(1)	Unmined Iron Ore and Low-Grade Iron-Bearing Formations		2.00%	2.00%
5(2)	All Other Property		2.00%	N/A

Appendix D – Green Acres and Rural Preserve Values

The Minnesota Agricultural Property Tax Law (referred to as “Green Acres”) helps insulate farm owners from rising land values due to non-agricultural influences on the land – such as nearby residential and commercial development, or seasonal cabin and resort properties.

Property enrolled in the Green Acres program is valued at its agricultural value rather than its highest and best use value (which may be impacted by development pressures). This provides a lower taxable value for qualifying properties and redistributes the tax burden to other properties in the same jurisdiction.

Only property classified as class 2a agricultural land under Minnesota Statutes section 273.13, subdivision 23 can qualify for Green Acres, and at least 10 contiguous acres must be used (unless it is a qualifying nursery or greenhouse).

Green Acres is a property tax deferral program. When a property is sold, transferred, or no longer qualifies for the program, the owner has to pay the difference in tax for the last three years of enrollment. When a property enrolled in Green Acres is sold to another person who may qualify for the program, the new owner must apply to the county assessor within 30 days of the purchase for the program to continue on the property.

Taxable Green Acres Value

Green Acres requires assessors to look at qualifying agricultural property in two ways.

- First, the assessor must value the property according to its highest and best use (as is done for all properties). This may include non-agricultural value influences.
- Then the assessor must determine the agricultural value of the property based on Department of Revenue guidance.
- If the agricultural value is below the highest and best use value, the assessor must use the agricultural value for tax purposes.

The Minnesota Department of Revenue establishes agricultural land values throughout the state in consultation with the University of Minnesota. (See Minnesota Statutes, section 273.111, subdivision 4.)

Analyzing Agricultural Sales

To establish these agricultural values, the department examines sales of agricultural land throughout the state. (See Minnesota Statutes, section 273.111, subdivision 4.)

The department looks at agricultural sales in each of the 87 counties to determine Green Acres values that reflect the agricultural economy in general. When determining Green Acres values, the department attempts to identify pure agricultural sales – sales that were not influenced by developmental pressure or other non-agricultural factors.

To identify pure agricultural sales, the department identifies areas where development pressure may affect the sale price of agricultural land. Properties from these areas are removed from the sales data. The remaining sales are used to determine Green Acres values for tillable and non-tillable land in each county.

Identifying Areas with Non-Agricultural Influences

The department has identified three variables that may indicate non-agricultural influences in a particular area, city, or town:

- Change in number of households
- Newly created non-agricultural parcels
- Annexations to cities and towns

These variables indicate the change in the previous three years for each city or town in Minnesota.¹⁰ Each variable is assigned a threshold that may indicate development pressure:

- More than five households in a city or town
- More than five new non-agricultural parcels in a city or town
- Any annexations (for all cities and towns in and surrounding the annexation)

Agricultural sales in areas that meet any two of the thresholds are flagged as sales with potential non-agricultural influence. These sales are referred to the department's regional Property Tax Compliance Officers (PTCOs) for further review.

Whenever a PTCO confirms that non-agricultural influence may have affected the price of a sale, it is removed from the sales data used to determine the Green Acres value. Sales are also removed if they include land on a lake or river, include non-agricultural land, or represent outliers in the data.

Determining Agricultural Values

After sales with potential non-agricultural influences are removed from the sales data, the remaining sales are used to determine each county's agricultural value, used for Green Acres purposes.

These values are calculated using a basic regression and the county's sales data from the previous 12 months – sale prices, tillable acres, and non-tillable acres. This regression estimates a value per acre for tillable land (β_1) and non-tillable land (β_2).

$$\text{Sale Price} = \beta_1 * \text{Tillable Acres} + \beta_2 * \text{Non - Tillable Acres}$$

Equation 2

The size and representativeness of sales data can vary by county and year to year. As a result, the Green Acres values calculated with a county's data for the previous 12 months may not always be reliable.

To get more data, the regression is run using two additional data sets: the previous 21 months of sales in each county, and the previous 12 months of sales in each agricultural region. If a county's 12-month value is questionable, the additional results are considered, prioritizing the 21-month results for the county over the 21-month results for the agricultural regions.

¹⁰ Data for the three variables comes from the Minnesota State Demographic Center, Metropolitan Council, Market Value by Parcel File, and Minnesota Geospatial Information Office.

If all three regressions fail to yield a consistent Green Acres value, the Property Tax Division’s staff sets Green Acres values based on surrounding counties, counties with similar agricultural markets, and previous years’ Green Acres values.

Rural Preserve

The Rural Preserve Property Tax Program complements Green Acres and provides similar property tax benefits for class 2b rural vacant land that is part of a contiguous farm enrolled in Green Acres (see Minnesota Statutes, section 273.114).

As with Green Acres, a portion of taxable value is deferred for qualifying land while it is enrolled in the program. The assessor determines two values for the land: a “highest and best use value” based on market conditions, and a value that is uninfluenced by non-agricultural factors such as residential or commercial development. The assessor must use whichever value is lower for property tax purposes.

This provides a lower taxable value for qualifying properties and redistributes the tax burden to other properties in the same jurisdiction. When a property is sold, transferred, or no longer qualifies for the program, the owner has to pay the difference in tax for the last three years of enrollment.

Taxable Rural Preserve Value

Rural Preserve values may be different than Green Acres values. Each year, the department issues a memo to notify counties of their Green Acres values for tillable and non-tillable agricultural lands. The department urges counties to use the following guidelines to calculate Rural Preserve values:

- For otherwise tillable lands, use the Green Acres tillable land value.
- For non-tillable lands that are otherwise pastureable, use their non-tillable Green Acres value.
- For unusable waste, wild land, swamp land, etc., use 50% of the **non-tillable** Green Acres value.

Examples

1. If the county has estimated the value of woods at \$2500 per acre because of recreational or other non-agricultural value influences, and the value for Rural Preserve is \$2200, the deferral is based on the \$300 per acre difference.
2. If a county has estimated the value of a swamp at \$1800 per acre because of recreational or other non-agricultural market value influences, and the value for Rural Preserve is \$2200, then the recommended Rural Preserve value for the **unusable** swamp land is \$1100 per acre (50% of \$2200), and the deferral is based on the \$700 difference in value.
3. If a county has valued a swamp at \$900 per acre due to lack of non-agricultural market influences, and the recommended value for Rural Preserve is \$2200 and 50% of that value is \$1100, there is no deferral. (The property may still be enrolled in the program, but the tax deferral only applies if the EMV set by the county exceeds the Rural Preserve value.)

Unusable wasteland often carries a very low estimated market value, which may not be high enough to receive a tax deferral under Rural Preserve (as shown in Example 3 above). However, there may be some areas of the state where recreational uses are affecting the market value of these unusable wastelands that are part of a farm.

County Average Value Per Acre – Assessment Year 2020

County	Tillable Value	Non-Tillable Value
Aitkin	1,500	1,000
Anoka	3,200	1,900
Becker	3,300	1,300
Beltrami	1,300	1,100
Benton	3,300	1,400
Big Stone	5,200	1,400
Blue Earth	7,400	1,700
Brown	7,200	1,600
Carlton	1,500	1,000
Carver	6,900	2,400
Cass	1,700	1,400
Chippewa	6,800	1,400
Chisago	3,200	1,900
Clay	4,200	1,100
Clearwater	1,500	900
Cook	800	800
Cottonwood	8,100	1,400
Crow Wing	2,300	1,400
Dakota	7,000	2,500
Dodge	7,500	2,100
Douglas	4,000	1,700
Faribault	7,100	1,400
Fillmore	6,000	2,600
Freeborn	6,300	1,400
Goodhue	7,000	2,600
Grant	5,400	1,700
Hennepin	6,900	2,500
Houston	5,000	2,900
Hubbard	2,400	1,400
Isanti	3,100	1,900
Itasca	1,200	1,000
Jackson	7,400	1,400
Kanabec	2,400	1,100
Kandiyohi	5,900	1,400
Kittson	2,000	800
Koochiching	800	800
Lac Qui Parle	5,200	1,400
Lake	900	900

County	Tillable Value	Non-Tillable Value
Lake of the Woods	1,000	800
Le Sueur	6,900	2,500
Lincoln	5,100	1,400
Lyon	6,400	1,400
Mcleod	6,300	1,800
Mahnomen	3,200	900
Marshall	2,300	800
Martin	7,400	1,400
Meeker	4,500	1,600
Mille Lacs	3,000	1,100
Morrison	2,800	1,400
Mower	6,900	1,400
Murray	6,900	1,400
Nicollet	7,300	1,800
Nobles	8,300	1,600
Norman	3,600	900
Olmsted	6,400	2,400
Otter Tail	3,100	1,400
Pennington	2,100	900
Pine	2,000	1,100
Pipestone	7,100	2,200
Polk	3,500	900
Pope	4,300	1,700
Ramsey	6,700	2,500
Red Lake	2,300	900
Redwood	7,000	1,500
Renville	7,000	1,400
Rice	6,800	2,500
Rock	9,600	2,200
Roseau	1,200	800
St. Louis	1,000	900
Scott	7,200	2,500
Sherburne	3,300	1,900
Sibley	7,300	2,000
Stearns	4,600	2,100
Steele	6,300	1,600
Stevens	5,500	1,500
Swift	5,900	1,400
Todd	2,300	1,400
Traverse	5,600	1,300
Wabasha	6,100	2,600

County	Tillable Value	Non-Tillable Value
Wadena	2,100	1,200
Waseca	7,100	1,600
Washington	6,700	2,500
Watsonwan	7,800	1,400
Wilkin	4,300	1,100
Winona	6,300	2,700
Wright	6,100	2,500
Yellow Medicine	6,100	1,400

Appendix E – Maps: Statewide Market Values and Assessment Practices Indicators

The following pages contain statewide charts and maps with information about Minnesota property values, sales ratio measures, and the Green Acres and Rural Preserve programs.

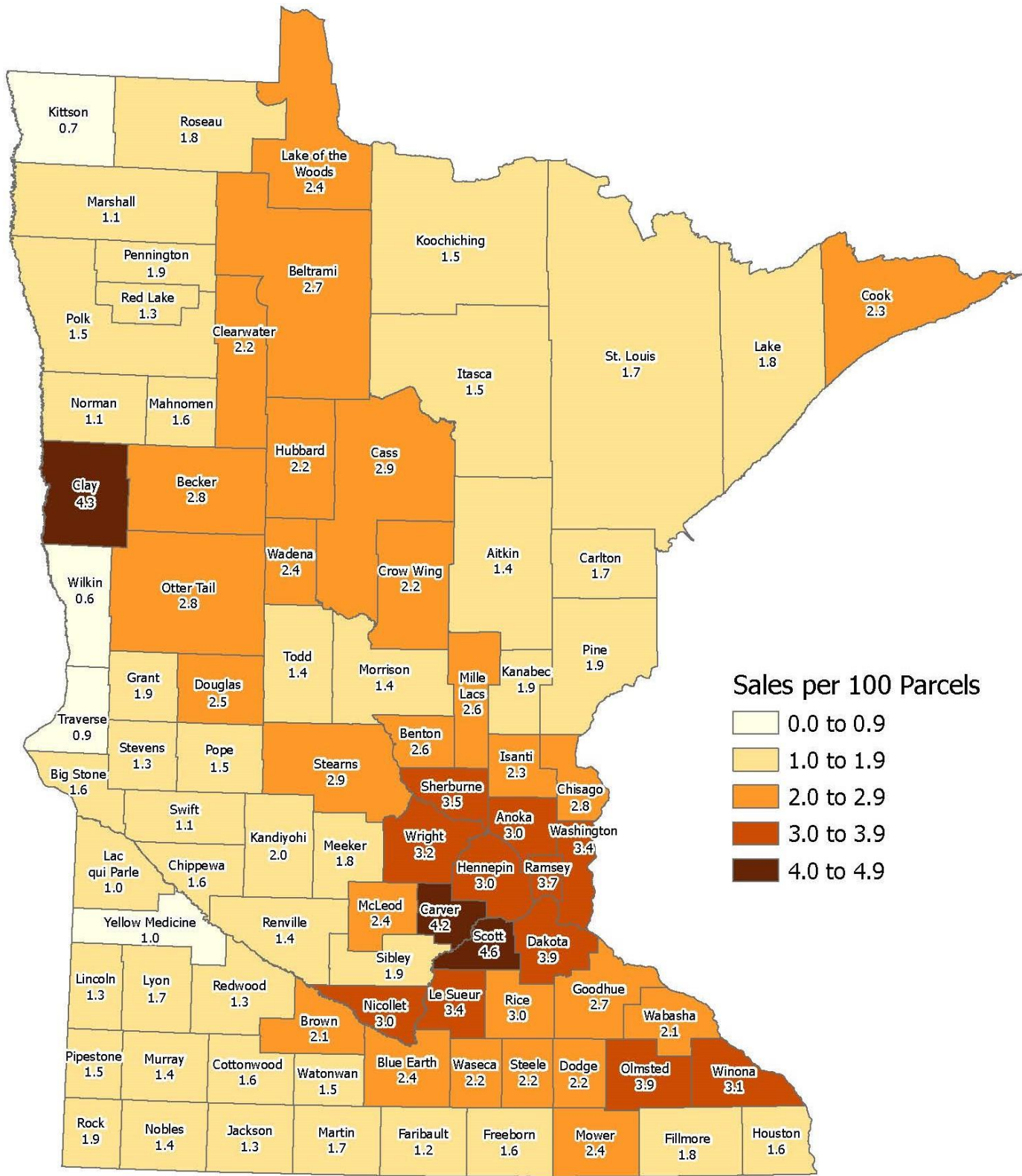
MAP 1 displays the percent change in estimated market value for each county from assessment years 2019 to 2020.

MAP 2 displays the real property sales per 100 parcels for each county for assessment year 2020.

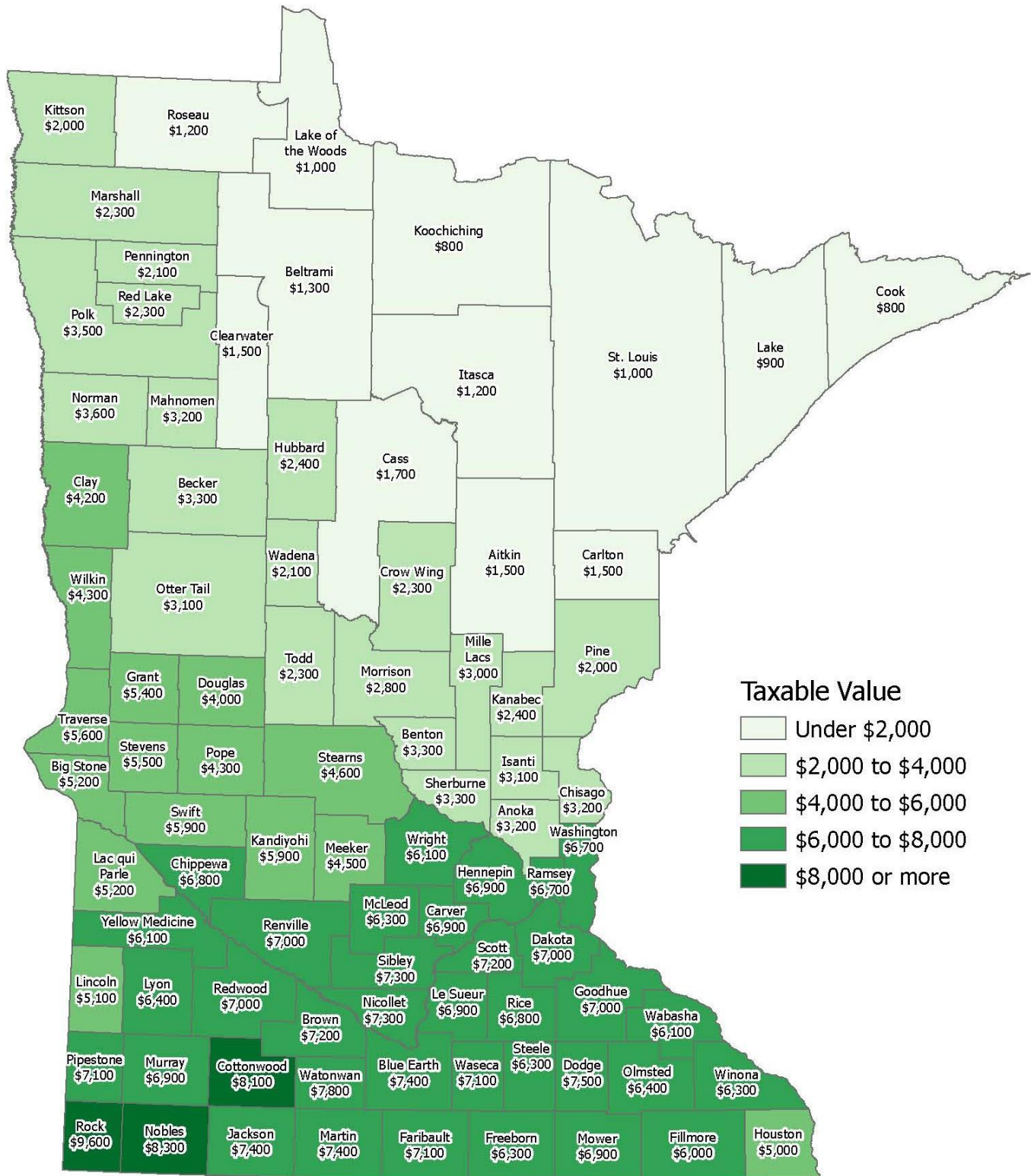
MAP 3 shows taxable tillable Green Acres/Rural Preserve values. Higher taxable values are shown in the southern portion of the state while lower taxable values are shown in the northeastern part of the state.

MAP 4 shows taxable non-tillable Green Acres/Rural Preserve values. Values to be used for non-tillable properties enrolled in Green Acres or Rural Preserve do not vary as widely as the values for tillable properties. The non-tillable values are closer to the tillable values in the northern half of the state.

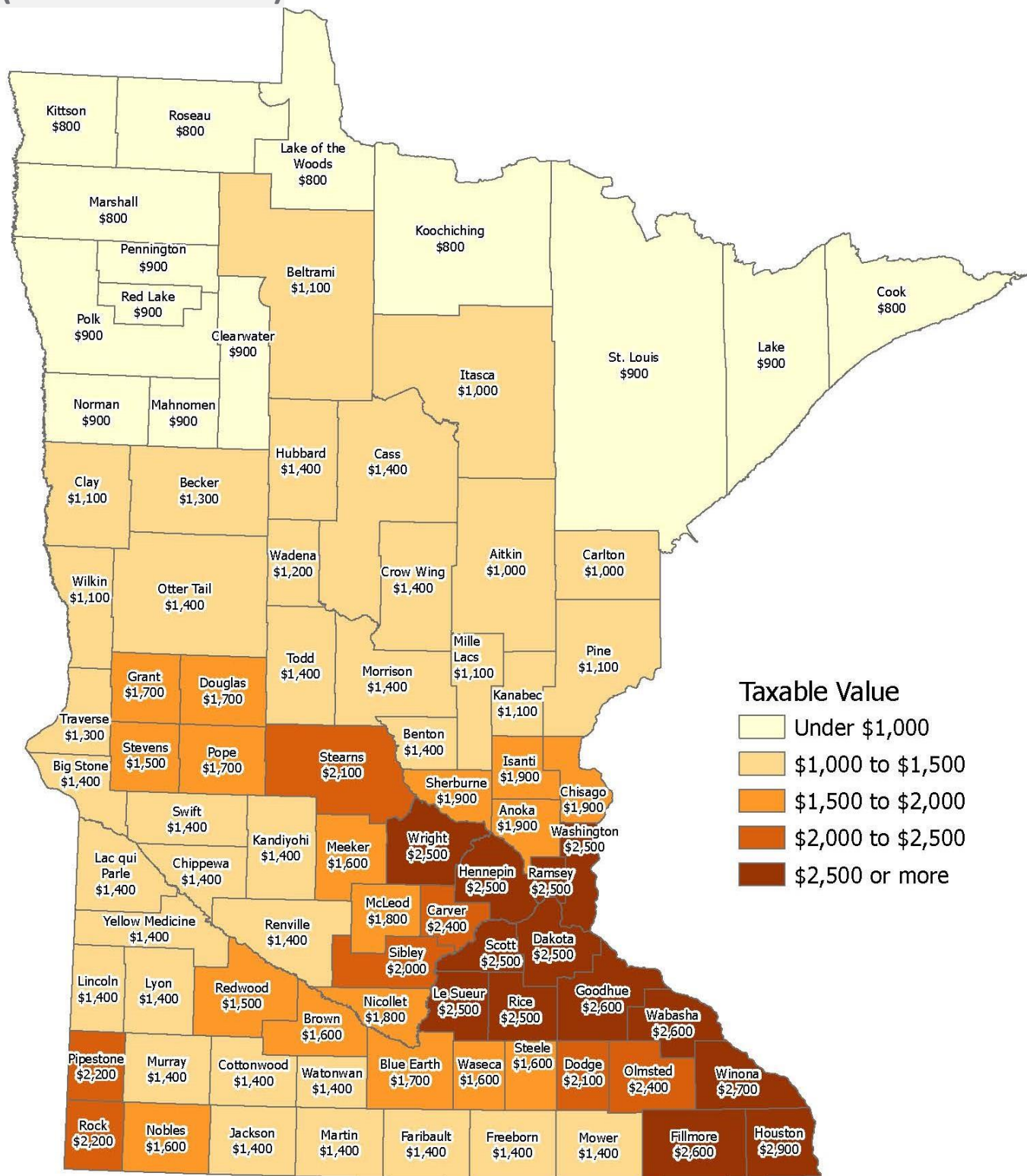
Map 2: Real Property Sales Per 100 Parcels in 2020



Map 3: Taxable Tillable Green Acres/Rural Preserve Value (2020 Assessment)



Map 4: Taxable Non-Tillable Green Acres/Rural Preserve Value (2020 Assessment)



Appendix F – Glossary

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. The change in assessor’s value is also called local effort.

$$\text{Adjusted Median Ratio} = \text{Median Ratio} \times (1 + \text{Local Effort})$$

Equation 3

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 Minnesota Department of Revenue.

CLASSIFICATION In Minnesota, property is classified according to its use on the assessment date – January 2. The classification system is used to identify a given property’s classification rate, which in turn determines the share of the tax burden borne by that property. There are five main property tax classifications used in Minnesota. However, in reality, the breakdown of property tax classifications includes 44 specific statutory descriptions that result in different class rates based on value tiers and homestead benefits. A classification rate table is shown in Appendix C.

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 Jan. 2 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.

NET TAX CAPACITY In Minnesota, property taxes are based on a property’s net tax capacity, which is its taxable market value multiplied by its classification rate.

$$\text{Taxable Market Value} \quad \times \quad \text{Classification Rate} \quad = \quad \text{Net Tax Capacity (NTC)}$$

Equation 4

For example, consider a residential homestead with a Taxable Market Value of \$100,000:

$$\$100,000 \quad \times \quad 1.00\% \quad = \quad \$1,000 \text{ NTC}$$

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 (eCRV).

STATE BOARD OF EQUALIZATION The State Board of Equalization consists of the Department 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 with ratios less than 0.5 or greater than 2. This eliminates a few extreme sales that would distort the COD.