

October 3, 2019

Economic Indicators and Trends
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## **Economic Indicators**

"Economic Indicators: An Update for the 7 Rivers Region" reports on a long-term study of regional economic indicators. The research is ongoing and spans a period of time to enable us to understand and report trends. This project is expected to continuously build on a base of economic information and provide decision makers with valuable tools for strategic planning. The information will also provide a basis for comparison with other regions and a measure of our progress.

State Bank Financial sponsors this research project in collaboration with the University of Wisconsin-La Crosse College of Business Administration and the *La Crosse Tribune*. These programs will continuously build on a base of information and provide decision makers like you with valuable tools for strategic planning.

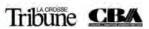
Specific goals of this project are:

- Support business owners in their business decisions by gathering key local economic indicators and trend information.
- Develop specific economic indicators for this region that are not readily available to decision makers.
- Develop tools to assess our progress in economic growth. Prepare baseline measures that will allow comparison with other regions and measure future progress of the region.
- Track the region's participation in the "new economy" and development in the high tech arena.
- Bring professionals together with business owners for discussion about the local economy and related critical issues.
- Create a business recruitment and retention tool by publishing the information.

Core economic indicators cover the following areas:

- Employment
- Income
- Cost of Living
- Consumer Attitude and Behavior
- Real Estate and Housing
- Interest Rates
- Equity Performance







#### **Economic Indicators and Trends**

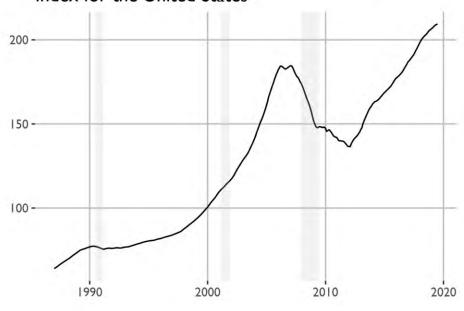
Taggert J. Brooks, Ph.D., UW-La Crosse Department of Economics

#### September 2019:

Since the Great Recession, it has been important to keep an eye on the housing market. For most people that have wealth, they hold it in the form of equity in their home. As the largest asset they hold, their consumption is likely impacted by their perceived wealth. It is also itself a source of consumption as it provides us a place to stay for which there is an implied rent we are paying.

Taking a look at some of the local, regional and national indicators of the housing market we start with national data on home prices. The Case Shiller index is a repeat sales index of home prices. It looks at the appreciation (or depreciation) that occurs between sales of the same house. Houses that do not sell, are not counted in the index. One can imagine that this misses some important aspect of the housing market, as homes that sell often are likely to be very different than homes which do not. The graph below demonstrates that nationally home prices have pushed past their previous peak in early 2007.

# S&P Case-Shiller National Composite Home Price Index for the United States



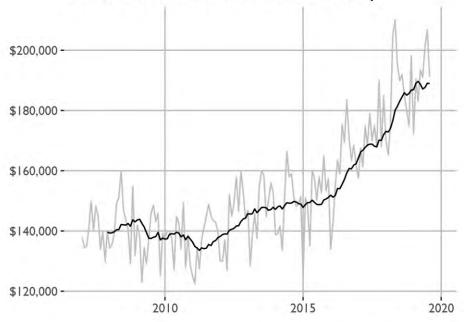
Source: Standard and Poor's

We do not have the same measure available locally, but we can look at the median selling price of homes listed and sold through the Wisconsin Realtors Association's Multiple Listing Service (MLS) in La Crosse County. The data is monthly and though not seasonally adjusted I have included a 12 month moving average to help see the underlying trend.





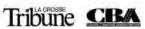
## Median Home Prices: La Crosse County



Source: Wisconsin REALTORS Association

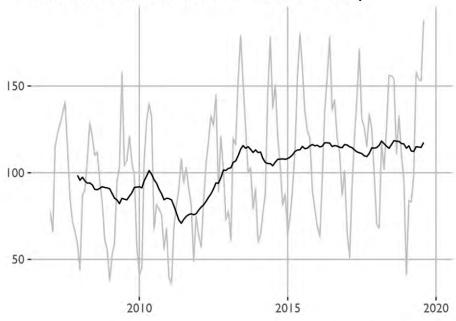
Whereas the national index is about 13.5% above its 2007 value, prices in La Crosse County are about 36% above the 2007 values. We should be a bit caution in the comparison since this is not a repeat sales measure, and it more prone to fluctuations associated with the types of homes on the market. That said, price growth has been strong locally, but the number of sales has not measurably increased from the recovered levels in 2014. Next we can see this in the chart which plots the number of homes sold per month. Again, it exhibits a great degree of seasonality, so I have included the 12 month moving average to make the underlying trend more visible.





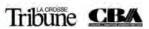


## Number of Home Sales: La Crosse County



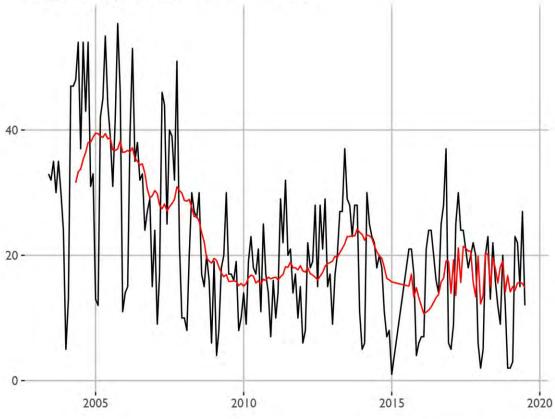
Source: Wisconsin REALTORS Association

While this isn't strictly a measure of supply, but rather an equilibrium measure of the quantity of supply and demand, one would expect in the face of rising prices to have seen more of a quantity response. These rising prices should have resulted in an increase in construction. However, looking at the permit data we don't really see that kind of a response. We just don't see a return to the level of construction we had in 2007. The data below is for the La Crosse MSA which includes La Crosse, WI and Houston county MN. It plots the number of single family permits filed each month. Again, I've used a moving average to help smooth the data. In 2005 there were on average 40 permits being pulled a month, and now we are at about 17.



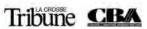






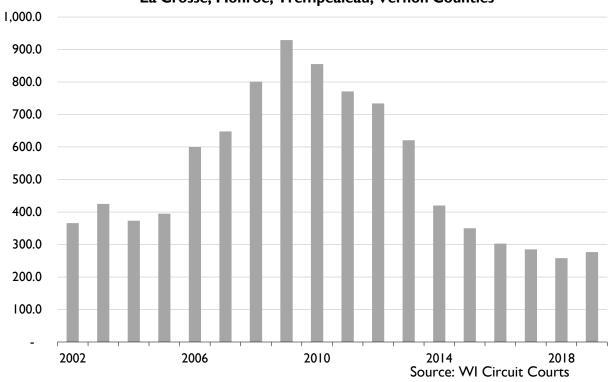
Source: Census Bureau

Further supporting prices is a dramatic reduction in the number of foreclosed homes over the last 5 years. This means we have worked through the excess supply of homes on the market, and as a consequence, prices have risen. The data below are for the Wisconsin counties in the 7 Rivers Region only. Due to the differences in foreclosures processes, it is difficult to get similar numbers for Minnesota counties. The closest like data that is accessible would be the number of court mandated sheriff sales. However, it requires calling sheriff offices to ask them to report the number of Sheriff Sales. The Wisconsin data comes from the Wisconsin Circuit Courts Access, which provides counts of the number of foreclosure filings, by county, by month.





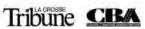




#### **Federal Reserve and Interest Rates**

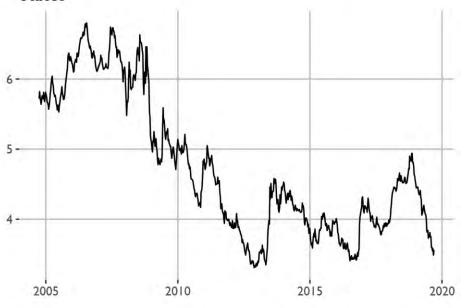
Another data series pointing to a possible explanation for rising prices in the housing market is the historically low level of interest rates. Below you will find the 30 year fixed rate mortgage average across the US. Interest rates by this measure have fallen back below 4% and again are near lows.







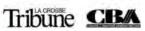
### 30-Year Fixed Rate Mortgage Average in the United States



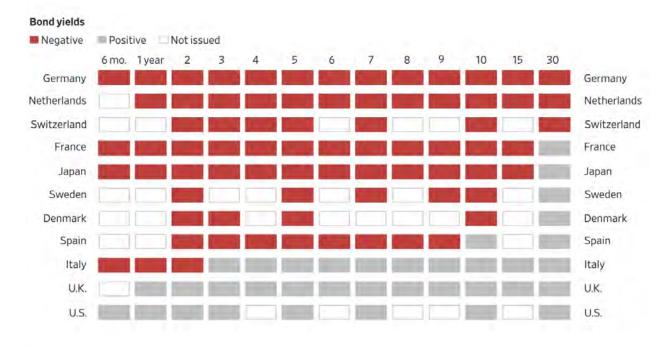
Source: Freddie Mac

As long term interest rates have fallen that has led to an inverted yield curve for a short period of time. This often portends a recession. However the Federal Reserve has stepped up and cut rates twice in an attempt to address what they fear is a softening economy.

Low rates are now a global phenomenon, with in fact many developed countries experiencing negative interest rates. The next graph plots bond yields for different durations, by country. The red (or dark) boxes represent yields that are negative as of late August, while the grey are positive. Most bonds for most countries in the panel are negative. Negative interest rates implies the bond issuer is being paid to borrow money.







Note: Data is through Aug. 21 Source: FactSet

#### **Labor Market**

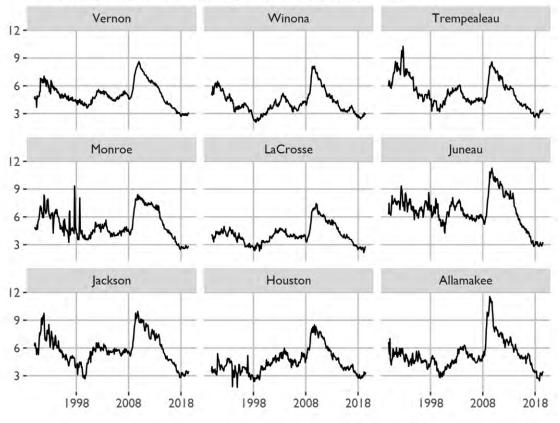
Turning our attention to the Labor market, one of the continued mysteries is the relative tightens one sees in the unemployment rates, yet there has not been a commensurate level of wage growth. Below we have the 7 Rivers Region unemployment rate by county. All of them show slight increases from the period lows, but they continue to be very low.





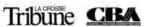


## Seasonally Adjusted County Unemployment Rates

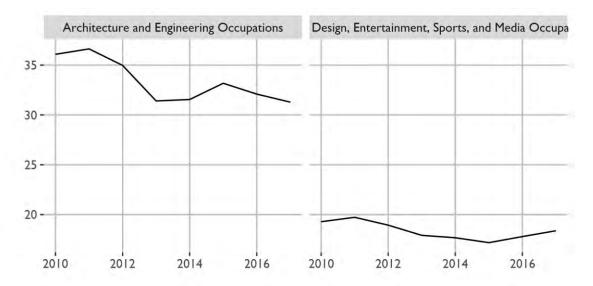


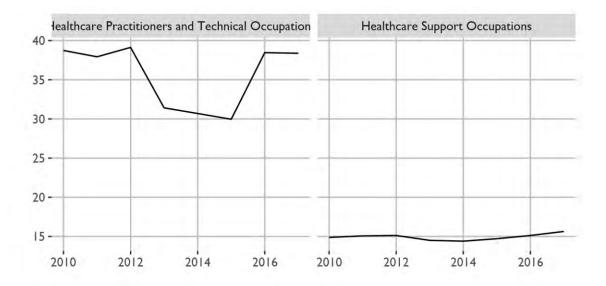
Source: U.S. Bureau of Labor Statistics

However if we look at some local wage data we do not see the usual response to tight markets – rising prices - or in the case of the labor market – rising wages. The data below come from the U.S. Bureau of Labor Statistics' Division of Occupational Employment Statistics. The Occupational Employment Statistics or OES data include the number of employees by occupation and by region. It also includes annual wages, and average hourly wages for each of those occupations, by region. I've created a real wage series for each of the major occupational categories for the La Crosse MSA, where the real wages are adjusted for inflation using the personal consumption expenditures price index (PCE). Below are just 4 examples of "major" occupation codes, and their wages over time. What should be most noticeable is the lack of wage growth. These hourly real wages are flat to falling.

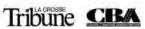




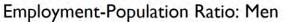




Some of the competing explanations that immediately come to mind is that in fact the labor market is not as tight as you might think from the unemployment rates. If one were to look at the employment to population ratio you would see, for men we are well below the pre-recession levels. This suggests there is a fair amount of idle labor that is keeping wages from growing more rapidly.



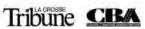






Source: Bureau of Labor Statistics

The degree of slackness in the labor market though, might be less than that measured simply by looking at men. If we turn to prime age workers, we see that we are almost at the pre-recession level. It turns out the fall in male employment to population is part of a long term downward trend in male participation.



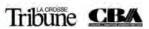


Employment Population Ratio: 25 - 54 years



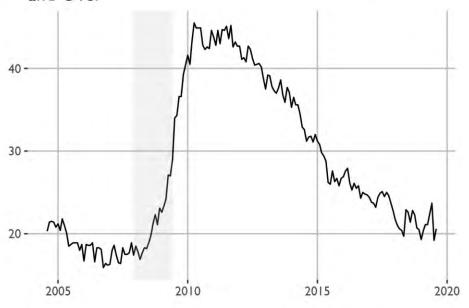
Source: Bureau of Labor Statistics

Also, it appears the percent of long term unemployed has fallen. So either works are giving up, if they have been looking for a long time, or they are finally finding jobs. The prime age employment to population ratio suggests they are finding jobs, even if some of them left the labor market, they are coming back in, helping keep wages low.





# Of Total Unemployed, Percent Unemployed 27 Weeks and Over



Source: Bureau of Labor Statistics

Further measures of the labor market come from the JOLTS data (Job openings and Labor Turnover Survey). These data paint a clear picture of the dynamics in the labor market. Hiring is slower than the growth in openings, layoffs trend ever lower, and job quits are rising, suggesting that workers are confident in their ability to find work.









So what are some reasons for slow wage growth? I think there is still some debate among economists, but some of the reasons include, the decline in unionization, the decline in worker productivity, the change in demographics of firms - they are bigger and older. Finally there are other explanations, such as the dramatic increase in economic inequality.

#### **Trade Update**

Since our last meeting I thought I would update some of the farm data we looked at. Soybean prices continued to stay below \$10 a bushel which for some areas is roughly the breakeven price. We can see from the next graph that the value of agricultural exports to China have continued their precipitous fall.

https://farmweeknow.com/story-projected-soybean-prices-may-yield-breakeven-levels-4-185674

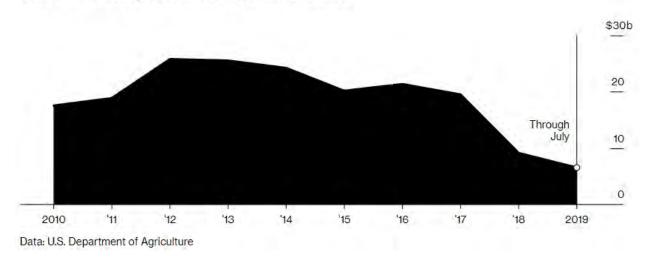






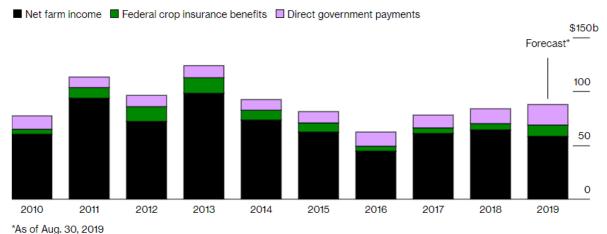


Value of U.S. Agricultural Exports to China



Of course, this has led to a decline in profitability for U.S. farms. In fact, were it not for the massive 28 Billion dollar subsidy to farmers, their profits would be lower than the last two<sup>2</sup>.

#### U.S. Farm Profits



Data: U.S. Department of Agriculture

#### **Consumer Sentiment.**

During the week of Sunday, September 14, 2019 I distributed, via email, the biannual consumer sentiment survey to approximately 1,400 past participants in programs related to the 7 Rivers Region.

<sup>&</sup>lt;sup>2</sup> https://www.bloomberg.com/news/articles/2019-09-19/farmers-say-trump-s-28-billion-bailout-isn-t-a-solution









The following data is based on results from the initial 49 responses received. A table with all the data since the inception of the regional survey is available below. We see from the most recent data the regional overall consumer sentiment index has fallen from its peak in October 2017. It has fallen back to a level not seen since before August of 2013. And for the first time since November of 2006 the national level is above the regional index level.

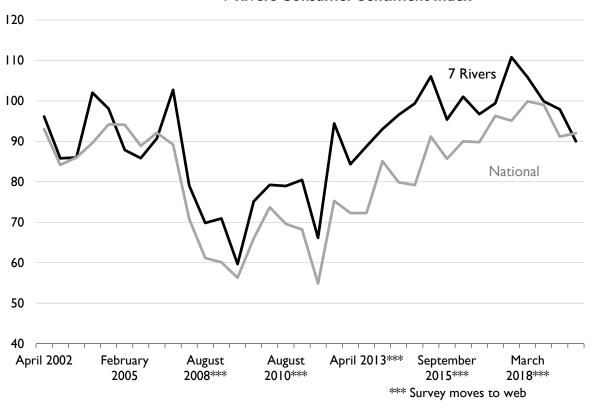
Looking at the breakdown of the index in the tables we can see the differences between the region and the rest of the nation on the two sub components - current conditions and expectations. It is clear that regionally we have had a larger drop off in the future expectations locally contra the national index which saw a small increase.



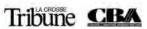




#### **7 Rivers Consumer Sentiment Index**

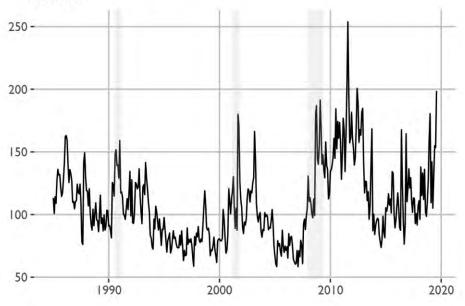


The complete picture can be seen in the table below. However, I want to note some other ways in which people are feeling anxious about the economy. The Economic Policy Uncertainty Index – although noisy - has been trending higher in recent months after falling in the latter half of the last Presidential administration. Not only are people feeling uncertain about the future state of the economy, they are uncertain about policy towards the economy.





## Economic Policy Uncertainty Index for United States



Source: Economic Policy Uncertainty

The other challenge is that while most people feel good about the current state of the economy, they are worried about the future. And specifically worried about an impending recession. The graph comes from A Washington Post/ABC News Poll, and are referenced in this NYT article<sup>3</sup>. A majority of people feel good about the economy, but also think a recession is likely in the next year. Sometimes these types of sentiment can become self-fulfilling prophecies.

<sup>&</sup>lt;sup>3</sup> https://www.nytimes.com/2019/08/22/business/economy/economics-survey-trump.html

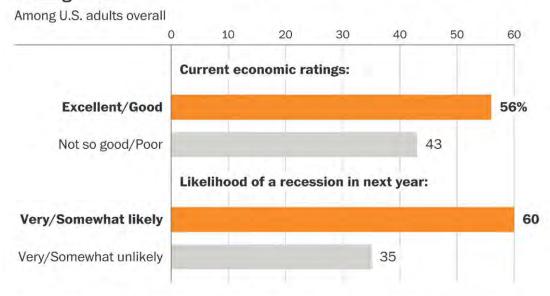




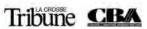




#### Most Americans rate economy positively, but worry a recession is coming soon



Source: Sept. 2-5, 2019, Washington Post-ABC News poll among 1,003 U.S. adults with an error margin of  $\pm$ -3.5 percentage points.





### **Consumer Sentiment Index Data**

	Consumer Sentiment		Current Conditions		Consumer Expectations	
	7 Rivers	National	7 Rivers	National	7 Rivers	National
April 2002	96.1	93	94.7	99.2	97.1	89.1
November 2002	85.8	84.2	97.0	93.1	78.6	78.5
April 2003	86.0	86	94.4	96.4	80.6	79.3
October 2003	102.0	89.6	104.6	99.9	100.4	83.0
April 2004	98.1	94.2	102.9	105	95.0	87.3
February 2005	87.9	94.1	100.7	109.2	79.6	84.4
March 2006	85.9	88.9	107.6	109.1	71.9	76.0
November 2006	90.8	92.1	96.7	106	86.9	83.2
April 2007***	102.7	89.2	113.7	111.1	95.7	<b>75.</b> I
February 2008***	79.I	70.8	91.3	83.8	71.2	62.4
August 2008***	69.9	61.2	76.5	73. I	65.6	53.5
December 2008***	70.9	60.1	87.0	69.5	60.6	57.8
February 2009***	59.7	56.3	75.9	65.5	49.2	50.5
July 2009***	75.2	66	83.7	70.5	69.7	63.2
February 2010***	79.2	73.7	91.8	84. I	71.2	66.9
August 2010***	79.0	69.6	91.5	69.0	70.9	64.1
April 201***	80.5	68.2	88.2	83.6	75.5	58.3
August 2011***	66.2	54.9	80.8	69.3	56.8	45.7
February 2012***	94.4	75.3	102.4	83.0	89.3	70.3
August 2012***	84.3	72.3	96.8	82.7	76.3	65.6
April 2013***	88.8	72.3	99.9	84.8	81.6	64.2
August 2013***	93.0	85.I	103.3	98.6	86.4	76.5
March 2014***-	96.6	79.9	108.4	96. I	89.0	69.4
August 2014***-	99.4	79.2	106.8	99.6	94.6	66.2
March 2015***	106.0	91.2	115.3	103.0	100.1	83.7
September 2015***	95.4	85.7	108.8	100.3	86.7	76.4
March 2016***	101.0	90.0	117.8	105.6	90.2	80.0
September 2016***	96.7	89.8	111.6	107.0	87.2	78.7
March 2017***	99.4	96.3	111.5	111.5	91.6	86.5
October 2017***	110.7	95.I	119.5	111.7	105.1	84.4
March 2018***	105.8	99.9	114.7	115.1	100	90.2
October 2018***	99.9	99.0	119.8	114.4	87.2	89.1
February 2019***	97.9	91.2	109.0	108.8	90.9	79.9
September 2019***	90.0	92.0	111.8	106.9	76.0	82.4

\*\*\* Survey moved to the web. Data for October 2017 preliminary at time of publication

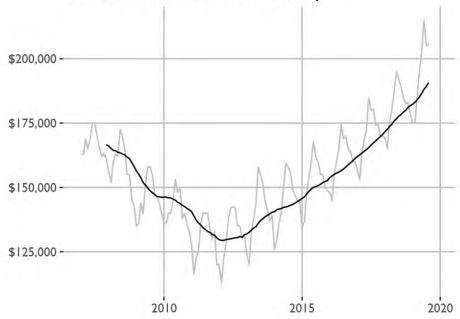






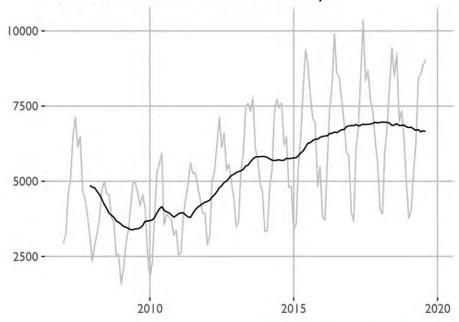
## Appendix : Housing Data

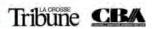
# Median Home Prices: WI County



Source: Wisconsin REALTORS Association

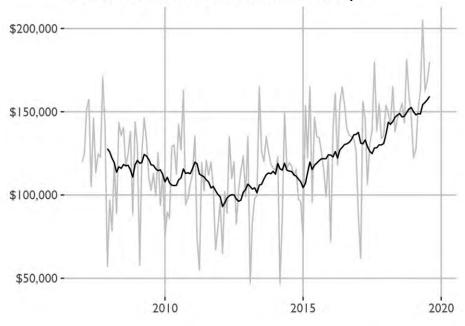
# Number of Home Sales: WI County





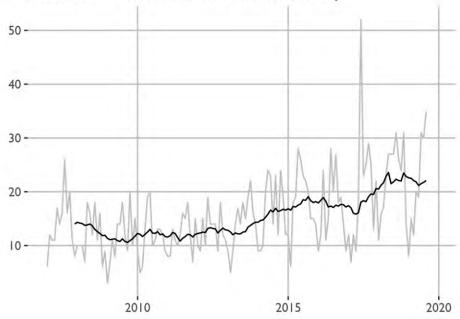


## Median Home Prices: Vernon County



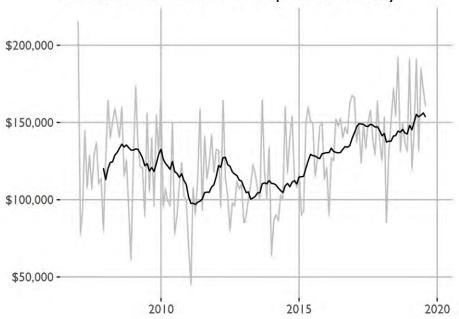
Source: Wisconsin REALTORS Association

# Number of Home Sales: Vernon County



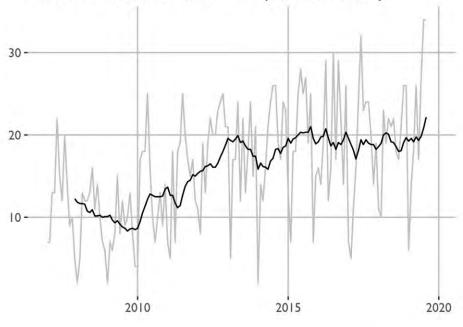


# Median Home Prices: Trempealeau County



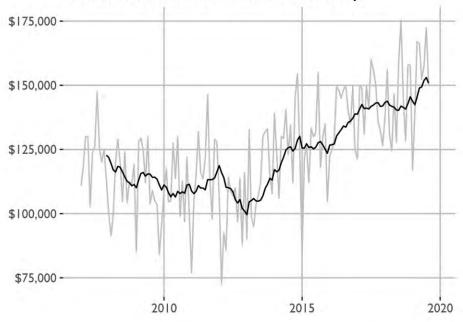
Source: Wisconsin REALTORS Association

# Number of Home Sales: Trempealeau County



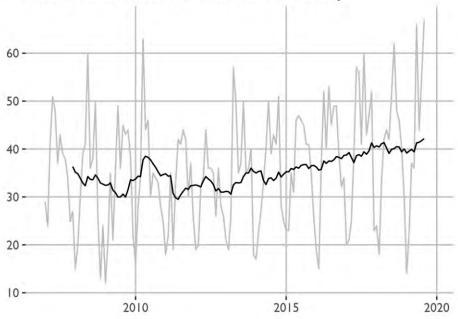


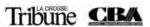
# Median Home Prices: Monroe County



Source: Wisconsin REALTORS Association

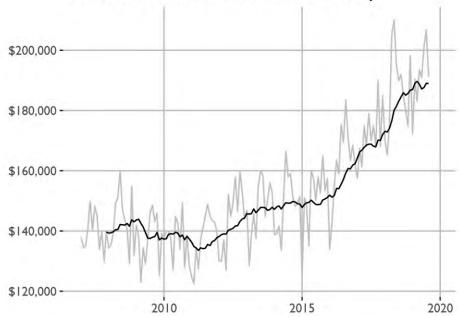
# Number of Home Sales: Monroe County





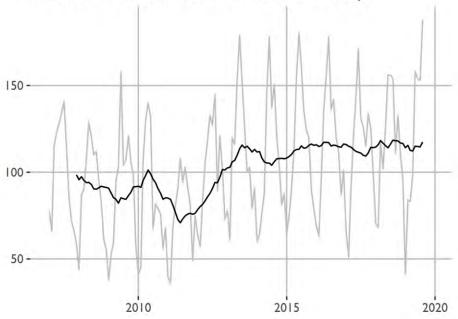


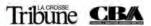
# Median Home Prices: La Crosse County



Source: Wisconsin REALTORS Association

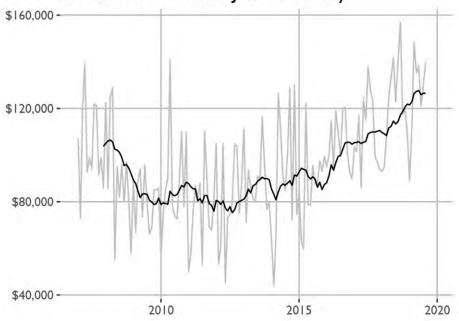
# Number of Home Sales: La Crosse County





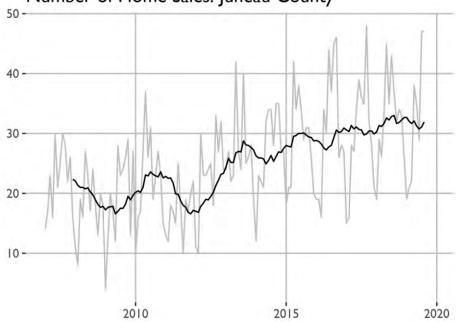


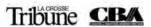
# Median Home Prices: Juneau County



Source: Wisconsin REALTORS Association

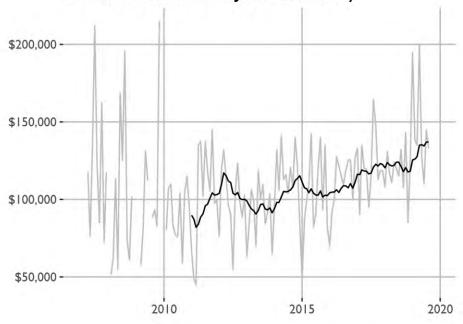
# Number of Home Sales: Juneau County







# Median Home Prices: Jackson County



Source: Wisconsin REALTORS Association

# Number of Home Sales: Jackson County

