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Staff Paper P20-1 January 2020

Staff Paper Series

Minnesota Farm Real Estate Sales: 1990-2019

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Department of
APPLIED
ECONOMICS

College of Food, Agricultural
and Natural Resource Sciences

UNIVERSITY OF MINNESOTA

Staff Paper P20-1 **January 2020**

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Staff Paper P20-1 January 2020

Minnesota Farm Real Estate Sales: 1990 – 2019

William F. Lazarus

Abstract

This report is a summary of the data contained on the farmland sales portion of the Minnesota Land Economics (MLE) web site (http://landeconomics.umn.edu) as of February 15, 2020. It is formally reissued each year, as new sales data become available.

The present document consists largely of graphs and tables summarizing sales over the past twenty-four years. It provides averages at the multi-county region and at the statewide levels of aggregation. Individual transaction data are available for downloading and analysis at the MLE web site.

An electronic version of the current report in fully navigable portable document format (pdf) is also available at: https://ageconsearch.umn.edu/record/301017 .

Minnesota Farm Real Estate Sales: 1990-2019

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What's New?

We now have almost 69,000 sales in the MLE database, covering the period October 1, 1989 - September 30, 2019. In all, these transactions cover 7.6 million acres.

Minnesota farmland prices, whether near the Twin Cities or in seemingly the most "rural" of areas, have always been affected by factors other than agricultural. While more highly productive cropland will still sell for more than will nearby less productive land, all lands are also desired for other reasons: recreation, retirement, investment, development. This results in some parcels selling for far more than we might expect if we simply focused on their farm income potential.

Overview

This document consists largely of graphs and tables summarizing Minnesota farm real estate sales over the past three decades. The goal is to give you some pictures of the data without imposing too much interpretation on you. It's my job to present the numbers; it's your job to decide what they mean.

If you want to get right to work, jump to The Charts. Otherwise, read along to find out how the numbers that underlie the graphs and tables were derived.

This report provides averages at the multi-county region and at the statewide levels of aggregation. All the transaction data summarized here are available for downloading and analysis at Minnesota Land Economics (MLE) web site. The data in this document are consistent with the MLE database on February 15, 2020.

The MLE site is constantly changing as new data are made available, new analyses are completed, and errors are found and (hopefully) remedied. Please check back periodically to find out what's new. As always, corrections and new data mean slightly different summary statistics and charts from year to year in these summary reports. That's why I give it all to you fresh each year.

Introduction

Economists commonly look to sales data to help understand land markets. In our language, we use observations of what some properties sold for (*prices*) to form expectations—to make a prediction—about how much other properties might sell for in the future (*values*).

Why might we care? I've heard three types of reasons. First, we're a score-keeping society. We want to know "how we're doing," and we've decided to accept the average price of farmland as one indicator of the general level of prosperity in rural America. If the price of land goes up, then people

in the country must be doing better. It's the rustic counterpart of our infatuation with the Dow Jones Index—the Dow goes up and we all celebrate, because "the economy" is somehow better. Both notions are largely unsupported by either economic science or common sense, but both are deeply embedded in the public psyche.

A second reason for tracking land price average is to decide if "Land" is a good investment strategy, compared to, say, utility stocks. I capitalize the word here to dramatize the difference between a piece of land, as in "the forty acres across the road," and Land as a class of assets. The average price of a set of land sales is felt by some analysts to be a useful indicator of how well investment in Land will perform.

A third use of average price data is to forecast a potential transaction price on an individual parcel. Two types of information might help here. If you know little or nothing about how much the parcel might fetch, you might decide to use the average price of parcels in the vicinity as the starting point of negotiation. Or, if you think you know what the parcel was worth last year, then you might use new knowledge about the movement of average prices to update your valuation. Either way, you use summary data for the entire market to help you with the valuation of an individual property.

Here is not the place for me to challenge any of these rationales. Nor will I provide my own estimates of what land will sell for or whether I think average prices will rise or fall. I can tell you with great confidence what *did* happen in the state's many land markets. It's up to you to figure out what *will* happen.

The Data

Most of the data used in the graphs and tables on this site come from annual Minnesota Department of Revenue compilations of property transactions reported by county auditors. When a Minnesota property is sold, the transaction details must be recorded at the county courthouse on a form called a certificate of real estate value, or CREV. On it, the seller attests that such-and-such a property was sold to so-and-so on a certain date for a specific price. Other information about the property (its size, intended use, soil characteristics, prior year's estimated market value) is often entered on the CREV as well.

Sales prices here are analyzed on a per-acre basis; the price includes not just land but also associated improvements, including structures. (Most years, well over three-quarters of the sales are for "bare land" only.) Sales with per-acre prices above $15,000 are excluded from the analysis for the years before 2014. (They're not really "agricultural" sales, even though a few may be classified as such by local tax officials.) That cutoff is indexed for inflation for the more recent years, so that the 2019 cutoff is $16,340. On many charts, (a few) higher priced sales are excluded for clarity.

All properties in the study were previously classified as "agricultural" for tax purposes and were not intended, according to the buyer and agreed upon by local tax officials, to be converted from agriculture. I define "agricultural properties" as all those that were assigned (by the county assessor) as classes 5, 15, and 25 for pre-2009 sales and 31, 32, and 37 for post-2009 sales. Since 2009, the state has also added new property classes that reflect "mixed" uses, principally agriculture and woodland. I include sales that formerly would have been assigned to the 5, 15, 25 classes that are now assigned to classes 47, 48, and 50--mixed-use classes--but only if the properties were more than 50% tillable.

The most recent reporting year covers the period January 1 through September 30 only, because of the way the data is collected by the Department of Revenue. As a consequence, the remainder of the

current year is not reported until the next sales study. So, for example, year 2019 sales that occurred in October, November, or December won't be available until the Spring 2021 study.

All these transactions can be analyzed or downloaded through the Minnesota Land Economics (MLE) web site.

Before a price enters the MLE data base, it passes through an series of filters and adjustments designed to make comparison among transactions more meaningful and more reliable. A first step is to ensure that the numbers are correct. There is always the chance that simple recording errors are made. Next, local or state officials remove any sale not deemed "arms-length," because it was sold, for example, to a member of the seller's immediate family.

After this filtering, sales prices are adjusted to make comparison among sales that occcured over the course of the year more appropriate. This "adjustment for time" is done by the Department of Revenue for all sales, as part of its official Sales Ratio Study procedures.

A second price adjustment, "for terms," is also made by the Department of Revenue where appropriate. Not all farm real estate sales are for the full title by warranty deed. Some are made through a contract for deed, an arrangement that allows the buyer to pay a certain amount now and other amounts at stated intervals. Until the final payment is made, the property title remains in the possession of the seller—even though the land has been "sold." Because the agreed-upon payment schedule is entered on the CREV, the Department can calculate a present value of the initial and subsequent payments. This becomes the official recorded sales price for the transaction and is used in Minnesota Land Economics.

Adjustments don't end with a time- and terms-adjusted sales price. In most cases, users of the data are interested in per-acre prices, not per-parcel prices. That means some chosen total price must be divided by some total acreage. But which price? Which acres? Should we use the total price, or should we first subtract out the value of buildings, personal property, ancillary property, or machinery to get closer to the "true" land price? Should we use all the land in the property, or just cropland?

In this report, I mostly use the median price—although I also report other averages (see below)—the halfway point in the distribution of time- and terms-adjusted total sales prices, minus the value of personal property, divided by the entire acreage of the parcel. Because I do not attempt to strip out the value of buildings and other "improvements"—such building data are unreliable—it's best to speak of the numbers here as referring to markets in "farm real estate", not in "farmland" per se. This definition is consistent with that used by the USDA and by the Census of Agriculture.

The graphs and tables included on this site (see The Charts) array the sales at the region or statewide levels only. The region boundaries used here are USDA agricultural statistics reporting districts. Here's a map of the district boundaries. The particular county grouping has problems, as would any such combination. For example, the Red River Valley, with its two worlds-apart farm real estate markets, is lumped into a single reporting area. And the Twin Cities metropolitan area is split among three regions. You can create your own aggregations and do your own analysis by going to Minnesota Land Economics. If you need a clean copy of any of the charts for publication, please contact the author.

How I calculate"average" prices

If there is any single story to be stressed from this analysis it is that use of a single number as "the" price of land for any area—county, region, state—can be misleading. There is a huge range in farm

real estate prices throughout Minnesota. Reliance upon the movement of any single number like the mean may mislead more than it informs. All that we actually observe are the recorded prices of hundreds of individual parcels, of varying characteristics, scattered throughout the state.

For some asset markets, year to year price movements can be measured from repeated readings of the same property or the same asset. But in land sales studies, each observed transaction is for a different piece of land: we rarely see the same parcel sell more than once in a number of years (even several decades). We opportunistically use observed sales as what statisticians sometimes call a "sample of convenience," a sample from which to infer the average price of *all* land, sold and unsold combined, for that year.

If observed sales happen to be of properties that disproportionately represent one end of the (unknown) range of prices for all parcels, then the sample's average may mislead us. The wider the actual range and the fewer the number of observed sales, the more likely it is that such a disproportionate and hence misleading sample may be "drawn."

Do the observed sales analyzed here provide sufficient information for us to describe the distribution of—and to make predictions about—the value of all farmland parcels? There are two potential problems: not very many sales and not very representative sales.

For any level of aggregation, three different averages, single numbers that are intended to capture the flavor of the whole distribution, can be calculated:

> (1) The *mean* is obtained by dividing the sum of all per-acre sales prices by the number of properties sold. This might be thought of as "the average parcel price." This was called the "transaction mean" in earlier publications.
>
> (2) The *median*, the price at which half of the transactions are higher and half are lower, can be thought of as the "middle price."
>
> (3) The *size-adjusted mean* (which I called the "area mean" in earlier publications) is the quotient of total dollar sales in an area divided by the total acreage sold in the same area. This final average can be thought of as the price of a "typical" acre.

We'd like a way to calculate an average from observed sales that best reflects the real but unobserved prices of all the other land in the area. At the region or state level, the median is a pretty good average: there are enough observations to leave us feeling comfortable that annual movements in this single number is a reasonable indicator of what's happening in that area. But at a county level, say, the median might be based on too few observations. We'd like to base our calculations on samples for which the range of (unknown) prices is small enough and for which the number of observations is large enough that we can feel comfortable that our observations are representative and that calculated statistics like the mean are useful.

For comparison, I provide both the mean (average) and the median prices in the price summary tables. But there is greater knowledge to be gained by examining the statewide price distributions that I've prepared for you. The importance of location is illustrated by the not-surprising finding that average land prices in different parts of the state move differently over time. I've also tested the argument that more productive land sells at a higher price, through graphs that compare selling price to agricultural productivity. (Productivity is measure by the CER, in older sales, and by the new CPI in newer sales. Details are avaible in the Soils Data section of Minnesota Land Economics.

For all this, and much much more, check out The Charts.

Land market dynamics

When owners are ready to sell farmland (or when buyers are ready to make an offer), how do they decide where to start the bidding? Both often start with the property's annual tax statement, which contains the assessor's estimate of what it is worth. Under Minnesota law, this estimate is for the full market value, the price the assessor expects the property to fetch if it went onto the market. How did the assessor come up with that estimate? By combining knowledge of local economic conditions with records of previous neighboring land sales, often obtained from University studies such as this one.

But buyers and sellers usually don't stop here. They frequently hire a professional appraiser to evaluate the property in much greater detail than can the assessor, who must assign a value to each of several thousand properties each year. Appraisers combine an examination of local market conditions and the characteristics of the property itself into a professional judgment of what the property might sell for. Many times appraisers will do an income analysis as well—something that local assessors are not permitted to do. This latter method values the property using its long-term earning potential.

So assessors, appraisers, analysts, buyers, and sellers all rely, at least in part, upon previous sales in the vicinity to decide on the value, the anticipated selling price, of a particular property. But these (relatively few) nearby sales were themselves made at prices strongly influenced by the judgments of these same (relatively few) assessors, appraisers, and analysts, based on the evidence of previous sales prices that they themselves were influential in determining in the first place.

The local farm real estate market is small, and it is circular. The market we think we observe from a distance is really in part one that we "make" ourselves, not strictly a collection of independent decisions made by anonymous buyers and sellers.

The average price for a region that I report is just a compilation of the sales that originated in scores of small "markets." Anecdotal evidence suggests that almost all bidders for farmland in Minnesota are neighbors. Very rarely does a new farmer enter the community by buying a whole farm, and even more rarely do outside investors buy into a community for farming purposes. As a result, a typical farmland property up for sale may see at most two or three legitimate offers. This is not a market in the the usual sense: few of the usual features of markets beloved of economists can be expected to hold.

Compilations such as those presented here can be used to infer economic conditions common to all local markets, but we should not fool ourselves into thinking that "land" is a commodity, that it has a single price, or that there are very many participants and local land markets.

And in conclusion...

I hope you're not completely sated with the limited analysis I've put up on this site. I encourage you to try your own hand at land market analysis. If you need an unadjusted transaction mean or area mean, or if you need some other level of aggregation such as a county, or if you'd like to try some fancier market analysis, go directly to Minnesota Land Economics and roll your own.

The Figures

a. USDA estimates of statewide farm real estate value, 1950-present

b. Median prices and number of sales in Minnesota by quarter: 1998 to present

c. Three "independent" estimates of statewide farm real estate value, 1990-present , with the sales grouped by calendar year (see also the sales year summary below)

d. Summary of mean and median farm real estate prices by region, by calendar year and by sales year, 2017-19

e. Median prices and number of sales by sales year (Oct. - Sept.): 1990 to present

f. Farm real estate sales summaries, 1990-present, by region and statewide, by calendar year:
State North West North Central North East West Central Central East Central South West South Central South East

g. Histogram of statewide farm real estate sales prices in 2019 Comparison of 2002, 2010, and 2019

h. Movements average farm real estate sales prices, 1990-present: by selected regions

i. Histogram of statewide farm real estate sales parcel sizes in 2019

j. Relationship of statewide farm real estate sales prices to land productivity in 2019

k. Relationship of statewide farm real estate sales prices to assessor estimated market value in 2019

l. Minnesota farmland sales through September: 1990 to present

m. Minnesota farmland sales contribution by region: 1990 to present

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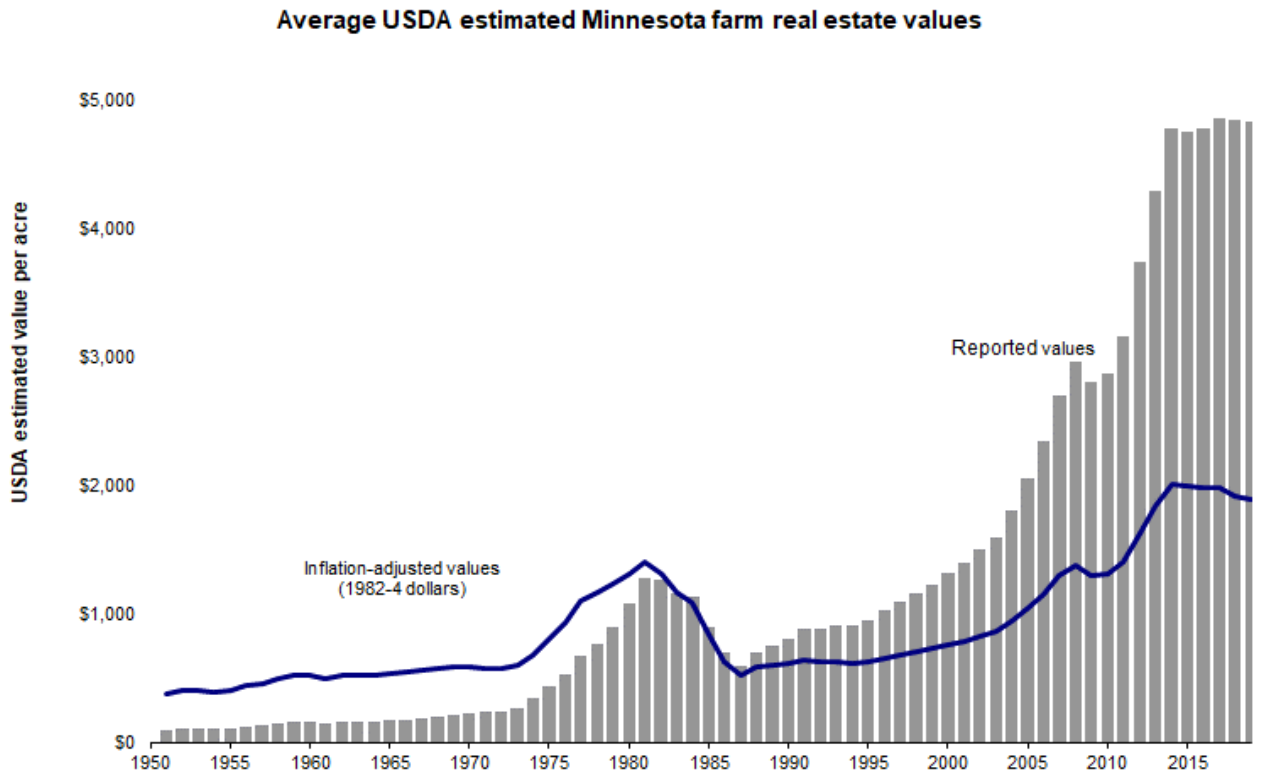
Minnesota farmland values

This chart is based on a series maintained by the Minnesota Agricultural Statistics Service office. Each summer the USDA reports an estimated average price of farmland plus buildings for each state, as of January 1 of that year. The data come from a sample of land parcels throughout the country, conducted earlier in the year. Owners of land within each sampled parcel are asked what they think their land is worth (its "expected sales price", or "value," in our terms). Their responses are aggregated to give a statistically valid average for the entire state. The USDA approach can ensure that the state average is a valid summary of the individual owners' valuations, but it cannot, of course, ensure that individual owners really know what their land is worth in the first place.



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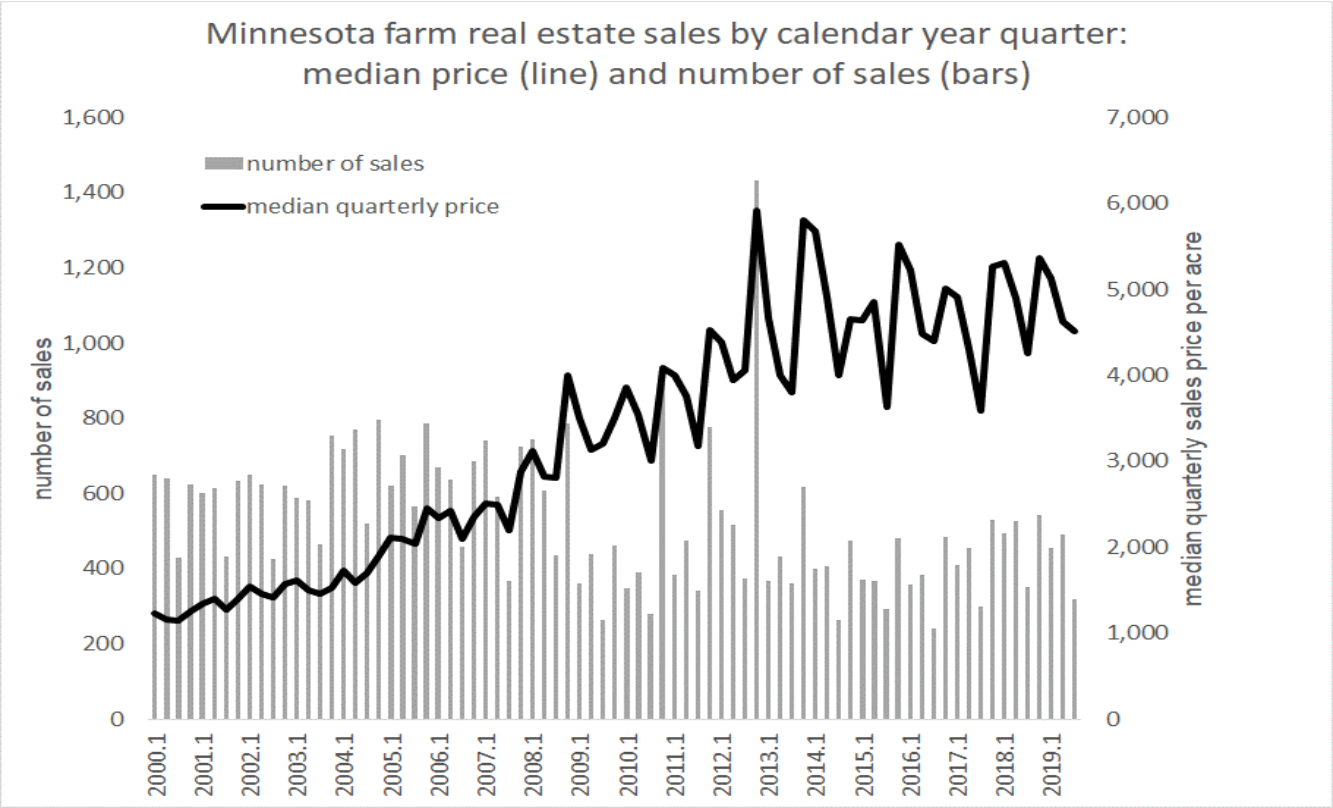
The chart below shows the median prices and number of sales on a quarterly basis. Seasonal fluctuations in recent years have been larger than in earlier years. The median price tends to be lower in the third quarter than in the rest of the year. The general trend in recent years seems to be flat to down slightly. Notice in the later tables and charts that this fourth-quarter difference results in a somewhat different picture in the annual numbers when calculated on a calendar year basis compared to a sales year basis (October 1 - September 30).



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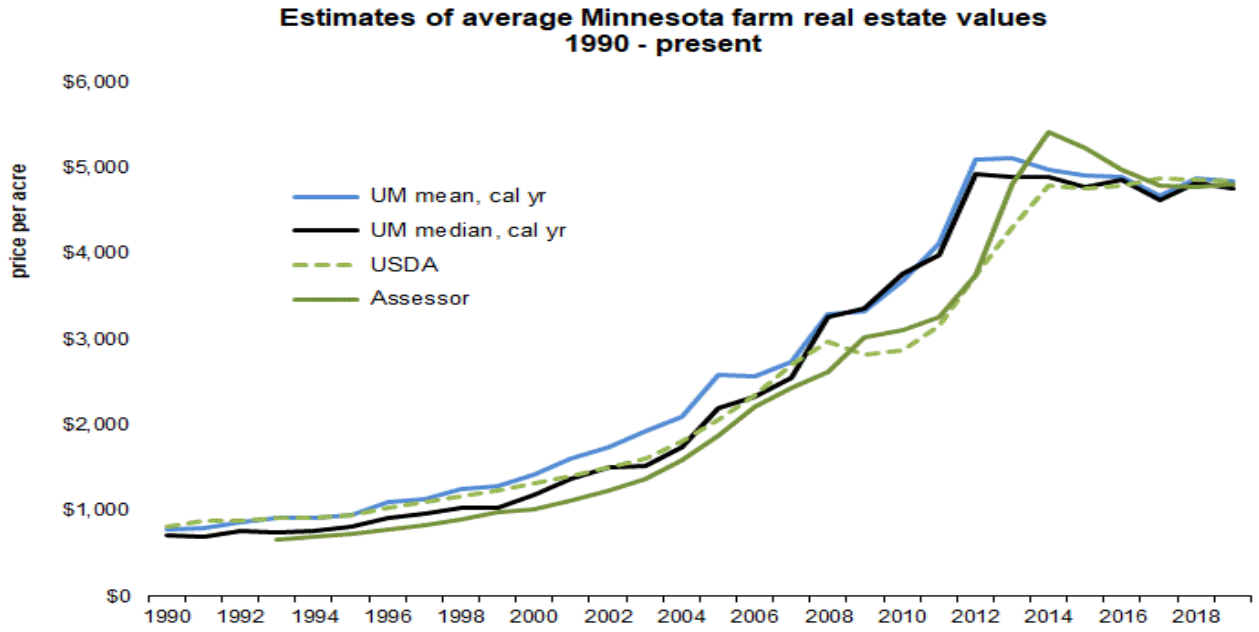
Here are estimates of average farm real estate value drawn from three different sources of data. One line shows price according to an annual USDA survey of property owners; another is the average (mean) of local property tax assessors' assignment of property values for tax purposes; the third and fourth are the calendar year mean and median sales prices from the UM study. Preliminary EMVs are available at Minnesota Land Economics in July of the noted year, USDA state-level estimates are available in August of the reported year, and the University's final sales report is published in the spring of the next year.



Original data from Department of Revenue compilations of Certificates of Real Estate Value, further adjusted by that agency and by the author, as described on the sales study site linked at the top.

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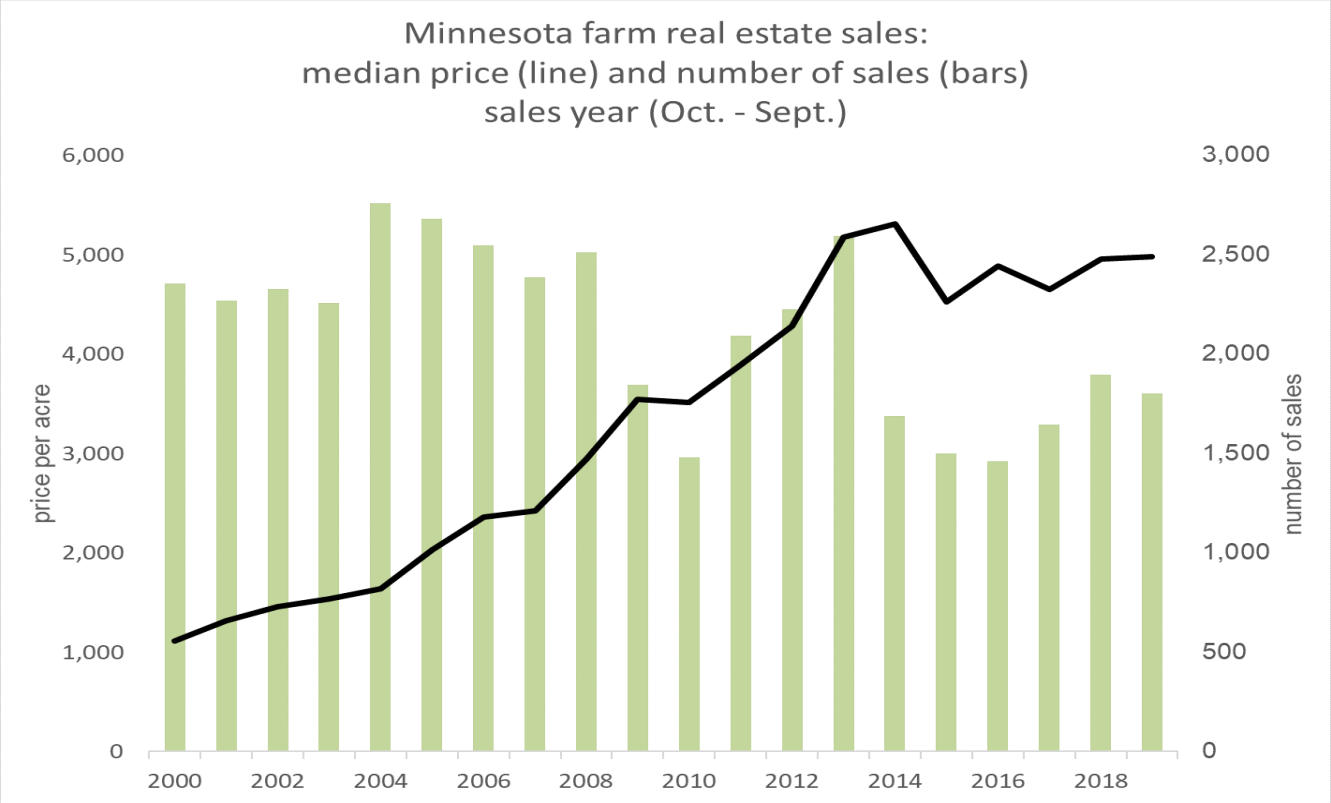
The calendar year average and median values were down in 2019 for the state as a whole while the sales year values saw a slight increase. The highest calendar year mean values in 2019 were in the Southwest region, at $6,782/acre, with the South Central region at $6,459 and the Southeast at $6,275. The calendar year mean and median and the sales year mean and median were all down in the Southeast. All of the measures were and were up in the Central region. The other regions saw mixed results for the four measures.

	2017	2018	2019	2017-18	2018-19	2017-19
Northwest						
Averages, calendar year	$2,186	$2,517	$2,537	15.2%	0.8%	16.1%
Averages, sales year	$2,179	$2,431	$2,546	11.6%	4.7%	16.8%
Medians, calendar year	$1,945	$2,230	$2,225	14.6%	-.02%	14.4%
Medians, sales year	$1,987	$2,074	$2,275	4.4%	9.7%	14.5
West Central						
Averages, calendar year	$4,297	$4,221	$4,188	-1.8%	-0.8%	-2.5%
Averages, sales year	$4,058	$4,335	$4,199	6.8%	-3.1%	3.5%
Medians, calendar year	$4,474	$4,214	$4.000	-5.8%	-5.1%	-10.6%
Medians, sales year	$4,125	$4,481	$4,067	8.6%	-9.2%	-1.4%
Central						
Averages, calendar year	$4,893	$5,107	$5,405	4.4%	5.9%	10.5%
Averages, sales year	$4,827	$5,136	$5,337	6.4%	3.9%	10.6%
Medians, calendar year	$4,693	$5,088	$5,400	8.4%	6.1%	15.1%
Medians, sales year	$4,665	$5,295	$5,331	-13.5%	0.7%	14.3%
Southwest						
Averages, calendar year	$6,513	$6,708	$6,782	3.0%	1.1%	4.1%
Averages, sales year	$6,578	$6,663	$6,806	1.3%	2.1%	3.5%
Medians, calendar year	$6,670	$6,872	$6,880	3.0%	0.1%	3.2%
Medians, sales year	$6,650	$6,935	$7,880	4.3%	-0.8%	3.5%
South Central						
Averages, calendar year	$6,395	$6,527	$6,459	2.1%	-1.0%	1.0%
Averages, sales year	$6,416	$6,464	$6,498	0.7%	0.5%	1.3%
Medians, calendar year	$6,562	$6,875	$6,746	4.8%	-1.9%	2.8%
Medians, sales year	$6,556	$6,875	$6,764	4.9%	-1.6%	3.2%
Southeast						
Averages, calendar year	$6,036	$6,644	$6,275	10.1%	-5.6%	4.0%
Averages, sales year	$5,812	$6,557	$6,401	12.8%	-2.4%	10.1%
Medians, calendar year	$6,124	$6,577	$6,200	7.4%	-5.7%	1.2%
Medians, sales year	$5,954	$6,756	$6,332	13.6%	-6.3%	6.5%
Minnesota						
Averages, calendar year	$4,667	$4,961	$4,837	6.3%	-2.5%	3.6%
Averages, sales year	$4,658	$4,923	$4,938	5.7%	0.3%	6.0%
Medians, calendar year	$4,625	$5,000	$4,750	8.1%	-5.0%	2.7%
Medians, sales year	$4,650	$4,960	$4,984	6.7%	0.5%	7.2%

Back to Minnesota Farm Real Estate Sales

The University of Minnesota farmland sales data is drawn from Department of Revenue reports covering a October-September "sales year." The chart below shows the median prices and number of sales by sales year, with the October-December data as quarter 1 and July-September as quarter 4.

The other charts in this publication are on a calendar year basis, so the 2017 data in the other charts is based only upon the first nine months of sales for that year. That means that for example, the 2017 data is based upon sales for January-September 2017. Sales occuring in the final three months of 2017 will be added to 2017 only when that data becomes available in 2018. The general trend in recent years seems to be flat to down slightly (click here to scroll back to the quarterly chart). That fourth-quarter difference is why this chart shows that the median price did not decline as much in 2017 as the calendar year median price did (click here to scroll back to the calendar year chart).



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State North West North Central North East West Central Central East Central South West South Central South East

State			Per-Acre Sales Price	
Calendar Yr	Number of Sales	Acres Sold	Mean	Median
1990	3,140	375,310	776	709
1991	2,619	311,693	787	690
1992	2,752	308,191	858	755
1993	2,680	292,607	906	750
1994	2,831	316,984	916	762
1995	2,557	267,664	951	804
1996	2,812	304,796	1,091	916
1997	2,871	327,951	1,134	964
1998	2,609	287,623	1,246	1,027
1999	2,323	251,905	1,279	1,038
2000	2,340	264,496	1,417	1,182
2001	2,279	255,022	1,610	1,372
2002	2,317	255,916	1,745	1,500
2003	2,387	261,233	1,918	1,521
2004	2,802	313,441	2,098	1,741
2005	2,674	279,698	2,584	2,193
2006	2,447	263,856	2,560	2,325
2007	2,424	271,658	2,724	2,552
2008	2,572	307,176	3,283	3,262
2009	1,536	169,784	3,322	3,337
2010	1,911	223,679	3,681	3,762
2011	1,987	227,712	4,093	3,965
2012	2,880	326,670	5,090	4,917
2013	1,781	189,713	5,111	4,890
2014	1,544	161,479	4,975	4,887
2015	1,510	154,421	4,911	4,776
2016	1,462	147,134	4,897	4,849
2017	1,690	183,108	4,667	4,625
2018	1,908	193,774	4,961	5,000
2019	1,262	128,786	4,837	4,750
Totals	68,879	7,621,053		
2017-18	Change		6.3%	8.1%
2018-19	Change		-2.5%	-5.0%

Original data from Department of Revenue compilations of Certificates of Real Estate Value, further adjusted by that agency and by the author, as described on the sales study site linked at the top. Data for the most recent year are for the first nine months only.

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State North West North Central North East West Central Central East Central South West South Central South East

North West			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	353	54,091	466	377
1991	354	52,516	445	349
1992	356	50,887	517	428
1993	331	43,954	568	435
1994	342	50,329	535	405
1995	285	38,513	528	375
1996	332	51,312	551	391
1997	352	52,161	551	438
1998	327	51,442	548	405
1999	294	42,627	594	437
2000	292	49,318	623	475
2001	314	53,187	647	443
2002	342	56,492	647	554
2003	406	69,240	656	553
2004	535	88,870	823	684
2005	455	69,906	988	861
2006	447	64,065	1,100	937
2007	463	69,689	1,158	952
2008	464	78,915	1,351	1,108
2009	285	45,560	1,448	1,246
2010	387	62,916	1,560	1,235
2011	413	71,176	1,675	1,253
2012	595	96,769	2,366	1,855
2013	385	61,908	2,524	2,000
2014	321	45,605	2,254	1,876
2015	255	37,419	2,479	2,000
2016	232	32,060	2,430	2,086
2017	323	49,741	2,186	1,945
2018	329	45,773	2,517	2,230
2019	270	42,186	2,537	2,225
Totals	10,836	1,678,363		
2017-18	Change		15.2%	14.6%
2018-19	Change		0.8%	-0.2%

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Back to Minnesota Farm Real Estate Sales

State North West North Central North East West Central Central East Central South West South Central South East

North Central			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	133	18,073	279	196
1991	159	19,707	327	208
1992	121	15,227	342	220
1993	167	21,746	365	243
1994	169	21,005	368	277
1995	124	16,298	396	269
1996	103	12,648	476	331
1997	92	12,462	459	340
1998	72	10,253	546	424
1999	106	13,276	649	463
2000	125	15,332	811	686
2001	83	11,771	736	588
2002	73	8,477	921	782
2003	91	8,990	1,147	955
2004	135	11,654	1,274	1,080
2005	141	13,527	1,748	1,492
2006	124	12,488	1,761	1,440
2007	83	9,769	1,601	1,337
2008	60	6,234	1,819	1,523
2009	18	2,134	2,011	1,863
2010	28	2,870	1,513	1,360
2011	33	3,508	1,609	1,157
2012	43	6,116	1,619	1,067
2013	67	7,101	1,626	1,270
2014	44	3,914	1,769	1,487
2015	53	4,900	1,916	1,539
2016	54	4,456	1,746	1,374
2017	53	6,046	1,772	1,567
2018	59	6,521	2,268	1,777
2019	40	2,653	1,933	1,529
Totals	2,653	310,787		
2017-18	Change		28.0%	13.4%
2018-19	Change		-14.7%	-14.0%

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State North West North Central North East West Central Central East Central South West South Central South East

North East			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	10	1,218	442	297
1991	15	1,616	319	193
1992	19	1,731	319	235
1993	17	1,451	279	250
1994	12	1,408	610	324
1995	7	770	344	222
1996	17	1,686	462	394
1997	12	1,171	741	563
1998	23	2,191	784	567
1999	23	2,038	587	422
2000	14	1,393	652	516
2001	11	796	1,349	1,141
2002	14	992	1,073	801
2003	14	822	1,140	654
2004	22	1,750	1,111	905
2005	27	2,258	1,469	994
2006	24	1,948	2,019	1,419
2007	17	1,166	1,468	1,160
2008	8	454	1,881	1,403
2009	3	262	2,249	2,125
2010	3	160	1,168	850
2011	1	74	965	965
2012	6	500	1,792	1,007
2013	4	390	1,469	1,307
2014	3	243	1,095	1,050
2015	5	347	1,818	1,450
2016	1	40	5,484	5,484
Totals	332	28,875		

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Back to Minnesota Farm Real Estate Sales

State North West North Central North East West Central Central East Central South West South Central South East

West Central			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	403	54,796	588	545
1991	369	53,713	607	585
1992	406	53,302	665	609
1993	327	43,029	648	594
1994	330	43,654	721	640
1995	297	37,409	677	622
1996	379	46,288	784	744
1997	454	57,422	846	728
1998	439	51,999	853	800
1999	373	44,086	974	887
2000	376	47,111	1,063	939
2001	356	44,741	1,119	1,019
2002	328	41,092	1,181	1,073
2003	383	42,363	1,429	1,242
2004	449	51,469	1,603	1,464
2005	398	42,306	1,980	1,830
2006	416	48,254	2,114	1,982
2007	399	47,638	2,394	2,172
2008	421	57,489	2,733	2,716
2009	250	29,252	2,720	2,812
2010	334	43,165	3,276	3,202
2011	322	37,945	3,412	3,415
2012	484	55,815	4,269	4,071
2013	231	26,196	4,648	4,285
2014	192	21,771	4,364	4,436
2015	221	24,230	4,112	3,774
2016	188	20,766	4,025	3,841
2017	227	25,720	4,297	4,474
2018	282	29,040	4,221	4,214
2019	169	16,683	4,188	4,000
Totals	10,195	1,238,080		
2017-18	Change		-1.8%	-5.8%
2018-19	Change		-0.8%	-5.1%

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Central			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	703	71,209	842	771
1991	478	50,147	888	787
1992	570	55,452	906	787
1993	603	55,293	1,045	800
1994	611	58,885	973	753
1995	571	49,974	1,022	811
1996	623	59,702	1,092	861
1997	585	59,608	1,216	948
1998	537	51,594	1,272	989
1999	515	49,131	1,366	1,000
2000	510	50,152	1,707	1,314
2001	515	43,491	2,021	1,487
2002	530	45,920	2,061	1,690
2003	550	46,577	2,474	1,780
2004	593	54,397	2,644	2,090
2005	555	46,627	3,394	2,736
2006	469	39,319	3,322	2,850
2007	450	38,404	3,315	2,887
2008	479	45,677	3,765	3,799
2009	276	24,148	3,843	3,855
2010	330	28,913	4,109	4,164
2011	402	34,136	4,418	4,269
2012	574	52,069	5,243	4,844
2013	379	31,230	4,983	4,228
2014	292	25,351	5,144	4,790
2015	265	22,079	4,902	4,800
2016	255	21,525	5,157	5,000
2017	324	27,943	4,893	4,693
2018	359	30,325	5,107	5,088
2019	239	17,660	5,405	5,400
Totals	14,137	1,286,752		
2017-18	Change		4.4%	8.4%
2018-19	Change		5.9%	6.1%

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East Central			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	299	28,453	583	410
1991	291	24,886	603	400
1992	333	28,457	753	438
1993	392	33,467	803	496
1994	459	39,813	797	500
1995	409	33,721	884	594
1996	403	33,243	1,317	763
1997	339	31,612	1,199	744
1998	294	22,337	1,405	933
1999	280	20,196	1,580	1,000
2000	213	14,784	1,767	1,178
2001	195	13,985	2,131	1,558
2002	166	11,288	2,976	2,124
2003	213	14,301	2,988	2,046
2004	210	14,218	2,936	2,181
2005	259	16,095	3,602	2,560
2006	171	11,159	3,363	2,424
2007	121	8,769	3,656	2,583
2008	106	7,920	3,372	2,797
2009	45	3,086	3,286	2,436
2010	53	3,839	3,470	2,500
2011	73	4,880	2,667	1,957
2012	93	6,969	2,953	2,500
2013	90	4,834	3,940	3,000
2014	79	5,425	3,412	2,200
2015	94	5,593	3,464	2,658
2016	96	6,562	3,244	2,717
Totals	5,766	448,827		

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South West			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	403	50,404	937	970
1991	335	39,666	1,049	1,026
1992	268	31,762	1,113	1,092
1993	251	28,992	1,181	1,150
1994	274	36,494	1,106	1,135
1995	237	30,680	1,119	1,116
1996	330	38,809	1,176	1,175
1997	364	47,321	1,228	1,271
1998	296	36,931	1,373	1,354
1999	236	32,239	1,319	1,334
2000	285	34,192	1,424	1,438
2001	281	32,202	1,511	1,558
2002	297	37,240	1,577	1,609
2003	250	30,446	1,707	1,733
2004	294	35,275	2,010	2,041
2005	294	35,915	2,326	2,371
2006	303	36,208	2,526	2,585
2007	331	39,180	3,011	2,972
2008	376	46,077	3,929	3,982
2009	240	27,249	3,855	4,000
2010	271	34,876	4,781	4,878
2011	207	24,436	6,043	6,019
2012	352	40,589	7,509	8,062
2013	158	17,703	7,878	8,211
2014	212	23,940	7,120	7,461
2015	186	20,277	7,011	7,227
2016	186	20,756	7,086	7,092
2017	179	20,432	6,513	6,670
2018	206	21,530	6,708	6,872
2019	117	13,230	6,782	6,880
Totals	8,019	965,050		
2017-18	Change		3.0%	3.0%
2018-19	Change		1.1%	0.1%

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State North West North Central North East West Central Central East Central South West South Central South East

South Central			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	410	41,217	1,175	1,157
1991	304	30,371	1,243	1,255
1992	344	33,791	1,290	1,286
1993	288	26,554	1,399	1,400
1994	329	31,959	1,419	1,389
1995	314	27,643	1,417	1,364
1996	360	32,001	1,579	1,566
1997	390	36,930	1,651	1,666
1998	334	29,929	1,961	1,865
1999	267	25,606	1,944	1,846
2000	275	25,244	1,891	1,828
2001	301	30,925	2,103	2,047
2002	329	29,474	2,183	2,050
2003	252	26,314	2,420	2,217
2004	316	32,207	2,795	2,592
2005	309	28,287	3,392	3,050
2006	294	28,525	3,262	3,096
2007	339	34,930	3,445	3,430
2008	440	41,127	4,401	4,463
2009	261	24,341	4,315	4,362
2010	304	26,938	4,968	5,011
2011	310	28,447	5,950	5,917
2012	458	41,318	7,430	7,554
2013	267	22,697	7,850	8,150
2014	236	20,821	7,240	7,500
2015	246	21,142	6,793	7,035
2016	260	23,210	6,752	7,009
2017	271	25,605	6,395	6,562
2018	297	25,509	6,527	6,875
2019	186	15,004	6,459	6,746
Totals	9,291	868,073		
2017-18	Change		2.1%	4.8%
2018-19	Change		-1.0%	-1.9%

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South East			Per-Acre Sales Price	
	Number of Sales	Acres Sold	Mean	Median
1990	426	55,849	861	801
1991	314	39,071	934	852
1992	335	37,582	1,047	960
1993	304	38,121	1,046	936
1994	305	33,437	1,223	1,026
1995	313	32,656	1,195	1,023
1996	265	29,107	1,377	1,204
1997	283	29,264	1,474	1,273
1998	287	30,947	1,681	1,400
1999	229	22,706	1,638	1,467
2000	250	26,970	1,806	1,629
2001	223	23,924	2,137	1,786
2002	238	24,941	2,430	2,000
2003	228	22,180	2,674	2,194
2004	248	23,601	3,475	2,702
2005	236	24,777	3,549	2,948
2006	199	21,890	3,861	2,958
2007	221	22,113	3,867	3,567
2008	218	23,283	4,435	4,000
2009	158	13,752	4,474	4,083
2010	201	20,001	4,704	4,462
2011	226	23,110	5,412	5,365
2012	275	26,525	6,459	6,283
2013	200	17,654	6,798	6,678
2014	165	14,410	6,358	6,230
2015	185	18,422	6,291	6,373
2016	147	15,066	5,840	5,800
2017	200	20,453	6,036	6,124
2018	242	25,113	6,644	6,577
2019	147	13,879	6,275	6,200
Totals	7,266	770,562		
2017-18	Change		10.1%	7.4%
2018-19	Change		-5.6%	-5.7%

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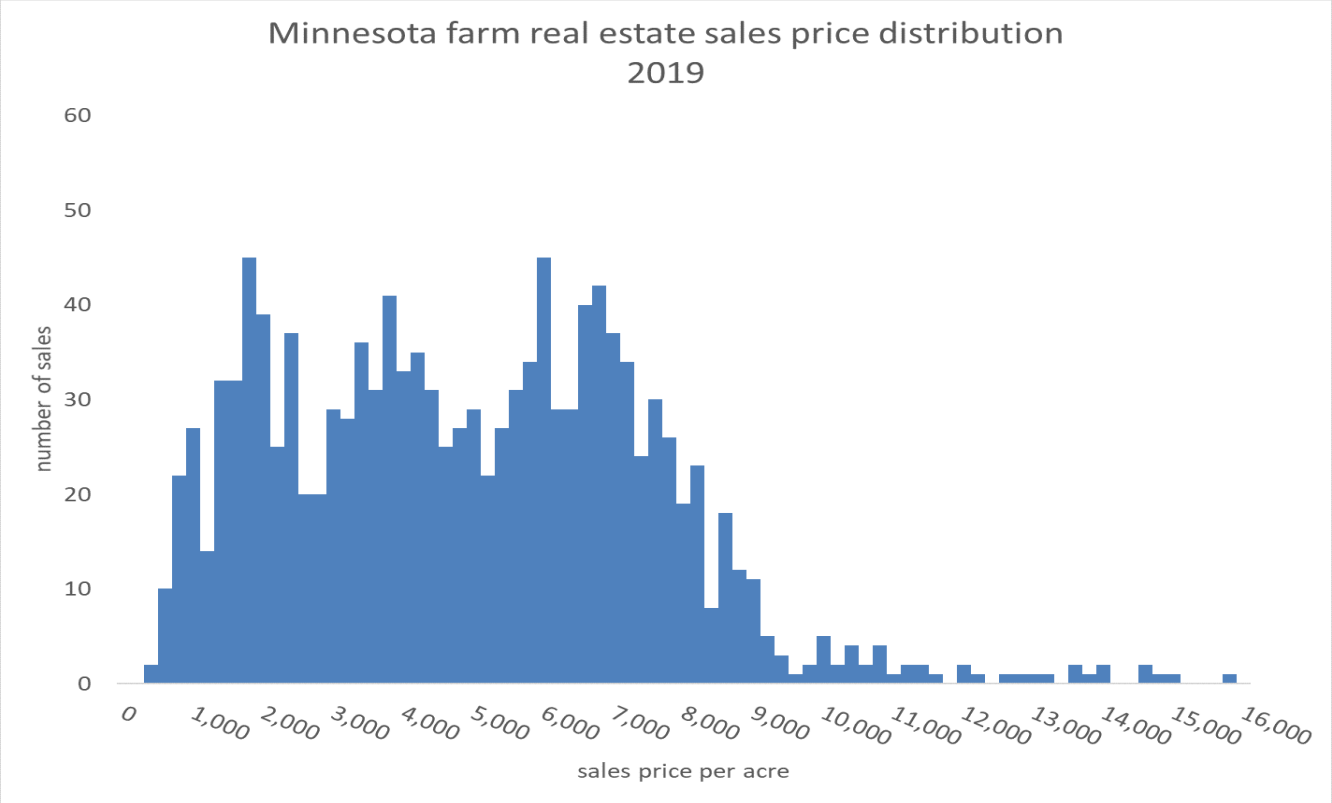
Comparison of 2002, 2010, and 2019



These graphs show the distribution of statewide sales prices over the years. Each vertical bar shows the number of transactions in that price range. The higher the bar, the more sales were observed in that range. A few sales beyond the range shown in the chart were dropped for consistency.

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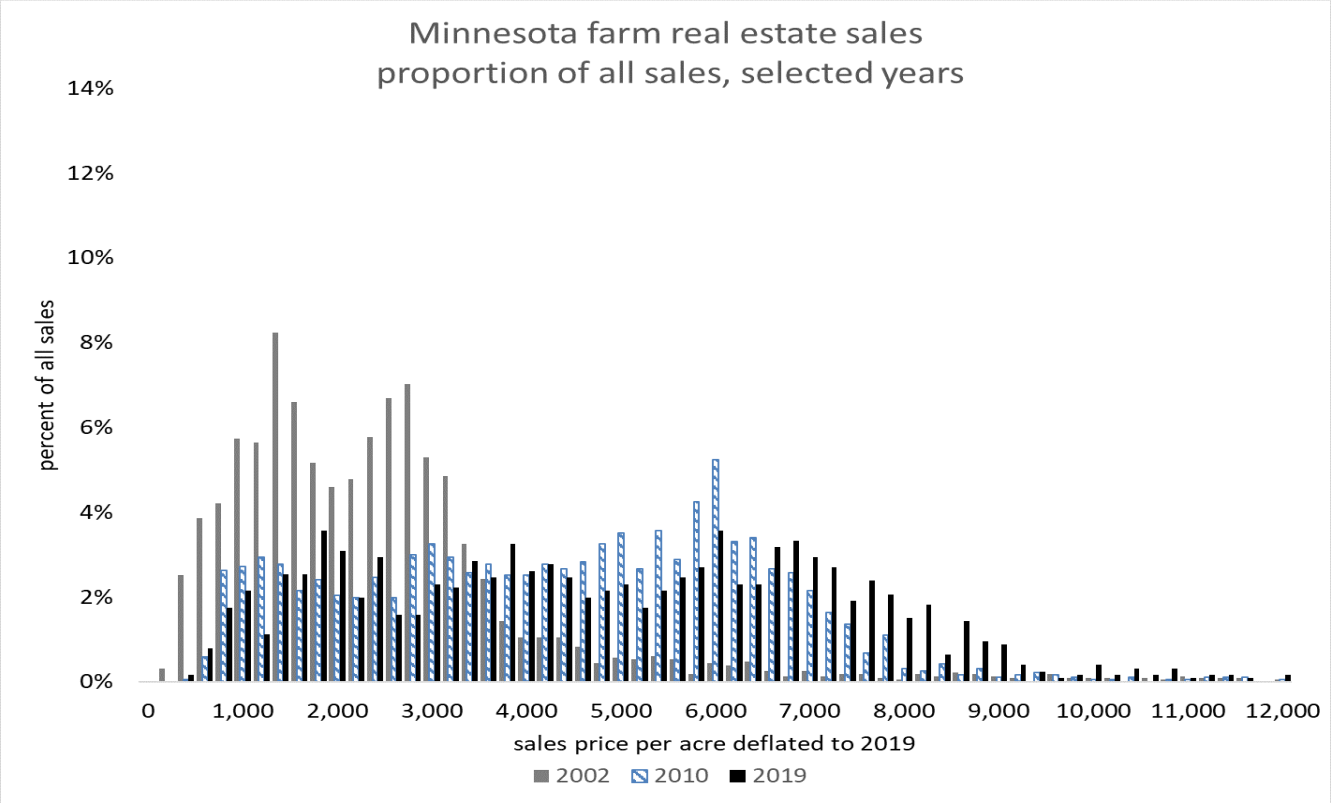

These graphs show the distribution of statewide sales prices over the years. Each vertical bar shows the number of transactions in that price range. The higher the bar, the more sales were observed in that range. A few sales beyond the range shown in the chart were dropped for consistency.

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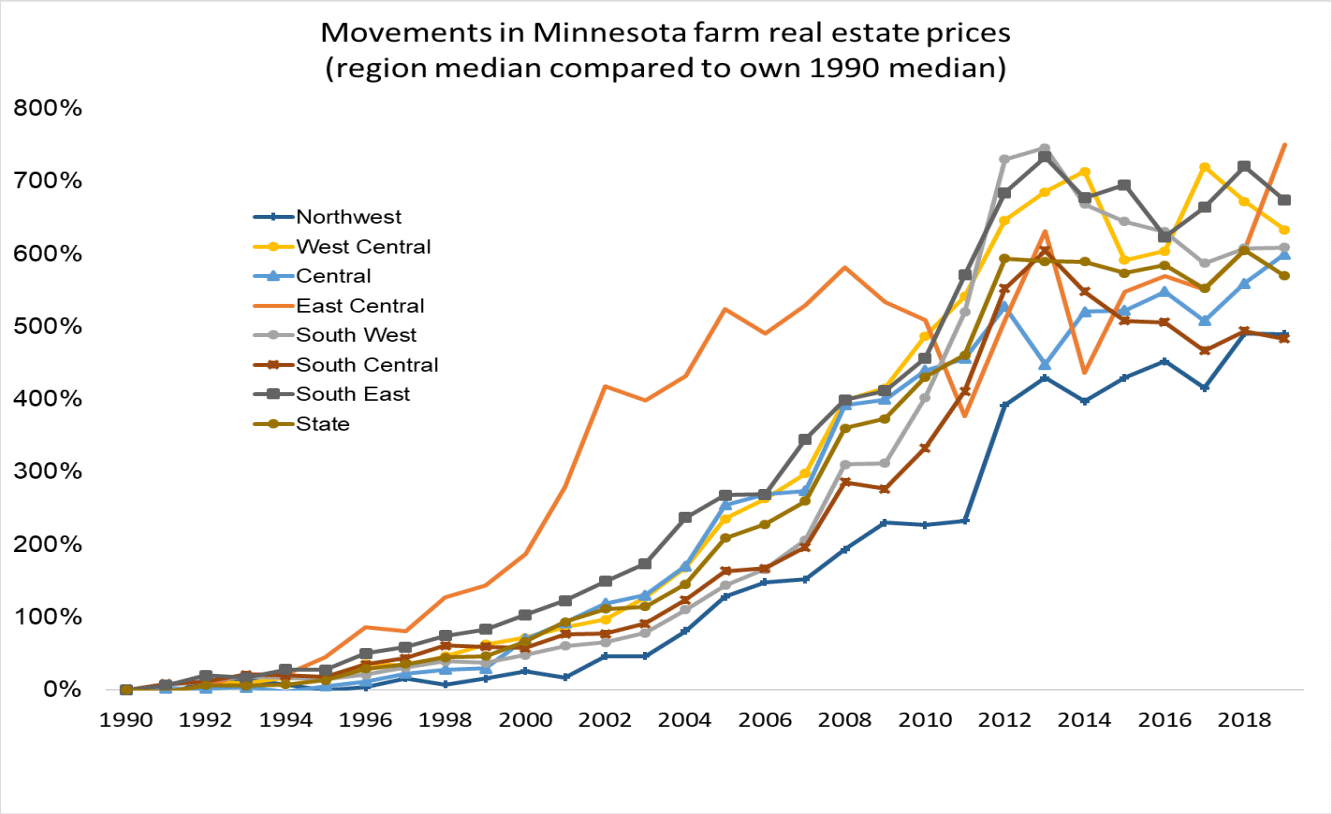

This chart shows each region's median annual price divided by its 1990 median price. This permits us to examine relative price movements without being distracted by differing price levels. So, for example, the Southeast region median prices increased seven-fold since 1990.

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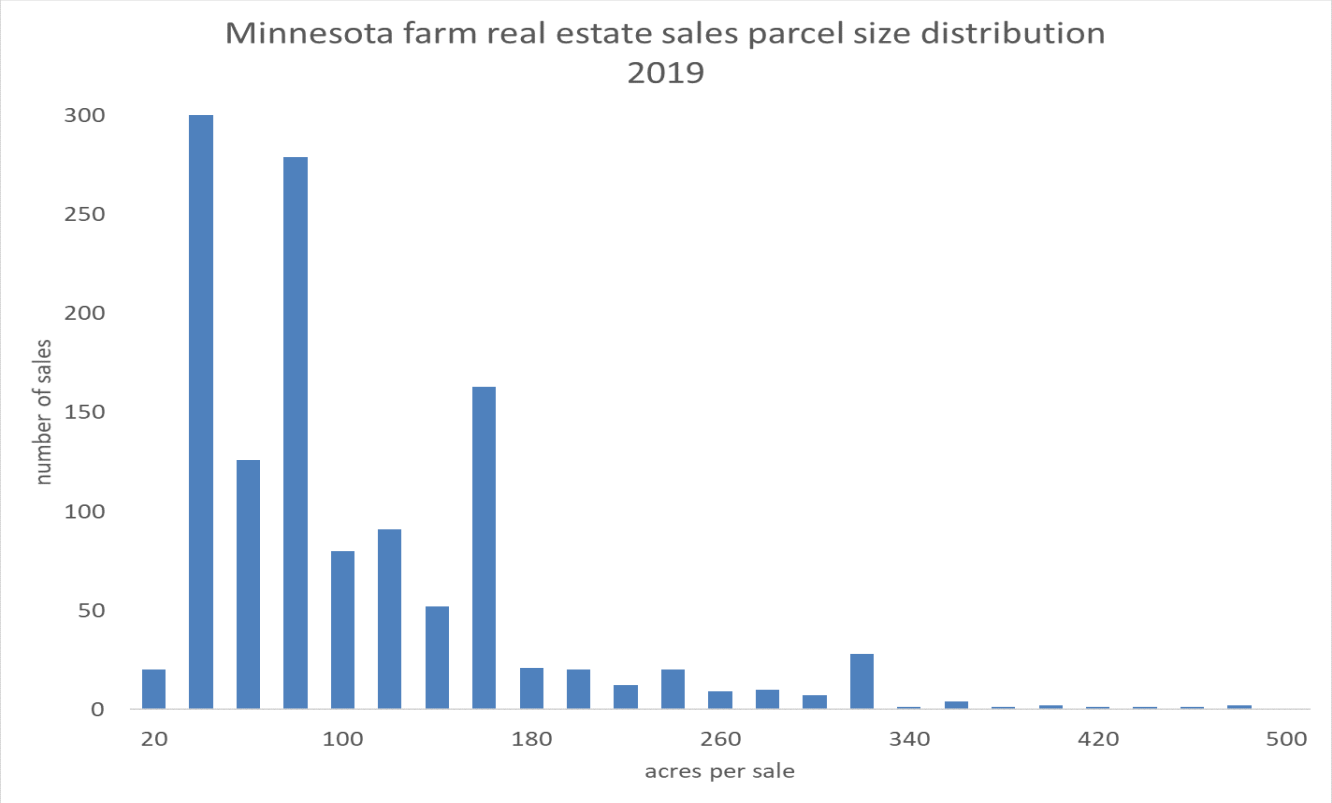

These graphs show the number of transactions in each size class. The higher the bar, the more sales were observed for that size class. Over the years, most Minnesota farm real estate transactions have for 160 acres or fewer, with the bulk at 40, 80, and 120 acres. This pattern reflects both the Survey origins of Midwestern farmland boundaries and the fact that practically nobody buys whole farms.

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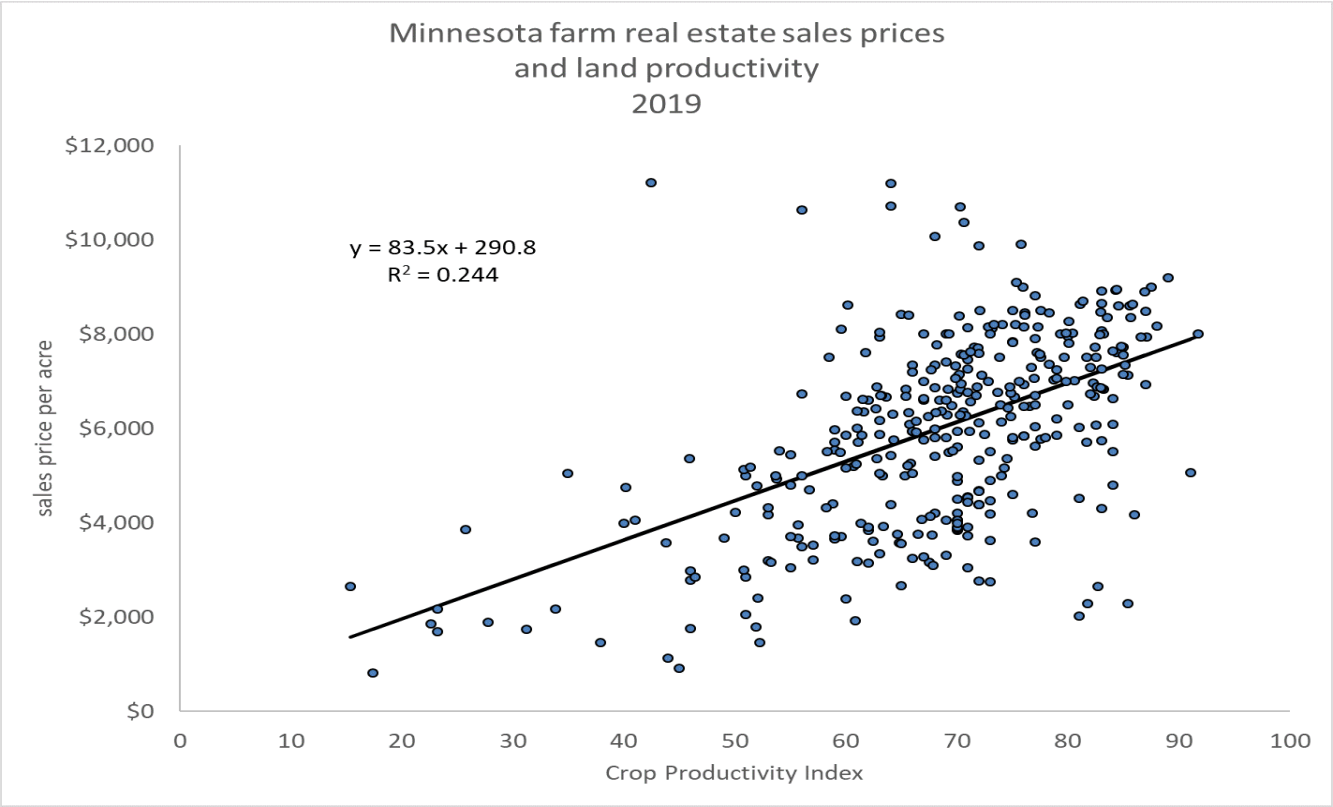

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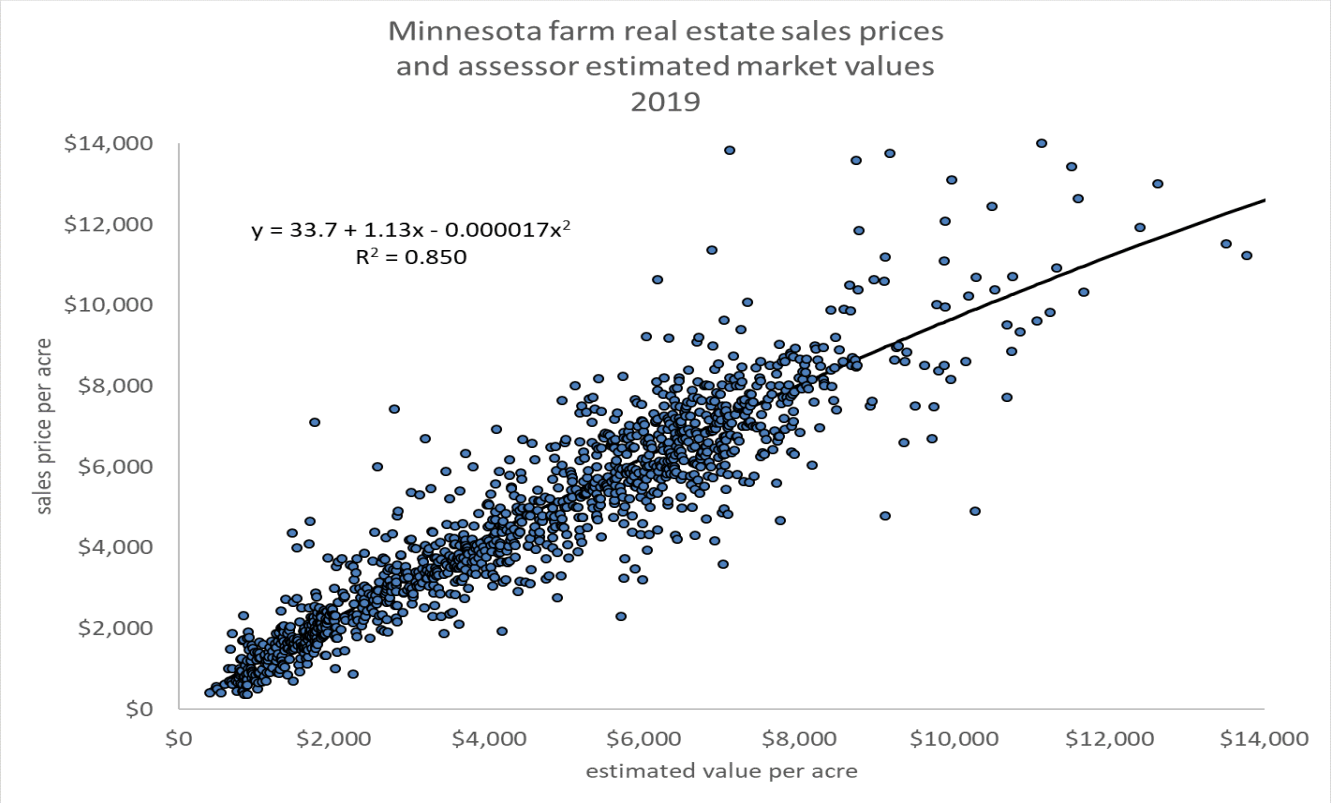

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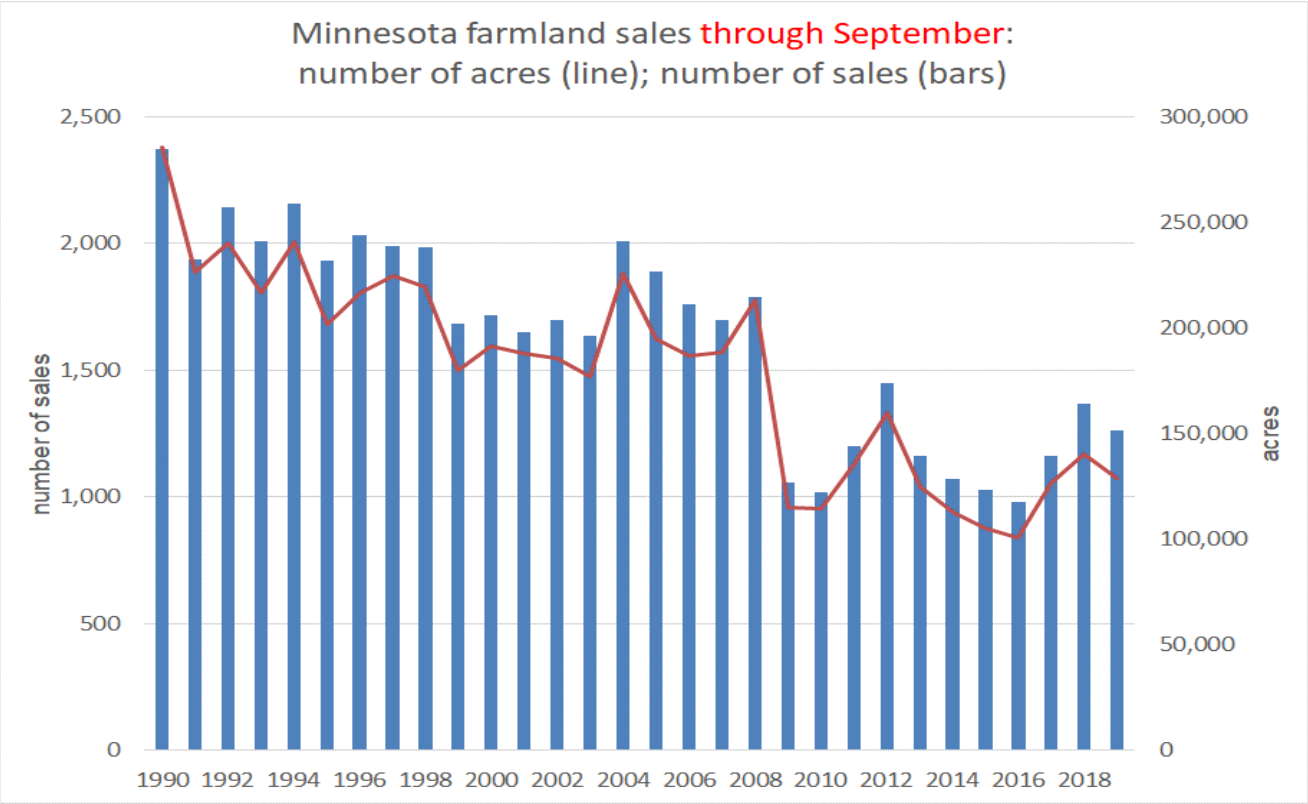
The University of Minnesota farmland sales data is drawn from Department of Revenue reports covering a October-September "sales year." In this study, we report on a calendar year basis, so we place sales from the first three months of the current sales year into the previous calendar year. Consequently, the current calendar year data is based only upon the first nine months of sales for that year. So, for example, the 2019 data is based upon sales for January-September 2019. Sales occuring in the final three months of 2019 will be added to 2019 only when that data becomes available in 2021.

This chart shows comparable nine-month transaction volumes over the years. Year-to-year fluctuations have been reasonably modest--until 2009.



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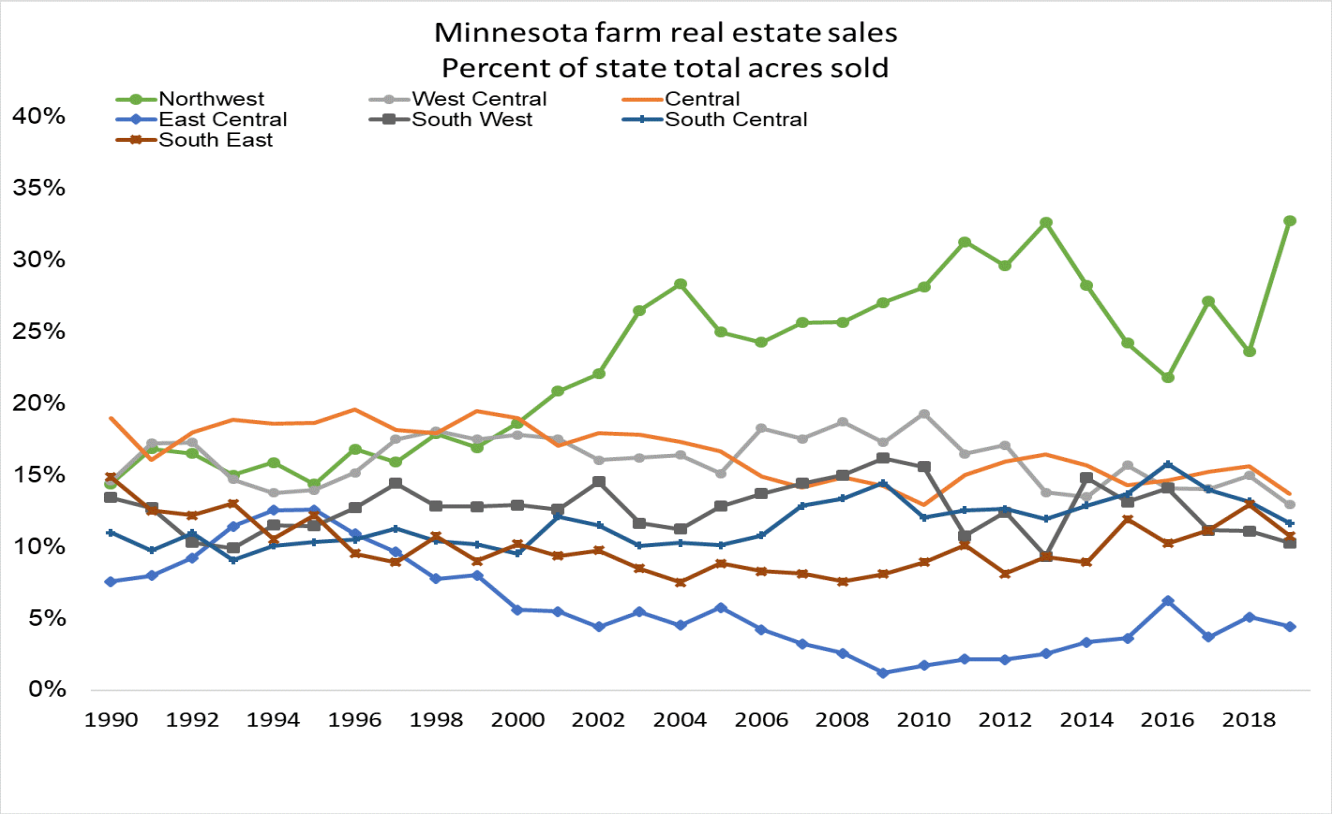
This chart shows the relative contribution of each region's sales to the statewide average. Note expecially that more and more of the state total comes from the relatively lower-priced North West region; the reverse is the case with the East Central region. Together, these trends have the effect of dampening increases in the statewide average price, shown elsewhere.



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