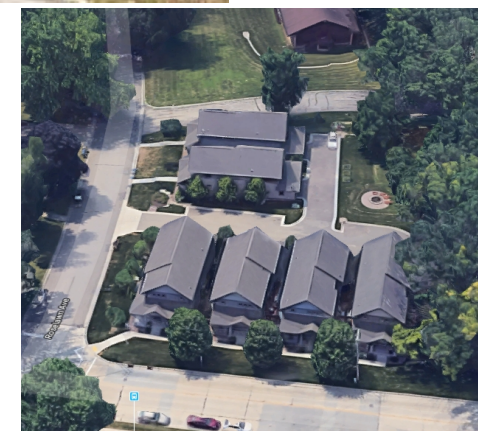


Housing Analytics: Trends and Issues in Housing and Affordability



Today's agenda

- “Analytics” – data for decision making; key metrics that summarize performance
- Not lose sight of bigger picture

- Trends in housing demand (households, jobs)
- Trends in housing supply (units)
- Trends in prices
- Trends in affordability

But first, a little thought-exercise

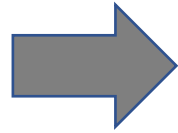
- “Thinking about housing prices and rents in your city or region”:

in the next 10 years (adjusting for inflation), do you want housing prices and rents to be:

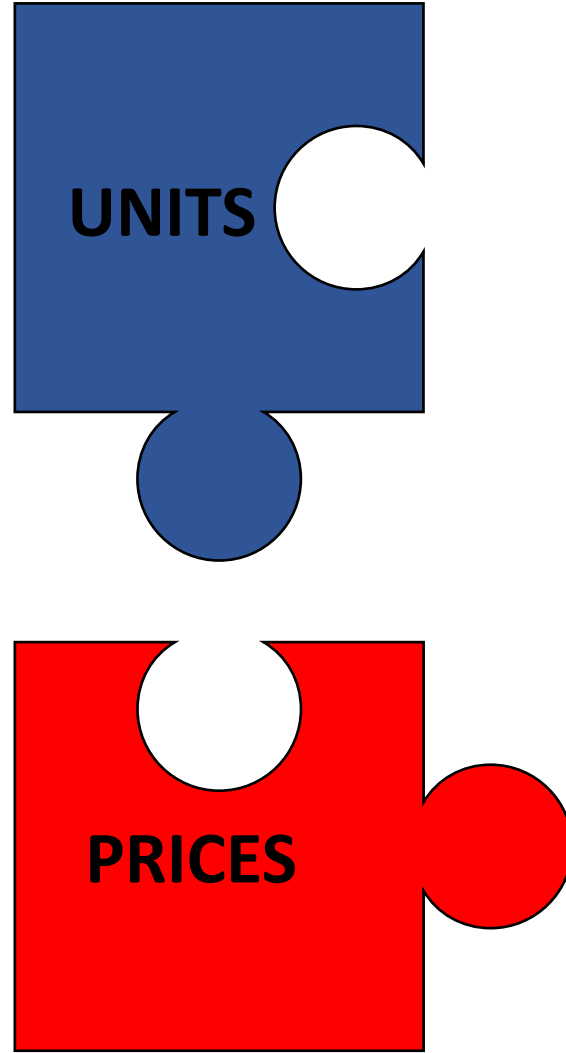
higher than they are today ?

about the same as they are today ?

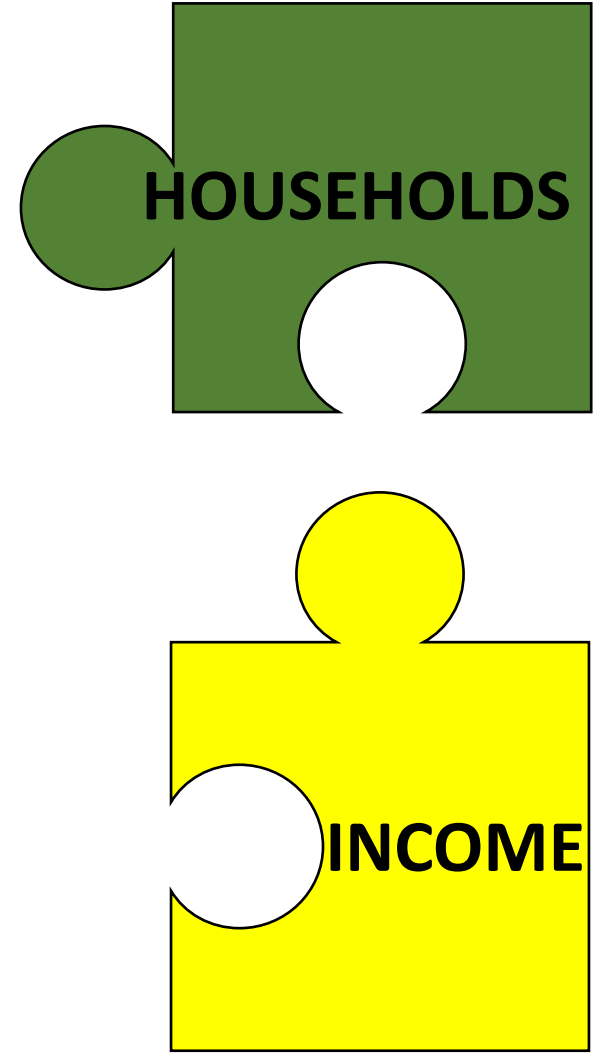
lower than they are today ?

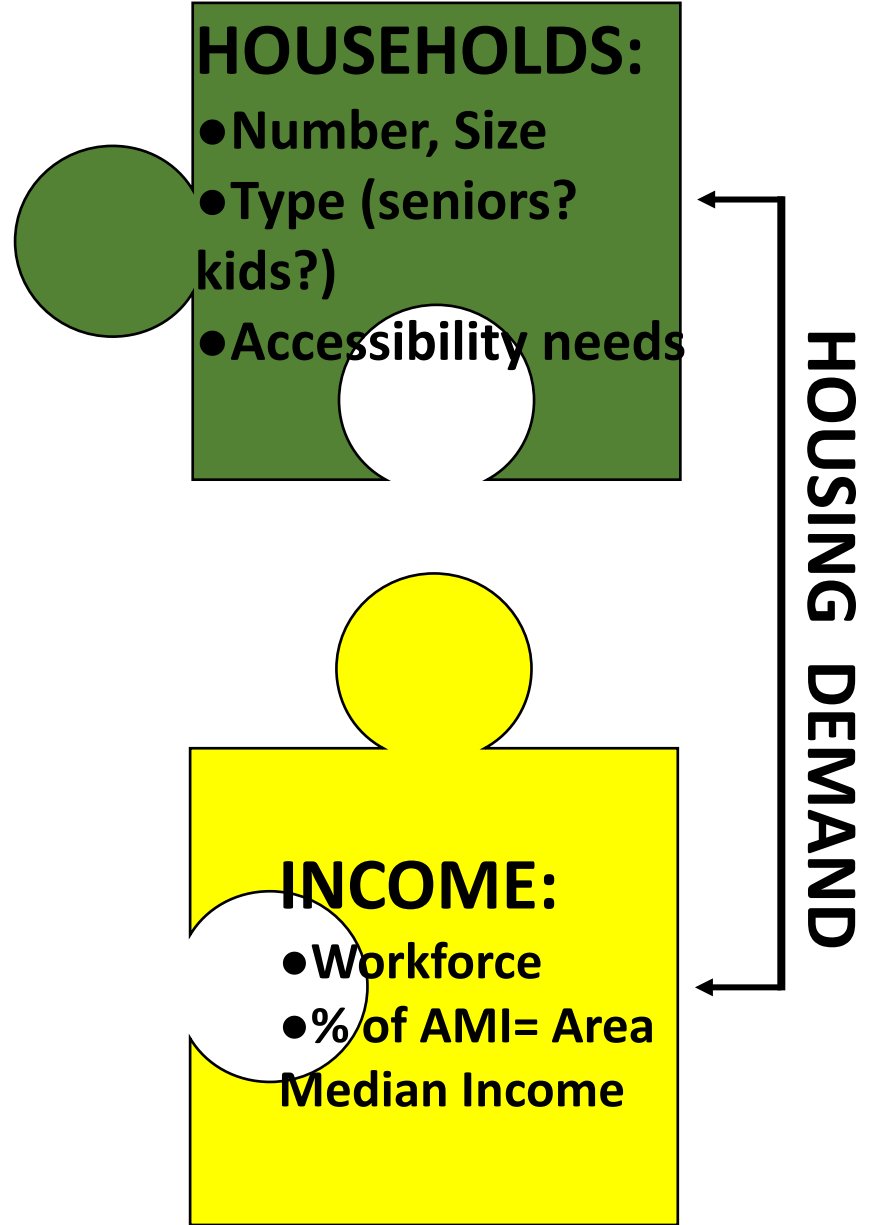


HOUSING SUPPLY



HOUSING DEMAND





Housing Demand: demographics and income/jobs

Wisconsin: Demographic and Housing Changes (2010-2021)

	2010	2021	Change	% Change	Ann.% Change
Population	5,691,047	5,895,908	204,861	3.6%	0.32%
Households	2,279,532	2,449,970	170,438	7.5%	0.66%
Housing units	2,625,477	2,748,274	122,797	4.7%	0.42%
Jobs	2,633,572	2,800,269	166,697	6.3%	0.56%
<i>Inflation-adjusted to 2021\$:</i>					
Median household income (in 2021\$)	\$60,908	\$67,125	\$6,217	10.2%	1.09%
Median owner household income (in 2021\$)	\$77,219	\$82,908	\$5,689	7.4%	0.79%
Median renter household income (in 2021\$)	\$33,669	\$41,326	\$7,657	22.7%	2.30%
Median value of owner-occupied homes (in 2021\$)	\$210,564	\$230,700	\$20,136	9.6%	1.02%
Median gross rent (in 2021\$)	\$1,063	\$1,191	\$128	12.1%	1.27%

Sources: US Census; Bureau of Labor Statistics (QCEW). Inflation adjustment: CPI-U from BLS.

Key messages:

- Slower than national average growth in jobs, income, and population
- Households continue to grow faster than housing units;
- Rents really accelerated in past 2 years
- Renter income growth suggests “displaced demand” – people who might otherwise have purchased homes if available/affordable

Housing Demand: demographics and income

Change in Wisconsin Households, by Size, 2010-2021

Household size	2010	2021	Change (2010-2021)	Avg. Ann. Growth Rate
1-person households	669,106	742,202	73,096	0.95%
2-person households	814,206	915,101	100,895	1.07%
3-person households	335,238	329,909	-5,329	-0.15%
4- or-more-person households	460,982	462,758	1,776	0.03%
Total households	2,279,532	2,449,970	170,438	0.66%

Source: US Census Bureau, 1-year American Community Survey

- Overall, slow rate of household growth = 0.66 percent per year
- Growth **mostly** in 1-person and 2-person households
- Average household size has declined
- Housing demand for 1- and 2-person households = smaller units, different housing types

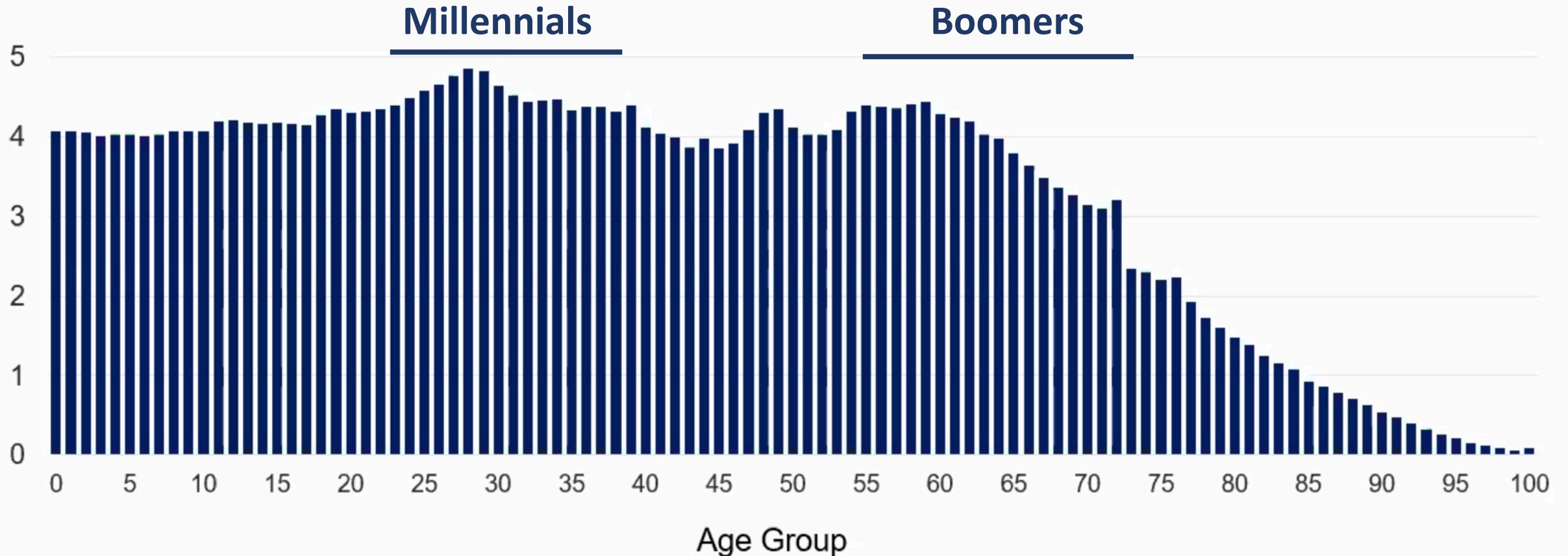
Change in Wisconsin Population, by Age, 2010-2021

Age	2010	2021	Change (2010-2021)	Avg. Ann. Growth Rate
Under 5 years	355,052	315,264	-39,788	-1.07%
5-17 years	981,156	959,341	-21,815	-0.20%
18-24 years	554,544	544,964	-9,580	-0.16%
25-34 years	717,027	737,899	20,872	0.26%
35-44 years	724,623	747,903	23,280	0.29%
45-54 years	873,392	702,240	-171,152	-1.96%
55-64 years	705,743	834,050	128,307	1.53%
65-74 years	401,693	647,116	245,423	4.43%
75 years or better	377,817	407,131	29,314	0.68%
Total	5,691,047	5,895,908	204,861	0.32%

Source: US Census Bureau, 1-year American Community Survey

Over the Last Decade, the Millennial and Baby-Boomer Generations Have Pushed Up the Population in The 20s and 60s

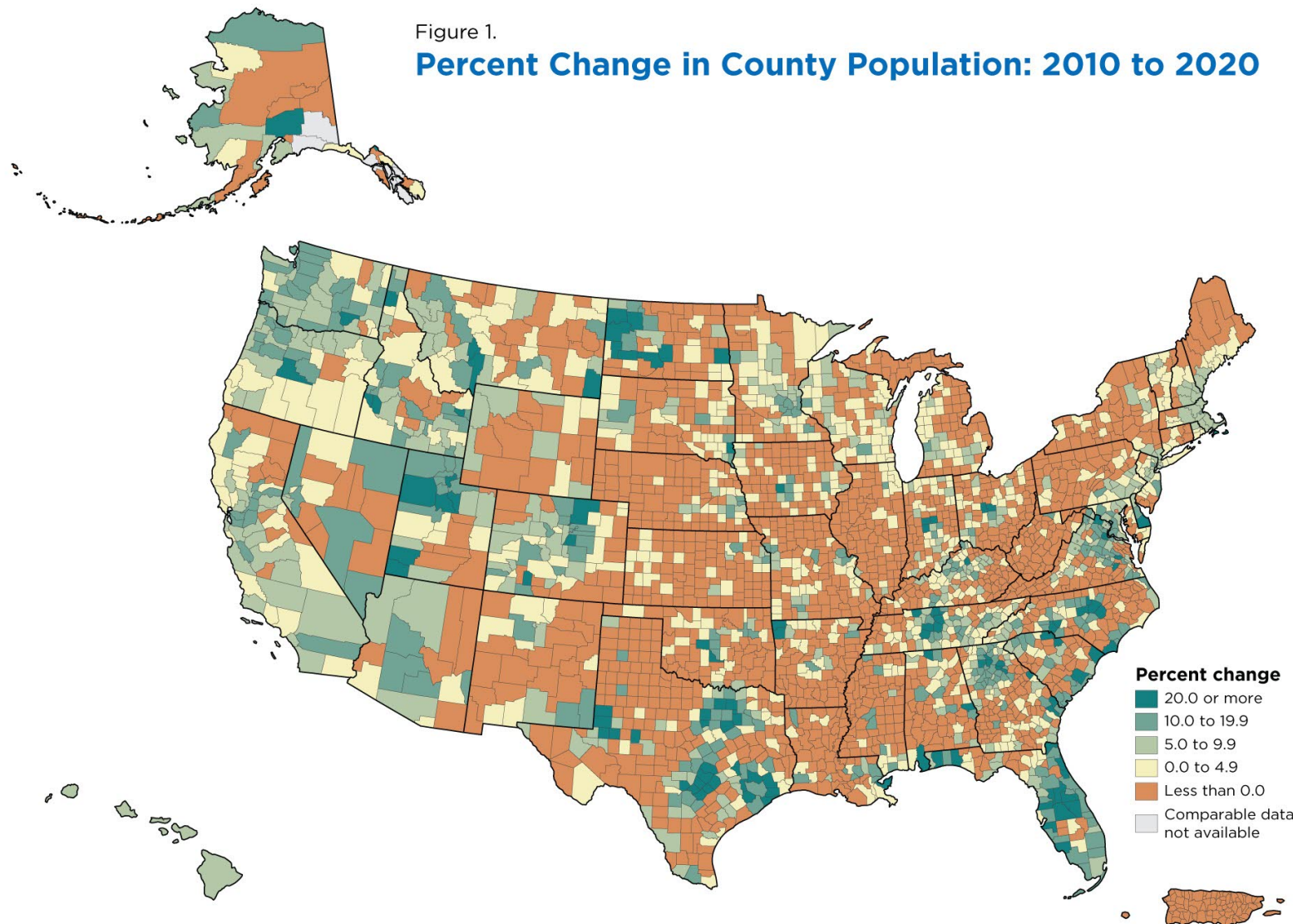
US Population in 2019 (Millions)



Source: JCHS tabulations of US Census Bureau, 2017 National Population Projections.

Figure 1.

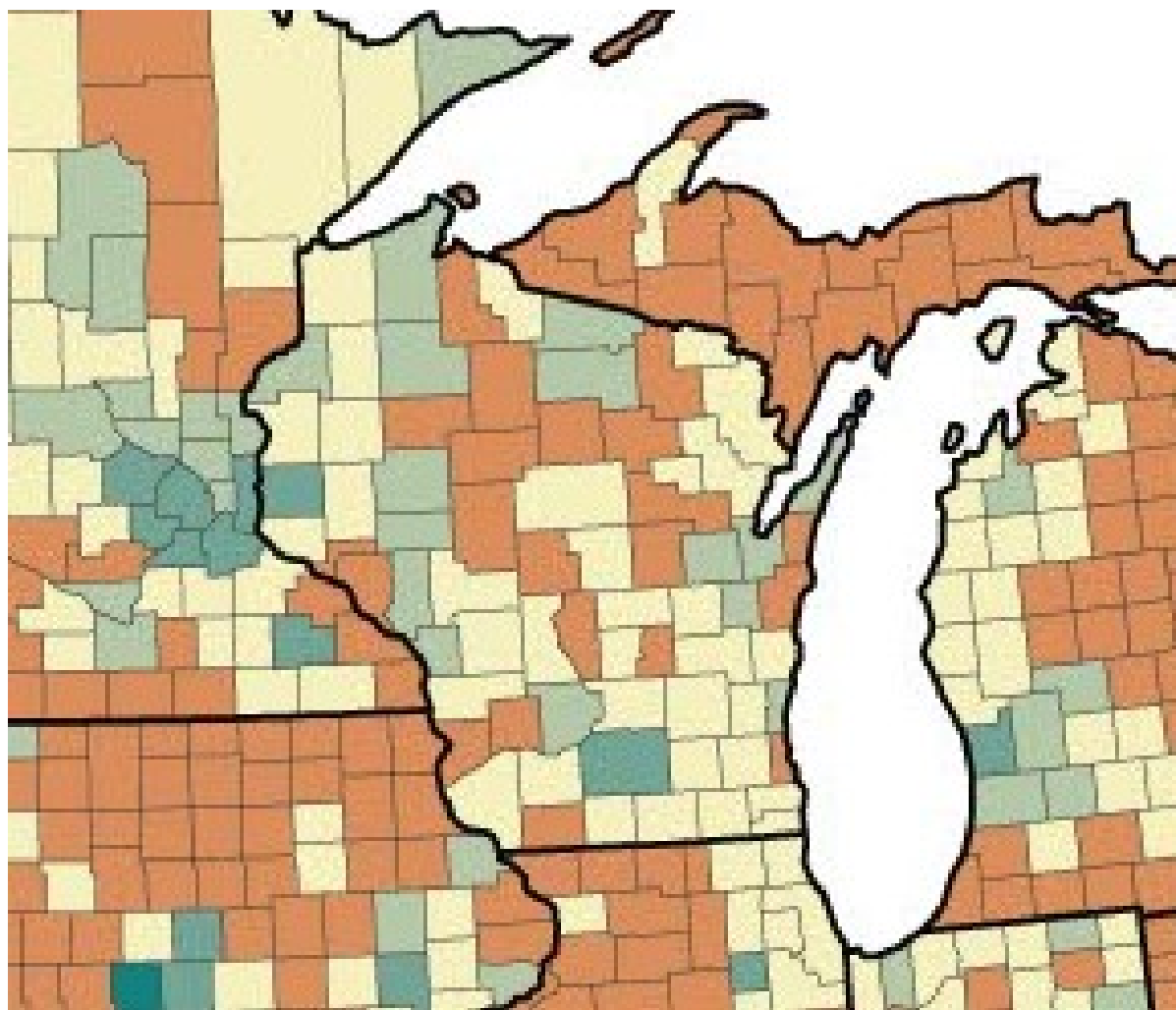
Percent Change in County Population: 2010 to 2020



Note: Bedford city, VA, was changed to town status and added to Bedford County, VA, effective July 1, 2013. For purposes of presenting data, Bedford County is treated as if Bedford city were included in it at the time of the 2010 census.

Information on confidentiality protection, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/decennial/2020/technical-documentation/complete-tech-docs/summary-file/>.

Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File; 2020 Census Redistricting Data (Public Law 94-171) Summary File.



Percent change

- 20.0 or more
- 10.0 to 19.9
- 5.0 to 9.9
- 0.0 to 4.9
- Less than 0.0
- Comparable data not available

Distribution of annual wages, by general occupation category, Eau Claire Metropolitan Region (2021)

Occupation Code	Occupation Title	Employees	% of total employment	10 th percentile annual wage	25 th percentile annual wage	50 th percentile annual wage	90 th percentile annual wage
430000	Office and Administrative Support Occupations	11,300	13.62%	\$27,870	\$29,820	\$36,960	\$59,120
410000	Sales and Related Occupations	8,170	9.85%	\$21,940	\$23,990	\$29,540	\$76,630
530000	Transportation and Material Moving Occupations	7,330	8.84%	\$22,660	\$28,800	\$36,770	\$55,620
510000	Production Occupations	6,790	8.19%	\$28,350	\$32,710	\$37,710	\$59,980
350000	Food Preparation and Serving Related Occupations	6,470	7.80%	\$17,210	\$18,230	\$23,030	\$36,480
290000	Healthcare Practitioners and Technical Occupations	5,940	7.16%	\$37,850	\$58,420	\$74,780	\$199,150
310000	Healthcare Support Occupations	4,380	5.28%	\$22,720	\$27,900	\$29,350	\$45,380
250000	Education, Training, and Library Occupations	4,330	5.22%	\$28,240	\$37,040	\$48,770	\$77,630
130000	Business and Financial Operations Occupations	4,190	5.05%	\$37,690	\$47,530	\$60,890	\$103,010
490000	Installation, Maintenance, and Repair Occupations	3,370	4.06%	\$29,240	\$37,080	\$47,100	\$76,110
470000	Construction and Extraction Occupations	3,200	3.86%	\$35,930	\$44,300	\$55,890	\$78,820
110000	Management Occupations	2,990	3.61%	\$47,400	\$74,060	\$96,720	\$197,910
370000	Building and Grounds Cleaning and Maintenance Occupations	2,370	2.86%	\$22,410	\$25,460	\$29,110	\$44,980
150000	Computer and Mathematical Occupations	1,830	2.21%	\$44,510	\$50,180	\$73,590	\$122,280
390000	Personal Care and Service Occupations	1,510	1.82%	\$17,220	\$22,120	\$27,970	\$46,230
330000	Protective Service Occupations	1,490	1.80%	\$28,680	\$35,630	\$47,520	\$73,070
170000	Architecture and Engineering Occupations	1,360	1.64%	\$46,520	\$58,730	\$74,410	\$100,330
210000	Community and Social Service Occupations	1,330	1.60%	\$28,820	\$36,490	\$48,690	\$62,950
270000	Arts, Design, Entertainment, Sports, and Media Occupations	780	0.94%	\$23,870	\$30,010	\$38,590	\$74,470
190000	Life, Physical, and Social Science Occupations	400	0.48%	\$36,470	\$48,620	\$62,260	\$100,730
230000	Legal Occupations	340	0.41%	\$36,910	\$46,020	\$59,240	\$162,820
450000	Farming, Fishing, and Forestry Occupations	120	0.14%	\$26,000	\$30,220	\$38,020	\$48,860
	All Occupations	82,940		\$22,770	\$29,050	\$38,400	\$79,360

Notes: Data source is US Dept. of Labor, Bureau of Labor Statistics, Occupational Employment and Wage Statistics (OEWS) database for 2021. Detailed occupational data are only available at the Metropolitan Statistical Area (MSA) geography: Eau Claire MSA contains Eau Claire and Chippewa counties. Occupational codes follow the Standard Occupational Classification system (SOC). The 50th percentile is also called the median.

Eau Claire MSA (Eau Claire + Chippewa Counties) FY 2022 Income Limits

	Persons in Family			
	1	2	3	4
100 percent of AMI (Median Income)	\$63,000	\$72,000	\$81,000	\$90,000
Low Income Limits (80% of AMI)	\$50,150	\$57,300	\$64,450	\$71,600
Multifamily tax subsidy limits (60% of AMI)	\$37,620	\$42,960	\$48,360	\$53,700
Very Low Income Limits (50% of AMI)	\$31,350	\$35,800	\$40,300	\$44,750
40% of AMI Income Limits	\$25,080	\$28,640	\$32,240	\$35,800
Extremely Low Income Limits (30% of AMI)	\$18,810	\$21,500	\$24,200	\$27,750

Source: HUD, Office of Policy Development and Research, Income Limits Briefing Materials, <http://www.huduser.org/portal/datasets/il.html> and WHEDA.

Additional data are released for family sizes larger than 4, but are not reported here for space considerations.

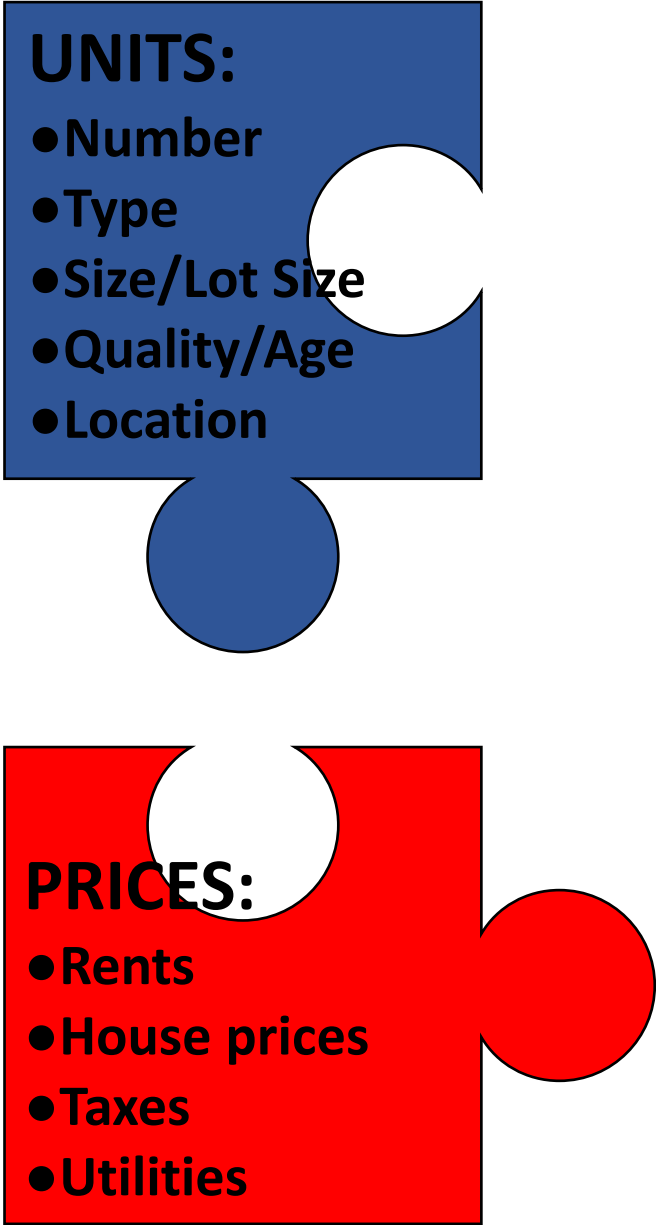
HOUSING SUPPLY

UNITS:

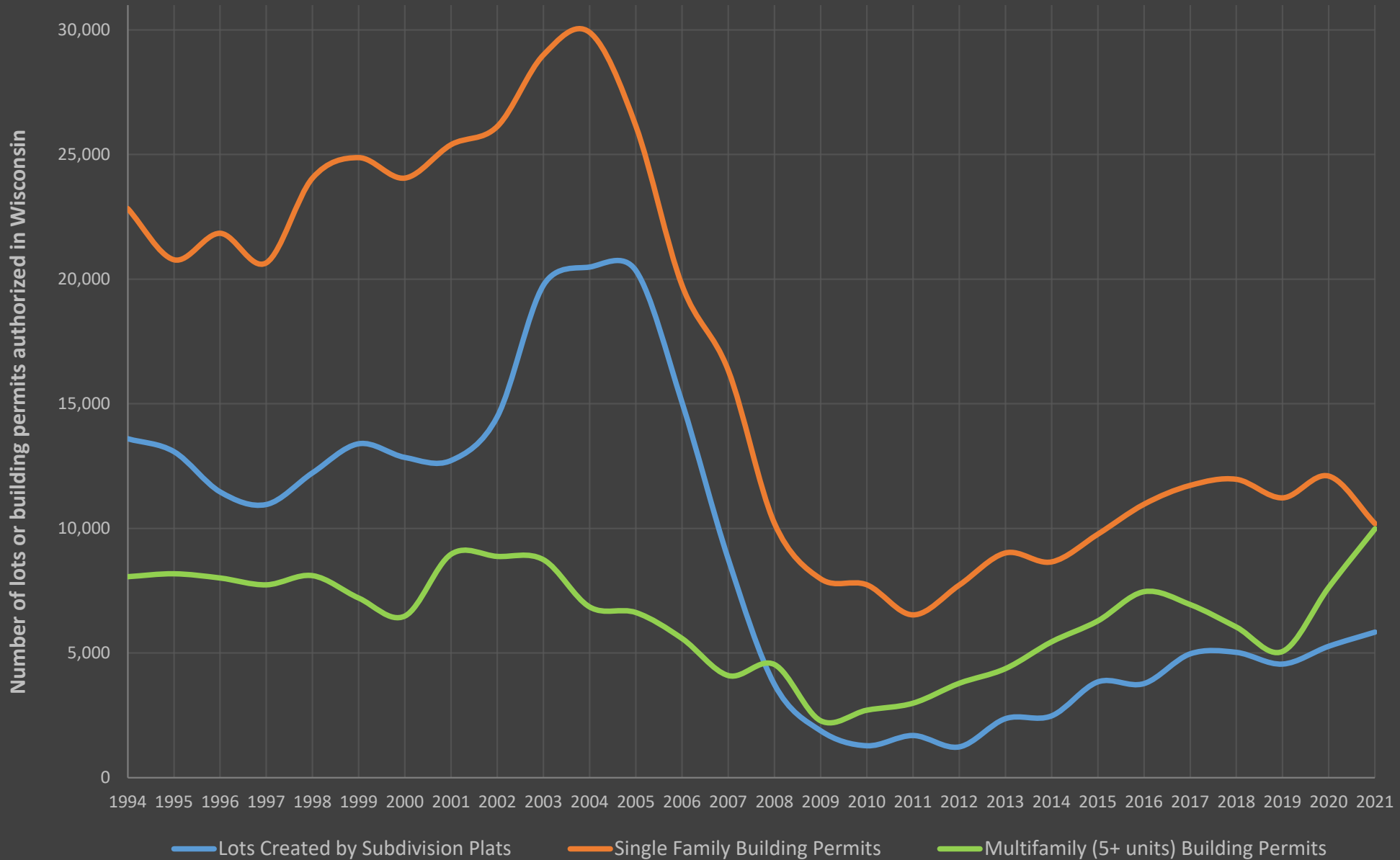
- Number
- Type
- Size/Lot Size
- Quality/Age
- Location

PRICES:

- Rents
- House prices
- Taxes
- Utilities



Housing Construction and Subdivision Activity in Wisconsin have not Recovered from Great Recession, Remain at Historically Low Levels



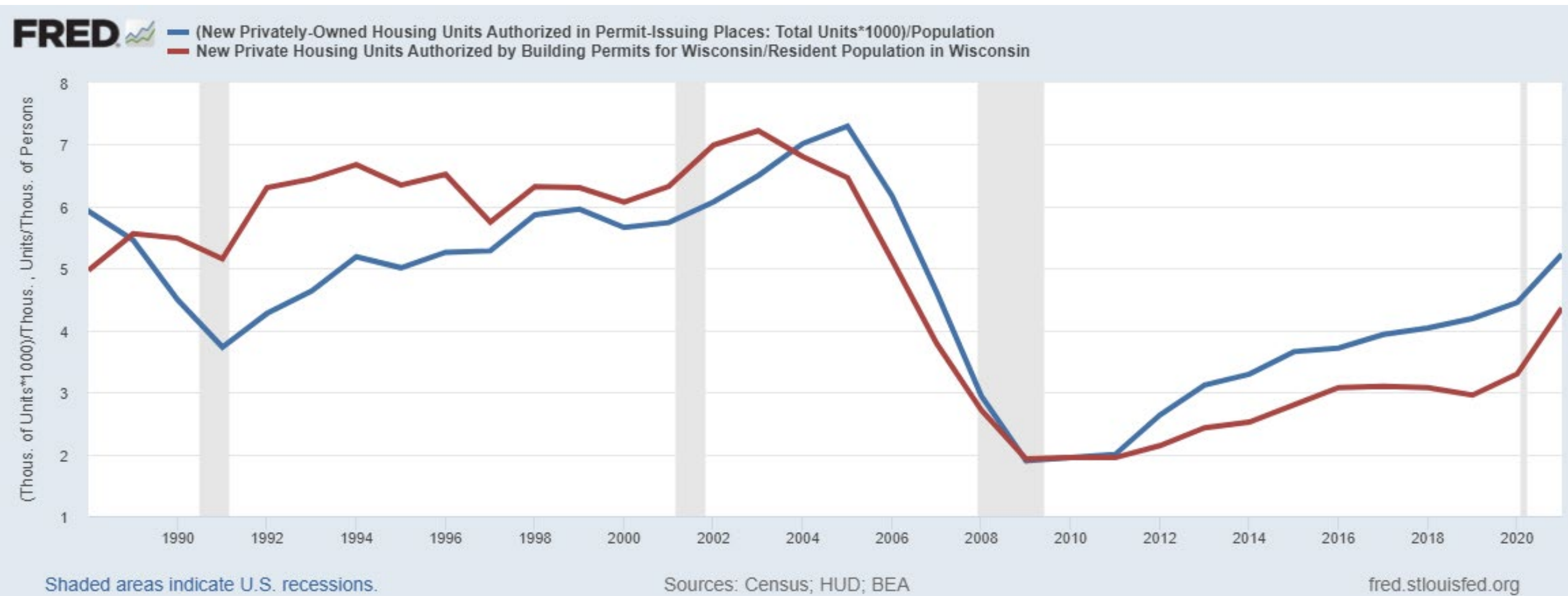
Source: Subdivision Lots from Wis. Dept. Admin.; Building Permits Database, U.S. Census Bureau. *2021 building permit data is preliminary.

Despite uptick in construction and subdivision lots (2019-2021), production remains less than half of historic trends.

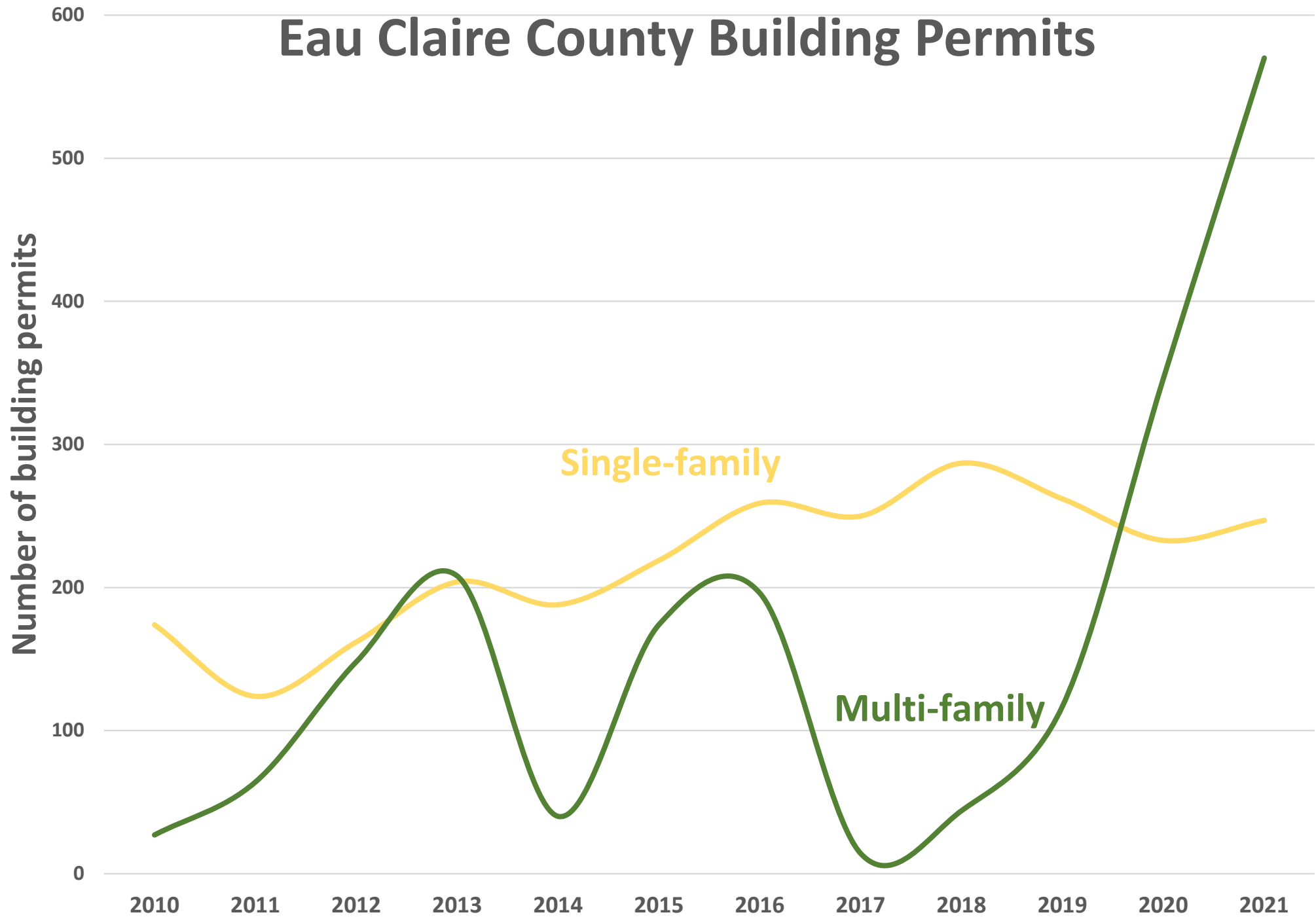
Wisconsin Building Permits and Subdivision Lot Summary

	1994 - 2004	2011 - 2018	2019 - 2021
Avg. Lots (by subdivision), per year	14,096	3,176	5,226
Avg. Building permits, per year	35,909	15,662	19,996
Avg. building permits per 1,000 population	6.78	2.72	3.41

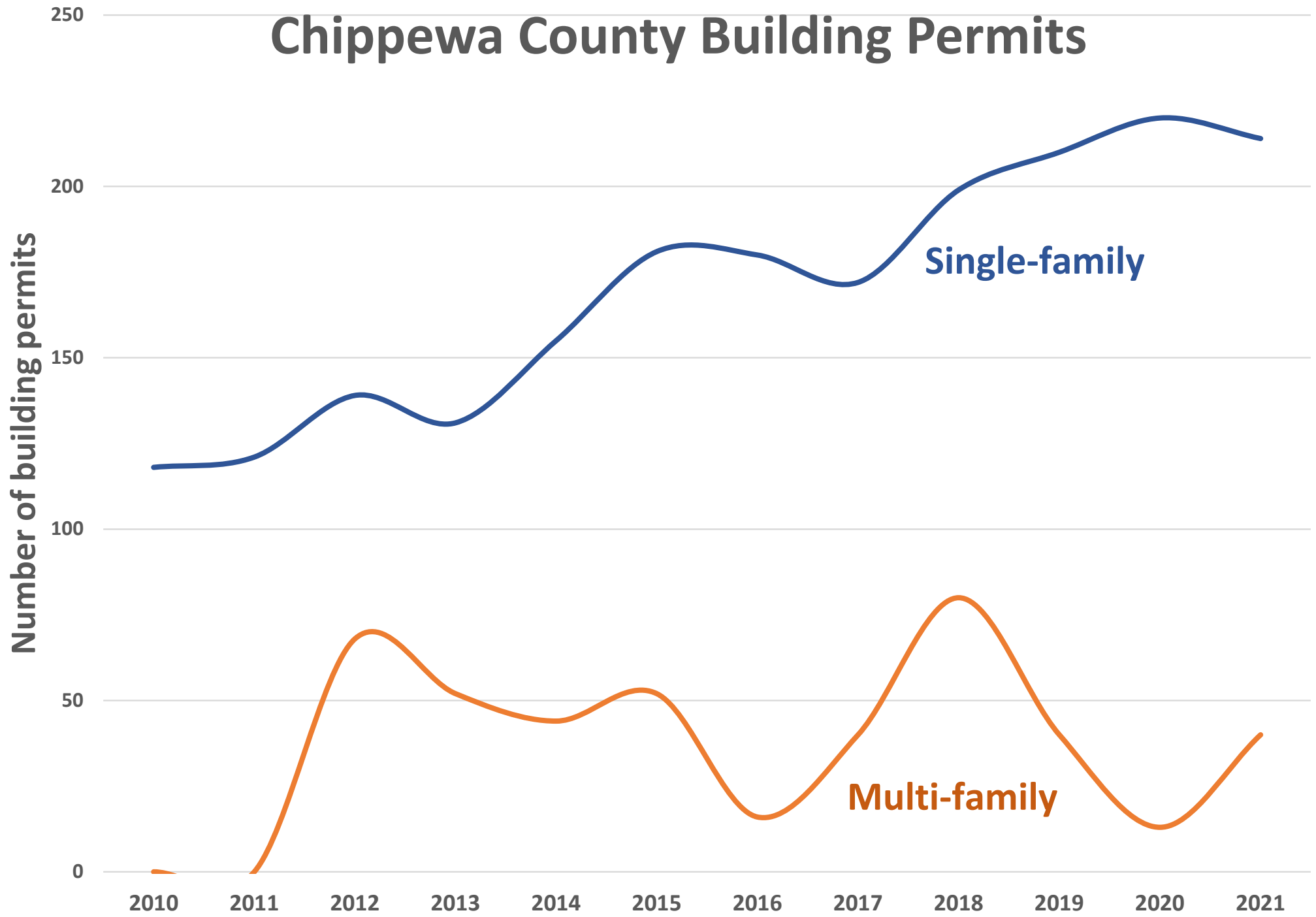
Wisconsin: past decade has built fewer housing units per capita than US average



Eau Claire County Building Permits



Chippewa County Building Permits



Aging housing stock: 57 percent of housing units built before 1980

Year Housing Built	Number of units	Percent of Units
Built 2020 or later	11,547	0.4%
Built 2010 or later	199,152	7.2%
Built 2000 to 2009	346,793	12.6%
Built 1990 to 1999	342,666	12.5%
Built 1980 to 1989	264,635	9.6%
Built 1970 to 1979	391,824	14.3%
Built 1960 to 1969	255,870	9.3%
Built 1950 to 1959	285,734	10.4%
Built 1940 to 1949	149,804	5.5%
Built 1939 or earlier	500,249	18.2%

Source: US Census Bureau, 1-year American Community Survey (2021)

Workforce Housing: Most Job Center Counties Have More Jobs than Housing Units

	Housing Units (2021)	Jobs (2021)	Jobs/Housing Balance
Waukesha	173,392	237,797	1.37
Brown	114,171	152,176	1.33
Dane	253,901	336,151	1.32
Outagamie	79,932	104,420	1.31
La Crosse	53,162	67,407	1.27
Eau Claire	45,677	56,470	1.24
Winnebago	76,554	90,504	1.18
Marathon	60,255	69,559	1.15
Sheboygan	52,617	58,604	1.11
Milwaukee	424,090	455,949	1.08
Fond du Lac	45,912	45,257	0.99
Kenosha	72,744	69,300	0.95
Washington	58,751	55,895	0.95
Rock	70,763	65,097	0.92
Racine	84,612	72,281	0.85
Walworth	53,521	41,276	0.77

Source: BLS QCEW, Census 1-year ACS

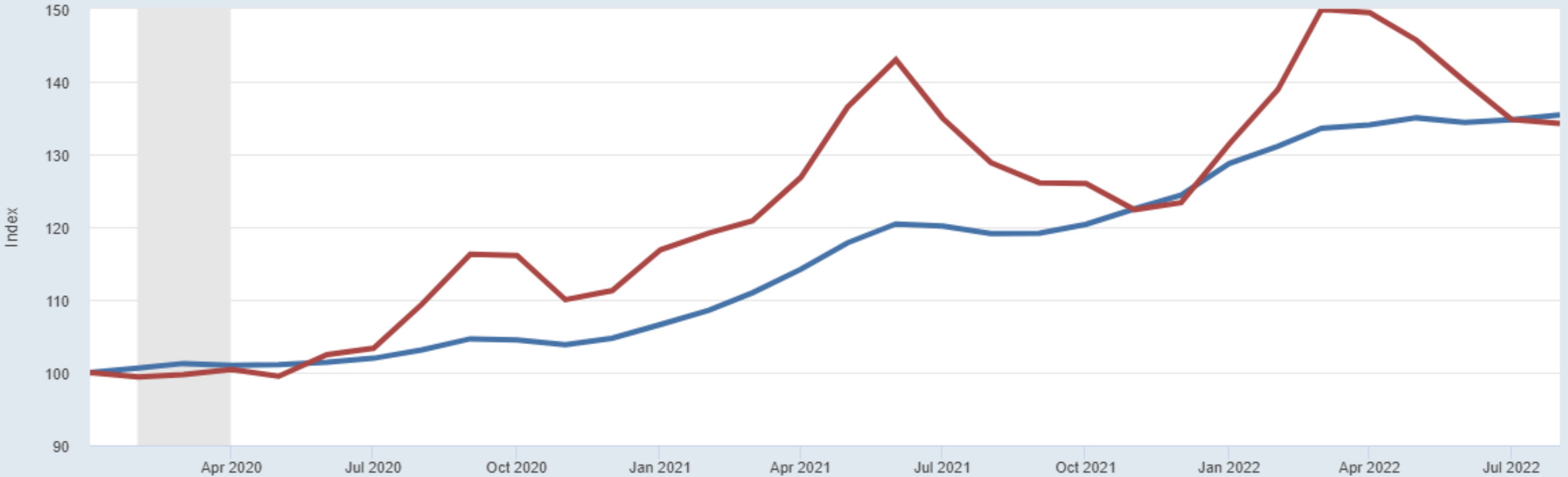
Excessively tight lending for Construction/Land Development



Multifamily Construction Costs Up 35 percent (Jan. 2020-August 2022)



— Producer Price Index by Commodity: Inputs to Industries: Net Inputs to Multifamily Residential Construction, Goods Less Foods and Energy, Jan 2020=100
— Producer Price Index by Commodity: Inputs to Industries: Net Inputs to Multifamily Residential Construction, Services, Jan 2020=100



Shaded areas indicate U.S. recessions.

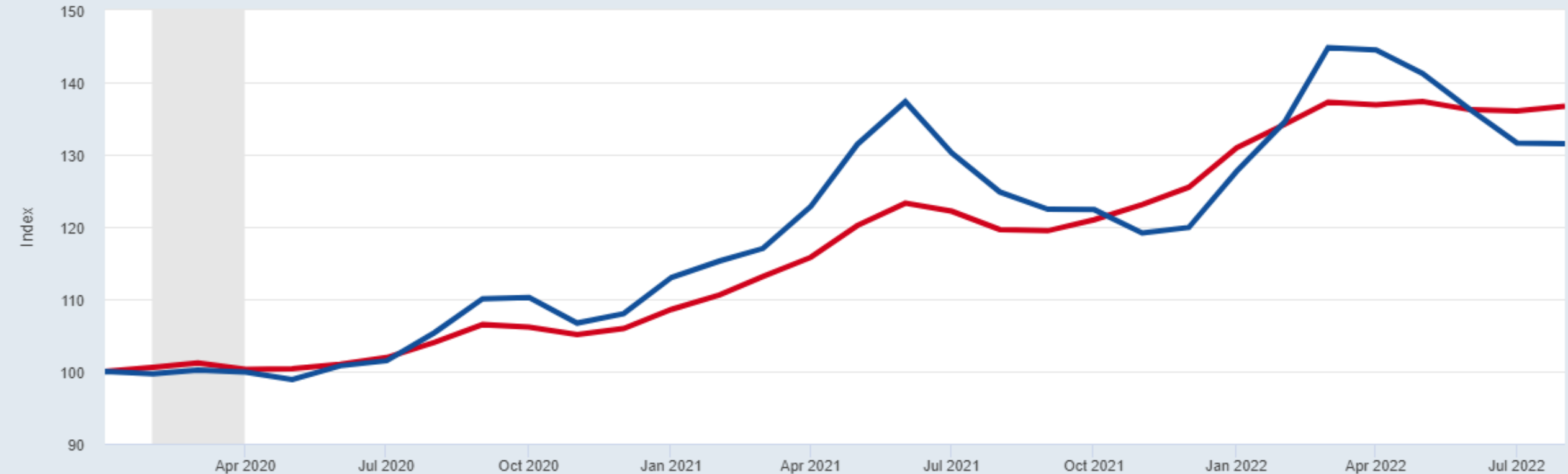
Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

Single-family Construction Costs up 36.5 percent (Jan. 2020 to August 2022)

FRED

— Producer Price Index by Commodity: Inputs to Industries: Net Inputs to Single Family Residential Construction, Goods Less Foods and Energy, Jan 2020=100
— Producer Price Index by Commodity: Inputs to Industries: Net Inputs to Single Family Residential Construction, Services, Jan 2020=100

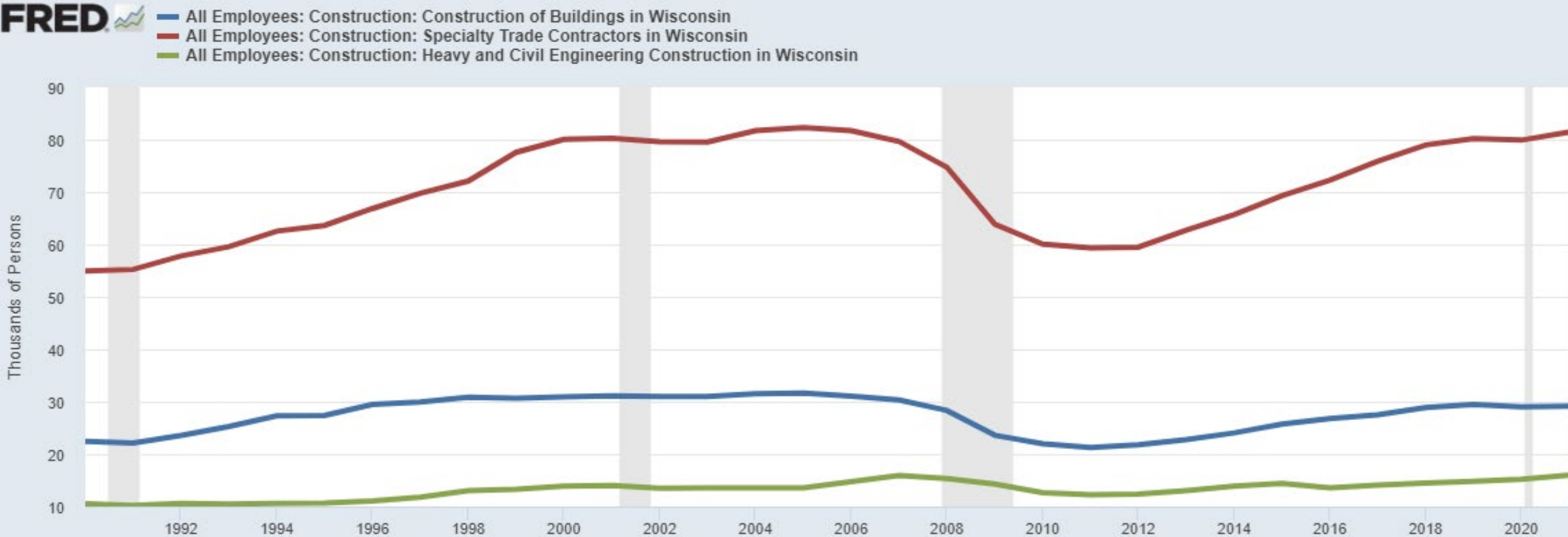


Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

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Construction Employment in Wisconsin still below 2006 peak

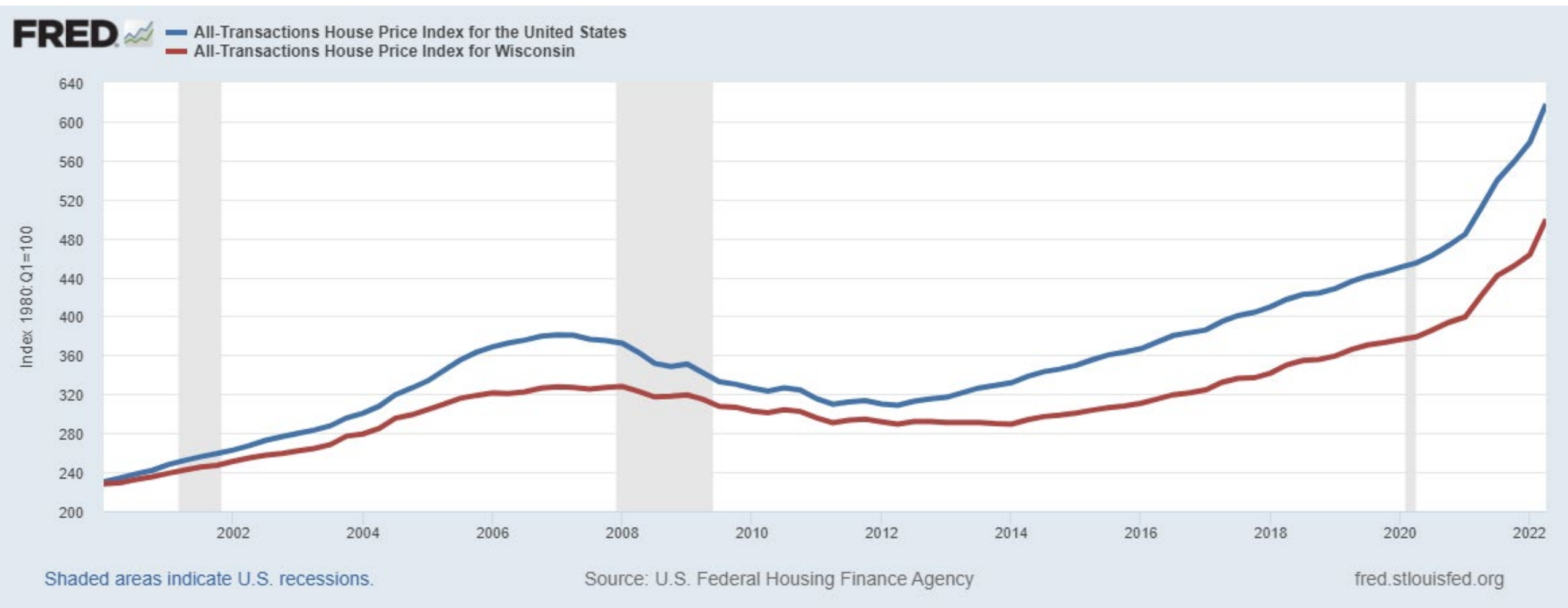


Shaded areas indicate U.S. recessions.

Sources: BLS; St. Louis Fed

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Wisconsin House Prices up 33.9 percent since end of 2019.



Wisconsin's Largest Counties Saw Significant House Price Increases During Pandemic

County	Population (2021)	Median Sales Price (2019)	Median Sales Price (2022 YTD)	Price Increase (2019-2022)	Percent Increase (2019-2022)
MILWAUKEE	947,241	\$170,000	\$223,950	\$53,950	31.7%
DANE	551,989	\$297,500	\$389,900	\$92,400	31.1%
WAUKESHA	410,666	\$308,500	\$405,000	\$96,500	31.3%
BROWN	267,612	\$195,000	\$273,250	\$78,250	40.1%
RACINE	197,249	\$180,900	\$226,000	\$45,100	24.9%
OUTAGAMIE	189,938	\$184,950	\$260,000	\$75,050	40.6%
KENOSHA	171,455	\$193,000	\$250,000	\$57,000	29.5%
WINNEBAGO	170,400	\$155,000	\$217,950	\$62,950	40.6%
ROCK	161,899	\$168,000	\$225,000	\$57,000	33.9%
WASHINGTON	140,052	\$252,000	\$334,950	\$82,950	32.9%
MARATHON	138,934	\$166,000	\$220,000	\$54,000	32.5%
LA CROSSE	120,331	\$195,000	\$266,500	\$71,500	36.7%
SHEBOYGAN	118,495	\$158,700	\$221,000	\$62,300	39.3%
EAU CLAIRE	105,349	\$189,900	\$279,900	\$90,000	47.4%
FOND DU LAC	104,944	\$142,500	\$190,000	\$47,500	33.3%
WALWORTH	104,759	\$225,300	\$310,000	\$84,700	37.6%

Source: Wisconsin Realtors Housing Statistics (accessed 9.25.22); population estimates from Wis. Dept. Admin.

Momentum West Counties House Prices Increases During Pandemic

County	Median Sales Price (2019)	Median Sales Price (2022 YTD)	Price Increase (2019-2022)	Percent Increase (2019-2022)
Barron	\$160,000	\$235,000	\$75,000	46.9%
Chippewa	\$190,000	\$260,000	\$70,000	36.8%
Clark	\$112,750	\$164,900	\$52,150	46.3%
Dunn	\$176,500	\$260,000	\$83,500	47.3%
Eau Claire	\$189,900	\$280,000	\$90,100	47.4%
Pepin	\$146,000	\$205,000	\$59,000	40.4%
Pierce	\$225,000	\$285,000	\$60,000	26.7%
Polk	\$195,550	\$265,000	\$69,450	35.5%
Rusk	\$120,000	\$177,700	\$57,700	48.1%
St. Croix	\$255,825	\$335,000	\$79,175	30.9%

Source: Wisconsin Realtors Housing Statistics (accessed 11.30.22)

Significant Increase in Mortgage Rates Since March

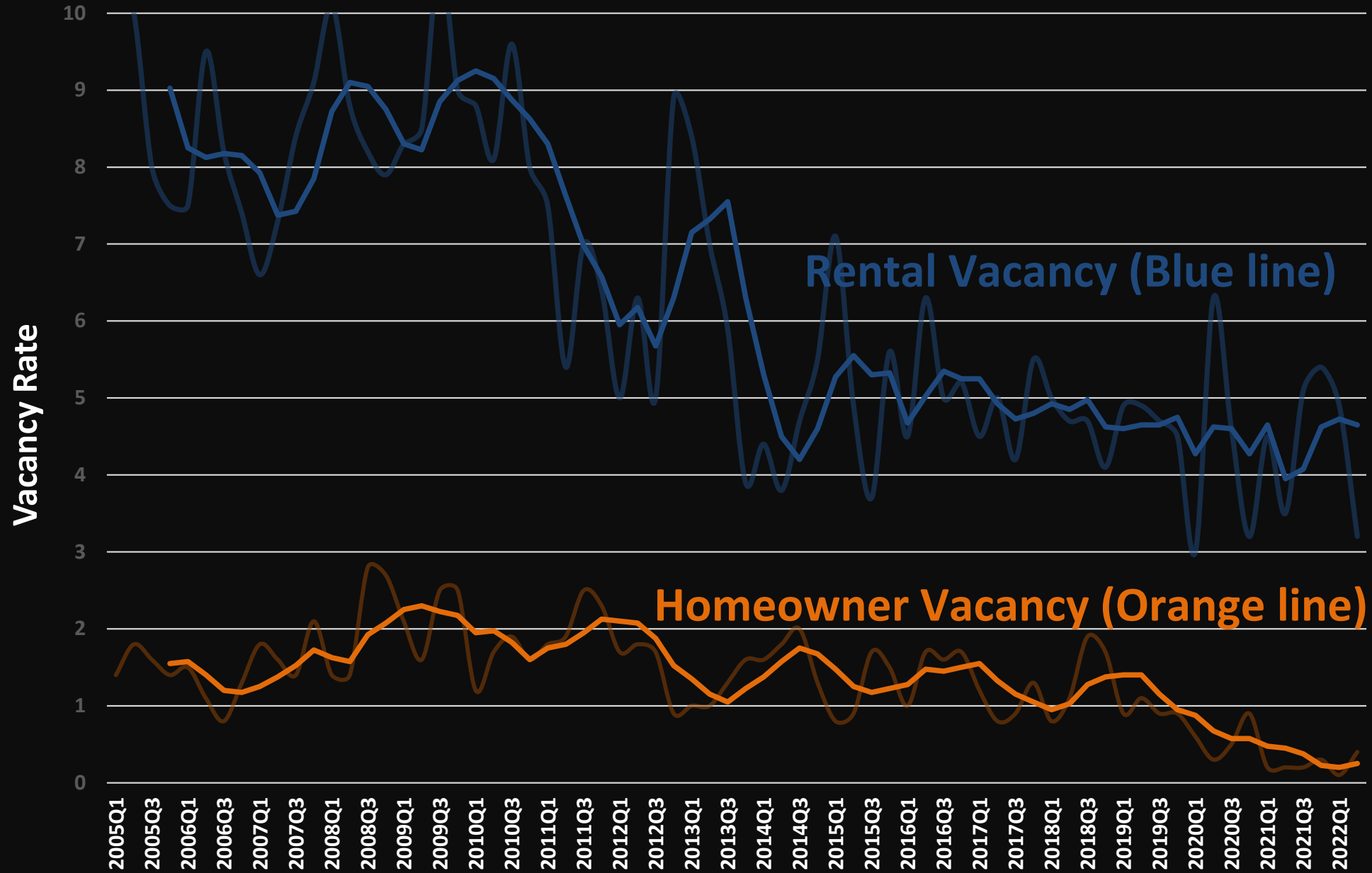




Housing

Affordability

Historically low housing vacancy rates in Wisconsin



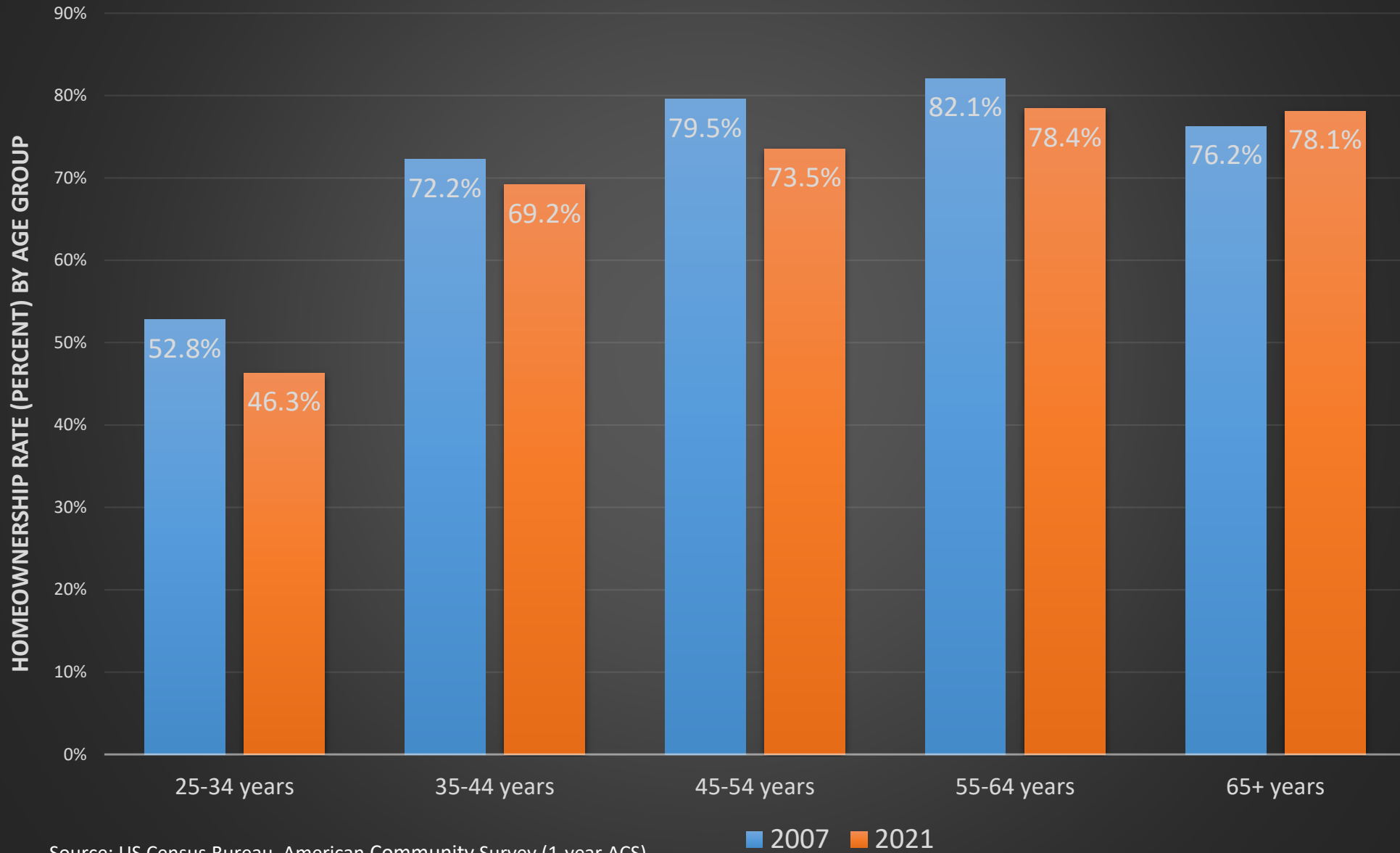
Source: US Census, Current Population Survey/Housing Vacancy Survey

Housing Affordability Declined in Every Wisconsin Region

Median-Price to Median-Income Ratio (Wis. Metros)	2015	2021	Change
Milwaukee-Waukesha-West Allis, WI	3.89	4.64	19.3% ↑
Madison, WI	3.68	4.57	24.2% ↑
Racine, WI	2.69	3.48	29.4% ↑
Green Bay, WI	2.57	3.45	34.2% ↑
Oshkosh-Neenah, WI	2.46	3.18	29.3% ↑
La Crosse-Onalaska, WI-MN	2.85	3.27	14.7% ↑
Sheboygan, WI	2.47	3.12	26.3% ↑
Appleton, WI	2.32	3.32	43.1% ↑
Janesville-Beloit, WI	2.37	3.00	26.6% ↑
Eau Claire, WI	2.83	3.00	6.0% ↑
Wausau, WI	2.53	2.74	8.3% ↑
Fond du Lac, WI	2.12	2.63	24.1% ↑
Chicago-Naperville-Elgin, IL-IN-WI	3.39	4.31	27.1% ↑
Minneapolis-St. Paul-Bloomington, MN-WI	3.11	4.35	39.9% ↑
Duluth, MN-WI	2.70	3.19	18.1% ↑
United States	3.97	5.33	34.3% ↑

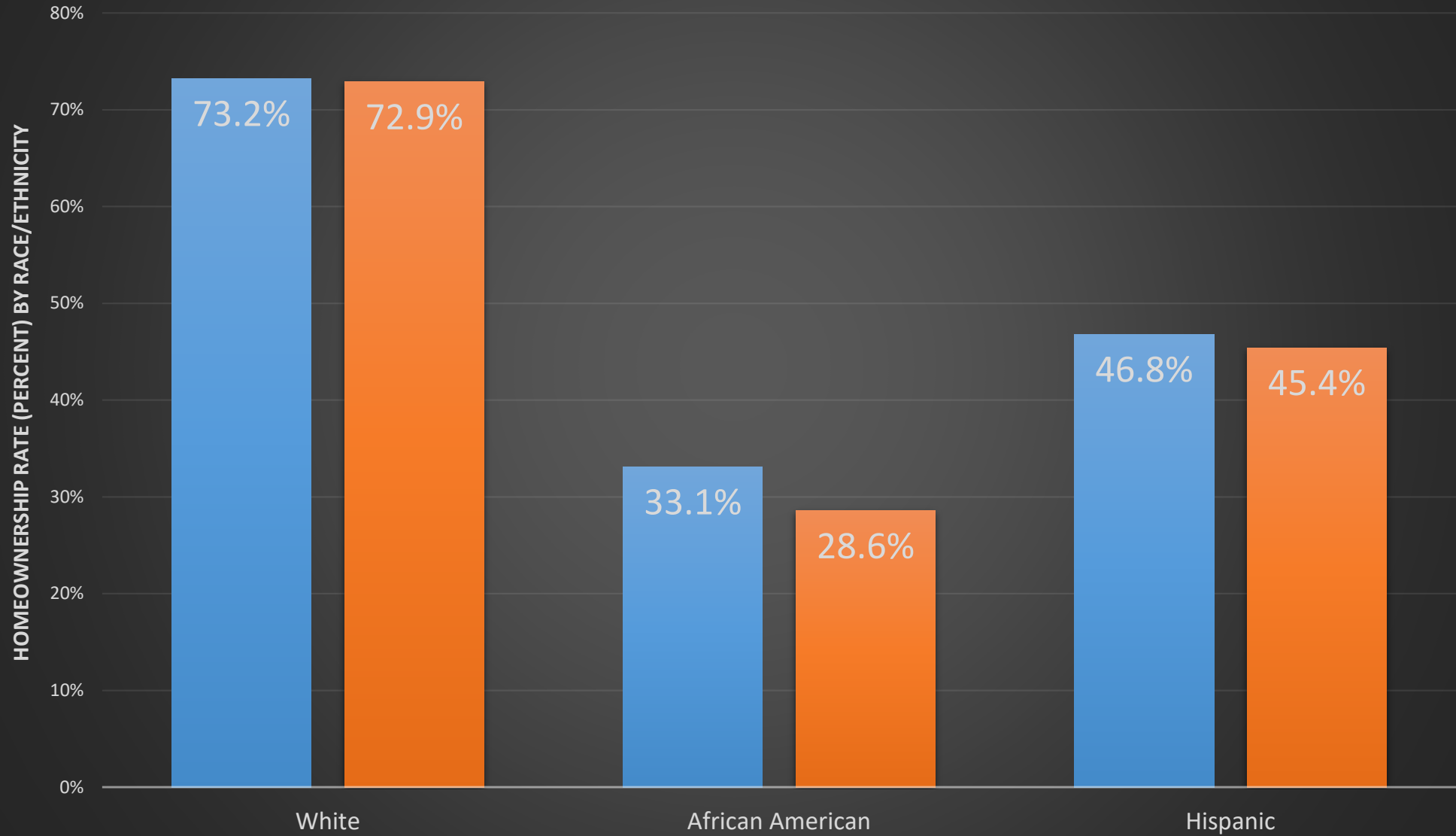
Source: Joint Center for Housing Studies, Harvard University: State of the Nation's Housing, 2022

Homeownership Rates Declined in Wisconsin from 2007-2021 Across All Age Groups (except Seniors), with Largest Drop for Youngest Families



Source: US Census Bureau, American Community Survey (1-year ACS).

Homeownership Rates Declined in Wisconsin from 2007-2021 Across All Racial/Ethnic Groups, with Largest Drop for African American Families



Source: US Census Bureau, American Community Survey (1-year ACS).

■ 2007 ■ 2021

Many Lower-Income Homeowners Pay More than 50 percent of their Income on Housing

Percent of homeowners "extremely cost-burdened," by income category

State	0-30 percent of area income	30-50 percent of area income	50-80 percent of area income	80-100 percent of area income	above median area income
ILLINOIS	60.5%	25.4%	8.0%	2.6%	0.5%
INDIANA	52.2%	16.5%	3.7%	1.0%	0.2%
IOWA	51.1%	15.2%	3.8%	1.2%	0.2%
MICHIGAN	55.9%	19.5%	5.4%	1.6%	0.3%
MINNESOTA	53.7%	18.7%	4.7%	1.4%	0.3%
WISCONSIN	58.7%	20.7%	5.8%	1.7%	0.3%

Source: US. Dept. Housing and Urban Development, Comprehensive Housing Affordability Strategy Data, 2015-2019

- **For lower-income homeowners, Wisconsin's rate of extreme cost burden is second only to Illinois among Midwest.**
- **Over 86,000 homeowners in Wisconsin with incomes below 50% AMI spend more than 50 percent of their income on housing.**
- **43,000 of those are seniors**

Wisconsin Leads Midwest with Highest Percentage of Lowest-Income Renters with Extreme Cost-Burdens

Percent of renters "extremely cost-burdened," by income category

State	0-30 percent of area income	30-50 percent of area income	50-80 percent of area income	80-100 percent of area income	above median area income
ILLINOIS	59.2%	20.9%	3.5%	1.2%	0.3%
INDIANA	60.4%	18.3%	2.3%	0.9%	0.3%
IOWA	59.1%	13.5%	2.2%	0.7%	0.4%
MICHIGAN	61.1%	22.7%	3.4%	1.1%	0.4%
MINNESOTA	57.0%	16.4%	2.9%	1.0%	0.3%
WISCONSIN	61.4%	15.6%	2.0%	0.5%	0.2%

Source: US. Dept. Housing and Urban Development, Comprehensive Housing Affordability Strategy Data, 2015-2019

Over 146,000 renting households in Wisconsin with incomes below 50% AMI spend more than 50 percent of their income on housing.

- Households with Greatest Housing Needs, Eau Claire County:

- Household income less than 50-percent of area median income (3-person family is \$40,300), and
- Pay more than 50 percent of household income on housing (extremely cost burdened):

	2011-2015	2015-2019
Renter households	3,610	3,085
Owner households	1,240	1,330