

The analysis presented in this report was completed prior to the COVID-19 outbreak in the United States and therefore the forecast estimates do not take into account the economic and housing market impacts of the actions taken to limit contagion of the virus. At this time, the duration and depth of the economic disruption are unclear, as are the extent and effectiveness of countermeasures. HUD will continue to monitor market conditions in the HMA and provide an updated report/addendum in the future.



COMPREHENSIVE HOUSING MARKET ANALYSIS

Green Bay, Wisconsin

U.S. Department of Housing and Urban Development,
Office of Policy Development and Research

As of January 1, 2020

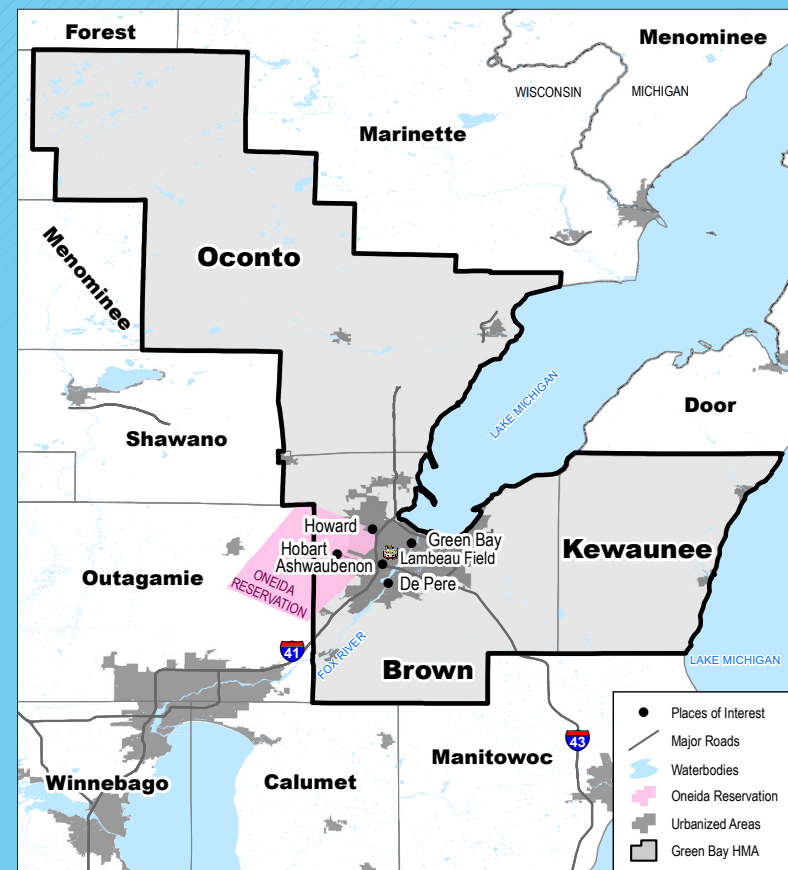


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Executive Summary

Housing Market Area Description

The Green Bay Housing Market Area (HMA) is coterminous with the Green Bay, WI Metropolitan Statistical Area, which consists of Brown, Kewaunee, and Oconto Counties in northeastern Wisconsin. The HMA has historically been known for several paper and meatpacking plants. The National Football League (NFL) team, the Green Bay Packers, got its name from a canned meatpacking company in 1919. The Packers are the only publicly-owned NFL team and have won 13 championships.



Tools and Resources

Find interim updates for this metropolitan area, and select geographies nationally, at PD&R's [Market-at-a-Glance tool](#). Additional data for the HMA can be found in this report's [supplemental tables](#). For information on HUD-supported activity in this area, see the [Community Assessment Reporting Tool](#).



Market Qualifiers

Economy



Stable: Nonfarm payrolls in the HMA expanded 1.4 percent during 2019.

Total nonfarm payrolls in the Green Bay HMA increased an average of 1.1 percent each year from 2010 through 2017, surpassing the pre-recessionary high in 2014. Job growth has been notably faster during the most recent 2 years (Figure 1). During 2019, total nonfarm payrolls grew 1.4 percent, or by 2,600 jobs, to 183,600 jobs; during 2018, nonfarm payrolls grew 1.5 percent, or by 2,700 jobs. Nonfarm payrolls increased in 6 of the 11 payroll sectors during 2019, with the leisure and hospitality and the education and health services sectors adding the most jobs (Table 1). The economy is expected to continue expanding during the 3-year forecast period, with nonfarm payrolls increasing by an average of 2,350 jobs, or 1.3 percent, a year.

Sales Market



Tight: The average new and existing home sales prices increased 4 percent during 2019.

Sales housing market conditions in the Green Bay HMA are currently tight, with an estimated 1.1-percent vacancy rate, down from 2.0 percent in April 2010, when conditions were soft. During 2019, approximately 5,675 new and existing homes sold, a decrease of 240 homes, or 4 percent, from a year earlier (Metrostudy, A Hanley Wood Company, with adjustments by the analyst). Demand is expected for 2,275 new homes during the forecast period. The estimated 230 homes currently under construction will satisfy part of the demand.

Rental Market



Balanced: During 2019, approximately 420 rental units were permitted, unchanged from the level during the previous year (preliminary data, with adjustments by the analyst).

The rental housing market in the HMA is currently balanced, with an estimated 4.8-percent vacancy rate, down from 7.4 percent in April 2010. The apartment market in the HMA is tight, with a 1.7-percent vacancy rate during the fourth quarter of 2019, down from 1.8 percent during the fourth quarter of 2018 (Reis, Inc.). During the 3-year forecast period, demand is estimated for 1,250 units; the 600 units currently under construction will satisfy a portion of that demand.

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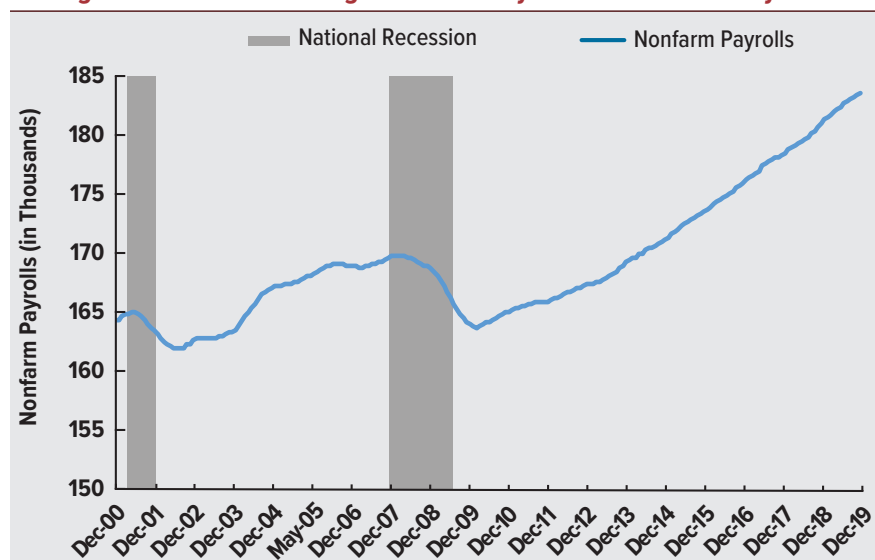
3-Year Housing Demand Forecast

	Sales Units	Rental Units
Green Bay HMA		
Total Demand	2,275	1,250
Under Construction	230	600

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of January 1, 2020. Sales demand includes an estimated demand for five mobile homes. The forecast period is January 1, 2020, to January 1, 2023.

Source: Estimates by the analyst



Figure 1. 12-Month Average Nonfarm Payrolls in the Green Bay HMA

Note: 12-month moving average.

Sources: U.S. Bureau of Labor Statistics; National Bureau of Economic Research

Table 1. 12-Month Average Nonfarm Payroll Jobs (1,000s) in the Green Bay HMA, by Sector

	12 Months Ending December 2018	12 Months Ending December 2019	Absolute Change	Percentage Change
Total Nonfarm Payroll Jobs	181.0	183.6	2.6	1.4
Goods-Producing Sectors	39.5	39.8	0.3	0.8
Mining, Logging, & Construction	8.3	8.2	-0.1	-1.2
Manufacturing	31.2	31.6	0.4	1.3
Service-Providing Sectors	141.5	143.8	2.3	1.6
Wholesale & Retail Trade	25.7	25.3	-0.4	-1.6
Transportation & Utilities	8.5	8.6	0.1	1.2
Information	1.7	1.7	0.0	0.0
Financial Activities	12.1	12.0	-0.1	-0.8
Professional & Business Services	19.7	19.1	-0.6	-3.0
Education & Health Services	27.0	28.1	1.1	4.1
Leisure & Hospitality	16.7	18.0	1.3	7.8
Other Services	8.8	9.0	0.2	2.3
Government	21.4	21.9	0.5	2.3

Notes: Based on 12-month averages through December 2018 and December 2019. Numbers may not add to totals due to rounding. Data are in thousands.

Source: U.S. Bureau of Labor Statistics

Economic Conditions

Largest sector: Manufacturing Sector

Despite falling to 17.2 percent of nonfarm payrolls from 20.8 percent during 2000, the manufacturing sector remains the largest payroll sector in the HMA (Figure 2).

Primary Local Economic Factors

The leisure and hospitality sector has a noteworthy impact on the Green Bay HMA economy. The city of Green Bay, known locally as Tiletown because the

Green Bay Packers have won more championships than any other NFL team, is a popular tourist destination for football enthusiasts. Visitors spent \$809.4 million during 2018, up 4 percent from 2017; that spending is partly because of recent development at the Tiletown District, a mixed-use development adjacent to Lambeau Field (the home stadium of the Green Bay Packers; Wisconsin Department of Tourism). More than 100 lakes, including Lake Michigan, and the Fox River, which boost recreational activity (Wisconsin Department of Natural Resources), also support tourism in the HMA. Due in part to access to major waterways, the HMA developed into a paper manufacturing area in the 1860s. Historical origins in paper production support a second nickname for the HMA: The Toilet Paper Capital of The World. Georgia-Pacific LLC, a pulp and paper

manufacturing company, is the fifth largest employer in the HMA, with 2,100 employees (Table 2). The company pays its employees in northeastern Wisconsin approximately \$164 million in wages and benefits, annually (Georgia-Pacific LLC). Partly because of decreased demand for paper associated with automation and the digitization of documents, manufacturing sector jobs declined during much of the 2000s, but the sector remains the largest in the HMA. In addition to paper manufacturing, metal products and foods (including dairy products) are produced in the HMA; the three industries account for more than 55 percent of jobs in the manufacturing sector. In 2018, approximately 118,000 cows produced 3.2 billion pounds of milk in the HMA, up from the 116,500 cows that produced 3.1 billion pounds in 2017 (United States Department of Agriculture, National Agriculture Statistics Service).

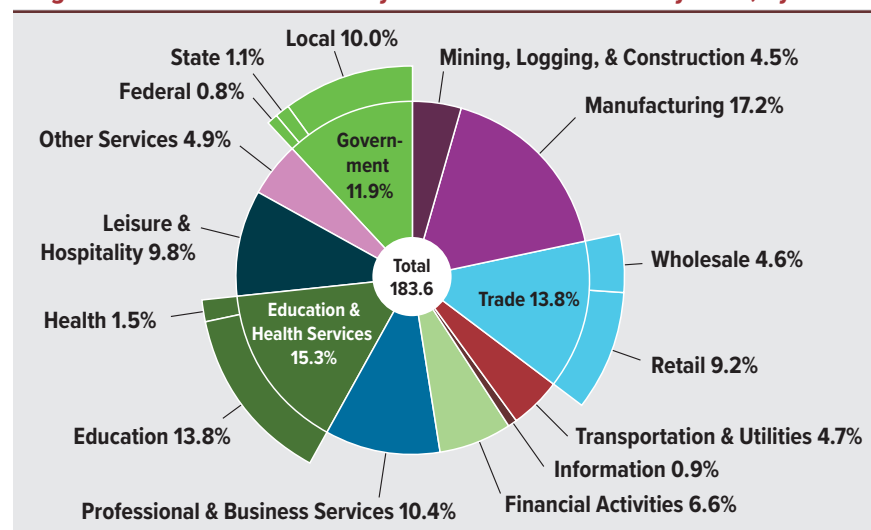
Current Conditions—Nonfarm Payrolls

Job growth in the HMA declined slightly during the past year but equaled the rate for the nation. Nonfarm payrolls in the HMA grew by 2,600 jobs, or 1.4 percent, to 183,600 during 2019; payrolls increased by 2,700 jobs, or 1.5 percent in the HMA during 2018. By comparison, the national growth rate was 1.4 percent during 2019 and 1.6 percent during 2018. The leisure and hospitality and the education and health services sectors, which rose by 1,300 and 1,100 jobs, or 7.8 and 4.1 percent, respectively, led job gains in the HMA during the past year. Significant job growth in the leisure and hospitality sector is attributed to the opening of Hotel Northland. Other notable job growth in the HMA occurred in the manufacturing sector, which increased by 400 jobs, or 1.3 percent.

Current Conditions—Unemployment

During the past year, the average unemployment rate increased slightly because labor force growth outpaced resident employment growth. The unemployment rate was 2.9 percent during 2019, up from 2.8 percent during 2018. The rate was below the recent peak of 8.5 percent during the 12 months ending March 2010,

Figure 2. Share of Nonfarm Payroll Jobs in the Green Bay HMA, by Sector



Notes: Total nonfarm payroll is in thousands. Percentages may not add to 100 percent due to rounding. Based on 12-month averages through December 2019. Source: U.S. Bureau of Labor Statistics

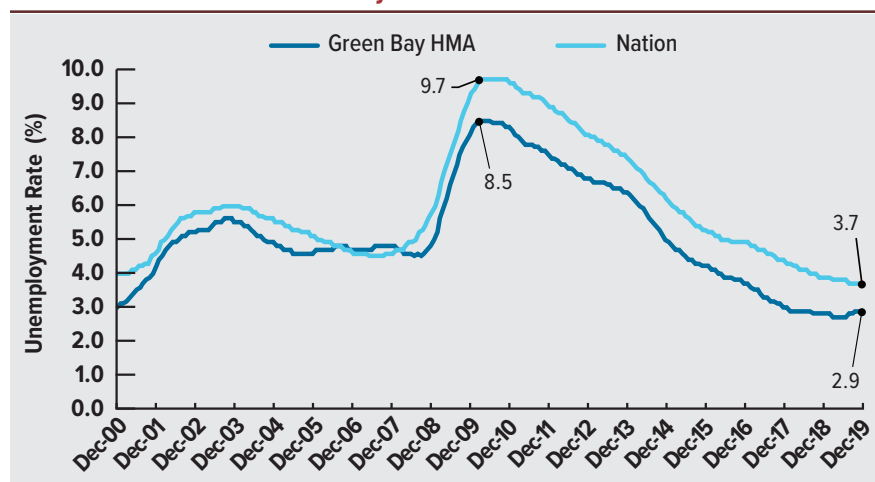
Table 2. Major Employers in the Green Bay HMA

Name of Employer	Nonfarm Payroll Sector	Number of Employees
Humana Inc.	Education & Health Services	3,275
Bellin Health Systems, Inc.	Education & Health Services	2,725
Oneida Nation of Wisconsin	Government	2,700
Schneider National, Inc.	Transportation & Utilities	2,625
Georgia-Pacific LLC	Manufacturing	2,100
UnitedHealth Group Incorporated	Education & Health Services	2,050
Aurora Health Care	Education & Health Services	2,000
HSBS St. Vincent Hospital	Education & Health Services	1,600
American Foods Group, LLC	Manufacturing	1,475
Prevea Health Services	Education & Health Services	1,425

Note: Excludes local school districts. Source: Moody's Analytics

which preceded the current period of economic expansion (Figure 3). Nationally, the unemployment rate was 3.7 percent during 2019, down from 3.9 percent a year earlier and down from the peak of 9.7 percent during the 12 months ending March 2010.

Figure 3. 12-Month Average Unemployment Rate in the Green Bay HMA and the Nation



Note: Based on the 12-month moving average.
Source: U.S. Bureau of Labor Statistics

Nonfarm Payroll Trends—Overview

From 2001 through 2017, the economy of the HMA generally followed national economic trends, but periods of job growth in the HMA were less pronounced than for the nation, and periods of job loss were generally less severe. From 2001 through 2002, during and immediately following the national economic recession, nonfarm payrolls in the HMA declined by an average of 800 jobs, or 0.5 percent, annually—the same rate as the nation. During the period, 6 of the 11 sectors in the HMA lost jobs, including the manufacturing sector, which declined by an average of 1,300 jobs, or 3.9 percent, annually. Job losses in the sector were partly

because of the restructuring that occurred when Georgia-Pacific LLC merged with the Fort James Corporation in 2000.

The HMA added an average of 1,400 jobs, or 0.8 percent, annually, during the subsequent 5 years to reach 169,700 jobs in 2007. During the period, jobs in the nation grew an average of 1.1 percent annually. The manufacturing sector continued to lose jobs from 2003 through 2007, with an average decline of 100 jobs, or 0.3 percent, annually. Gains in most service-providing sectors, including the education and health services and the leisure and hospitality sectors, which added a combined annual average of 800 jobs, a year, more than offset those losses. Job growth in these sectors is discussed in the Economic Sectors of Significance section below.

From 2008 through 2009, when the number of jobs declined an average of 2.5 percent a year nationally, job losses in the HMA averaged 2,900 jobs, or only 1.7 percent, annually. During the period, job losses in the HMA were widespread, but the manufacturing sector led the declines with an average loss of 1,700 jobs, or 5.5 percent, annually. In 2008, Unilever PLC closed an ice cream manufacturing plant, eliminating 250 jobs and beginning in 2009, Georgia-Pacific LLC laid off approximately 160 workers at its production plant.

Following the effects of the Great Recession, the HMA added jobs every year from 2010 through 2017, with nonfarm payrolls surpassing the pre-recessionary high in 2014. Job growth in the HMA lagged the rate for the nation, however, for much of the period. Nonfarm payrolls grew an average of 1,800 jobs, or 1.1 percent, annually in the HMA from 2010 through 2017, compared with an average of 1.4 percent, a year for the nation. Within the HMA, 8 of the 11 sectors added jobs from 2010 through 2017. The manufacturing sector contributed to job gains during the period, increasing by an average of 300 jobs, or 1.2 percent, annually. Despite 8 years of manufacturing job growth, the sector did not recover the total number of jobs lost during the previous decade.

Economic Sectors of Significance

Manufacturing

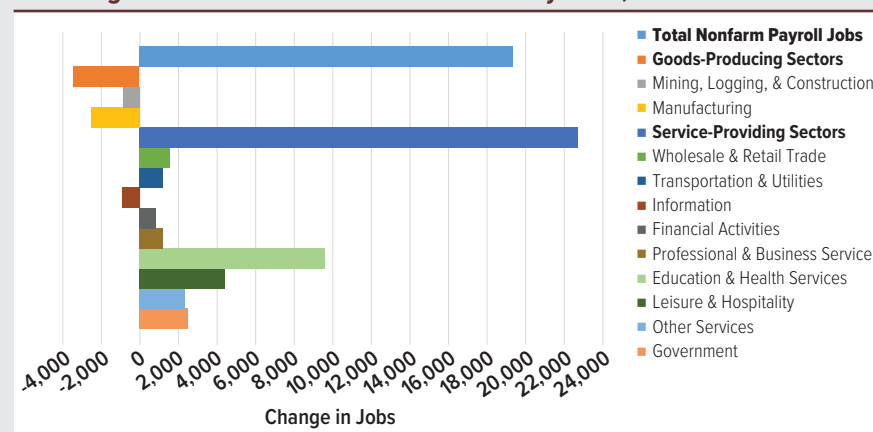
The manufacturing sector had three periods of significant job loss from 2001 through 2009, followed by a period of continuous but modest job gains since 2010; the sector is 7 percent below the 34,100-job peak in 2000. The sector remains the largest nonfarm payroll sector in the HMA, however, accounting for 31,600 jobs, or 17.2 percent of nonfarm payrolls during 2019. Manufacturing sector jobs in the nation are 26 percent below the 17.3 million jobs in 2000, accounting for 8.5 percent of all nonfarm payroll jobs, compared with 13.1 percent in 2000. The durable goods industry has accounted for nearly 70 percent of sector growth in the HMA since 2010. The largest rate of increase occurred in the machinery manufacturing industry, which added an average of 270 jobs, or 1.3 percent, a year. The Northeast Wisconsin Manufacturing Alliance, which was established in 2006 by a group of manufacturers, works with educators, workforce developers, chambers of commerce, and state organizations to promote manufacturing in the northeastern Wisconsin region. In the annual Manufacturing Vitality Index report completed by the Alliance for 2020, approximately 75 percent of the 108 companies that responded to the survey indicated that they had difficulty hiring new employees in 2019, mostly because of a lack in supply of skilled workers; however, 46 percent of respondents indicated that they expect to hire new employees during the first quarter of 2020, and 35 percent plan to hire each quarter of 2020. Custom metal fabricator Robinson Metal, Inc. will begin construction on a 178,000-square-foot expansion of a production facility in De Pere in February 2020. When the expansion is complete, the company expects to add 20 manufacturing jobs. Additional expected job growth in the manufacturing sector is discussed in the Employment Forecast section.

Education and Health Services

The education and health services sector, with 28,100 jobs, accounted for more than 15 percent of nonfarm payrolls during 2019. The sector has added the most jobs and has been the fastest growing payroll sector in the HMA since 2001

(Figure 4), contracting only twice since 2001—once in 2007 and again in 2012. Overall, the sector has increased by an average of 500 jobs, or 2.2 percent, annually since 2001, surpassing the wholesale and retail trade sector in 2016 to become the second largest sector in the HMA. Since 2001, the healthcare and social assistance industry increased an average of 460 jobs, or 2.2 percent, annually; this industry accounts for 9 out of every 10 jobs in the sector. Notable gains in the sector since 2001 include 80 jobs added at the new \$12 million Bellin Health Tiletown Sports Medicine and Orthopedics clinic in 2017. The clinic is one of three anchor facilities at the Tiletown District.

Figure 4. Sector Growth in the Green Bay HMA, 2001 to Current



Note: The current date is January 1, 2020.

Source: U.S. Bureau of Labor Statistics

Leisure and Hospitality

With an average of 18,000 jobs during 2019, the leisure and hospitality sector is currently the sixth largest nonfarm payroll sector in the HMA but has had an increasingly significant impact on the local economy during the past two decades. The sector has grown by an average of 200 jobs, or 1.5 percent, a year since 2001, the second most jobs added in the HMA during the period. During 2017,

the sector benefited from the completion of the second and third anchors at the Titledown District: the \$4.9 million Hinterland Brewery and the \$45 million, 144-room Lodge Kohler hotel, which added approximately 200 jobs. A park and plaza with a snow-tubing hill also opened on the property in 2017. Additionally, a \$44 million renovation of the 160-room Hotel Northland in downtown Green Bay was completed in February 2019. The property, originally built as a hotel, had been used for senior apartments but has now returned to its original use.

Oneida Nation of Wisconsin

The Oneida Nation of Wisconsin is the third largest employer in the HMA, with approximately 2,700 employees. The tribe has several businesses in the HMA, including three casinos. In 2014, the casinos underwent a \$28 million renovation that added nearly 30,000 square feet. During the fourth quarter of 2019, the gaming gross profit for the Oneida Tribe increased 2.9 percent, compared with the same period 1 year earlier (Oneida Economic Enterprises Report).

Employment Forecast

During the 3-year forecast period, nonfarm payroll growth is expected to continue in the HMA, averaging 2,350 jobs, or 1.3 percent, annually. Job growth is expected to be highest in the first year of the forecast period and moderate through the third year. The education and health services, the leisure and hospitality, and the manufacturing sectors are expected to continue adding jobs. As part of the largest capital investment in the history of Brown County, Green Bay Packaging Inc., a pulp and paper manufacturing company, is replacing a 71-year-old paper mill with a new \$500 million facility that will produce 100-percent recycled materials in the city of Green Bay. The company will increase capacity by 50 percent, cut greenhouse gas emissions, and eliminate wastewater discharges into the Fox River. When the new mill opens in early 2021, more than 1,100 jobs will be retained, and 200 new jobs are expected to be added by 2022.



Population and Households

Current population: 324,400 (Table 3)

Population growth in the HMA has remained relatively steady since 2007, however, the proportions of population change due to net in-migration and net natural increase have shifted.

Table 3. Green Bay HMA Population and Household Quick Facts

Population Quick Facts		2010	Current	Forecast
	Population	306,241	324,400	329,700
	Average Annual Change	2,375	1,850	1,800
	Percentage Change	0.8	0.6	0.6
Household Quick Facts		2010	Current	Forecast
	Households	122,037	130,400	133,000
	Average Annual Change	1,325	860	870
	Percentage Change	1.1	0.7	0.7

Notes: Average annual changes and percentage changes are based on averages from 2000 to 2010, 2010 to current, and current to forecast. The forecast period is from the current date (January 1, 2020), to January 1, 2023.

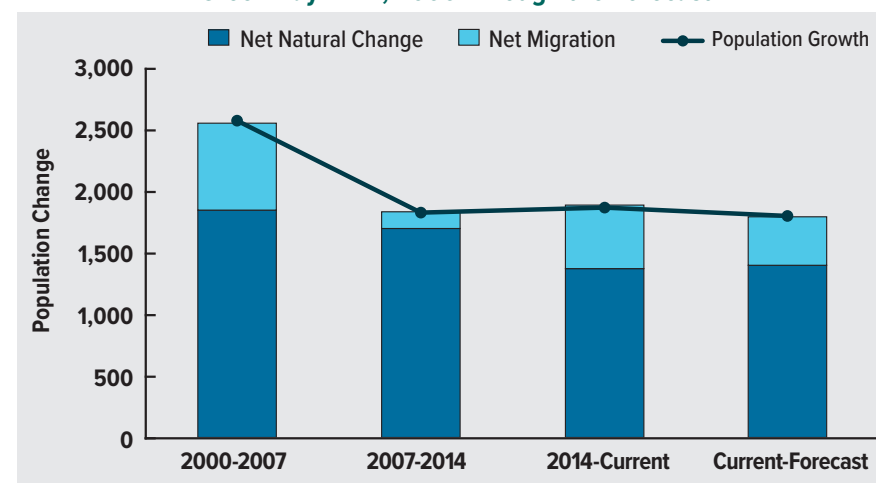
Sources: 2000 and 2010—2000 Census and 2010 Census; current and forecast—estimates by the analyst

Population Trends

The population in the Green Bay HMA has grown at a slower rate since 2007, compared with the early to mid-2000s. Generally lower home sales prices in the HMA than in other parts of Wisconsin have made the HMA an attractive destination for residents from other parts of Wisconsin (Internal Revenue Service tax return data). From 2000 to 2007, when the economy in the HMA had net job gains, the population of the HMA increased by an average of 2,575, or 0.9 percent, annually (U.S. Census Bureau population estimates, as of July 1). During

the period, net natural increase averaged 1,850 people annually and accounted for nearly 72 percent of population growth (Figure 5). Population growth has been relatively subdued since 2007 with limited net in-migration from 2007 to 2014 and reduced net natural increase since 2014. From 2007 to 2014, a period that included the Great Recession and the subsequent recovery both nationally and in the HMA, the population of the HMA increased by an average of 1,825, or 0.6 percent, a year. Approximately 93 percent of population growth during the period was attributed to average net natural increase, which averaged 1,700 people a year, while net in-migration averaged only 130 people annually. Despite strengthening economic conditions since 2014, the rate of population growth has remained relatively unchanged at an average of 0.6 percent, or 1,875 people, annually, to 324,400 as of January 1, 2020. During the period, net in-migration rose to an average of 500 people annually, accounting for nearly 27 percent of

Figure 5. Components of Population Change in the Green Bay HMA, 2000 Through the Forecast



Notes: Net natural change and net migration totals are average annual totals over the time period. The forecast period is from the current date (January 1, 2020), to January 1, 2023.

Sources: U.S. Census Bureau; current to forecast—estimates by the analyst

population growth. Net natural increase fell, however, to an average of 1,375 people annually. The decline in net natural increase reflects an increase in the retirement age portion of the population, generally defined as residents ages 65 and older.

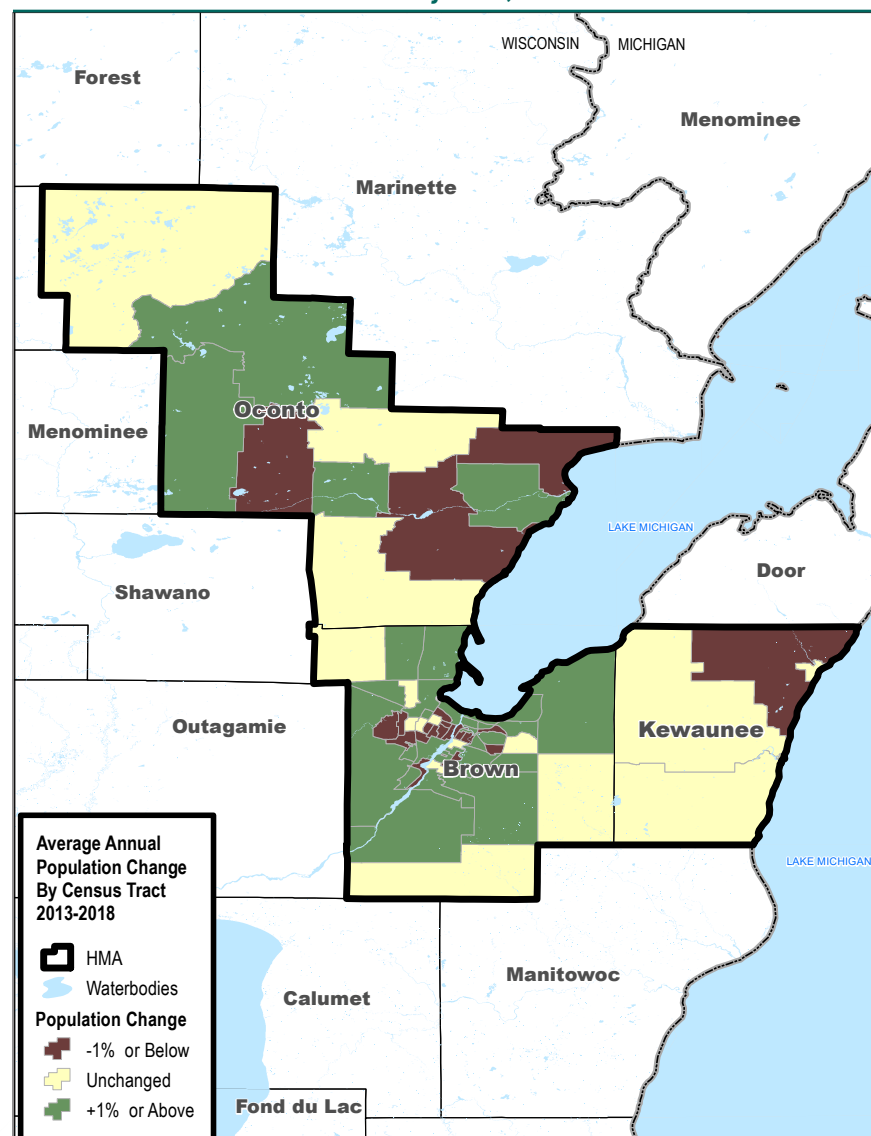
Population by Geography

Nearly 82 percent of the population of the HMA resides in Brown County, which includes the most populous city—Green Bay—and the fastest growing community, the village of Hobart. As of 2018, the city of Green Bay was the third largest city in Wisconsin, behind Milwaukee and Madison, with an estimated population of 104,900 (2018 American Community Survey [ACS] 1-year estimates). From 2013 to 2018, the population of the city of Green Bay grew an average of less than 0.1 percent, or by 50 people annually (Map 1). By comparison, the population of the village of Hobart grew an average of 5.3 percent, or by 430 people, annually, to 9,500 people from 2013 to 2018. The village has become an increasingly attractive option for residents who work in the HMA and want newly built single-family homes in master-planned communities such as Centennial Centre, which is in what is considered to be the downtown of Hobart. Most of the western portion of Brown County, along with neighboring Outagamie County, consists of Oneida Nation Reservation land, which covers approximately 65,450 acres. During 2018, the combined population in the Oneida Reservation and off-reservation trust land in Brown and Outagamie Counties was 24,800, an average increase of 240 people, or 1.0 percent, annually, from 2013 to 2018.

Age Cohort Trends

The recent slowing of net natural increase in the HMA is tied, in part, to a sharp increase in the number of people at or above retirement age. From 2010 to 2018, this age cohort increased by an average of 1,575 people, or 3.6 percent, a year, nearly six times the overall population growth rate for the HMA (ACS 1-year estimates). Relatively low home sale prices and access to healthcare services attracted retirees from outside the HMA and incentivized aging residents to

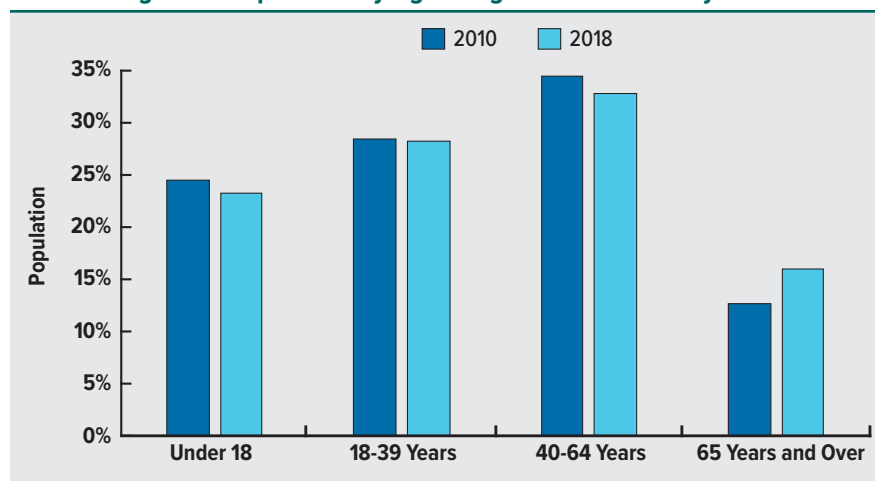
Map 1. Average Annual Population Change by Census Tract in the Green Bay HMA, 2013–2018



Source: 2013-2018 American Community Survey 5-year data

retire in place during the period. During 2018, residents ages 65 years and older accounted for 16 percent of the total population of the HMA, up from only 13 percent in 2010 (Figure 6). The population ages 18 years and younger decreased by an average of 400 people, or 0.1 percent, annually, from 2010 to 2018. The cohort ages 18 to 39 years grew by an average of 390 people, or 0.4 percent, annually, during the period. The cohort ages 40 to 64 years decreased by an average of 70 people, or 0.1 percent, annually.

Figure 6. Population by Age Range in the Green Bay HMA



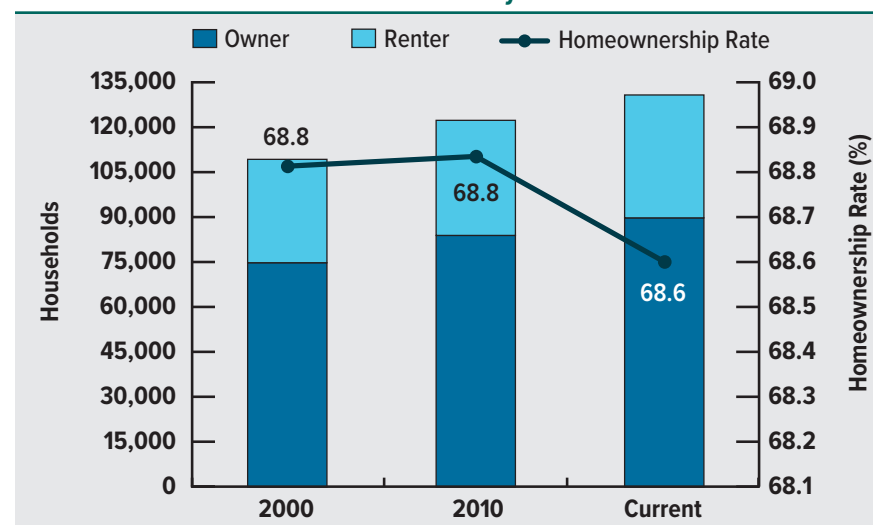
Source: U.S. Census Bureau

Household Trends

An estimated 130,400 households reside in the Green Bay HMA as of January 1, 2020, up by an average of 860 households, or 0.7 percent, annually, since 2010. Slower population growth since 2010 in the HMA has resulted in a lower rate of

household formation, compared with the average of 1.1 percent, annually, from 2000 to 2010. In part because of retirees' propensity to purchase homes, the decline in homeownership in the HMA since 2010 is notably mild compared with the nation. The current homeownership rate in the HMA is estimated at 68.6 percent, down from 68.8 percent in 2010 (Figure 7); the current homeownership rate nationwide is approximately 64.0 percent, compared with 65.4 percent in 2010. The homeownership rate in the HMA has declined since 2010, largely because renter households accounted for 34 percent of household growth since 2010, compared with 31 percent from 2000 to 2010.

Figure 7. Households by Tenure and Homeownership Rate in the Green Bay HMA



Note: The current date is January 1, 2020.

Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by the analyst

Population and Household Growth Forecast

During the 3-year forecast period, the population of the Green Bay HMA is expected to increase by an average of 1,800 people, or 0.6 percent, annually, reaching 329,700 by January 1, 2023. Net in-migration is expected to account for approximately 22 percent of population growth during the forecast period, as people continue to move to the HMA for affordable housing and job opportunities. More than two-thirds of population growth will consist of those ages 65 and

older. During the next 3 years, continued population and economic growth will contribute to stable household growth in the HMA, which is expected to increase by an average of 870 households, or 0.7 percent, annually, reaching 133,000 households by January 1, 2023. Brown County is expected to make up the largest share of population and household growth during the forecast period because of continued construction activity in more urbanized areas.



Home Sales Market

Market Conditions: Tight

Since 2012, home sales have increased an average of 6 percent annually, and average home sales prices have increased an average of 4 percent annually.

Current Conditions

The home sales market in the Green Bay HMA is currently tight, with an estimated 1.1-percent vacancy rate, down from 2.0 percent in April 2010 when the market was soft (Table 4). Sales market conditions were generally tight to balanced in the early 2000s but began to soften with the onset of the Great Recession and the subsequent housing market downturn. Conditions remained soft through 2011, but the impact of distressed sales was relatively mild in the HMA. Job gains, continued population growth, and relatively low levels of new homebuilding activity have since contributed to significant absorption of existing

inventory. Since 2012, continued low levels of new home construction have contributed to tight market conditions, and average home sales prices have increased, although the HMA remains relatively affordable.

REO Sales and Delinquent Mortgages

The rate of seriously delinquent mortgage loans and real estate owned (REO) properties has been notably low in the HMA compared with state and national rates since 2010. In the HMA, the rate of seriously delinquent mortgage loans and REO properties peaked at 4.7 percent in January 2010, compared with the 5.3- and 8.6-percent peak rates in Wisconsin and the nation, respectively, during the same month (CoreLogic, Inc.). As of December 2019, the rate in the HMA was 0.8 percent, unchanged from 2018, but below the 0.9- and 1.4-percent rates for the state and nation, respectively. With the relatively moderate impact of the national housing crisis on the rate of seriously delinquent mortgage loans and REO properties in the HMA, the homeownership rate decreased only slightly from 2010 through the current period.

Table 4. Home Sales Quick Facts in the Green Bay HMA

Home Sales Quick Facts	Green Bay HMA		Nation
	Vacancy Rate	1.1%	NA
	Months of Inventory	NA	2.6
	Total Home Sales	5,675	6,209,000
	1-Year Change	-4%	-3%
	New Home Sales Price	\$319,900	\$386,400
	1-Year Change	6%	2%
	Existing Home Sales Price	\$188,000	\$297,100
	1-Year Change	4%	4%
	Mortgage Delinquency Rate	0.8%	1.4%

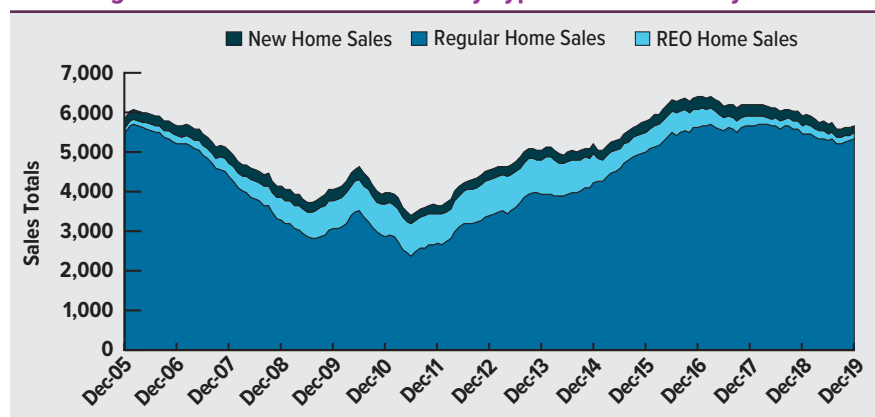
NA = data not available.

Notes: The vacancy rate is as of the current date; home sales and prices are for the 12 months ending December 2019; and months of inventory and mortgage delinquency data are as of December 2019. The current date is January 1, 2020.

Sources: CoreLogic, Inc.; Metrostudy, A Hanley Wood Company

Existing Home Sales and Prices

Existing home sales in the HMA have increased during much of the period since the local housing market downturn, although the accelerated existing sales price growth has limited existing home sales activity during the past 3 years (Figure 8). During 2005, approximately 5,600 existing homes sold, but sales began decreasing in 2006, 2 years before new home sales declined. From 2006 through 2011, existing home sales fell an average of 360 homes, or 8 percent, annually, to 3,425 homes sold. During this period, tightening mortgage lending standards, the local economic downturn, and slower population growth put downward pressure on existing home sales. The sales market in the HMA began improving in 2012, and sales increased at an average annual rate of 12 percent, from 2012 through 2016, to 6,075 existing homes sold. Existing home sales increased at the same

Figure 8. 12-Month Sales Totals by Type in the Green Bay HMA

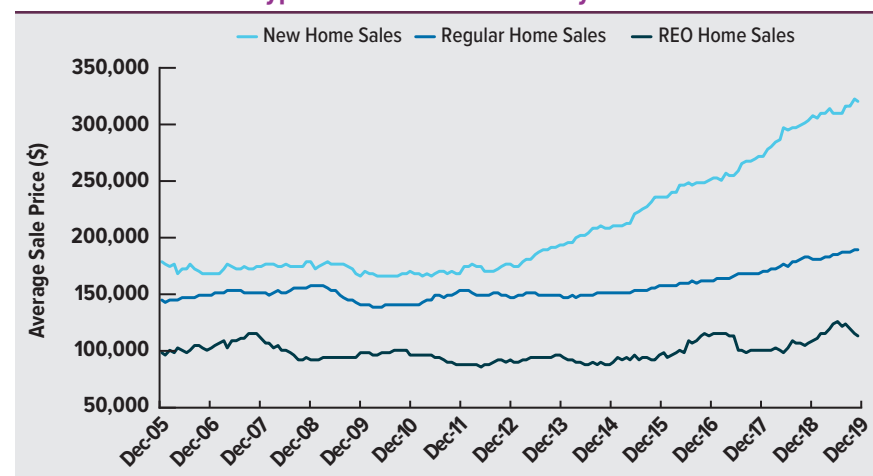
REO = real estate owned.

Source: Metrostudy, A Hanley Wood Company

time the economy gained momentum. Lower levels of net in-migration compared with the early to mid-2000s did not reduce existing home sales from 2012 through 2016 partly because demand for housing was strong following the period of delayed household formation. During 2019, approximately 5,475 existing homes were sold, an average annual decline of 3 percent since 2017. Existing sales made up 96 percent of total sales in the HMA during this period. Since 2005, the proportion ranged from 94 to 96 percent, except for the 2008-through-2010 period, when existing sales were 93 percent of total sales.

The average existing home sales price in the HMA was \$188,000 in 2019. Figure 9 shows the 12-month average sales price for regular resales, REO sales, and new home sales prices since 2005. Since 2006, the average existing home sales price

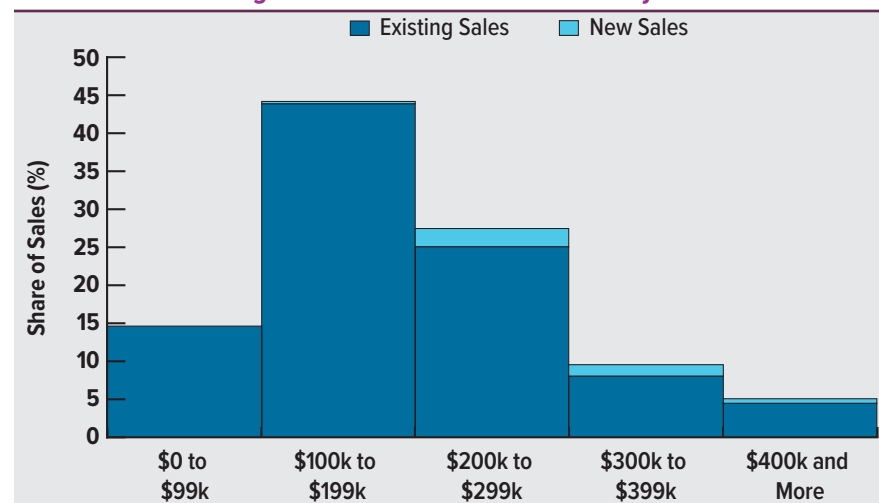
in the HMA has risen nearly every year, except for 2009 and 2012, when REO sales made up 19 and 21 percent of existing sales and put downward pressure on sales prices. Sales price growth has accelerated since 2015, increasing by an average of 5 percent a year, compared with a 2-percent annual increase from 2013 through 2014. Home sales prices increased in part because the proportion of REO sales decreased from 18 percent of existing sales in 2013 to 3 percent in 2019. Nearly 50 percent of existing sales were priced between \$100,000 and \$199,999 during 2019 (Figure 10).

Figure 9. 12-Month Average Sales Price by Type of Sale in the Green Bay HMA

REO = real estate owned.

Source: Metrostudy, A Hanley Wood Company

Figure 10. Share of Sales by Price Range During the 12 Months Ending December 2019 in the Green Bay HMA



Note: New and existing sales include single-family homes, townhomes, and condominium units.
Source: Metrostudy, A Hanley Wood Company

New Home Sales and Prices

After declining each year from 2008 through 2011, new homes sales have increased during much of the period since 2012. The number of new home sales has declined during the past 2 years, however, and new home sales are currently below the 310 homes sold during 2007. New home sales peaked in 2007 and accounted for 6 percent of total sales because of the ease of acquiring home loans, including those for more expensive, newly built homes. New home sales declined an average of 25 homes, or 8 percent a year from 2008 through 2011, to 210 homes, but increased an average of 15 homes, or 6 percent, annually from 2012 through 2017, to 300 sales. During 2019, approximately 200 new homes sold, down 18 percent from 2018, partly because of a decrease in new home construction. Brown County accounted for 83 percent of new home sales in the

HMA during 2019, largely because of ongoing demand for new housing in master-planned communities; Kewaunee and Oconto Counties accounted for 4 and 13 percent, respectively, of new home sales in the HMA. The average new home sales price was \$319,900 during 2019, an 8-percent increase from 2018 and the highest level since 2005. During 2019, 54 percent of all new homes sold in the HMA were below \$300,000.

Housing Affordability: Sales

Home sales prices in the HMA have generally been lower in the HMA than in other parts of Wisconsin. Although the difference in prices between the HMA and the state has contracted, the HMA remains affordable. From 2005 through 2010, home sales prices in the HMA were on average 14 percent lower than in Wisconsin, a figure which subsequently declined to an average of 12 percent lower from 2011 through 2017, and an average of 7 percent lower since 2018 (CoreLogic, Inc., with adjustments by the analyst). The smaller difference between the two prices is likely because of a reduced amount of housing available for sale in the HMA and increasing demand.

Homeownership in the Green Bay HMA is also affordable relative to the nation. Since 2006, home sales prices in the HMA have been, on average, 41 percent lower than in the nation (CoreLogic, Inc., with adjustments by the analyst). Factors like increased rent, student loan debt, and delayed marriage and childbearing, which typically delay home purchases for those ages 35 and under, were less of a concern in the HMA than the nation from 2010 to 2018 (Urban Institute). Households in this age group are notably more likely to own their home in the HMA than similar households nationwide (2010 Census and ACS 1-year estimates). From 2010 to 2018, the homeownership rate for those under 35 years of age increased by 4.7 percentage points to 47.0 percent in the HMA (Table 5). Nationwide, homeownership for those under the age of 35 declined by 2.3 percentage points to 33.7 percent during the 2010-to-2018 period. From 2010 to

2018, homeownership for heads of households in the HMA aged 35 to 44 years declined by 1.0 percentage point to 69.7 percent, but declined by 4.4 percentage points, to 57.9 percent nationwide.

Table 5. Homeownership Rates by Age of Householder

	Green Bay HMA			Nation		
	2000	2010	2018	2000	2010	2018
Householder Under 35 Years	42.0	42.3	47.0	39.1	36.0	33.7
Householder Ages 35 to 44 Years	74.0	70.7	69.7	66.2	62.3	57.9
Total Households	68.8	68.8	69.7	66.2	65.1	63.9

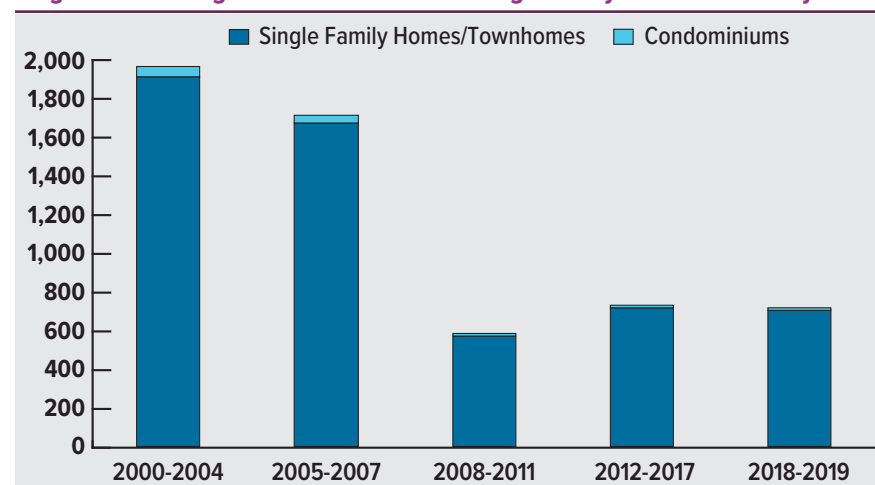
Sources: 2000 and 2010 Decennial Census; 2018 American Community Survey 1-year estimates

Sales Construction Activity

Homebuilding activity has increased since 2012, but fewer new homes have been permitted than during the early-to-mid 2000s (Figure 11). From 2000 through 2004, an average of 1,950 homes were permitted annually. In response to the local economic contraction and the national housing market downturn, the number of homes permitted decreased to an average of 1,725 homes annually from 2005 through 2007, before declining further to an average of only 570 homes permitted a year from 2008 through 2011. Production began to increase the following year, and from 2012 through 2017—a period that included an increase in net in-migration—homebuilding activity increased by an average of 60 homes a year to 830 in 2017. Developers responded to the relatively high levels of construction and slowed their building activity. During 2019, approximately 640 homes were permitted, down from 780 homes permitted during the previous year (preliminary data, with adjustments by the analyst). From 2000 through 2007, approximately 3 percent of all homes permitted in the HMA were condominiums, but since 2008, that proportion has dropped to 1 percent. Most condominium construction in the HMA has occurred in Brown County, partly because of a desire

from residents to live in urban centers and limited developable land compared with Kewaunee and Oconto Counties.

Figure 11. Average Annual Sales Permitting Activity in the Green Bay HMA



Notes: Includes single-family homes, townhomes, and condominiums. Data for 2019 are through December 2019.

Sources: U.S. Census Bureau, Building Permits Survey; 2000 through 2018—final data and estimates by the analyst; 2019—preliminary data and estimates by the analyst

New Construction

Nearly 80 percent of new for-sale home construction since 2012 has occurred in Brown County, with significant development under construction 5 miles west of the city of Green Bay in the village of Hobart. Of the more than 33 square miles of land in Hobart, the most active area with regard to new construction is the mixed-use, master-planned, tax increment district of Centennial Centre. Eight phases have occurred at Centennial Centre since the initial bid was solicited in April 2009. The most recent phase includes 250 residential lots in the Cobblestone at Centennial Centre, Fieldstone Estates, and Woodfield Prairie subdivisions; lot prices start at \$79,000. Currently, 34 condominiums are under construction

in Brown County, including at Whitney School, a converted school with 12 condominiums and 23 apartments near downtown Green Bay. Construction of Titledown Homes, a 54-townhome development located in the Titledown District, is also underway. The homes will each be three stories; have three bedrooms, two full bathrooms, and two half bathrooms; and will range from 2,333 to 2,857 square feet; prices start in the high \$600,000s. The first townhomes are expected to be completed in April 2020. Eight of the potential 40 condominiums at Rail Yard Condominiums are also under construction. The condominiums are adjacent to the 22-acre Rail Yard, a redeveloped warehouse that includes commercial and retail spaces, and restaurants along the Fox River in downtown Green Bay. Prices start at \$234,000 for a one-bedroom home, \$362,000 for a two-bedroom home, and \$435,000 for a three-bedroom home. Map 2 shows condominiums and apartments currently under construction.

Forecast

During the next 3 years, demand is expected for an estimated 2,275 new homes in the HMA (Table 6). Because of the currently tight sales housing market conditions, demand may be stronger in the first year of the 3-year forecast period. The 230 homes currently under construction will satisfy a portion of the demand. Most of the demand will be for new homes priced below \$300,000 in Brown County.

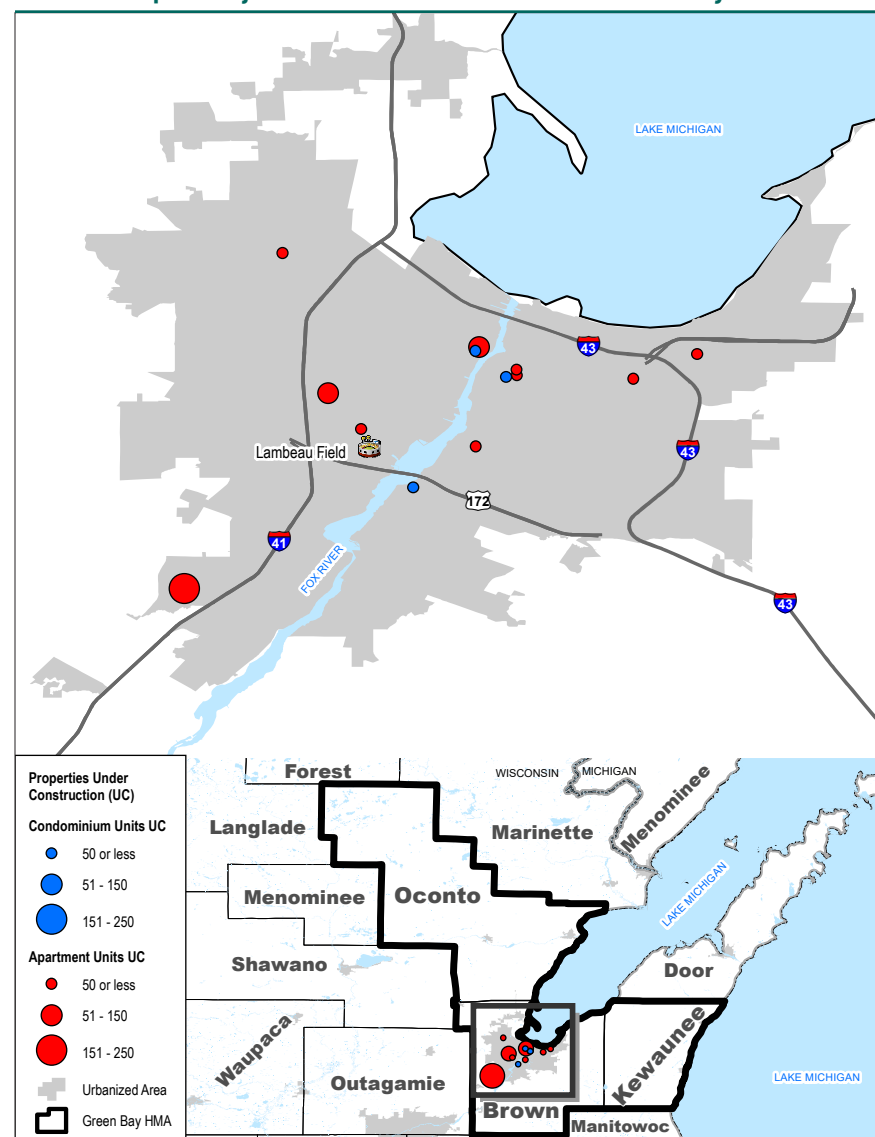
**Table 6. Demand for New Sales Units in the Green Bay HMA
During the Forecast Period**

Sales Units	
Demand	2,275 Units
Under Construction	230 Units

Note: The forecast period is from January 1, 2020, to January 1, 2023.

Source: Estimates by the analyst

Map 2. Projects Under Construction in the Green Bay HMA



Source: Dodge Data & Analytics LLC, with adjustments by the analyst

Rental Market

Market Conditions: Balanced

During the fourth quarter of 2019, the average apartment rent increased 1 percent and the apartment vacancy rate decreased 0.1 percentage point.

Current Conditions and Recent Trends

The overall rental housing market in the Green Bay HMA is balanced, with an estimated 4.8-percent vacancy rate, down from 7.4 percent in April 2010 when conditions were soft (Table 7). The vacancy rate declined partly because of a small but important shift from homeownership to renting, which began during the housing crisis, and an increasing preference of residents to live in urban centers, where a large proportion of the rental inventory in the HMA is located. Renter households currently account for 31.4 percent of all households in the HMA, up from 31.2 percent in 2010. Approximately 28 percent of renter households in the HMA lived in detached and attached single-family homes as of 2018, up from 27 percent in 2010 (ACS 1-year data). Only 20 percent of all renter households in the HMA lived in buildings with two to four units as of 2018, down from 24 percent in 2010. Multifamily buildings with five or more units, typically apartments, accounted for 52 percent of all occupied rental units in the HMA in 2018, up from 46 percent in 2010.

Apartment Market Conditions

The apartment market in the Green Bay HMA has generally tightened since 2012 and is currently tight. From the fourth quarter of 2012 through the fourth quarter of 2017, the apartment vacancy rate in the HMA fell from 4.2 to 2.6 percent. The apartment vacancy rate declined all but one year during the period as a result of improved economic conditions, increased net in-migration, and a higher propensity to rent but only a modest increase in apartment construction (Figure 12). During the same

Table 7. Rental and Apartment Market Quick Facts in the Green Bay HMA

Rental Market Quick Facts		2010 (%)	Current (%)
	Rental Vacancy Rate	7.4	4.8
	Occupied Rental Units by Structure		
	Single-Family Attached & Detached	27.2	27.8
	Multifamily (2–4 Units)	24.4	19.7
	Multifamily (5+ Units)	46.1	51.9
	Other (Including Mobile Homes)	2.2	0.5

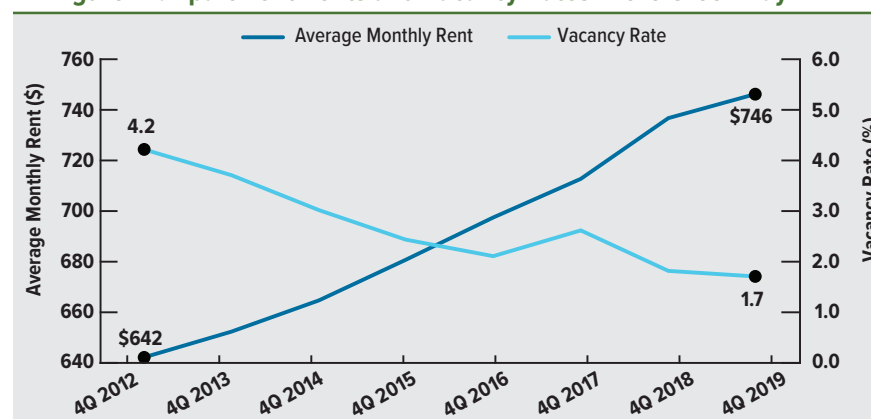
Apartment Market Quick Facts		Current	YoY Change
	Apartment Vacancy Rate	1.7	-0.1
	Average Rent	\$746	1.4
	Studio	\$587	1.9
	One-Bedroom	\$652	0.8
	Two-Bedroom	\$796	1.9
	Three-Bedroom	\$822	-4.4

YoY = year-over-year.

Notes: The current date is January 1, 2020. Percentages may not add to 100 due to rounding.

Sources: 2010 and 2018 American Community Survey 1-year data; Reis, Inc.

Figure 12. Apartment Rents and Vacancy Rates in the Green Bay HMA



4Q = fourth quarter.

Source: Reis, Inc.

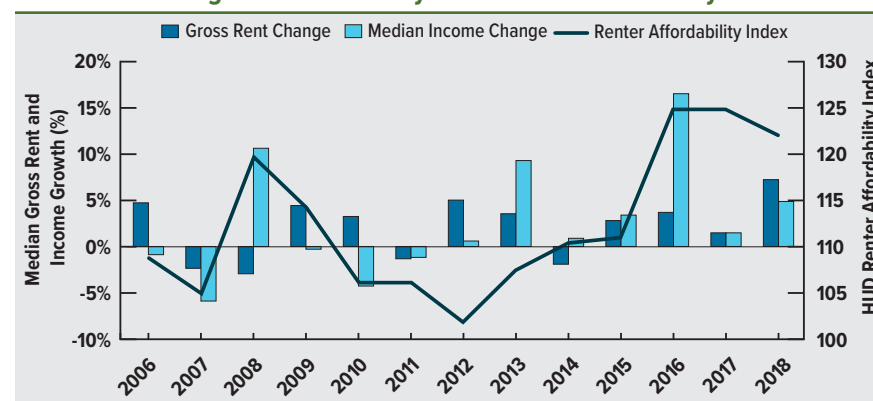
period, the average monthly rent for apartment units increased an average of 2 percent a year to \$712. During the fourth quarter of 2019, the apartment vacancy rate was 1.7 percent, down from 1.8 percent during the fourth quarter of 2018, and well below the 4.7-percent rate for the nation (Reis, Inc.). The average apartment rent in the HMA increased by \$10, or 1 percent, to \$746 during the fourth quarter of 2019 from a year earlier; nationally, the average rent increased 4 percent, to \$1,498. The average apartment rents by the number of bedrooms in the HMA were \$587, \$652, \$796, and \$822 for a studio, one-, two-, and three-bedroom units, respectively, during the fourth quarter of 2019. The average rent for units built after 2009 was \$1,069, and the vacancy rate was higher than the overall apartment market at 2.3 percent. The tightest segment of the HMA apartment market was for units built from 1970 through 1979, which had a vacancy rate of 1.2 percent and an average rent of \$691.

Housing Affordability: Rental

The rental housing market in the Green Bay HMA is affordable and affordability has generally increased since 2013 despite a decline in 2018 when rent growth outpaced income growth. Affordability is higher than levels during the most recent national recession when incomes declined. From 2013 to 2018, the median income for renter households in the HMA rose 41 percent, to \$39,080 (Figure 13). During the same time, the median gross monthly rent increased only 17 percent, from \$706 to \$801. As a result, the HUD Rental Affordability Index, a measure of median renter household income relative to qualifying income for the median-priced rental unit, increased during the period. The index was 122 during 2018, up from 107.3 in 2013. By comparison, the median income for renter households in the HMA declined 5 percent, from \$29,287 in 2008 to \$27,727 in 2012, and the median gross monthly rent increased 11 percent, from \$612 to \$682. The HUD Rental Affordability Index decreased from 119.6 to 101.6 during the period.

During the 2012-through-2016 period, an estimated 20.4 percent of all renter households in the HMA were cost-burdened, while 18.4 percent were severely

Figure 13. Green Bay HMA Rental Affordability



Source: American Community Survey, 1-year data

cost-burdened, spending 50 percent or more of their income on rent (Table 8). By comparison, nationwide, 21.9 and 23.3 percent of renter households were cost-burdened and severely cost-burdened, respectively. Cost-burden is a more significant issue for lower-income renter households in the HMA. Of renter households with incomes less than 50 percent of the area median family income in the HMA, 33.8 percent paid between 30 and 49 percent of their incomes toward rent and 38.5 percent paid 50 percent or more during the 2012-to-2016 period. Nationwide, a larger proportion of households were severely cost-burdened, at 49.3 percent.

Table 8. Percentage of Cost Burdened Renter Households by Income, 2016

	Cost-Burdened		Severely Cost-Burdened	
	Green Bay HMA	Nation	Green Bay HMA	Nation
Renter Households with Income <50% HAMFI	33.8	26.4	38.5	49.3
Total Renter Households	20.4	21.9	18.4	23.3

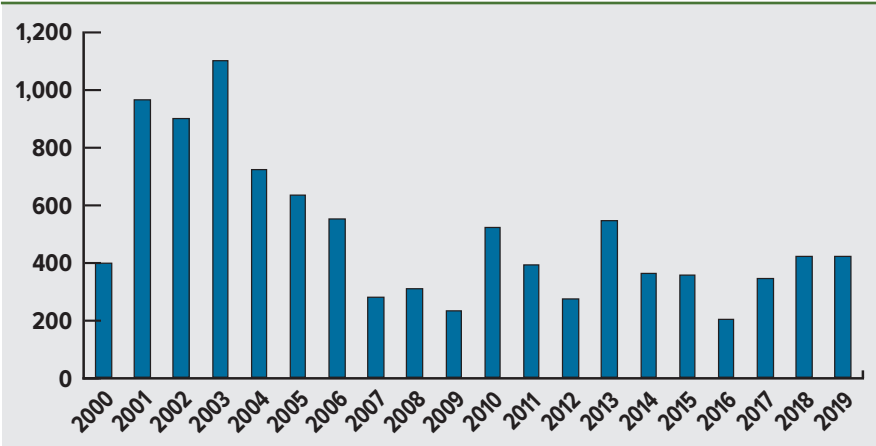
HAMFI =

Source: Consolidated Planning/CHAS Data, 2016 American Community Survey 1-year data (huduser.gov)

Rental Construction Activity

Since 2010, rental construction activity in the HMA has generally trended upward from the permitting levels during the local housing market downturn, but recent levels are below construction activity from the early-to-mid period of the previous decade (Figure 14). During 2000, approximately 400 rental units were permitted, and from 2001 through 2003, permitting increased by an average of 230 units, or 41 percent, a year; permitting reached a high of 1,100 units in 2003 when population growth was relatively strong. Rental permitting decreased, however, during 5 of the next 6 years. From 2004 through 2006, permitting declined by an average of 180 units, or 21 percent, a year, to 550 units in 2006, and declined further to an average of only 270 units permitted annually from 2007 through 2009. Production increased during the following year, however, and from 2010 through 2017, rental permitting activity averaged 370 units, annually. During 2019, approximately 420 rental units were permitted, unchanged from the level during the previous year (preliminary data, with adjustments by the analyst).

Figure 14. Average Annual Rental Permitting Activity in the Green Bay HMA



Notes: Includes apartments and units intended for rental occupancy. Data for 2019 are through December 2019.
Sources: U.S. Census Bureau, Building Permits Survey; 2000–2018 final data and analyst estimates; 2019 preliminary data and estimates by the analyst

New Construction

The approximately 600 apartment units under construction in the HMA are all being built in Brown County. One of the largest properties underway is Sand Lake, an apartment complex in the city of De Pere, where the final 126 of 252 units are currently under construction. When complete in April 2021, the property will offer one- and two-bedroom units with monthly rents starting at \$895 and \$1,100, respectively. In the redeveloped Rail Yard, the mixed-income Broadway Lofts will feature 107 units, of which 85 percent will be for tenants making up to 80 percent of the area median income, with the remaining units offered at market rate. When it opens in December 2020, the development will feature one-, two-, and three-bedroom units, with rents ranging from \$600 to \$1,400. Titledown Flats, a 150-unit apartment complex located in Titledown District, is also currently underway. The property will feature studio, one-, two-, and three-bedroom units. Completion is currently scheduled for the summer of 2021, with rents yet to be published. In response to the sharp increase in the retirement age population in the HMA, approximately 340 senior housing units have been completed since 2010, although no additional units are currently under construction.

Forecast

During the 3-year forecast period, demand is estimated for 1,250 new rental units (Table 9). The 600 units currently under construction will satisfy a portion of the demand. Demand is expected to be relatively steady because household growth will continue at the same annual rate as the 2010-to-current period. Building activity is expected to be concentrated in Brown County because of residents’ desire to live in urban communities near amenities and job centers.

Table 9. Demand for New Rental Units in the Green Bay HMA During the Forecast Period

Rental Units	
Demand	1,250 Units
Under Construction	600 Units

Note: The forecast period is January 1, 2020, to January 1, 2023.
Source: Estimates by the analyst



Terminology Definitions and Notes

A. Definitions

Cost Burdened	Spending more than 30 percent of household income on housing costs.
Demand	The demand estimates in the analysis are not a forecast of building activity. They are the estimates of the total housing production needed to achieve a balanced market at the end of the 3-year forecast period given conditions on the as-of date of the analysis, growth, losses, and excess vacancies. The estimates do not account for units currently under construction or units in the development pipeline.
Existing Sales	Regular resale and real estate owned sales.
Forecast Period	1/1/2020–1/1/2023—Estimates by the analyst
Homebuilding Activity/Building Permits/Construction Activity	Building permits do not necessarily reflect all residential building activity that occurs in an HMA. Some units are constructed or created without a building permit or are issued a different type of building permit. For example, some units classified as commercial structures are not reflected in the residential building permits. As a result, the analyst, through diligent fieldwork, makes an estimate of this additional construction activity. Some of these estimates are included in the discussions of single-family and multifamily building permits.

Home Sales/ Home Sales Prices/ Sales Housing	Includes single-family home, townhome, and condominium sales.
Net Natural Increase	Resident births minus resident deaths.
Northeastern Wisconsin	A region consisting of 18 counties, including Brown, Calumet, Door, Florence, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Winnebago, and Waushara.
Rental Market/ Rental Vacancy Rate	Includes apartments and other rental units such as single-family, multifamily, and mobile homes.
Senior Housing	Housing units limited to residence by older adults, typically ages 55 and older. Properties classified as senior apartments, independent living facilities, or assisted living are considered senior housing.
Seriously Delinquent Mortgages	Mortgages 90+ days delinquent or in foreclosure.

B. Notes on Geography

1.	The metropolitan statistical area definition noted in this report is based on the delineations established by the Office of Management and Budget (OMB) in the OMB Bulletin dated April 10, 2018.
2.	Urbanized areas are defined using the U.S. Census Bureau 2010 Census Urban and Rural Classification and the Urban Area Criteria.
3.	The census tracts referenced in this report are from the 2010 Census.

C. Additional Notes

1.	The NAHB Housing Opportunity Index represents the share of homes sold in the HMA that would have been affordable to a family earning the local median income, based on standard mortgage underwriting criteria.
2.	This analysis has been prepared for the assistance and guidance of HUD in its operations. The factual information, findings, and conclusions may also be useful to builders, mortgagees, and others concerned with local housing market conditions and trends. The analysis does not purport to make determinations regarding the acceptability of any mortgage insurance proposals that may be under consideration by the Department.
3.	The factual framework for this analysis follows the guidelines and methods developed by the Economic and Market Analysis Division within HUD. The analysis and findings are as thorough and current as possible based on information available on the as-of date from local and national sources. As such, findings or conclusions may be modified by subsequent developments. HUD expresses its appreciation to those industry sources and state and local government officials who provided data and information on local economic and housing market conditions.
Cover Photo	iStock

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