

The analysis presented in this report includes data from the early stages of the COVID-19 outbreak in the United States. The unprecedentedly large and rapid changes in many data series, and the similarly unprecedentedly large policy responses, make analysis of, and longer run predictions for, the economy and housing markets exceptionally difficult and uncertain. HUD will continue to monitor market conditions in the HMA and provide an updated report/addendum in the future.

COMPREHENSIVE HOUSING MARKET ANALYSIS

Lake County-Kenosha County, Illinois-Wisconsin

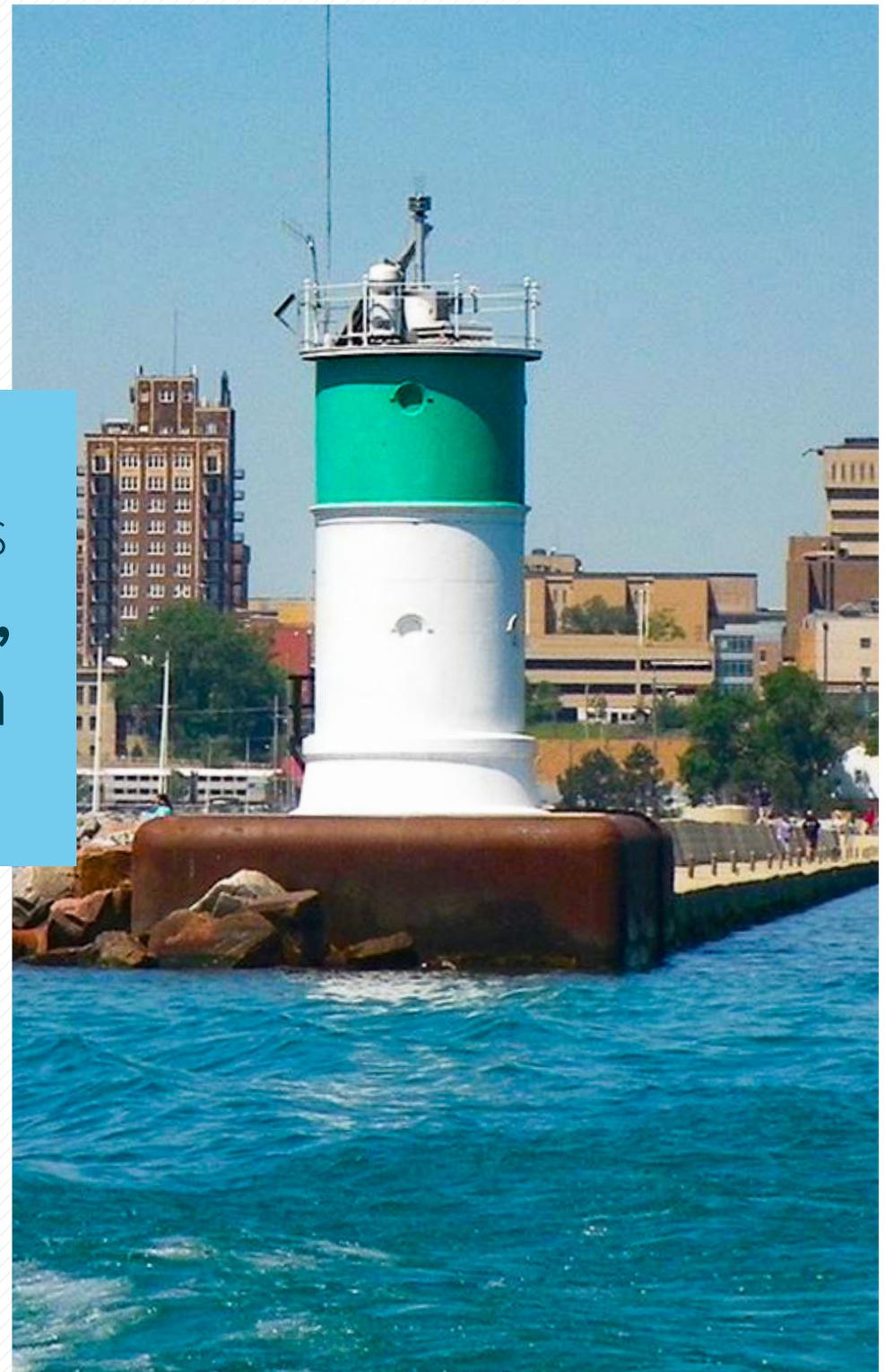
U.S. Department of Housing and Urban Development,
Office of Policy Development and Research

As of July 1, 2020



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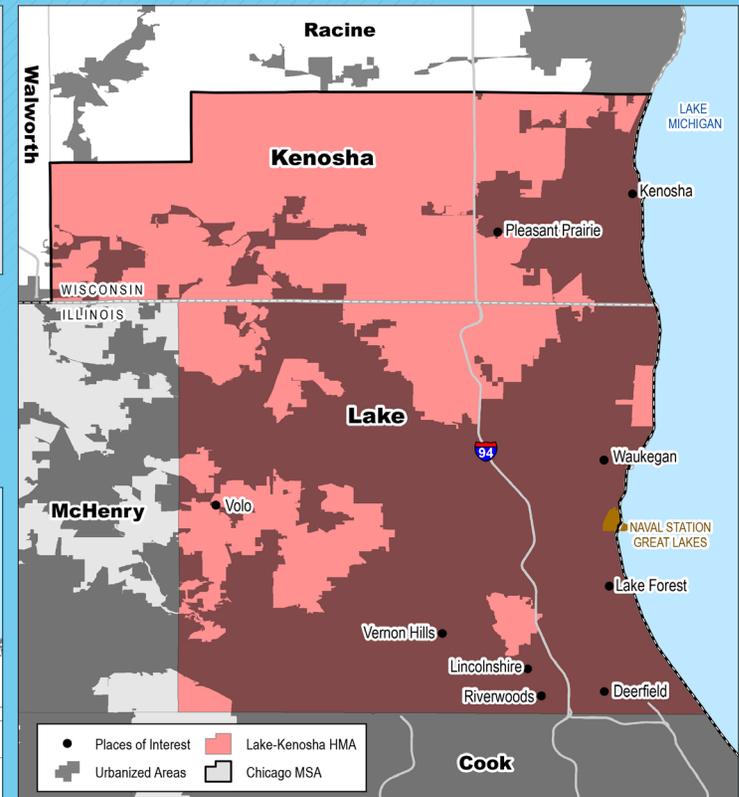


Executive Summary

Housing Market Area Description

The Lake County-Kenosha County Housing Market Area (hereafter, the Lake-Kenosha HMA) consists of two counties: Lake County, Illinois, and Kenosha County, Wisconsin. The two-county area is coterminous with the Lake County-Kenosha County, IL-WI Metropolitan Division and is part of the Chicago-Naperville-Elgin, IL-IN-WI Metropolitan Statistical Area (hereafter, Chicago MSA). The HMA is predominantly suburban, with employment centers disbursed throughout the area rather than a central business district, and a relatively large share of housing is single-family homes. Slightly less than one-half of residents commuted to a job outside the HMA in 2017, mostly to other places in Illinois and Wisconsin. Industries of economic significance within the HMA include pharmaceuticals, business services, and distribution.

The current population of the HMA is estimated at 863,800.



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



Weak: The number of jobs lost during the second quarter of 2020 exceeded the total number of jobs gained from 2011 through 2018.

The economy has weakened sharply since March 2020 because of measures taken to slow the spread of COVID-19. During the second quarter of 2020, nonfarm payrolls declined 12.0 percent, or by 51,100 jobs. For context, from 2011 through 2018, total nonfarm payrolls increased by 44,800 jobs, or an average of 5,600 jobs annually. Job growth slowed to 400, or 0.1 percent, in 2019, partially because of corporate relocations out of the HMA. During the 3-year forecast period, jobs are expected to increase an average of 0.5 percent annually, with growth strengthening as businesses increase capacity and consumer confidence rises.

Sales Market



Slightly Soft: From 2014 through 2019, total home sales declined an average of 1 percent annually and prices increased an average of 1 percent annually.

The average home sales price is up from the 2012 low but is below the 2007 high. During the 12 months ending June 2020, home sales totaled 14,800, down 8 percent from the previous 12 months, and the average home sales price was \$280,900, up 3 percent from a year earlier. Fewer homes on the market, combined with increased demand for larger homes because of an increase in working and attending school from home, contributed to the recent decline in sales and increase in prices. During the 3-year forecast period, demand is expected for an additional 1,875 homes. The 220 homes currently under construction will meet a portion of forecast demand.

Rental Market



Balanced but Weakening: The overall rental vacancy rate is currently estimated at 6.3 percent, down from 8.5 percent in 2010.

Apartment market conditions are also balanced. During the second quarter of 2020, the average apartment rent was \$1,220—up 3 percent from a year ago, continuing a period of 3-percent year-over-year increases that began in 2018. The apartment vacancy rate was 4.0 percent during the second quarter of 2020, up 0.4 percentage point from a year earlier. Weak economic conditions have led to fewer households being able to pay rent. During the final week of June 2020, approximately 22 percent of renter households in the Chicago MSA had deferred or did not pay rent (U.S. Census Household Pulse Survey, Week 9). Most of those households had incomes of less than \$35,000. During the forecast period, demand is expected for 1,050 additional rental units. The 810 units currently under construction represent approximately three-fourths of expected demand.

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3-Year Housing Demand Forecast		
	Sales Units	Rental Units
Lake-Kenosha HMA	Total Demand	1,875
	Under Construction	220
		810

Notes: Total demand represents the estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of July 1, 2020. The forecast period is July 1, 2020, to July 1, 2023.
Source: Estimates by the analyst



Economic Conditions

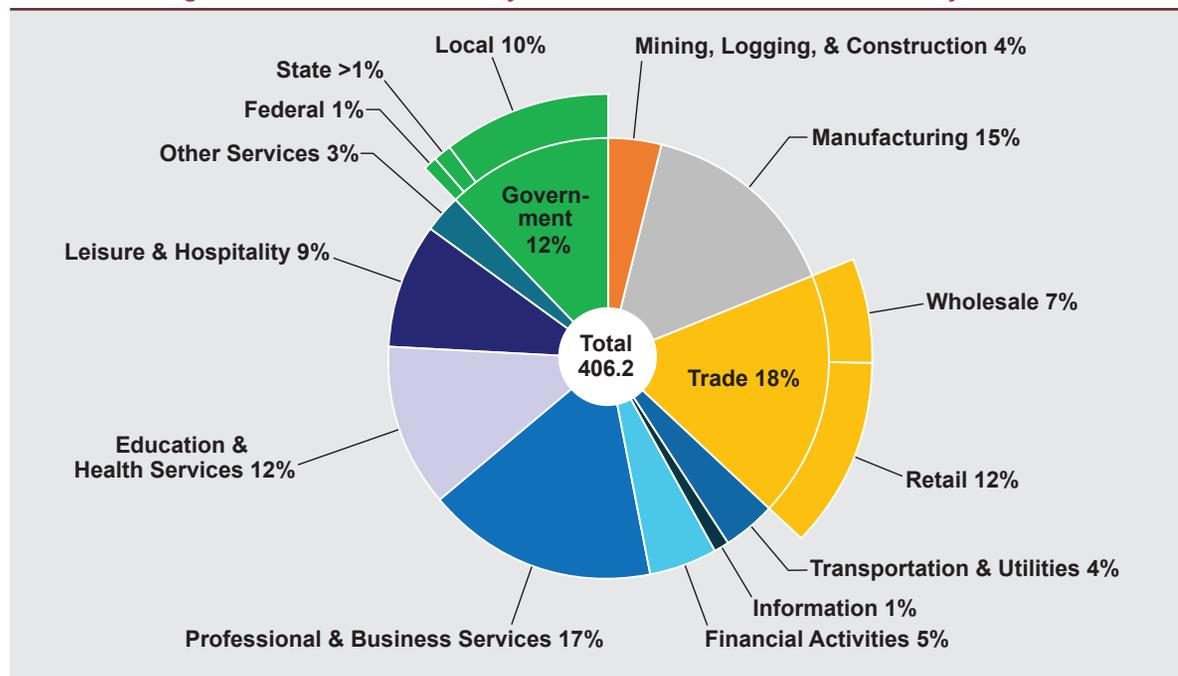
Largest Sector: Wholesale and Retail Trade

Job loss during the second quarter of 2020, which included temporary business closures to limit the spread of COVID-19, totaled 51,100—a 12.0-percent decline from the same quarter a year earlier. Losses during the quarter occurred in 10 of the 11 sectors but were concentrated in the leisure and hospitality sector.

Primary Local Economic Factors

The Lake-Kenosha HMA is a center for corporate operations, with 11 Fortune 500 companies headquartered in the area. The number of people that work in management of companies and enterprises in the HMA is approximately twice the national average (QCEW Location Quotient). Companies with headquarters in the HMA operate in numerous industries, such as pharmaceutical manufacturers Abbott Laboratories, AbbVie Inc., and Baxter International Inc.; retailers Walgreens Boots Alliance, Inc., and Jockey International, Inc.; finance and credit company Discover Financial Services; and food manufacturer Mondelēz International, Inc. The professional and businesses services sector, which includes management of companies, was the second largest nonfarm payroll sector in the HMA during the 12 months ending June 2020 (Figure 1).

Figure 1. Share of Nonfarm Payroll Jobs in the Lake-Kenosha 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 June 2020. Source: U.S. Bureau of Labor Statistics

Naval Station Great Lakes in Lake County is the only bootcamp for the United States Navy. The station employs approximately 12,000 military and 9,000 civilian personnel on base and at the adjacent Captain James A. Lovell Federal Health Care Center. Each year, more than 38,000 recruits graduate from basic training, becoming sailors in the U.S. Navy. The base had an economic impact of \$1.3 billion in Illinois in 2016 (Visit Lake County).

The location of the HMA—approximately 50 miles north of downtown Chicago, 50 miles south of downtown Milwaukee, and bisected by Interstate 94—has enabled warehousing, packaging, and distribution to become an increasingly important part of the local economy. From 2011—the first year of job growth after the end of the Great Recession—through 2018, the transportation and utilities sector grew by nearly 200 percent, which was the fastest rate of growth among all sectors in the HMA. Much of the job growth is attributed to Uline—a

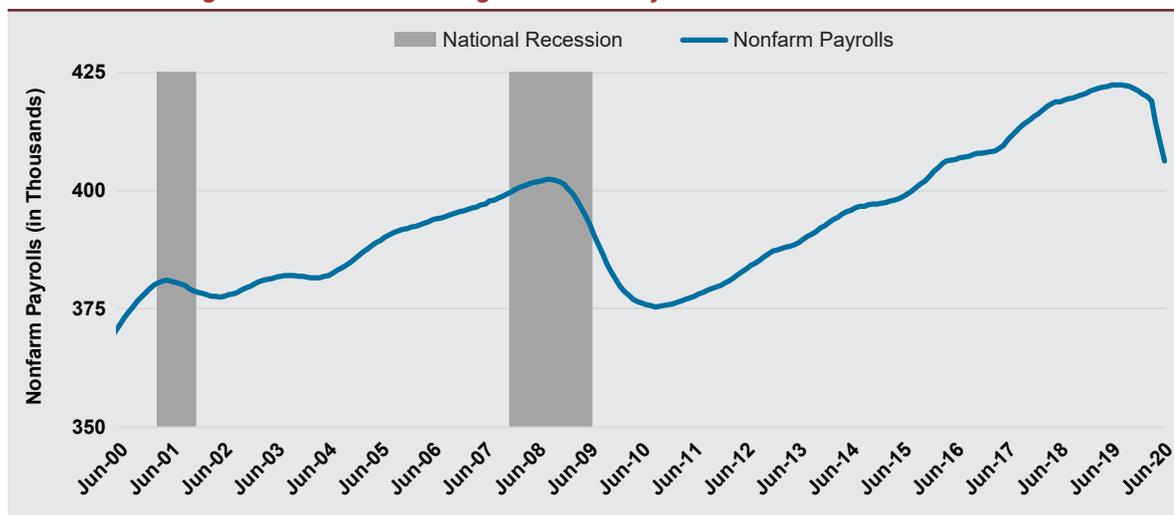
distributor of shipping, packaging, and industrial supplies headquartered in Kenosha County—which has more than doubled its employee count since 2010. To support the increase in freight traffic along I-94, a \$1.8 billion highway expansion project in Kenosha and Racine Counties is currently underway.

Because of the proximity to the cities of Chicago and Milwaukee, economic and housing conditions in the HMA are closely connected to conditions in the surrounding area. In 2017, approximately 47 percent of people working in the HMA lived elsewhere, mostly in northeastern Illinois and southeastern Wisconsin (U.S. Census OnTheMap). Conversely, 49 percent of residents commuted outside the HMA for work in 2017.

Current Conditions— Nonfarm Payrolls

Nonfarm payrolls have fallen sharply in the past 12 months. The average number of nonfarm payroll jobs was 406,200 during the 12 months ending June 2020—down by 16,100 jobs, or 3.8 percent, from a year earlier (Figure 2). Job losses occurred in 9 of the 11 sectors but were largest in the leisure and hospitality sector, which fell by 5,400 jobs, or 13.0 percent (Table 1). Although most of the job loss is attributed to temporary business closures enacted to limit the spread of COVID-19, payrolls had been declining since late 2019, partially because of corporate relocations out of the HMA and a shift away from in-store retail spending.

Figure 2. 12-Month Average Nonfarm Payrolls in the Lake-Kenosha 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 Lake-Kenosha HMA, by Sector

	12 Months Ending June 2019	12 Months Ending June 2020	Absolute Change	Percentage Change
Total Nonfarm Payroll Jobs	422.3	406.2	-16.1	-3.8
Goods-Producing Sectors	78.2	77.4	-0.8	-1.0
Mining, Logging, & Construction	15.8	15.5	-0.3	-1.9
Manufacturing	62.4	62.0	-0.4	-0.6
Service-Providing Sectors	344.1	328.8	-15.3	-4.4
Wholesale & Retail Trade	77.7	74.4	-3.3	-4.2
Transportation & Utilities	15.3	15.5	0.2	1.3
Information	3.6	3.4	-0.2	-5.6
Financial Activities	22.6	22.0	-0.6	-2.7
Professional & Business Services	71.7	67.7	-4.0	-5.6
Education & Health Services	47.9	48.0	0.1	0.2
Leisure & Hospitality	41.4	36.0	-5.4	-13.0
Other Services	13.4	13.0	-0.4	-3.0
Government	50.6	48.8	-1.8	-3.6

Notes: Based on 12-month averages through June 2019 and June 2020. Numbers may not add to totals due to rounding. Data are in thousands.
Source: U.S. Bureau of Labor Statistics

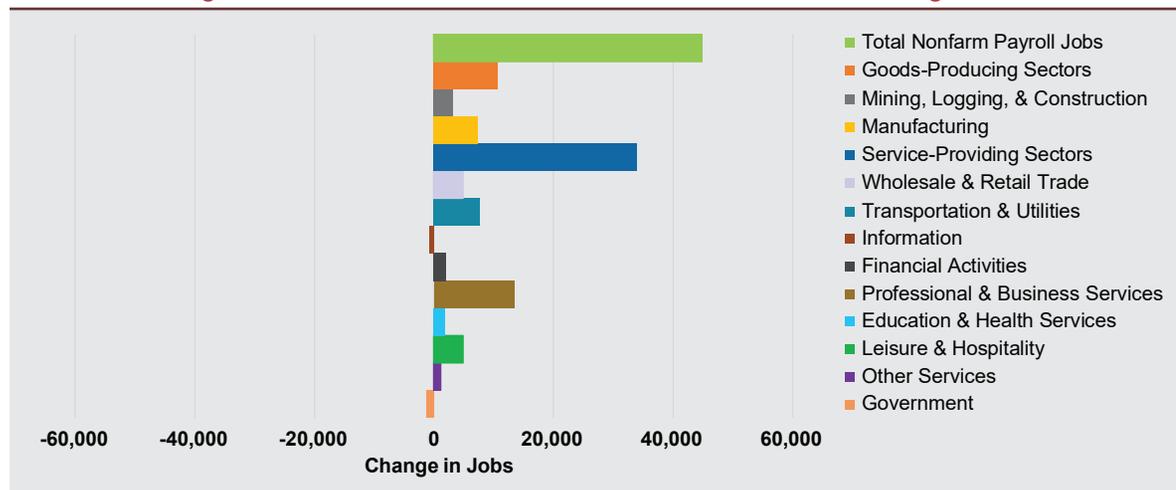


Impacts of COVID-19

A substantial portion of the recent job loss has occurred since March 2020 and is attributed to individual consumer choices and public policy responses to limit the spread of COVID-19, which was declared a global pandemic on March 11, 2020. A stay-at-home order was in effect from March 21, 2020, through May 29, 2020, in Illinois and from March 26, 2020, through May 13, 2020, in Wisconsin, restricting or temporarily closing some customer-facing and service-oriented businesses. Government restrictions have eased since late May, but individuals and businesses continue to limit in-person interaction, resulting in reduced consumer spending. From January to July 1, 2020, consumer spending declined approximately 25 percent in Lake County and 20 percent in Kenosha County (Opportunity Insights).

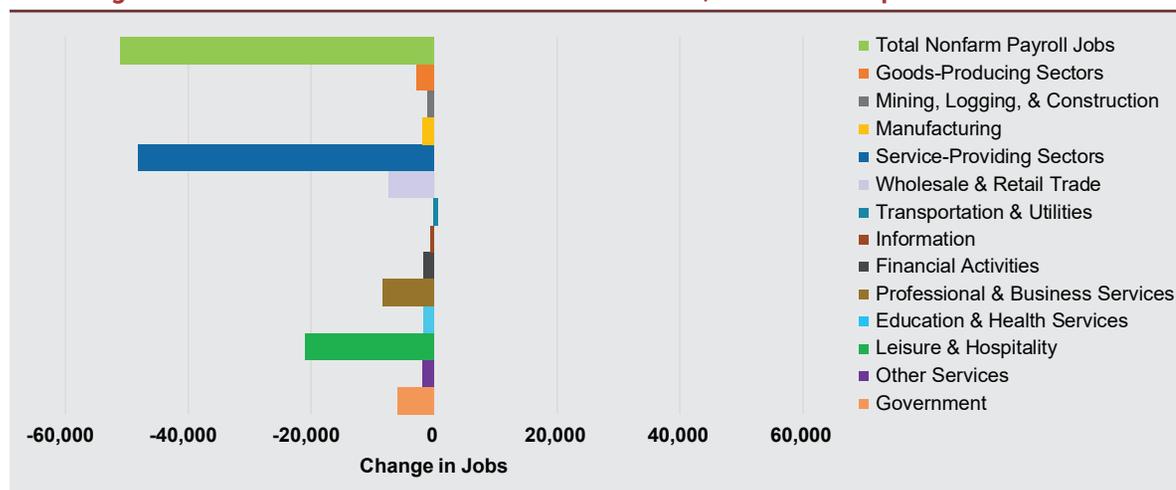
During the second quarter of 2020, nonfarm payrolls averaged 374,200—down 51,100 jobs, or 12.0 percent, compared with the second quarter of 2019; that loss exceeded the number of all jobs gained from 2011 through 2018 (Figures 3a and 3b). The leisure and hospitality sector accounted for 40 percent of the jobs lost in the HMA during the second quarter of 2020, down by 21,000, or 49 percent. Restaurants, bars, and hotels reopened in June 2020, with capacity restrictions and lower customer demand, but seasonal attractions have remained closed. Six Flags Great America,

Figure 3a. Sector Growth in the Lake-Kenosha HMA, 2011 Through 2018



Source: U.S. Bureau of Labor Statistics

Figure 3b. Sector Growth in the Lake-Kenosha HMA, 2Q 2020 Compared with 2Q 2019



Note: 2Q = second quarter.
Source: U.S. Bureau of Labor Statistics



an amusement park with capacity for 54,000 visitors a day and one of the largest employers in the HMA (Table 2); Ravinia Festival, an outdoor concert venue with nightly events for up to 15,000 attendees; and the Bristol Renaissance Faire, which draws 200,000 throughout the summer, did not open for the 2020 season. The only sector to add jobs compared with the second quarter of 2019 was the transportation and utilities sector, which was up by 700 jobs, or 4.6 percent. In response to an accelerating shift toward e-commerce, Amazon.com, Inc. distribution centers and Uline added an unannounced number of jobs.

Current Conditions— Unemployment

The unemployment rate in the Lake-Kenosha HMA was at a 2-decade low of 4.1 percent in 2019, but temporary business closures and reduced spending since March 2020 have resulted in increased unemployment. During the 12 months ending June 2020, the unemployment rate averaged 6.0 percent—up from 4.3 percent during the previous 12 months but lower than the previous peak of 10.6 percent in 2010 (Figure 4). More reflective of current conditions, however, the unemployment rate during the second quarter of 2020 was 13.0 percent—up from 3.6 percent during the second quarter of 2019. The previous second quarter high was 9.7 percent in 2010.

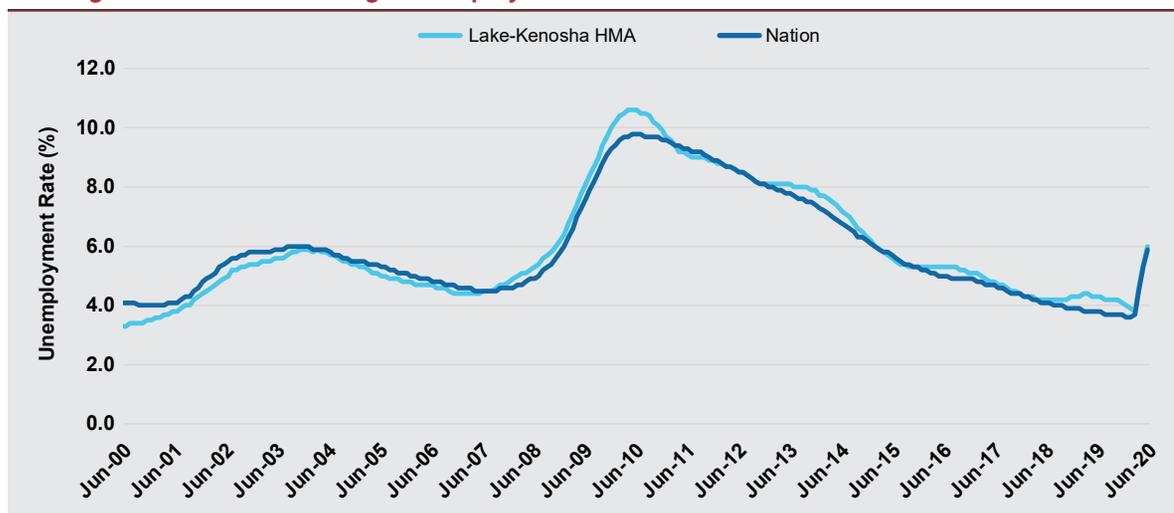
Table 2. Major Employers in the Lake-Kenosha HMA

Name of Employer	Nonfarm Payroll Sector	Number of Employees
AbbVie Inc.	Manufacturing	11,000
Naval Station Great Lakes	Government	9,000
Baxter International Inc.	Manufacturing	5,900
Walgreens Boots Alliance, Inc.	Wholesale & Retail Trade	5,000
Abbott Laboratories	Manufacturing	4,000
Aon/Hewitt	Professional & Business Services	4,000
Alight Solutions LLC	Professional & Business Services	4,000
W.W. Grainger, Inc.	Manufacturing	3,610
CDW Corporation	Wholesale & Retail Trade	3,600
Six Flags Great America	Leisure & Hospitality	3,000

Note: Excludes local school districts and active-duty military personnel.

Sources: Choose Milwaukee, 2018; Kenosha Area Business Alliance, 2017; Lake County, 2018, 2020; Lake County Partners, 2016; Moody's, Inc. 2020

Figure 4. 12-Month Average Unemployment Rate in the Lake-Kenosha HMA and the Nation



Note: Based on the 12-month moving average.

Source: U.S. Bureau of Labor Statistics



Economic Periods of Significance

2000 Through 2008:

Growth in the Service-Providing Sectors

The early and mid-2000s were a period of economic growth, supported both by new residents that commuted to jobs outside the HMA and by service-sector jobs within the HMA generated, in part, by the new residents. The proportion of residents commuting to jobs outside the HMA increased from 43 percent in 2002 to 47 percent in 2008. From 2001 through 2008, nonfarm payrolls increased by an average of 2,900 jobs, or 0.7 percent, annually. All job gains were in the service-providing sectors, which increased by an average of 4,300 jobs, or 1.4 percent, annually. Jobs in sectors that primarily serve the local population—the education and health services, the wholesale and retail trade, the leisure and hospitality, and the government sectors—accounted for three-fourths of the gains. Notable gains at companies that produce goods or services for sale outside the HMA include 1,700 additional employees at Abbott Laboratories and 600 employees at Baxter International Inc., both headquartered in the HMA. Losses in the manufacturing sector—which averaged 1,400 jobs, or 2.1 percent, annually—partially offset gains elsewhere.

2009 Through 2010: Job Decline

The period from 2009 through 2010 was a time of weak economic conditions influenced by the national housing crisis and the Great Recession. Total nonfarm payrolls declined by an average of 12,800 jobs, or 3.2 percent, annually. Large corporations in the high-tech, finance, and pharmaceutical industries announced layoffs in 2009 and 2010. Motorola Mobility LLC, The Hongkong and Shanghai Banking Corporation Limited (HSBC), Discover Financial Services, and Takeda Pharmaceutical Company Limited reduced their combined workforces by 2,300 employees. Single-family home construction, which had been elevated in the early 2000s—supporting many jobs in the construction subsector—had been declining since 2005 and fell sharply in 2009 and 2010 in response to the national housing crisis. Jobs in the

mining, logging, and construction sector declined by an average of 3,300, or 19.1 percent, annually during 2009 and 2010, continuing a period of decline that began in 2007.

The transportation and utilities sector was one of only three sectors to add jobs during 2009 and 2010, with an average increase of 500 jobs, or 6.5 percent, annually. Many of the gains were associated with the growing logistics and distribution industry centered around I-94. The Visual Pak Companies, a company headquartered in Waukegan since the early 1980s, added freight services in 2009, contributing to the increase in jobs.

2011 Through 2018: Recovery and Expansion

The 2010s were a period of relatively strong job growth. Payrolls expanded by an average of 5,600 jobs, or 1.4 percent, annually from 2011 through 2018—exceeding the 2008 high in 2015, 1 year after the nation had recovered. Payrolls in the professional and business services sector led gains, with an average increase of 1,700 jobs, or 2.7 percent, annually. Only two sectors declined: the government sector, down by an average of 200 jobs, or 0.3 percent, annually; and the information sector, down by an average of 100 jobs, or 2.5 percent, annually.

Companies with corporate headquarters in the HMA—including Walgreens Boots Alliance, Inc.; Baxter International Inc.; CDW Corporation; and Alight Solutions LLC—added a combined 5,800 employees during the period. Caterpillar Inc. relocated its corporate headquarters from Peoria to Deerfield, Illinois, bringing 300 jobs to the area in 2017. The company known as Abbott Laboratories in 2010 remained stable but split into two corporations to allow for specialization: AbbVie Inc., which focuses on pharmaceutical manufacturing, and Abbott Laboratories, which works on the other lines of business. A notable exception to the corporate expansion was Motorola Mobility LLC, which employed 4,000 in the HMA in 2011 but relocated its office to downtown Chicago in 2014.

The transportation and utilities sector continued to emerge as a source of job growth during the 2010s. From 2011 through 2018, the sector added an average

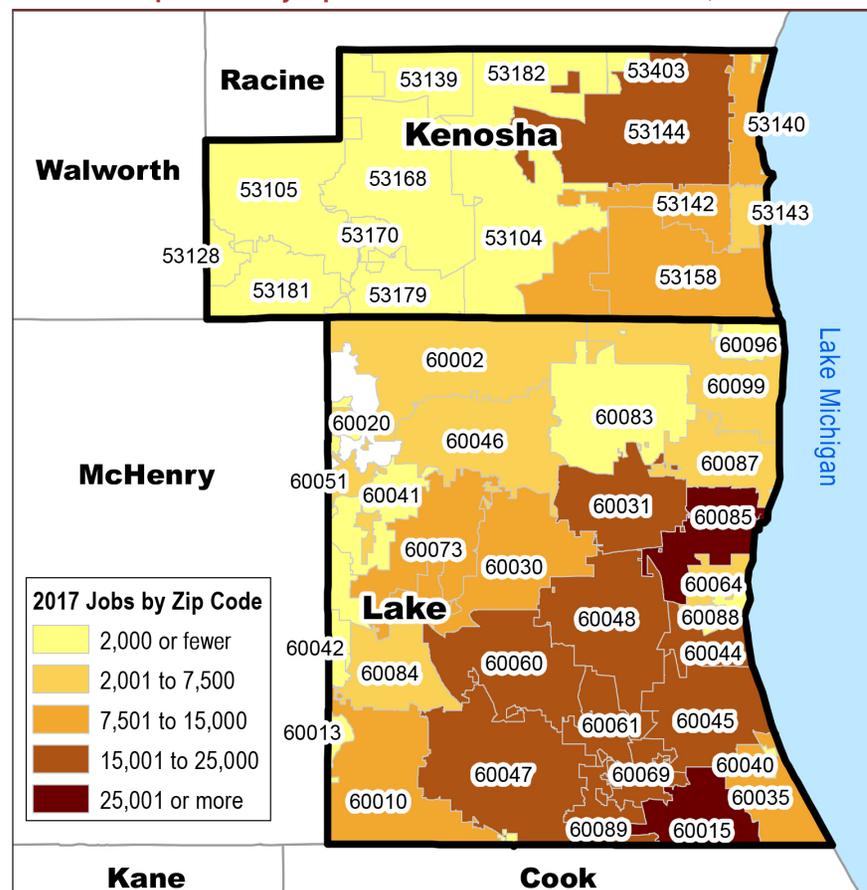
of 1,000 jobs, or 8.5 percent growth, annually. Uline moved from Lake County to Kenosha County in 2010 and has since expanded into more than a dozen buildings. Amazon.com, Inc. opened warehouses in Kenosha in 2015 and Waukegan in 2017, hiring nearly 2,000 workers.

2019: Job Growth Slows

Job growth slowed substantially in 2019 compared with earlier in the 2010s because of corporate relocations out of the HMA and an increased shift toward online shopping. Nonfarm payrolls increased by only 400 jobs, or 0.1 percent, during 2019. The professional and businesses services sector added 600 jobs, or 0.9 percent, which was approximately 1,100 jobs below the average annual increase during the previous 8 years. The wholesale and retail trade sector declined by 1,400 jobs, or 1.8 percent, in 2019, compared with an average annual gain of 600 jobs, or 0.8 percent, during the previous 8-year period. Nationwide, online spending has risen to 16 percent of total retail spending, up from 6 percent in 2010, which has reduced the need for brick-and-mortar retail stores. Store closures in the HMA in 2019 included Shopko and Payless Shoe Source.

Corporate relocations have slowed economic growth, as companies moved from office parks in the HMA to larger central city downtowns. Walgreens Boots Alliance, Inc., Mondelēz International, Inc., and Takeda Pharmaceutical Company Limited announced plans in early 2019 to move workers out of the area by the end of 2020. A total of 1,700 workers at Walgreens Boots Alliance, Inc. and Mondelēz International, Inc. began transferring to offices in downtown Chicago, and 1,000 jobs at Takeda Pharmaceutical Company Limited began relocating to Boston in late 2019. The Walgreens Boots Alliance, Inc. headquarters designation and some employees will remain in the HMA.

Map 3: Jobs by Zip code in the Lake-Kenosha HMA, 2017



Jobs by Zip Code

In the HMA in 2017, jobs were generally concentrated in eastern Lake and Kenosha Counties (Map 3). The 60085 Zip code, which roughly corresponds to Waukegan, Illinois, had 33,800 jobs—the largest concentration of jobs in the HMA, including facilities for Abbott Laboratories, The Visual Pak Companies,

and several manufacturers. With 32,500 jobs, the 60015 Zip code, which roughly corresponds to Deerfield and Riverwoods, IL, had the second largest concentration of jobs, including office parks that housed Discover Financial Services, Walgreens Boots Alliance, Inc., Mondelēz International, Inc.,



and Takeda Pharmaceutical Company Limited. Three of those companies announced relocations in 2019, moving 2,700 jobs out of the 60015 Zip code. In Kenosha County, the Zip code with the most jobs was 53144, which corresponds to the northwest portion of Kenosha, Wisconsin, and includes the University of Wisconsin–Parkside; Gateway Technical College; Kenosha Regional Airport; and several businesses in the transportation and warehousing industry.

Employment Forecast

During the forecast period, nonfarm payrolls are expected to increase by an average of 0.5 percent annually. Total nonfarm payrolls at the end of the forecast period are expected to remain below the 2019 high. Weak economic conditions are expected in the early part of the forecast period, as individuals

and local governments continue to take actions to limit the spread of COVID-19. The vast majority of job gains are expected to occur in the later years of the forecast period, as businesses reopen, increase capacity, and partially recover jobs lost. The rise in online purchasing is expected to continue, supporting job growth in the transportation and utilities sector but hampering the recovery of jobs in the retail trade subsector. In late March 2020, Uline announced plans to construct a new warehouse and add 350 jobs during the next 3 years. Increased production of pharmaceuticals used to address the pandemic are also expected to support job growth. Abbott Laboratories began manufacturing COVID-19 testing supplies in April 2020. Production is expected to continue to increase in the near term.



Population and Households

Current Population: 863,800

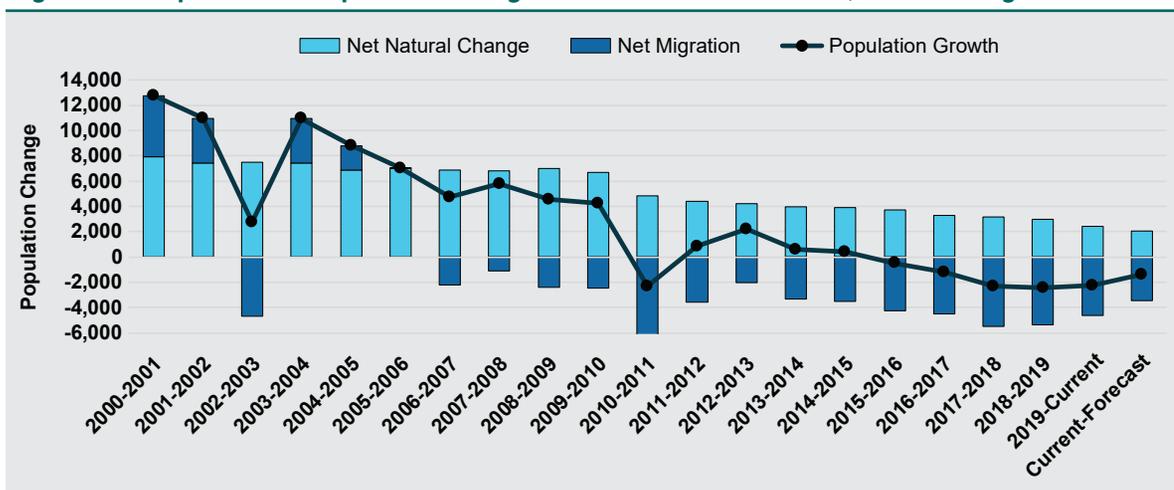
The share of residents aged 60 and older increased from 16 percent of the population in 2010 to 21 percent in 2019, while the portion of residents aged 19 and younger fell from 30 percent in 2010 to 27 percent in 2019.

Population growth in the Lake-Kenosha HMA is affected by both job growth and demographic trends. In the 2000s, years of stronger population growth coincided with years of stronger job growth, but in the 2010s, slower recovery from the Great Recession than elsewhere and an aging population led to slower growth and then a decline of the population. A steady decline in net natural increase (resident births minus resident deaths) and rising net out-migration have both contributed to the overall population decline since 2015 (Figure 5).

2000 to 2010

The population increased relatively quickly in the early 2000s but slowed in the later portion of the decade, averaging an additional 7,600 residents or a 0.9-percent increase annually from 2000 to 2010 (Table 3). From 2000 to 2006, the population grew the fastest, rising by an average of 9,200, or 1.1 percent, annually, including an average annual net natural increase of 7,425 people and average

Figure 5. Components of Population Change in the Lake-Kenosha 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 (July 1, 2020) to July 1, 2023.
Sources: U.S. Census Bureau; current to forecast—estimates by the analyst

Table 3. Lake-Kenosha HMA Population and Household Quick Facts

	2010	Current	Forecast	
Population Quick Facts	Population	869,888	863,800	859,600
	Average Annual Change	7,600	-590	-1,400
	Percentage Change	0.9	-0.1	-0.2
Household Quick Facts	Households	304,362	315,200	317,500
	Average Annual Change	3,200	1,050	770
	Percentage Change	1.1	0.3	0.2

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 (July 1, 2020) to July 1, 2023.
Sources: 2000 and 2010—2000 Census and 2010 Census; current and forecast—estimates by the analyst

net in-migration of 1,775 people. Restructuring under the Base Realignment and Closure (BRAC) process at Naval Station Great Lakes in 2002 resulted in approximately 2,000 military personnel and their families relocating out of the HMA. In the years excluding the BRAC, net in-migration averaged 2,750 annually. From 2006 to 2010, population growth slowed to an average of 4,900, or 0.6 percent, annually. With the onset



of the Great Recession, migration shifted from net in to net out, as people moved away for job opportunities elsewhere and the birthrate fell with weaker economic conditions influencing family planning. Net natural increase averaged 6,925 and net out-migration averaged 2,025 annually during the 2006-to-2010 period.

2010 to 2020

The population increased very slowly in the early 2010s and then declined in later years of the decade. During the period of recovery from the Great Recession, from 2010 to 2015, the population increased by an average of 350 people, or less than 0.1 percent, annually. Net natural increase continued to fall, averaging 4,250 people annually, and net out-migration accelerated to an average of 3,900 people annually. Since 2015, the population has declined by an average of 1,750 people, or 0.2 percent, annually, despite stronger job growth. Corporate relocations out of the HMA and a growing number of retirement-age residents moving out of the HMA contributed to net out-migration rising to an average of 4,850 people annually. The increase in older residents and a lower birthrate—which fell from 11.7 per 1,000 residents in 2011 to 10.5 per 1,000 residents in 2019—led to net natural increase falling to an average of 3,100 people annually since 2015.

International in-migration offset a portion of domestic out-migration in the early 2010s, but recent declines in international in-migration have

contributed to increased net out-migration. In 2018 and 2019, international in-migration averaged 740 people annually—down from an average of 1,725 people annually from 2011 to 2017.

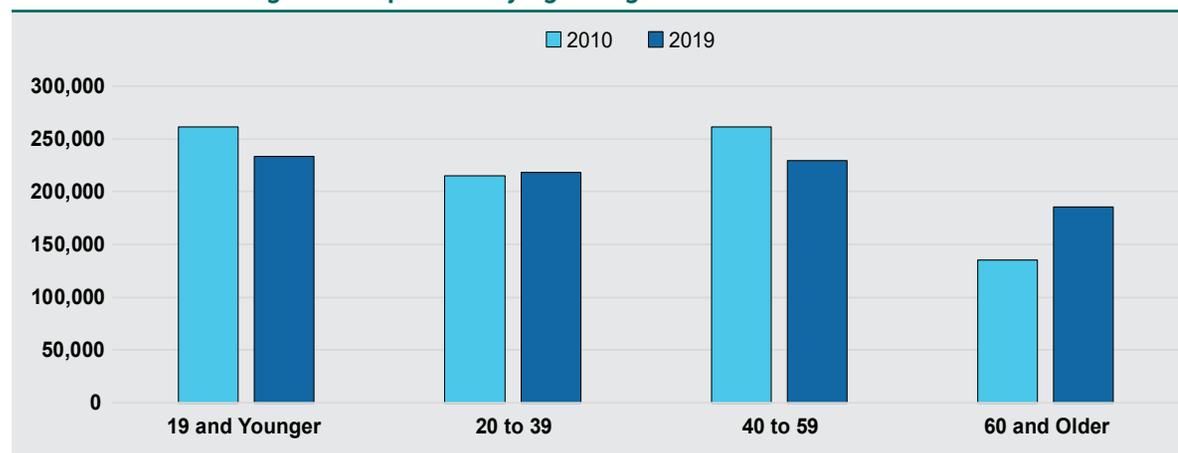
Age Cohorts and the Birthrate

Since 2010, the number of older residents in the HMA has greatly increased, while the number of younger residents has fallen, contributing to the decline in net natural increase. In 2010, the median age in Lake and Kenosha Counties was 36.8 and 36.3 years, respectively, but increased by approximately 2 years in each county to 38.7 and 38.1 years in 2019. From 2010 to 2019, the number of older residents in the HMA aged 60 and older increased 37 percent, while the number people aged 19 and younger fell 11 percent (Figure 6). The number of births fell an average of 1 percent annually from 2011 to 2019, while the number of deaths has increased 2 percent annually.

Domestic Migration

Most domestic migration into and out of the HMA is primarily to and from other areas in Wisconsin and Illinois, with approximately 60 percent of people moving in and 50 percent of the people leaving the HMA attributed to the two states (Internal Revenue Service 2017–2018 data). Net in-migration to the HMA from

Figure 6. Population by Age Range in the Lake-Kenosha HMA



Sources: 2010 and 2019 American Community Survey 1-year data



Illinois and Wisconsin totaled 670 in 2018 (Table 4). The largest share of movers into the HMA came from Cook County, Illinois, which includes the city of Chicago, and accounted for 60 percent of net in-migration from the two-state area. Domestic out-migration to other parts of the nation offset local in-migration. The most common destinations outside Illinois and Wisconsin included San Diego County, California, which has a large concentration of U.S. Navy personnel, and Maricopa County, Arizona (Phoenix) and Clark County, Nevada (Las Vegas), which are popular retirement destinations.

Population Forecast

The population decline is expected to continue during the forecast period but at a slightly lower level compared with the period since 2015.

The forecast population decline is expected to average 1,400, or 0.2 percent, annually. Net out-migration is expected to slow. In-migration from the city of Chicago and Cook County is expected to increase, partly offsetting a larger portion of out-migration to elsewhere in the nation. With some schools planning to hold classes remotely in the fall of 2020 and employers encouraging employees to work from home in the near term, areas with single-family homes and backyards, which includes much of the HMA, are expected to attract new residents from nearby places, such as the city of Chicago, which has smaller homes and more limited private outdoor space. Following local trends, net natural increase is expected to continue to slow, as the number of births declines and the share of older residents rises.

Table 4. Migration Flows in the Lake-Kenosha HMA

Location	Into the HMA	Out of the HMA	Net Migration
Illinois and Wisconsin Counties	11,550	10,900	670
San Diego County, CA	230	300	-75
Maricopa County, AZ	150	390	-240
Clark County, NV	50	150	-100
Other Counties in the USA	7,625	10,250	-2,625

Source: Missouri Census Data Center Single County IRS Migration Profile 2017–2018

Military Personnel and University Students

The number of military personnel and full-time university students represent a small portion of the population and an even smaller number of households because most students and military personnel live on campus or in military housing. Military personnel represent approximately 2 percent of the population, and university students represent 1 percent of the population.

In September 2019, approximately 15,800 active-duty military personnel and an additional 4,700 national guard or reserve lived in the HMA. Nearly all lived in the 60088, 60064, and 60037 Zip codes, which correspond with the location of the military base and military family-housing complexes. Because the primary function of Naval Station Great Lakes is to hold trainings for early-career personnel, most are required to live on base.

The four largest universities in the HMA—Carthage College, University of Wisconsin–Parkside, Lake Forest College, and Rosalind Franklin University—had a combined enrollment of 10,500 students in the fall of 2019. The universities require freshmen and sophomores to live on campus or with family in a commutable distance, and many undergraduates remain in university housing during their junior and senior years. Fewer than 1,000 student households are estimated to reside off campus in the HMA, or less than one-half of 1 percent of all households.

Household Growth Trends and Forecast

Household growth has also slowed in recent years, reflecting the slower population growth and recent decline. In the 2000s, when population growth was relatively strong—and especially the early 2000s, when mortgages were easier to obtain—household growth averaged 3,200, or 1.1 percent, annually.



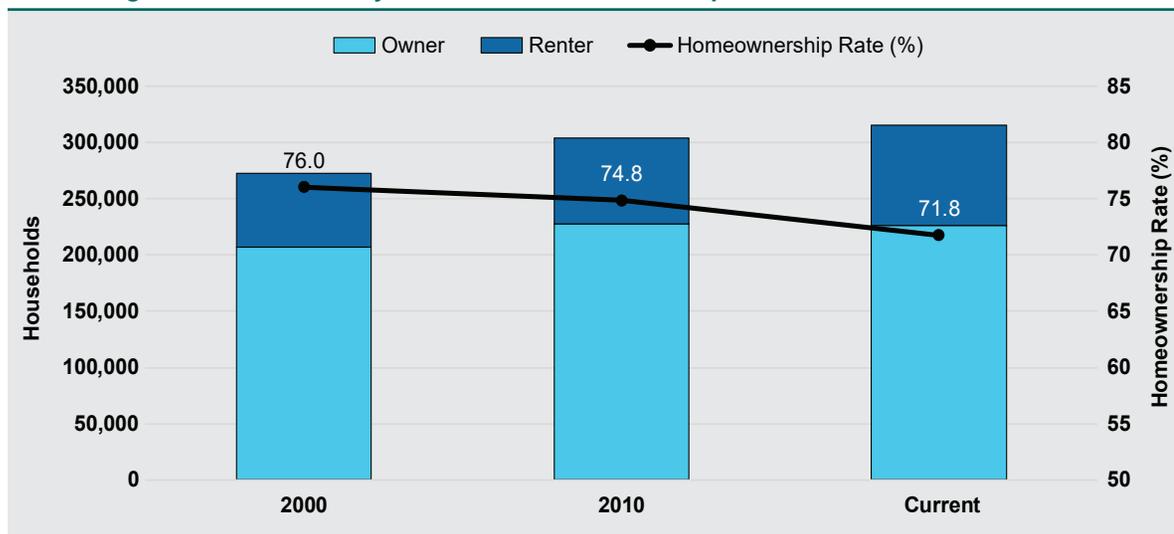
When population growth slowed in the 2010s, household growth slowed too. From 2010 to the current date, household growth has averaged 1,050, or 0.3 percent, annually. During the 3-year forecast period, household growth is expected to average 770, or 0.2 percent, annually. Household growth is expected to continue to moderate but at a decelerating rate compared with the previous decade. Preference for single-family homes—the most common housing type in the HMA—is expected to increase, attracting more households from the city of Chicago and Cook County, where multifamily housing with smaller units is more common.

Households by Tenure

The homeownership rate in the Lake-Kenosha HMA is well above the Chicago MSA and the nation, but as in the Chicago MSA and the nation, the rate has fallen in recent years because the number of renter households has increased faster than the number of owner households. The current homeownership rate in the HMA is estimated at

71.8 percent—down from 74.8 percent in 2010 (Figure 7). The homeownership rate in the Chicago MSA and the nation were 64.4 percent and 64.1 percent, respectively in 2019, also down from 2010 (2010 and 2019 American Community Survey [ACS] 1-year data). Since 2010, renter households in the HMA have increased by an average of 1,225, or 1.5 percent, annually, and owner households have decreased by an average of 160, or 0.1 percent, annually.

Figure 7. Households by Tenure and Homeownership Rate in the Lake-Kenosha HMA



Note: The current date is July 1, 2020.
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by the analyst



Home Sales Market

Market Conditions: Slightly Soft

The average home sales price during the 12 months ending June 2020 was 15 percent above the 2012 low but is 16 percent below the 2007 high.

Housing Market Overview

The home sales market is currently slightly soft. The inventory of homes for sale is relatively low, but price growth in the later 2010s has been limited, partially because of increasing out-migration and overall population decline. Despite strong job growth throughout the 2010s, the number of homes sold has also followed population trends, with a modest decline in the later 2010s. Total home sales—including new and existing single-family homes, townhomes, and condominiums—decreased an average of 1 percent annually from 2014 through 2019, and the average sales price increased 1 percent annually during the same period. The inventory of homes for sale was down from 13.2 months in 2010 to 4.5 months in 2019 (CoreLogic, Inc.). The economic impact of precautionary measures to limit the spread of COVID-19 have led to a decline in home sales and accelerating price growth since March 2020. The home sales vacancy rate is currently estimated at 1.4 percent—down from 2.3 percent in 2010, when the market was soft (Table 5).

The HMA is a relatively affordable area. During the second quarter of 2020, a household with the median income in the HMA could afford 73 percent of homes in the area (NAHB/Wells Fargo Housing Opportunity Index). By comparison, in both the Chicago-Naperville-Arlington Heights area (Cook, DuPage, Will, McHenry, Kendall, and Grundy Counties in Illinois) and the nation, a median income household could afford only 60 percent of homes.

Current Conditions

Home sales during the 12 months ending June 2020 were affected by both the onset of COVID-19 in March 2020 and several large companies relocating out of the HMA. Total home sales declined 8 percent compared with the 12 months ending June 2019, accelerating from a 3-percent decline during the previous 12 months. Home sales prices averaged \$280,900—up 3 percent compared with the 12 months ending June 2019, a shift from a 2-percent decline during the previous 12 months.

Impacts of COVID-19

The effects of COVID-19-related precautions on the home sales market have been mixed, resulting in reduced home sales and rising home sales prices in the second quarter of 2020. Many would-be sellers were reluctant to list homes and make them available to tours, contributing to a change in trends. Total home sales fell 31 percent from a year earlier, to 3,400, which was the fewest second

Table 5. Home Sales Quick Facts in the Lake-Kenosha HMA

	Lake-Kenosha HMA	Nation
Vacancy Rate	1.4%	NA
Months of Inventory	4.3	3.1
Total Home Sales	14,800	5,394,000
1-Year Change	-8%	-5%
New Home Sales Price	\$275,200	\$317,700
1-Year Change	3%	4%
Existing Home Sales Price	\$477,800	\$409,800
1-Year Change	2%	-1%
Mortgage Delinquency Rate	3.8%	4.0%

NA = data not available.

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

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



quarter home sales since 2011 and a steeper year-over-year decline than during the housing crisis in the late 2000s (Metrostudy, A Hanley Wood Company, with adjustments by the analyst). The average homes sales price was up 5 percent, to \$293,700—the sharpest year-over-year increase since the second quarter of 2017. The change in prices and sales is partially attributed to a decline in the inventory of homes for sale, and low mortgage interest rates that incentivized buying. The inventory of homes for sale averaged 3.5 months during the second quarter of 2020—down from 3.9 months during the same quarter a year earlier (CoreLogic, Inc., with adjustments by the analyst). Mortgage interest rates averaged 3.2 percent for a 30-year fixed-rate mortgage during the second quarter of 2020—down from 4.0 percent a year earlier (Freddie Mac, with adjustments by the analyst).

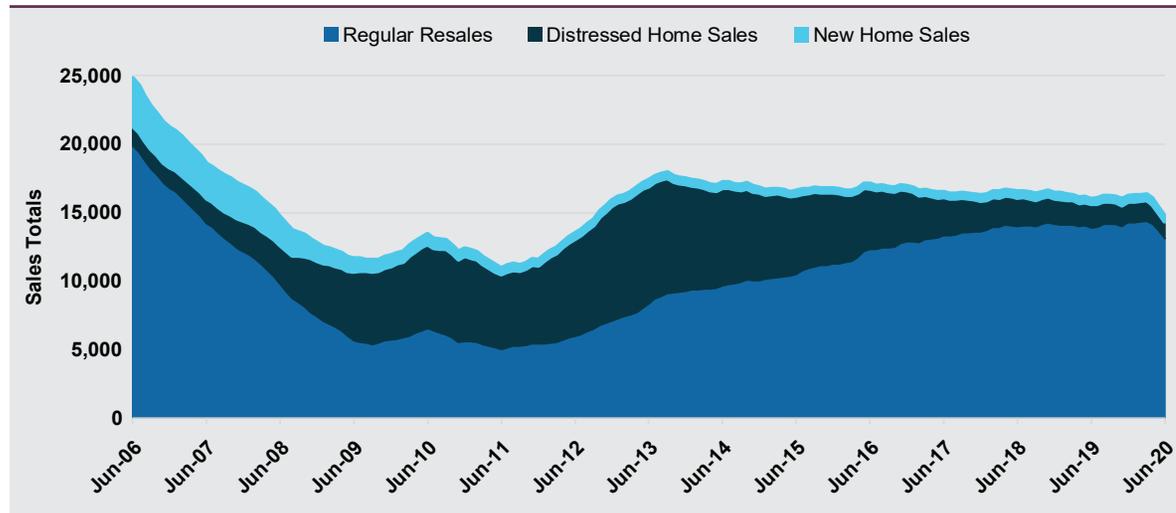
Policy changes enabled by the CARES Act have affected sales resulting from a foreclosure. Enacted on March 27, 2020, the CARES Act covers federally backed mortgage loans, preventing mortgage servicers from initiating the foreclosure process or holding a foreclosure sale, and requires servicers to offer forbearance (temporary deferral of monthly payments) to borrowers experiencing financial hardship because of COVID-19. Foreclosures in the HMA during the second quarter of 2020 were down 90 percent from a year earlier, compared with an average decline of 23 percent year-over-year from 2012 through 2019.

Historical Home Sales Trends

Total home sales have declined modestly since 2014, after a period of partial recovery from recession-era lows, and are well below levels from the mid-2000s. Benefiting from the availability of undeveloped land available for new home construction and supported by stronger population growth, home sales—including new and existing homes—reached a high of 25,350 in 2005. Home sales then fell an average of 17 percent annually from 2006 through 2009; increased 4 percent in 2010, partially because of a federal first-time homebuyer tax credit; and then dropped 7 percent to a historic low of 11,600 in 2011 (Figure 8). During 2012 and 2013, home sales increased an average of 23 percent annually to a recent high of 17,550 in 2013, supported by gains in new, regular resale, and distressed sales. From 2014 through 2019, total home sales declined an average of 1 percent annually, to 16,250. Regular resale sales increased an average of 7 percent annually but were more than offset by a declining number of distressed sales. New construction home sales were unchanged during the 2014-through-2019 period.

New home sales accounted for 15 percent of total home sales from 2005 through 2007, shrank as a portion of total sales each year from 2008 through 2013, and have accounted for only 2 percent of total sales from

Figure 8. 12-Month Sales Totals by Type in the Lake-Kenosha HMA



Note: Distressed home sales include foreclosures and real estate owned properties.
Source: Metrostudy, A Hanley Wood Company, with adjustments by the analyst



2014 through 2019. New home sales accounted for 3 percent of total sales during the second quarter of 2020, partially because new homes are unoccupied and can be easier to tour.

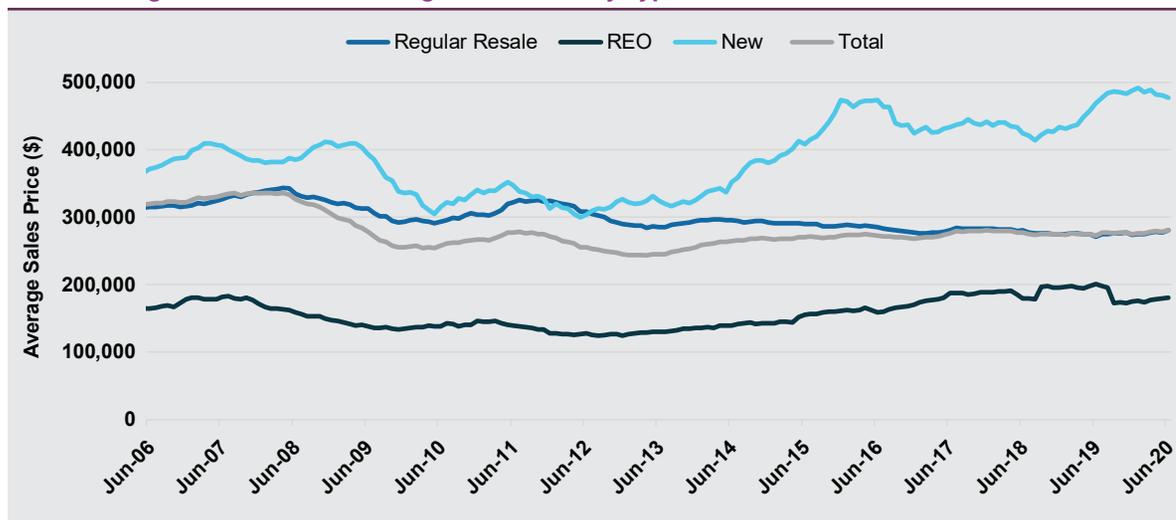
Delinquent Mortgages

The share of seriously delinquent mortgages and real estate owned (REO) properties increased sharply in June 2020. That increase likely reflects homeowners who stopped paying their mortgage at the onset of the COVID-19 pandemic in March 2020 becoming 90 days delinquent on their mortgage in June 2020. The share of seriously delinquent mortgages and REO properties was 3.8 percent in June 2020—up from 1.6 percent in May 2020 and 1.5 percent in June 2019 (CoreLogic, Inc.). Before the recent increase, the rate had been declining since early 2012. For context, the rates in the Chicago MSA and the nation were 4.5 percent and 4.0 percent, respectively, in June 2020—each up 2.4 percentage points from 1 month earlier.

Historical Home Sales Price Trends

The average home sales price in the HMA was at a historic high in 2007. Home sales prices averaged \$335,800 in 2007 and then fell by an average of 6 percent annually, to a low of \$244,500 in 2012 (Figure 9; Metrostudy, A Hanley Wood Company, with adjustments by the analyst). In addition to

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



REO = real estate owned.
Source: Metrostudy, A Hanley Wood Company, with adjustments by the analyst

weak economic conditions during the late 2000s and early 2010s, the high level of inventory of homes for sale—which was 7.5 months in 2012—contributed to the decline in the average home sales price. The changing mix of homes sold also affected the average price, with new homes—which had prices 15 to 35 percent above the average—becoming a smaller portion of total sales and distressed sales—which had prices approximately 50 percent below the average—becoming a larger portion of sales in the early 2010s. As the economy recovered during 2013 and 2014, the average price increased 5 percent annually, but price growth slowed to less than 1 percent annually from 2015 through 2019 because of a declining population and reduced demand for sales housing.

Sales and Prices by Square Footage and Size

Comparing the average sales price per square foot, prices in the HMA are below the average for the Chicago MSA and the nation. During the second quarter of 2020, prices in the HMA averaged \$143 per square foot, compared with \$171 in the MSA and \$189 in the nation (Metrostudy, A Hanley Wood Company, with adjustments by the analyst). Homes also tend to be larger in the HMA relative to the other areas.

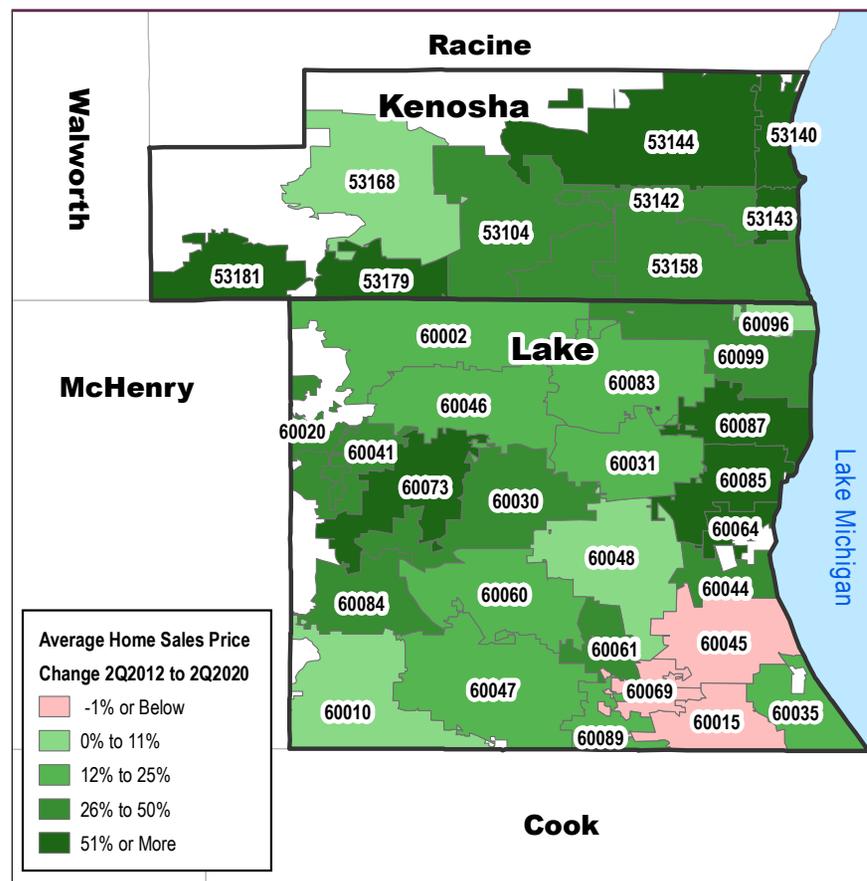
The average size of a home sold during the second quarter of 2020 was 2,100 square feet in the HMA, which is larger than the average of 1,875 in both the MSA and the nation. With the increase in the number of people working and attending school from home since March 2020, home size and price per square foot are expected to be increasingly important factors in homebuying in the near term. The average size of a home sold in the HMA during the second quarter of 2020 was up 4 percent compared with a home sold during the second quarter of 2019. The size of a home sold in the MSA was up 3 percent and was relatively unchanged in the nation during the same period.

Homes sold in the HMA are larger than those in the Chicago MSA and the nation, partially because of the larger share of single-family homes, which tend to be larger than other housing types, such as condominiums. Approximately 92 percent of owner-occupied homes in the HMA are single-family homes, compared with 83 percent in the Chicago MSA and 88 percent in the nation (2019 ACS 1-year data).

Sales Prices by Zip Code

The current average home sales price has increased in nearly all Zip codes in the HMA since the historic low in 2012, but prices in areas with residents most likely to be affected by the corporate relocations have continued to decline. The Zip code with the largest percentage decline in price since 2012 was 60015, which corresponds to the Riverwoods and Deerfield, Illinois areas (Map 4). Walgreens Boots Alliance, Inc., Mondelēz International, Inc., and Takeda Pharmaceutical Company Limited—which all announced relocations in 2019—had offices in the Zip code. The only other Zip codes with a decline in prices since 2012 were the 60069 and 60045 Zip codes, which correspond to Lincolnshire and Lake Forest, Illinois, respectively, and are adjacent to 60015. For context, from the second quarter of 2012 through the second quarter of 2020, the average home sales price in the HMA increased 12 percent. Among the 34 Zip codes in the HMA with 20 or more sales during each of the two quarters of reference, 27 had an average price increase of 12 percent or more, 4 had increases between 1 and 11 percent, and 3 had a decline in prices.

Map 4: Average Home Sales Price Change by Zip Code in the Lake-Kenosha HMA from 2Q 2012 to 2Q 2020



Sales Construction Activity

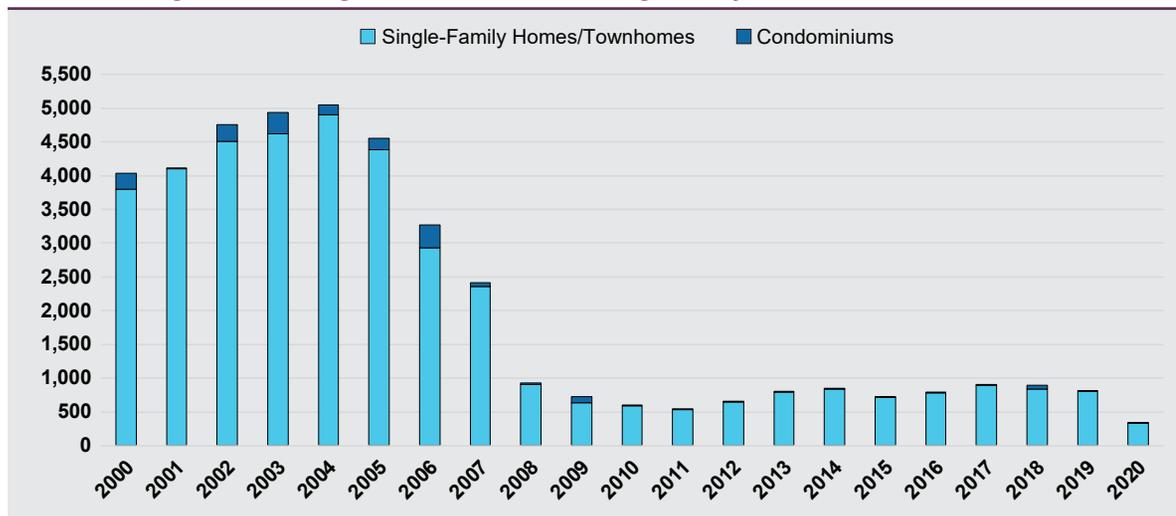
Sales construction activity—as measured by the number of single-family homes, townhomes, and condominiums permitted—was elevated in the 2000s and had increased only modestly since the Great Recession-era lows. Sales

permitting averaged 4,575 homes annually from 2000 to 2004 but fell sharply each year from 2005 through 2008, declining an average of 34 percent annually, to 930 homes permitted in 2008 (Figure 10). Permitting continued at low levels from 2009 through 2011, averaging 620 homes annually, and increased slightly during the period of economic recovery in the HMA, averaging 750 homes annually from 2012 through 2015. As the economy shifted from recovery to expansion, permitting increased to 850 homes annually from 2016 through 2019. During the 12 months ending June 2020, permitting declined, totaling 720—down from 920 homes permitted during the previous 12 months. Economic uncertainty combined with limitations on in-person public meetings since March 2020 contributed to fewer homes permitted during the most recent 12 months.

Examples of Recent Sales and Prices

Approximately 55 percent of existing homes sold in the HMA during the 12 months ending June 2020 were priced between \$100,000 and \$300,000 (Figure 11). Homes priced at less than \$100,000 accounted for 15 percent of existing home sales, and homes priced at \$300,000 or more accounted for the remaining 30 percent of existing sales. New homes tend to be more expensive, with 75 percent of new home sales priced at more than \$300,000.

Figure 10. Average Annual Sales Permitting Activity in the Lake-Kenosha HMA



Notes: Includes single-family homes, townhomes, and condominiums. Data for 2020 are through June 2020.
Sources: U.S. Census Bureau, Building Permits Survey; 2000 through 2019—final data and estimates by the analyst; 2020—preliminary data and estimates by the analyst

Figure 11. Share of Overall Sales by Price Range During the 12 Months Ending June 2020 in the Lake-Kenosha HMA



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



New construction home prices vary substantially throughout the HMA, with prices higher in places with easier access to regional transportation. In outlying areas, farther from the interstate highways and Metra (the regional train network connecting to downtown Chicago) stations, new construction homes are available at prices below the average for the HMA. In Volo, a town in Lake County approximately 12 miles west of Interstate 94 and without a Metra station, 18 single-family homes in the 86-lot Remington Pointe subdivision sold for an average of \$270,500 during the past 12 months. In Vernon Hills, a town in southeast Lake County only 3 miles west of I-94 and with

a Metra station, 21 homes in the 128-lot Residences at the Cuneo Mansion and Gardens subdivision sold for an average of \$726,900 during the most recent 12 months.

Forecast

During the forecast period, demand is expected for an additional 1,875 homes (Table 6). The 220 homes currently under construction are expected to meet a portion of demand during the first year of the forecast period. Demand is expected to increase as economic conditions improve; however, continued weak economic conditions in the near term and slower household growth are expected to result in demand for fewer additional homes compared with recent years.

Table 6. Demand for New Sales Units in the Lake-Kenosha HMA During the Forecast Period

Sales Units	
Demand	1,875 Units
Under Construction	220 Units

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



Rental Market

Market Conditions: Balanced, but Weakening

Construction of general occupancy apartments since 2014 has been evenly divided, with approximately the same number of units built in Lake and Kenosha Counties.

Current Rental Market Conditions and Recent Trends

The rental market is currently balanced but is showing signs of weakening. The vacancy rate for all rental units—including apartments and renter-occupied single-family homes, townhomes, condominiums, and mobile homes—is currently estimated at 6.3 percent, down from 8.5 percent in 2010, when conditions were soft (Table 7). Improving economic conditions through 2019 and growth in renter households resulted in the lower vacancy rate compared with 2010.

Table 7. Rental and Apartment Market Quick Facts in the Lake-Kenosha HMA

Rental Market Quick Facts	2010 (%)	Current (%)	
	Rental Vacancy Rate	8.5	6.3
	Occupied Rental Units by Structure		
	Single-Family Attached & Detached	36	33
	Multifamily (2–4 Units)	19	15
	Multifamily (5+ Units)	44	49
Other (Including Mobile Homes)	2	2	

Apartment Market Quick Facts	Current	YoY Change	
	Apartment Vacancy Rate	4.0	0.4
	Average Rent	\$1,220	3
	Studio	\$961	3
	One-Bedroom	\$939	1
	Two-Bedroom	\$1,303	2
Three-Bedroom	\$1,697	0	

YoY= year-over-year.

Notes: The current date is July 1, 2020. Percentages may not add to 100 due to rounding. Average rent for all units is for 2Q2020. Average rent by bedroom is for June 2020.

Sources: 2010 and 2019 American Community Survey, 1-year data; Real Page, Inc., with adjustments by the analyst

Weaker economic conditions since March 2020 have led to fewer households being able to pay rent. According to a survey conducted during the last week of June 2020, approximately 22 percent of renter households in the Chicago MSA did not pay or deferred rent during the past month (U.S. Census Household Pulse Survey, Week 9). During the same week, approximately 31 percent of renter households stated that they would defer or had slight or no confidence in their ability to pay rent for the next month. Households with incomes less than \$35,000 were most severely affected, accounting for 55 percent of the renters that deferred or did not pay rent and 70 percent of the renters with limited or no confidence to pay next month.

The median rents in Lake and Kenosha Counties were \$1,210 and \$959, respectively (2019 ACS 1-year data), and households with incomes of \$48,400 and \$38,360 would be able to afford the median rental unit without becoming cost burdened. The median renter household income was \$48,065 in Lake County and \$39,498 in Kenosha County.

Components of the Rental Housing Market

Single-family homes are a relatively larger share of the rental units compared with the share in the Chicago MSA. In 2019, single-family homes accounted for 33 percent of all renter-occupied

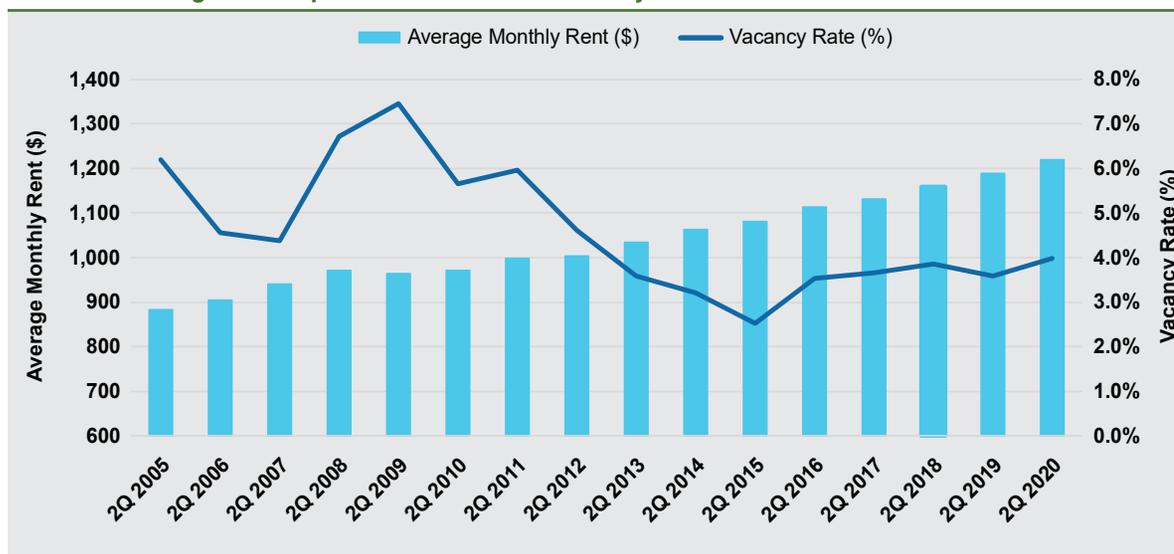
units, compared with 21 percent of rental units in the Chicago MSA (2019 ACS 1-year estimates). Multifamily housing—buildings with two or more units, including duplexes, apartments, renter-occupied condominiums, and assisted living—accounted for 64 percent of all rental units in the HMA in 2019. Mobile homes and other property types accounted for 2 percent of all rental units.

Apartment Market Conditions

The apartment market is also balanced. The average rent has increased steadily since 2018—up an average of 3 percent annually, to \$1,220 during the second quarter of 2020 (Figure 12). Rent growth averaged 2 percent annually from 2013 through 2017 and 1 percent annually from 2008 to 2012. The vacancy rate has been trending upward since reaching a low of 2.5 percent in 2015. During the second quarter of 2020, the vacancy rate increased 0.4 percentage point from the same quarter a year earlier, to 4.0 percent, and was at the highest level since 2012. An increase in the number of new construction rental units entering the market beginning in 2016 contributed to the rising vacancy rate and accelerating rent growth.

Comparing the Lake-Kenosha HMA with apartment conditions in the Chicago MSA, the average rent was lower, rent growth was faster, and the vacancy rate was lower in the HMA during the second quarter of 2020. The average

Figure 12. Apartment Rents and Vacancy Rates in the Lake-Kenosha HMA



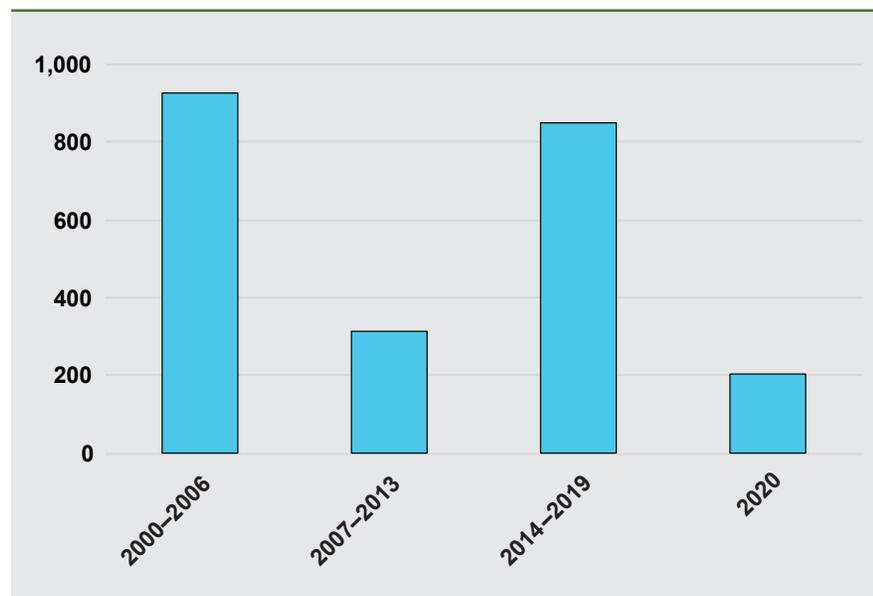
2Q = second quarter.
Source: Real Page, Inc.

rent in the MSA was \$1,576—up less than 1 percent from a year ago and slowing from a 7-percent gain during the previous year. The vacancy rate in the MSA was 5.0 percent—also up 0.4 percentage point from the same quarter a year earlier and has fluctuated between 4.0 and 5.5 percent since 2015.

Rental Construction Activity

Rental construction, as measured by the number of rental units permitted, has been relatively elevated in recent years but is below levels from the early 2000s, when population growth was stronger. From 2000 through 2006, the number of rental units permitted averaged 920 annually (Figure 13). With weakening economic conditions from the Great Recession and early recovery, rental construction averaged only 310 units annually from 2007 through 2013. Stronger job growth, economic recovery from the Great Recession, and a growing number of renter households supported an increase in rental unit permitting, rising to an average of 850 units annually from 2014 through 2019. During the most recent 12 months, permitting totaled 830 units—unchanged from the previous 12 months (preliminary data).

Figure 13. Average Annual Rental Permitting Activity in the Lake-Kenosha HMA

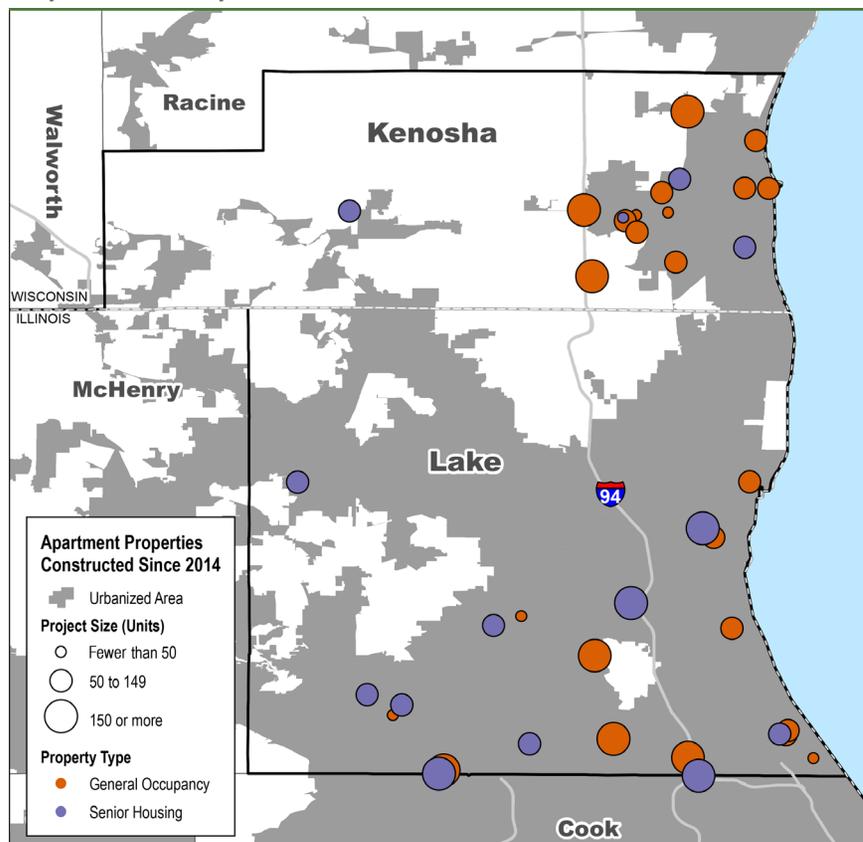


Notes: Includes apartments and units intended for rental occupancy. Data for 2020 are through June 2020. Sources: U.S. Census Bureau, Building Permits Survey; 2000-2019—final data and estimates by the analyst; 2020—preliminary data and estimates by the analyst

Rental Construction Activity by Geography

Rental property construction since 2014 has been concentrated in the southern portion of Lake County and the eastern portion of Kenosha County (Map 5). The growing share of seniors has resulted in a relatively large share of the new rental units being in age-restricted buildings. Senior housing accounted for 30 percent of units permitted, with most of that property type constructed in southern Lake County. General occupancy units accounted for the remaining 70 percent of units permitted, with the number of units evenly divided between Kenosha and Lake Counties.

Map 5: Rental Properties Constructed in the Lake-Kenosha HMA since 2014



Rents at newly constructed apartments in Lake County tend to be higher than rents at newly constructed apartments in Kenosha County. Two general occupancy apartments opened in Lake County in 2019: The Atworth at Melody Farm—a 260-unit property in Vernon Hills, with rents ranging from \$1,390 for a studio to \$3,212 for a three-bedroom unit—and 444 Social—a 302-unit property in Lincolnshire, with rents ranging from \$1,435 for a studio to \$3,665 for a three-bedroom unit. In Kenosha County, Breeze Terrace—a

213-unit apartment in Pleasant Prairie—opened in early 2020, with rents ranging from \$1,099 for a one-bedroom unit to \$1,975 for a two-bedroom unit.

Forecast

During the forecast period, demand is expected for an additional 1,050 rental units (Table 8). The 810 units currently under construction are expected to meet three-fourths of the expected demand. Demand is expected to increase as

economic conditions improve; however, continued weak economic conditions in the near term and slower household growth are expected to result in demand for fewer additional units compared with the demand in recent years.

Table 8. Demand for New Rental Units in the Lake-Kenosha HMA During the Forecast Period

Rental Units	
Demand	1,050 Units
Under Construction	810 Units

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



Terminology Definitions and Notes

A. Definitions

CARES Act	The Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law on March 27th, 2020. The more than \$2 trillion in federal funding provides economic assistance in response to the public health and economic impacts of COVID-19.
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.
Distressed Sales	Short sales and real estate owned (REO) sales.
Forecast Period	7/1/2020–7/1/2023—Estimates by the analyst.
Home Sales/ Home Sales Prices	Includes single-family home, townhome, and condominium sales.
NAHB/Wells Fargo Housing Opportunity Index	The National Association Homebuilders (NAHB)/Wells Fargo 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.



Rental Market/ Rental Vacancy Rate	Includes apartments and other rental units such as single-family, multifamily, and mobile homes.
Sales/Rental Units Permitted	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.
Senior Housing	Housing restricted to tenants meeting a minimum age requirement, typically 55 and older or 62 and older.
Seriously Delinquent Mortgages	Mortgages 90+ days delinquent or in foreclosure.

B. Notes on Geography

1.	The metropolitan division and metropolitan statistical area 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 National Association of Home Buyers (NAHB)/Wells Fargo 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.

D. Photo/Map Credits

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