Housing Analytics:

Trends and Issues in Housing and Affordability

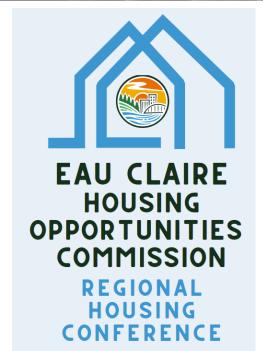






Prof. Kurt Paulsen



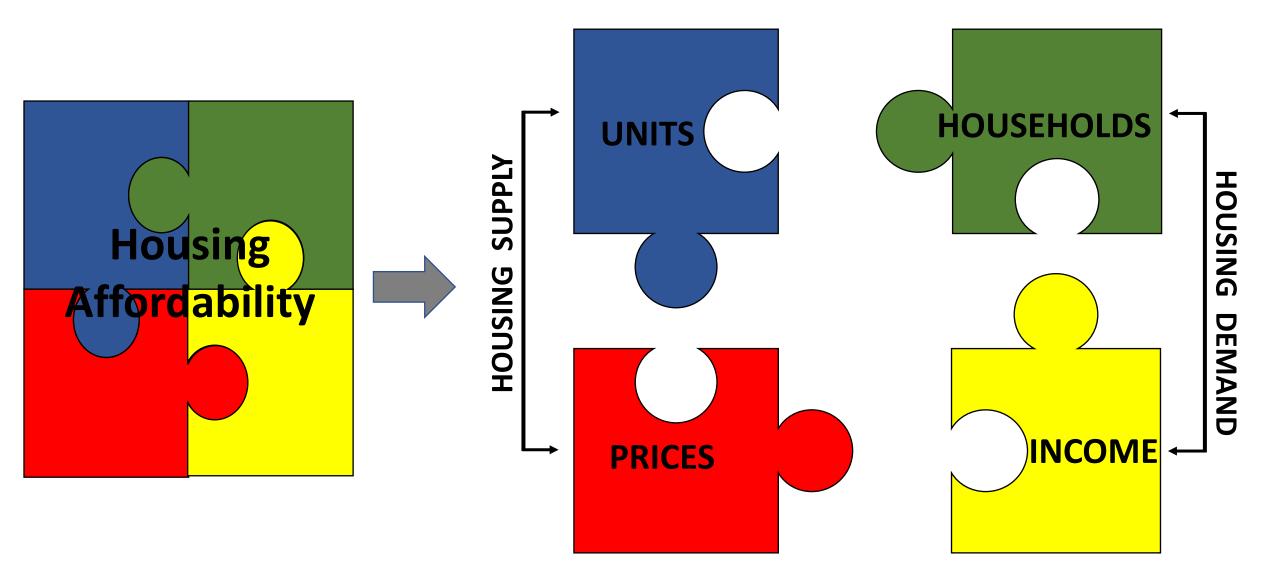








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Housing Demand: demographics and income/jobs

Wisconsin: Demographic and Housing Changes (2010-2022)

	2010	2022	Change	% Change	Ann.% Change
Population	5,691,047	5,892,539	201,492	3.5%	0.29%
Households	2,279,532	2,491,121	211,589	9.3%	0.74%
Housing units	2,625,477	2,770,355	144,878	5.5%	0.45%
Jobs	2,633,572	2,877,343	243,771	9.3%	0.74%
Inflation-adjusted to 2022\$:					
Median household income (in 2022\$)	\$65,759	\$70,996	\$5,237	8.0%	0.64%
Median owner household income (in 2022\$)	\$83,369	\$87,815	\$4,446	5.3%	0.43%
Median renter household income (in 2022\$)	\$36,351	\$43,449	\$7,098	19.5%	1.50%
Median value of owner-occupied homes (in 2022\$)	\$227,335	\$252,800	\$25,465	11.2%	0.89%
Median gross rent (in 2022\$)	\$1,147	\$992	-\$155	-13.5%	-1.21%

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 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, 2010-2022

Household size	2010	2022	Change (2010-2022)	Avg. Ann. Growth Rate
1-person households	669,106	771,357	102,251	1.19%
2-person households	814,206	936,566	122,360	1.17%
3-person households	335,238	331,714	-3,524	-0.09%
4- or-more-person households	460,982	451,484	-9,498	-0.17%
Total households	2,279,532	2,491,121	211,589	0.74%

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

- Overall, slow rate of household growth = 0.74 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

Tenure by Household Income, Eau Claire County (2022)

Household Income	Number of Households	Percent Renters	Percent Homeowners
Less than \$20,000	4,130	71.7%	28.3%
\$20,000 to \$35,000	5,579	51.7%	48.3%
\$35,000 to \$50,000	5,731	55.1%	44.9%
\$50,000 to \$75,000	8,761	40.1%	59.9%
\$75,000 to \$100,000	5,506	24.9%	75.1%
\$100,000 to \$150,000	8,501	22.9%	77.1%
More than \$150,000	6,965	12.4%	87.6%
County Total	45,173	37.0%	63.0%

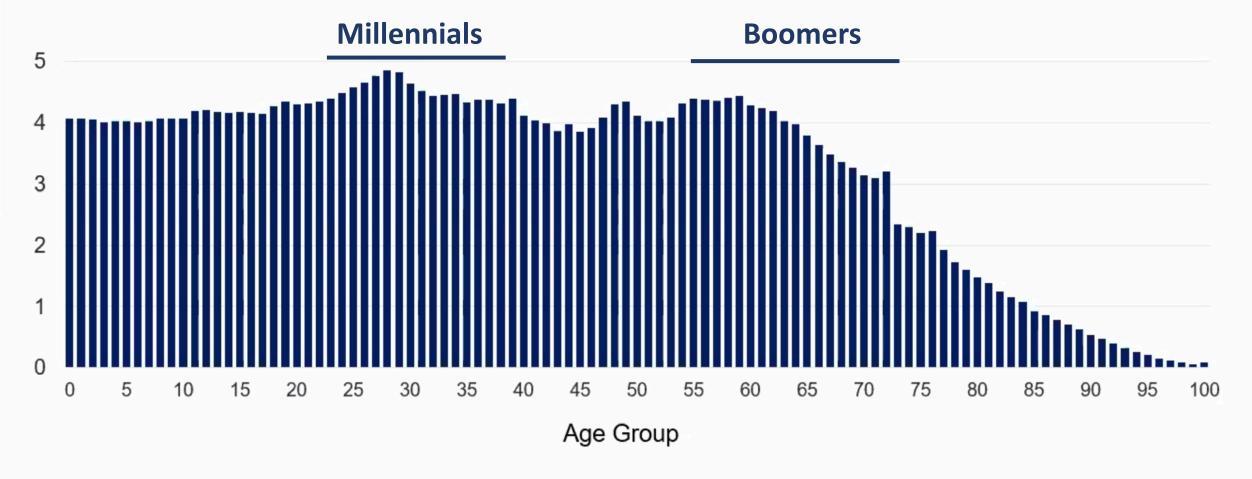
Source: US Census, American Community Survey 1-year data.

Median household income is \$74,755. So, let's say \$75,000.

Approximately 1/3rd earn less than \$50,000. Approximately 1/3rd earn between \$50,000 and \$100,000. Approximately 1/3rd earn more than \$100,000.

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)



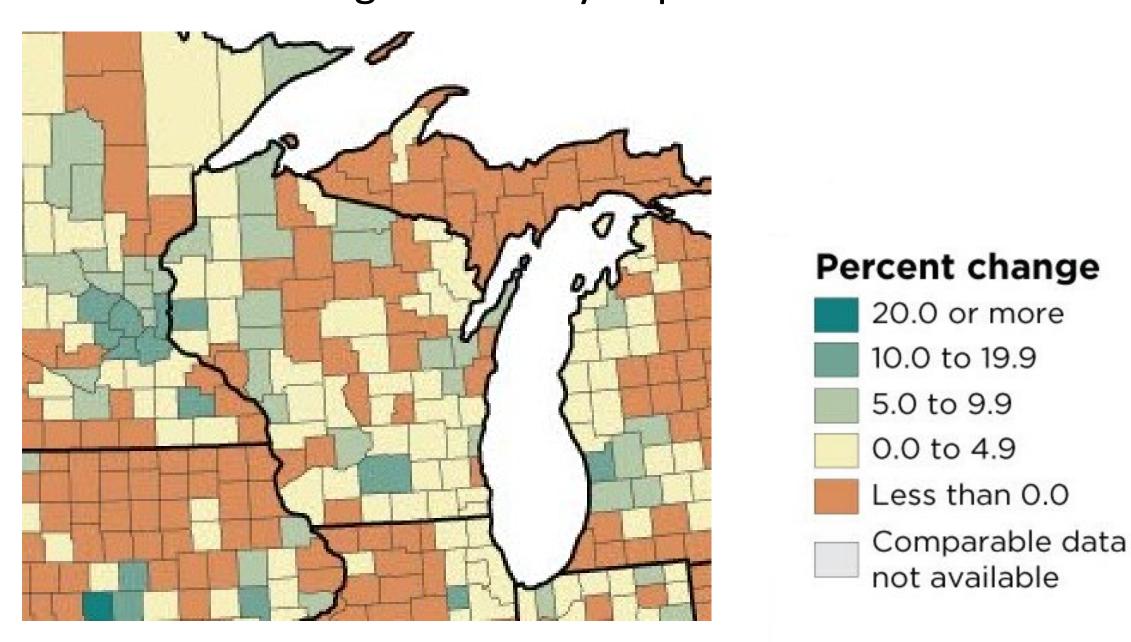


Change in Wisconsin Population, by Age, 2010-2022

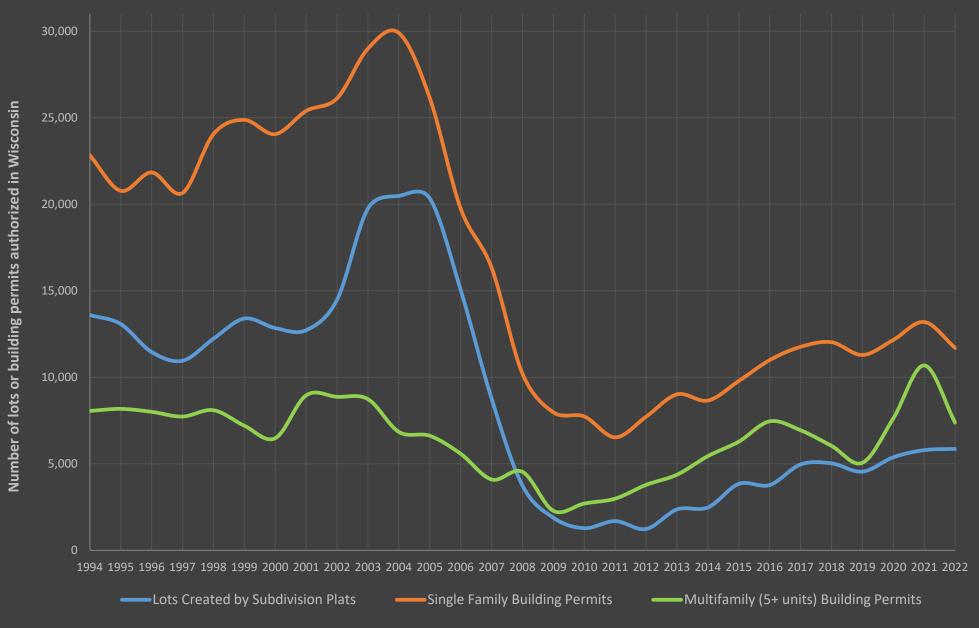
Age	2010	2022	Change (2010-2022)	Avg. Ann. Growth Rate
Under 5 years	355,052	309,244	-45,808	-1.14%
5-17 years	981,156	932,536	-48,620	-0.42%
18-24 years	554,544	562,259	7,715	0.12%
25-34 years	717,027	733,729	16,702	0.19%
35-44 years	724,623	742,993	18,370	0.21%
45-54 years	873,392	692,508	-180,884	-1.92%
55-64 years	705,743	816,884	111,141	1.23%
65-74 years	401,693	658,466	256,773	4.20%
75 years or better	377,817	443,920	66,103	1.35%
Total	5,691,047	5,892,539	201,492	0.29%

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

Percent Change in County Population: 2010 - 2020





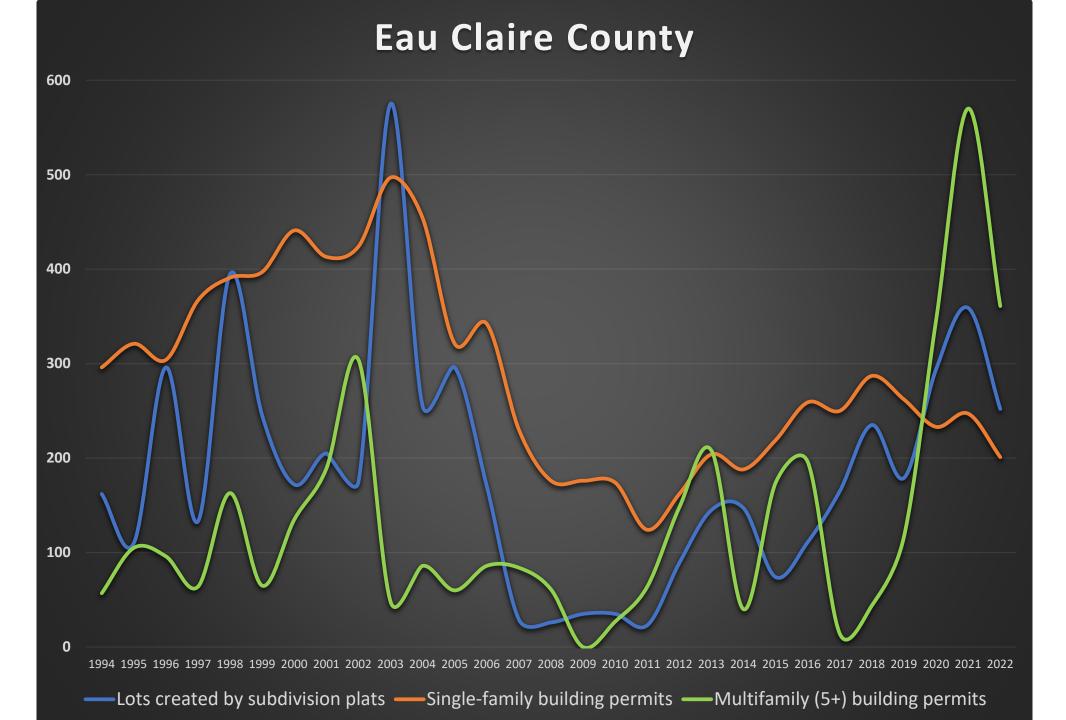


Source: Subdivision Lots from Wis. Dept. Admin.; Building Permits Database, U.S. Census Bureau. *2022 building permit data is preliminary.

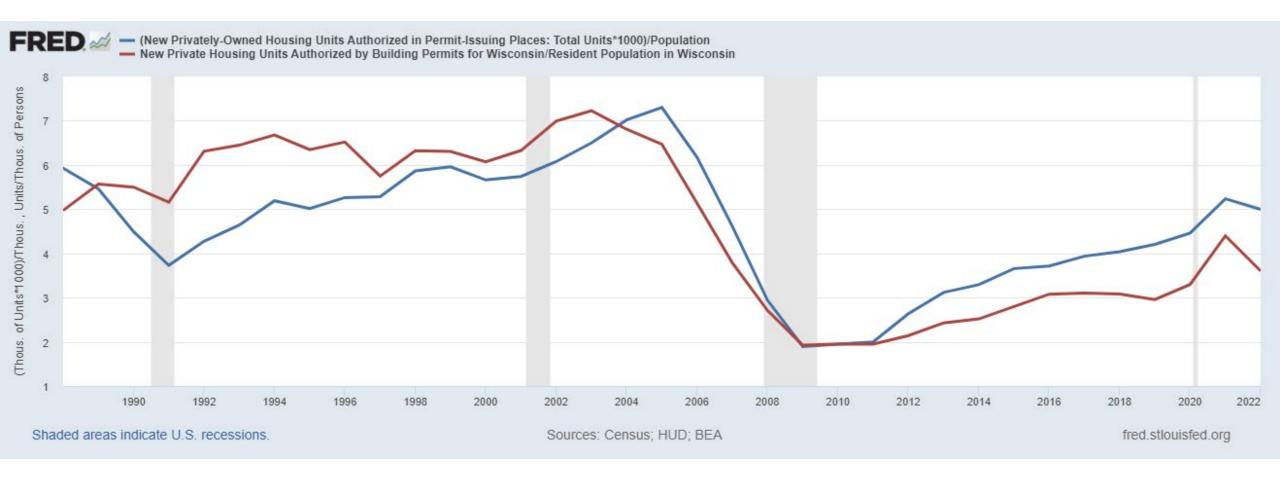
Despite uptick in construction and subdivision lots (2019-2022), production remains less than half of historic trends.

Wisconsin Building Permits and Subdivision Lot Summary

	1994 - 2004	2011 - 2018	2019 - 2022
Avg. Lots (by subdivision), per year	14,096	3,176	5,400
Avg. Building permits, per year	35,909	15,681	21,163
Avg. building permits per 1,000 population	6.78	2.72	3.59



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



Wisconsin's 20 Largest Counties Underproduced Over 34,000 Housing Units from 2006-2022

	Growth in households	Growth in housing units	Housing "Underproduction"	Previous Report Gap
	(2006-2022)	(2006-2022)	(2006-2022)	(2006-2017)
Milwaukee County	12,201	15,542		
Dane County	65,439	52,490	12,949	11,206
Waukesha County	23,800	20,299	3,501	2,213
Brown County	17,328	13,761	3,567	1,661
Racine County	3,417	4,641		
Outagamie County	10,400	9,768	632	
Winnebago County	5,261	6,662		
Kenosha County	9,970	6,946	3,024	
Rock County	5,060	3,814	1,246	1,036
Marathon County	4,765	4,689	76	
Washington County	6,910	6,700	210	
La Crosse County	7,147	7,346		
Sheboygan County	3,959	3,192	767	332
Eau Claire County	5,910	5,527	383	
Walworth County	4,918	4,179	739	537
Fond du Lac County	5,236	3,758	1,478	798
St. Croix County	6,534	6,301	233	
Ozaukee County	6,474	4,372	2,102	827
Dodge County	3,490	2,030	1,460	
Jefferson County	5,378	3,308	2,070	1,228
20 Largest Wisconsin Counties	213,597	185,325	34,437	19,838

Source: Author's calculations based on 2006 and 2022 1-year American Community Survey data, U.S. Census Bureau. Households are 1- or more persons who occupy a housing unit. Housing units include vacant structures for sale or rent or seasonal use.

Workforce Housing: Most Job Center Counties Have More Jobs than Housing Units Year-round*

	Housing Units (2022)	Jobs (2022)	Jobs/Housing Balance
Waukesha	174,960	243,193	1.39
Brown	115,209	155,653	1.35
Dane	259,586	344,839	1.33
Outagamie	80,476	106,604	1.32
La Crosse	53,746	68,584	1.28
Eau Claire	46,530	58,017	1.25
Winnebago	77,392	92,071	1.19
Marathon	60,675	70,592	1.16
Sheboygan	52,796	59,381	1.12
Milwaukee	421,704	463,797	1.10
Fond du Lac	46,061	46,031	1.00
Kenosha	73,600	71,037	0.97
Washington	59,190	57,009	0.96
Walworth	44,846	42,443	0.95
Rock	71,289	66,349	0.93
Racine	83,639	73,803	0.88

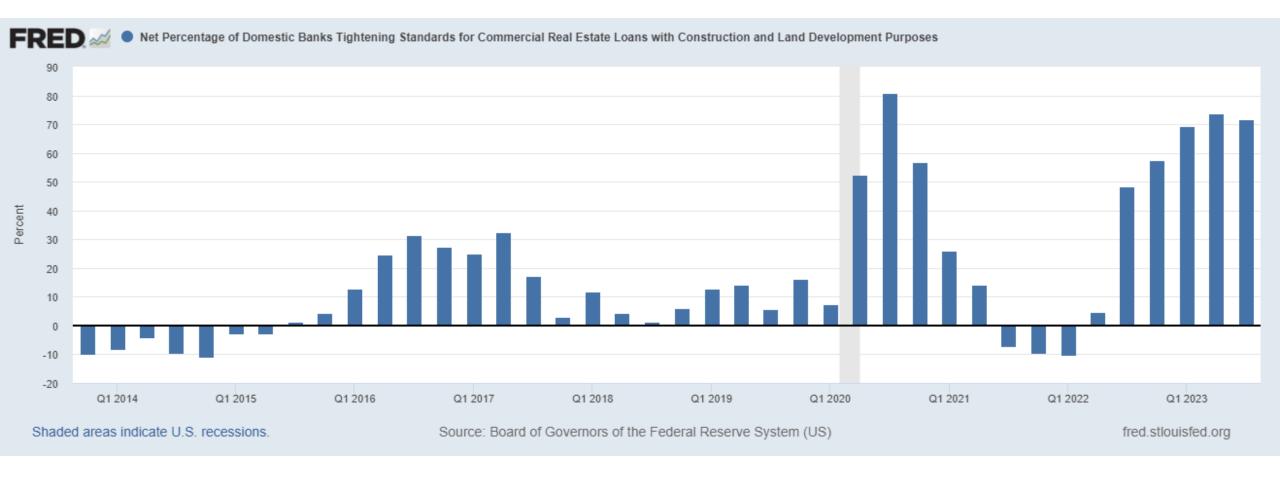
Source: BLS QCEW, Census 1-year ACS. *Year-round units excludes for "seasonal, recreational, or occassional use."

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)

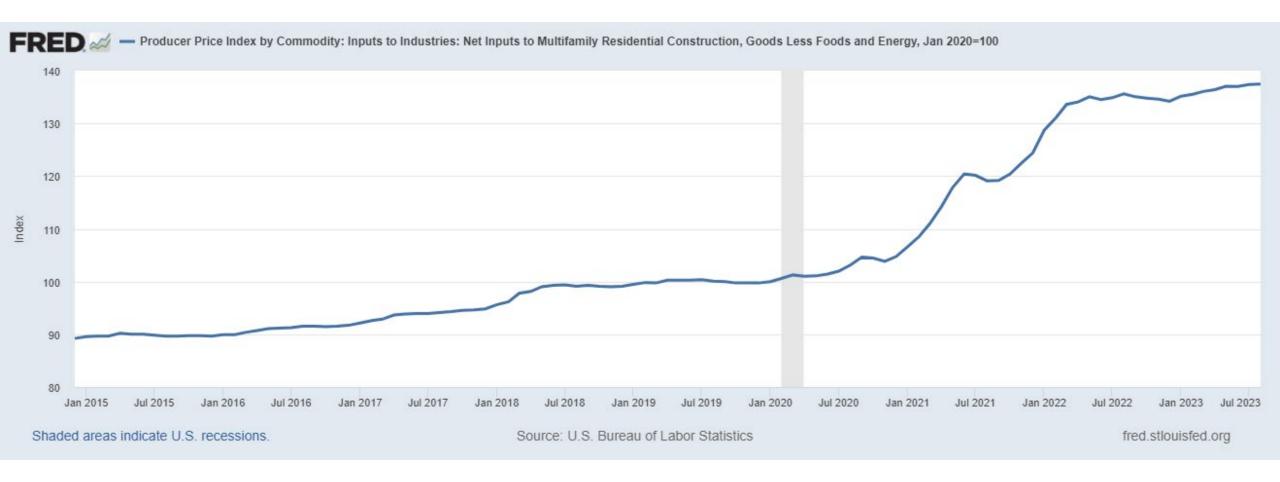
Excessively tight lending for Construction/Land Development



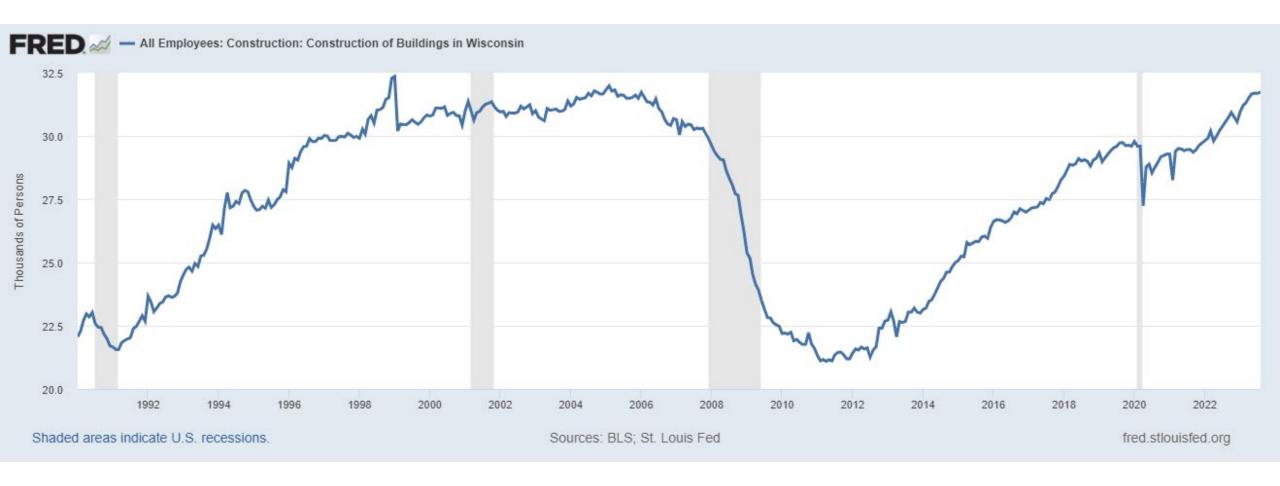
Single-family Construction Costs up 36.6 percent (Jan. 2020 to August 2023)



Multifamily Construction Costs Up 37.5 percent (Jan. 2020- August 2023)



Construction Employment in Wisconsin still below 2005 peak



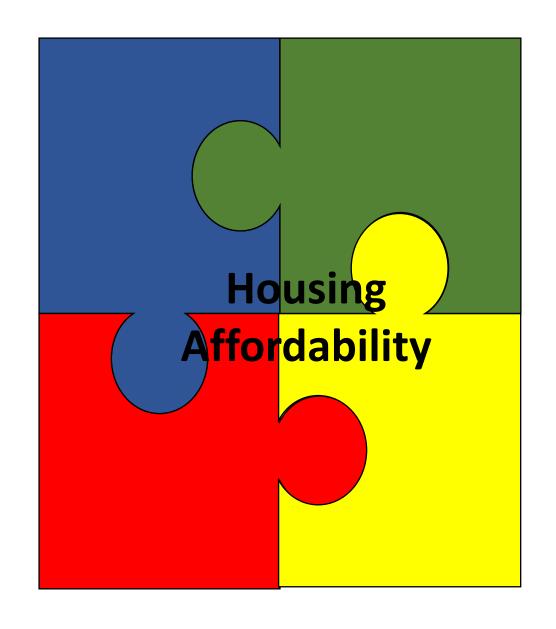
Wisconsin House Price Index up 43 percent (Q1 2020 to Q2 2023).



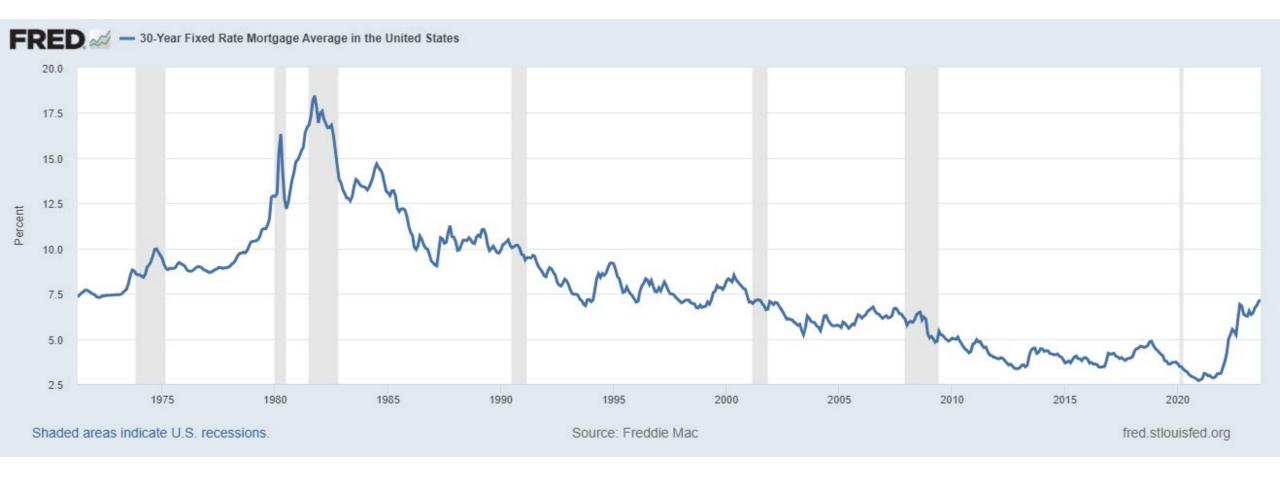
Wisconsin's Largest Counties Saw Significant House Price Increases Since 2019

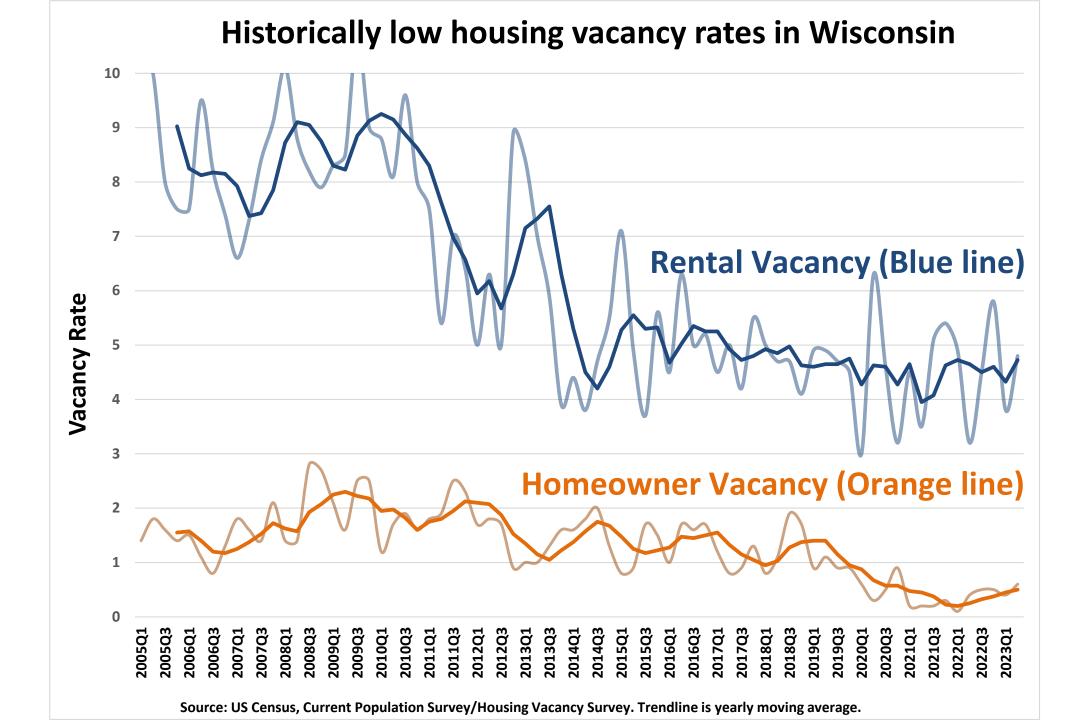
County	Population (2021)	Median Sales Price	Median Sales Price	Price Increase	Percent Increase
County	Population (2021)	(2019)	(August 2023)	(2019-2023)	(2019-2023)
MILWAUKEE	947,241	\$170,000	\$250,000	\$80,000	47.1%
DANE	551,989	\$297,500	\$415,000	\$117,500	39.5%
WAUKESHA	410,666	\$308,500	\$433,956	\$125,456	40.7%
BROWN	267,612	\$195,000	\$318,000	\$123,000	63.1%
RACINE	197,249	\$180,900	\$242,650	\$61,750	34.1%
OUTAGAMIE	189,938	\$184,950	\$286,000	\$101,050	54.6%
KENOSHA	171,455	\$193,000	\$285,150	\$92,150	47.7%
WINNEBAGO	170,400	\$155,000	\$257,500	\$102,500	66.1%
ROCK	161,899	\$168,000	\$250,000	\$82,000	48.8%
WASHINGTON	140,052	\$252,000	\$365,000	\$113,000	44.8%
MARATHON	138,934	\$166,000	\$256,500	\$90,500	54.5%
LA CROSSE	120,331	\$195,000	\$317,000	\$122,000	62.6%
SHEBOYGAN	118,495	\$158,700	\$251,000	\$92,300	58.2%
EAU CLAIRE	105,349	\$189,900	\$320,000	\$130,100	68.5%
FOND DU LAC	104,944	\$142,500	\$240,000	\$97,500	68.4%
WALWORTH	104,759	\$225,300	\$385,000	\$90,950	40.4%
WALWORTH	104,759	\$225,300	\$385,000	\$90,950	40.4%

Source: Wisconsin Realtors Housing Statistics (accessed 9.24.23); population estimates from Wis. Dept. Admin.



Mortgage Interest Rates Rising (or returning to normal?)



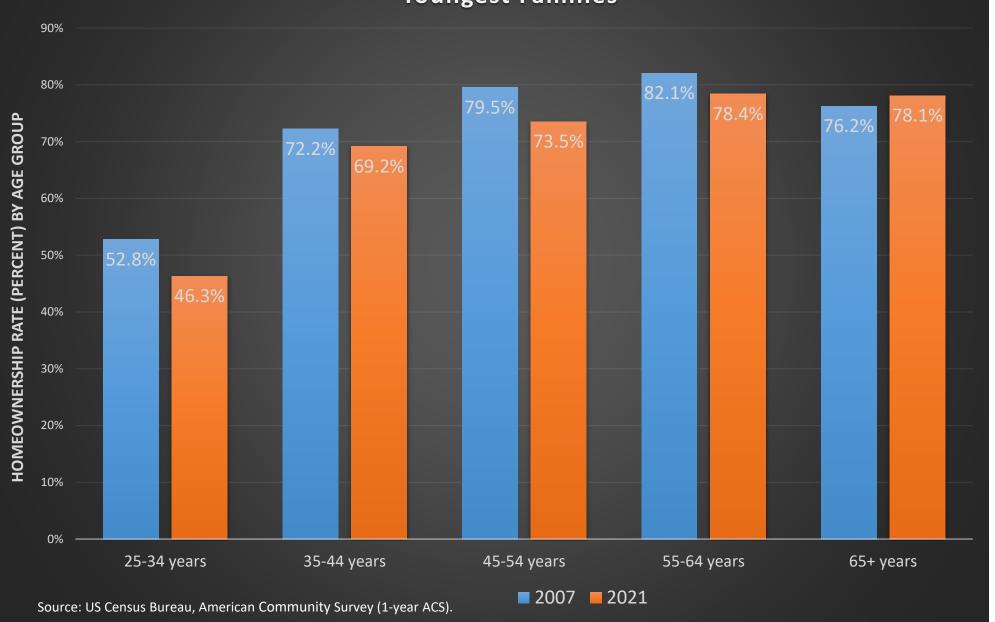


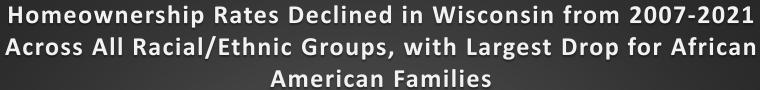
Housing Affordability Declined in Every Wisconsin Region

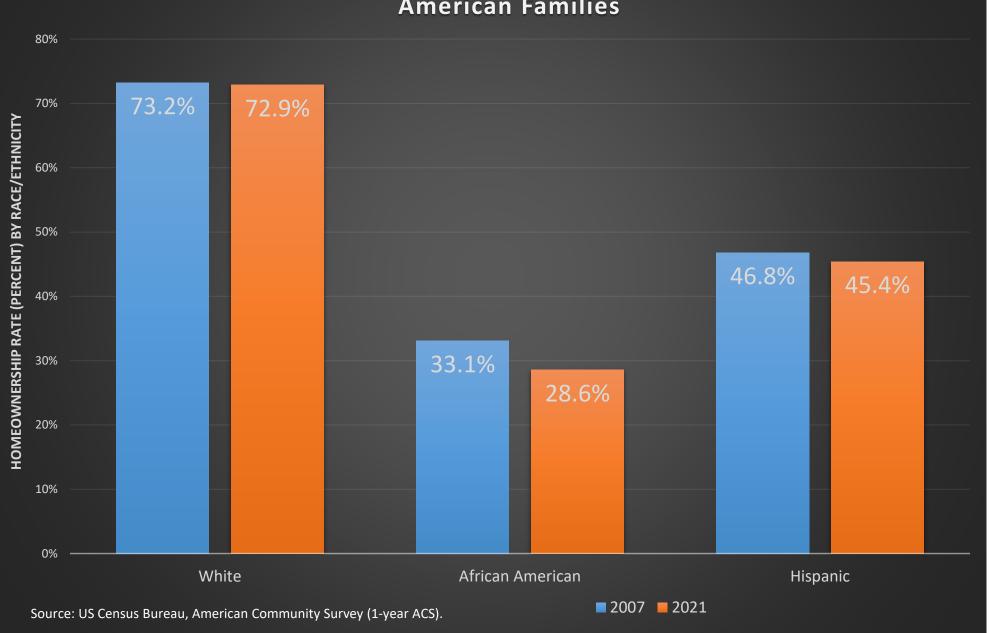
Median-Price to Median-Income Ratio (Wis. Metros)	2015	2022	Change
Milwaukee-Waukesha-West Allis, WI	3.89	4.89	25.7% 🛧
Madison, WI	3.68	5.04	36.8% 🛧
Racine, WI	2.69	3.57	32.7% 🛧
Green Bay, WI	2.57	3.83	48.8% 🛧
Oshkosh-Neenah, WI	2.46	3.38	37.5% 🛧
La Crosse-Onalaska, WI-MN	2.85	3.79	33.0% 🛧
Sheboygan, WI	2.47	3.68	49.1% 🛧
Appleton, WI	2.32	3.46	49.0% 🛧
Janesville-Beloit, WI	2.37	3.33	40.4% 🛧
Eau Claire, WI	2.83	3.77	33.3% 🛧
Wausau, WI	2.53	2.83	11.8% 🛧
Fond du Lac, WI	2.12	2.71	27.8% 🛧
Chicago-Naperville-Elgin, IL-IN-WI	3.39	4.34	28.1% 🛧
Minneapolis-St. Paul-Bloomington, MN-WI	3.11	4.26	37.0% 🛧
Duluth, MN-WI	2.70	3.20	18.6% 1
United States	3.97	5.56	40.0% 1

Source: Joint Center for Housing Studies, Harvard University: State of the Nation's Housing, 2023

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







Simple Illustration: What Households Can Afford (by Household Income)

Household Income	Gross Rent Can Afford (per month)	FHA Mortgage - House Price Can Afford	Cash at Closing (FHA)
\$35,000	\$875.00	\$88,072	\$5,725
\$50,000	\$1,250.00	\$131,873	\$8,572
\$75,000	\$1,875.00	\$204,874	\$13,317
•••••			
\$104.250	\$2,606.25	\$290.000	\$18.869

Note: FHA mortgage assumes 3.5 percent downpayment, 30 year fixed rate of 7.625%, 3% closing costs; property tax rate 14.46 mills; UFMIP financed into mortgage, 85 bps FHA insurance, \$1500/year homeowners insurance, 31% max mortgage DTI Example uses Year-to-date Median sales price for Eau Claire County, WRA (Accessed 10.31.23)

Approximate Price Range for Current For-Sale New Construction Single-family homes in Eau Claire

- I looked at Realtor.com for current new construction for "entry-level" or "middle level" homes (all prices approximate, lots of variation)
- For 3-bedroom, 2-bath homes:
 - Smaller homes (approx. 1600 ft²):
 - Smaller lot (less than 5000 ft²) \$350,000 to \$380,000
 - Medium lot (5000 ft2 to 8000 ft²) \$375,000 to \$400,000
 - Medium homes (approx. 2000 ft²):
 - Smaller lot (less than 5000 ft²) \$375,000 to \$400,000
 - Medium lot (5000 ft2 to 8000 ft²) \$395,000 to \$415,000
- For 3-bedroom, 3-bath homes:
 - Medium homes (approx. 2400 ft²):
 - Smaller lot (less than 5000 ft²) \$400,000 to \$415,000
 - Medium lot (5000 ft2 to 8000 ft²) \$410,000 to \$425,000

Current Median Rents In Eau Claire

	1 Bedroom	2 Bedroom
Zumper	\$870	\$1,000
Rent.com	\$795	\$1,395
Zillow	\$850	\$1,098
Apartments.com	\$1,050	\$1,123
Average	\$891	\$1,154

New construction apartments rent: 1 Bedroom approx. \$1.75-\$1.80 per square foot; 2 bedroom \$1.55 - \$1.65 per square foot.

Consider 600 to 650 square foot 1 bedroom = \$1050 to \$1150 Consider 975 to 1025 square foot 2 bedroom = \$1500 to \$1650

Wisconsin Apartment Properties Operating Data (per \$1.00 of rent paid)

Category	Per \$1 rent	If \$1200/month rent
Mortgage	\$0.46	\$552.00
Taxes	\$0.12	\$144.00
Mngmt/Admin/Marketing	\$0.09	\$108.00
Utilities	\$0.07	\$84.00
Repair and Maitenance	\$0.07	\$84.00
Employee payroll	\$0.06	\$72.00
Insurance	\$0.02	\$24.00
CapEx Reserve	\$0.02	\$24.00
Total Expenses	\$0.91	\$1,092.00
Expenses minus revenues (profit)	\$0.09	\$108.00

Source: National Apartment Association (2023); 2022 operating data on 9,263 properties financed in Freddie Mac CMBS.

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

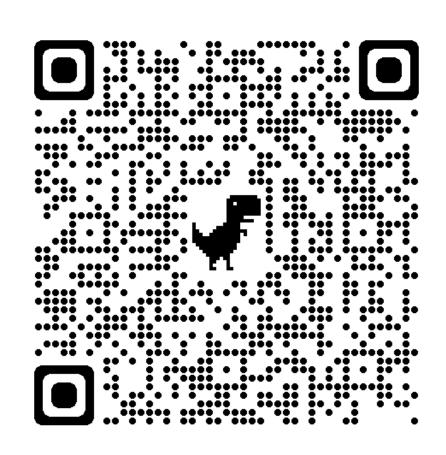
Wisconsin: Bipartisan Housing Package

- Restore Main Street (2023 Wis. Act 15)
- Commercial to Housing (Vacancy to Vitality) (2023 Wis. Act 18)
- Infrastructure Access (2023 Wis. Act 14)
- Home Repair and Rehab (2023 Wis. Act 17)

• \$525 million !!!

• https://www.wheda.com/about-wheda/legislative-priorities/bipartisan-housing-legislation-package

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Wisconsin: Bipartisan Housing Package

- For Main Street, Commercial to Housing, and Infrastructure Access Loans, requirements include:
- "The eligible political subdivision has reduced the cost of ... housing in connection with the eligible project by voluntarily revising zoning ordinances, subdivision regulations, or other land development regulations to increase development density, expedite approvals, reduce impact fees, or reduce parking, building, or other development costs with respect to the eligible project. ...
- The eligible political subdivision is in compliance with the requirements under ss. 66.1001 [Comprehensive Planning], 66.10013 [Housing Affordability Report], and 66.10014 [New Housing Fee Report], to the extent those requirements apply to the political subdivision.
- The eligible political subdivision has updated the housing element of its comprehensive plan under s. 66.1001 (2) (b) within the 5 years immediately preceding the date of the loan application.