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Whitewater

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Fiscal and Economic Research Center

**WALWORTH COUNTY HOUSING
REPORT- AN ANALYSIS OF WALWORTH
COUNTY AND ITS MUNICIPALITIES**

by

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Executive Summary

The Fiscal and Economic Research Center of the University of Wisconsin Whitewater has reviewed data regarding both single family and multi-family housing, which develops a picture of Walworth County, Wisconsin's housing market. This report contains three areas of analysis.

Part 1: Walworth County single-family housing supply, cost-efficiency, and demand

Part 2: Walworth County renter-occupied housing

Part 3: A housing analysis of thirteen municipalities in Walworth County

A. Summary of Major Findings & Conclusions

Walworth County has a low and diminishing months' supply of housing, quickly increasing home prices, and a lack of workforce housing options. From 2010-2020, the results for Walworth County show that low rates of housing unit construction have been unable to keep pace with suppressed household growth. Projections by the ACS and DOA show that if household growth rates were to continue at a similar rate, current housing unit construction would not keep pace, further exasperating Walworth County's housing issues. The results indicate that housing unit construction will not keep pace with household growth from 2020-2030. A shortage of housing options would result in lower months' inventory, meaning buyers will have fewer options, and increasing home prices. Policy changes that address this disequilibrium may improve the health of the housing market and prevent the shortage from compounding.

B. Part 1 Overview: Walworth County Single-Family Housing

Determining Owner-Occupied Housing Demand & Supply

Part 1 of the report is focused on determining single-family housing demand and supply in the current Walworth County market. Months' supply of housing, home prices, and other metrics were analyzed to determine the current demand. The months' supply of housing and price of homes over time both indicate high demand for housing in the County which is not being met by current supply. The findings also suggest that the housing shortage is compounded when workforce housing is analyzed in isolation.

Owner-Occupied Workforce Housing Demand & Supply

The availability of owner-occupied workforce housing in Walworth County was reviewed by looking at monthly homeowner housing costs as a percentage of income and Asset Limited, Income Constrained, Employed households (United For ALICE households). The ALICE data revealed household populations in the lowest income brackets lacked access to adequate housing.

Change in Demand for Owner-Occupied Housing

"Population Projections and the Outlook of Walworth County's Homeowner Housing Market" analyzes projected demand changes for owner-occupied housing. Estimates regarding the need for additional owner and renter occupied homes between 2020-2025 and between 2020-2030 are based on household population projections and other metrics discussed in the report. Using the Wisconsin Department of Administration household growth projections, housing demand is projected to increase by 3,475 owner-occupied units between 2020-2025. For the 10-year time frame from 2020-2030, an estimated 6,448 owner-occupied units will be needed. However, as a

note of caution, it was found when reviewing prior projections that the Wisconsin Department of Administration (DOA) projections tend to overestimate household growth in recent years. Several potential household growth scenarios over the next ten years were therefore analyzed based on American Community Survey and DOA household estimates to provide a better idea of housing demand in Walworth County in the near future.

Major Findings and Conclusions: Walworth County

Based on the Study's analysis, this report also concludes that

- There is evidence of high demand for single-family housing in Walworth County.
- Results suggest a general shortage of single-family housing in Walworth County, and this shortage is more pronounced for more workforce housing.
- Comparison of new housing construction, building permits, population growth, and other related projections suggest that a shortage may compound in the near future without intervention.
- Walworth County has a high percentage of seasonal, recreational, and occasional use homes.

C. Part 2 Overview: Walworth County Multi-Family Housing

The rental-occupied housing section of the report looks at data that is focused on any housing where rent is collected. In 2020, roughly 31% of the households in Walworth County lived in rented housing. The percentage of people living in rented housing in Walworth County has remained relatively constant over recent years. The median household income for renting households in 2020 was \$40,751, while the median rent in the County was estimated at \$899/month or \$10,788/year. A household with income of \$38,218 could therefore expect to spend about 28% of its income on housing costs.

Walworth County's rental-occupied workforce housing differs slightly relative to the rest of the State of Wisconsin, in that it appears to be less available. The US Department of Housing and Urban Development considers households that spend more than 30% of their income on housing as burdened by their housing costs. About 42% of Walworth County renter-occupied households spend 30% or more of their income on rent, whereas that number is 43% for the State of Wisconsin. However, the availability (supply) of adequate rental properties for income constrained households is lacking. The data shows that the highest concentration of rental households spending 30% or more on housing costs fall below the rental household median income.

Rental supply and demand over the past several years have been relatively stable. Both the number of renting households and the quantity of newly built rental units have remained low. The median rental price in Walworth County has appreciated 9.7% since 2015, compared to 11.0% in the State of Wisconsin as a whole. The data suggest a need for additional cost-effective rental units targeted to households earning less than the 2020 median rental income of \$40,751.

D. Part 3 Overview: Municipalities Within Walworth County

In addition to assessing Walworth County as a whole, data was also collected for the cities and villages. Note that several of these communities overlap county boundaries. The metrics presented for these municipalities in this report made use of each municipality's individual boundary, extending beyond the Walworth County boundary where appropriate. Measures that were used on a county-wide level were also used to determine the health of the housing market in the identified municipalities. Similar housing shortage trends found in the County level analysis are evident across the municipalities. However, for the smaller communities, there were limits on the availability of all data points.

Each of the municipalities has its own unique housing situation, but some housing trends are present across the municipalities.

Applying the ALICE household data provides further insight into the availability of housing for income constrained households. The municipalities have a heterogeneous distribution of ALICE households. For example, the City of Elkhorn and the Village of Bloomfield have 39% and 35% of households that are below the ALICE Threshold, which is comparable to Walworth County, but in the Village of Walworth, 42% of households are below the ALICE Threshold. Each municipality should review ALICE household distribution when addressing local housing availability issues.

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Data Sources Used in the Study

American Community Survey (ACS) – Census

The American Community Survey (ACS) is a demographics survey issued each year by the Census Bureau. The survey has an initial sample of 3.5 million housing units each year, and each housing unit is randomly selected a maximum of once every five years. This factors to one in thirty-eight US households receiving an invitation to participate in the study each year. Due to the nature of how the data is collected for the ACS, estimates tend to be most accurate for areas with populations of at least 65,000. Areas with smaller populations risk that the households surveyed do not provide an accurate representation of all the households in the area. Therefore, the ACS estimates presented in this report on a municipality level have higher levels of uncertainty. Keep in mind that due to the smaller sample sizes, the municipality projections tend to have a wide margin of error.

Wisconsin Department of Administration (DOA)

The Wisconsin Department of Administration Demographic Services Center develops annual population estimates and future projections for the State of Wisconsin and its counties and municipalities. The household projections developed by the DOA in 2013 using 2010 Census population data are used in this report to estimate future housing demand on a county and municipality level.

Wisconsin Department of Revenue (DOR)

The Wisconsin Department of Revenue records all real estate transfers in the State of Wisconsin. This provides data on property sales including location, date, and selling price of homes. Under Wisconsin law, these records are required to be publicly accessible. The data is used in the report to identify recent months' inventory and home price appreciation in Walworth County and its municipalities. The real estate transfers are filtered to isolate arms-length transactions.

Part 1: Walworth County Single Family Housing

A. Current Supply of Single-Family Housing

Part 1 of this report analyzes the current state of the single-family housing market in Walworth County by estimating the months' supply of housing and home values over time.

- **The months' supply of housing** is the ratio of houses for sale to houses sold. “This provides an indication of the size of the for-sale inventory in relation to the number of houses currently being sold. The months' supply indicates how long the current for-sale inventory would last given the current sales rate if no additional new houses were built” (St. Louis Federal Reserve Bank). This indicator is determined by dividing the total number of homes for sale by the number of sales per month. According to the National Council of Housing Market Analysts, “A market area’s performance in adding and filling additional units is often a better gauge of its ability to accommodate additional units than household growth statistics, especially in an area with a stable or declining population or an aging housing stock that does not satisfy needs or expectations of current residents.”
- **Housing prices over time** are analyzed to evaluate demand directly. Increases in housing prices over time in a particular area can suggest an undersupply of housing, in combination with other factors.

B. Months' Supply of Housing: Walworth County

The Months' Supply of Housing is important for estimating housing demand because it provides insight on the rate at which houses are selling, compared to the unused supply of homes. The Months' Supply of Housing is calculated by taking the number of for-sale homes and dividing it by the number of sales per month over a certain period (in this case, 1 year). This metric can also be reframed as the Absorption Rate, which describes the percent of the existing for-sale homes that would be sold in 1 month if homes continued to sell at the same rate (e.g., a 3 months' supply of housing corresponds to a 33.3% absorption rate, as $1 \text{ month supply} / 3 \text{ months' supply} = 33\%$ sold in a single month).

Months' Supply of Housing: Methodology

The Months' Supply of Housing data was obtained from the Wisconsin Realtors Association's monthly home sale reports for 2018 through July 2022. For 2016 and 2017, the Months' Supply of Housing was calculated using housing sale data from the Wisconsin Department of Revenue historical real estate transfer records. An analysis of Walworth County's for-sale single-family housing market was completed.

- **Walworth County, Single-family Homes:** The Walworth County single-family home data showed an average of 172 homes sold per month, and 3.30 Months' Inventory as of July 2022 (*see Table 1*)

Table 1: Walworth County Months' Inventory of Single-Family Homes						
	Homes Sold July 2021- July 2022	Months	Average Sold Per Month	Available to be Sold July 2022	Month's Supply of Housing	Absorption Rate
Walworth	2,063	12	172	567	3.30	30.3%

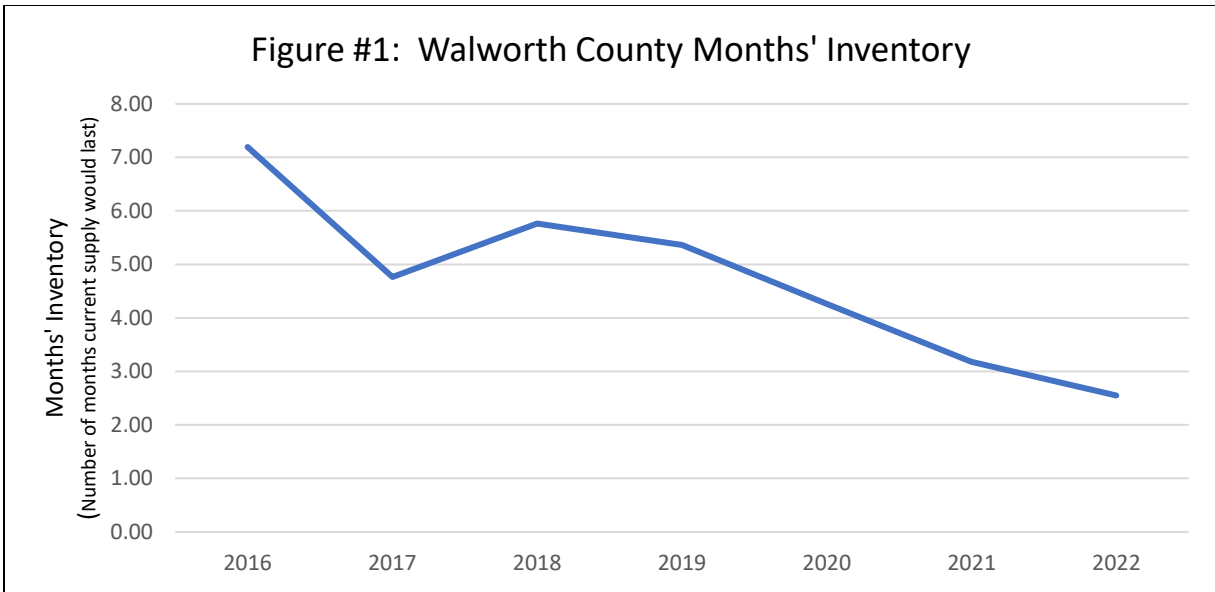
Typically, a market that favors sellers has less than 6 months of supply, while more than 6 months of supply indicates an excess of homes for sale that favors buyers (Findwell). As a result, a Months' Supply of Housing lower than 6 months is a "seller's market" where supply is not meeting demand (i.e., a shortage). Walworth County is below this threshold.

Important to note is the different sources of data for the years 2016-2017 compared to 2018-2022. This may explain the increase in months' inventory from 2017 to 2018.

Even when averaged over each year, Walworth County's months' supply of housing has been decreasing and has been below the 6 months' supply mark since 2017. Walworth County averaged a 3.18 months' supply of housing in 2021. This indicates there is excess demand for single-family housing in Walworth County.

Table 2: Walworth County Months' Inventory: Single-Family Homes						
	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	2,090	12	174	1,253	7.19	13.9%
2017	2,295	12	191	911	4.76	21.0%
2018	1,918	12	160	921	5.76	17.4%
2019	1,915	12	160	856	5.36	18.6%
2020	2,130	12	178	757	4.26	23.4%
2021	2,017	12	168	534	3.18	31.5%
2022	1,145	8	143	364	2.55	39.3%

**2022 months' inventory includes the months of January-August*



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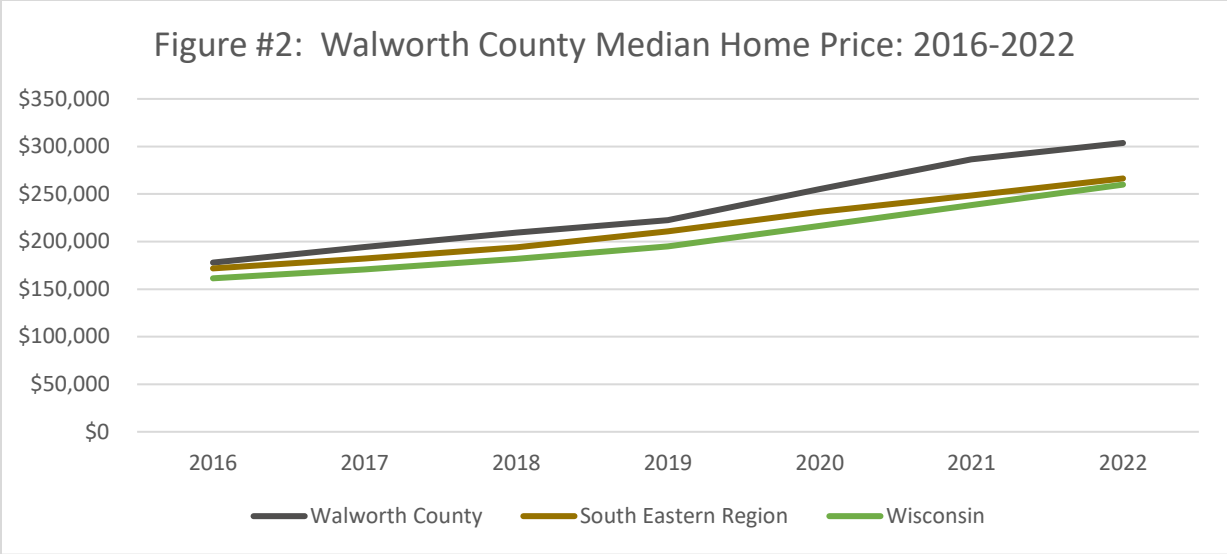
C. Housing Prices Over Time

A supply shortage may result in increasing home prices. Housing prices across the state (and across the country) have trended upwards since 2013. The data in *Table 3* are estimates provided by the Wisconsin Realtors Association. The median price is calculated using summary data of sales prices from multiple listing services measuring existing home and condo sales. As seen in the figures, median home prices for Walworth County have appreciated slightly faster than both the Southeast Region of Wisconsin and the State of Wisconsin as a whole. The Wisconsin Realtors Association defines the Southeast Region of Wisconsin as Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, and Waukesha counties. The total percent appreciation estimate demonstrates a 61.0% increase in the median home sale price for Walworth County from 2016 to 2021. The median home price in Walworth County remains higher than the median home price of Wisconsin and the Southeast Region over the past six years. This may drive demand and prices upward, which can exacerbate the workforce housing challenge. As shown in *Table 3*, Walworth County had a high rate of home price appreciation in the last year alone. The median price appreciated 12.3% in 2021, well outpacing the Southeast Region median price appreciation of 7.4%. The most recent data from July 2022 suggest home prices are continuing to increase. Note that home sales are strongest in the spring, often yielding elevated prices.

Table 3: Walworth County Median Home Price

Year	Walworth			Southeast Region			Wisconsin		
	Median	Yearly Increase	Total % appreciation since 2016	Median	Yearly Increase	Total % appreciation since 2016	Median	Yearly Increase	Total % appreciation since 2016
2016	\$177,913	-	-	\$171,796	-	-	\$161,379	-	-
2017	\$194,403	9.3%	9.3%	\$182,183	6.0%	6.0%	\$170,729	5.8%	5.8%
2018	\$209,367	7.7%	17.7%	\$193,950	6.5%	12.9%	\$181,915	6.6%	12.7%
2019	\$222,633	6.3%	25.1%	\$210,759	8.7%	22.7%	\$195,017	7.2%	20.8%
2020	\$255,035	14.6%	43.3%	\$231,342	9.8%	34.7%	\$216,467	11.0%	34.1%
2021	\$286,479	12.3%	61.0%	\$248,388	7.4%	44.6%	\$238,241	10.1%	47.6%
Aug-22	\$303,643	6.0%	70.7%	\$266,326	7.2%	55.0%	\$259,857	9.1%	61.0%

*2022 median home price was calculated using the months of January-August



**2022 includes January-August

Walworth County Median Close Price

The Wisconsin Department of Revenue’s home sale database is employed to create the median home sale prices for the last six years, 2016-2022. This data captures actual single-family home sales within a given time period. This data found that the median closed home sales price increased by 41.9% in 2021 and by 91.0% over the six-year period. However, this data includes both condominiums and land and building homes. A large number of condominiums were sold for low prices in 2016 and 2018. This results in home price appreciation estimates that are not representative of the housing market as a whole. The large number of condominiums sold in 2016 and 2018 pulled down the median home price, resulting in a seemingly high home price appreciation.

When filtered to include only land and building homes, it is shown that median home price has appreciated at a steady rate from 2016 to 2021 (*Table 5*). The data found that the median closed home sale price increased by 6.9% in 2022 and by 130.7% over the six-year period.

The data was further broken down into quartiles based on home prices. In this instance, the data is divided into three parts, with the second portion representing the average. For example, in 2020, the first quartile estimate is \$177,000. As a result, 25% of single-family homes sold in Walworth County during 2020 were closed below \$177,000, 50% sold between \$177,000 and \$339,000, and 25% sold above \$339,000. The first and third quartile estimates have both grown year to year which is consistent with the increasing overall home price median.

The first and third quartile growth has remained consistent with each other, with third quartile estimate growth slightly outpacing first quartile estimate growth (see *Figure 3*).

Table 4: Walworth County Single Family Median Close Price (Including Condos)			
Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$255,000	21.4%	96.2%
2022	\$253,000	-0.8%	94.6%

*2022 includes January-August

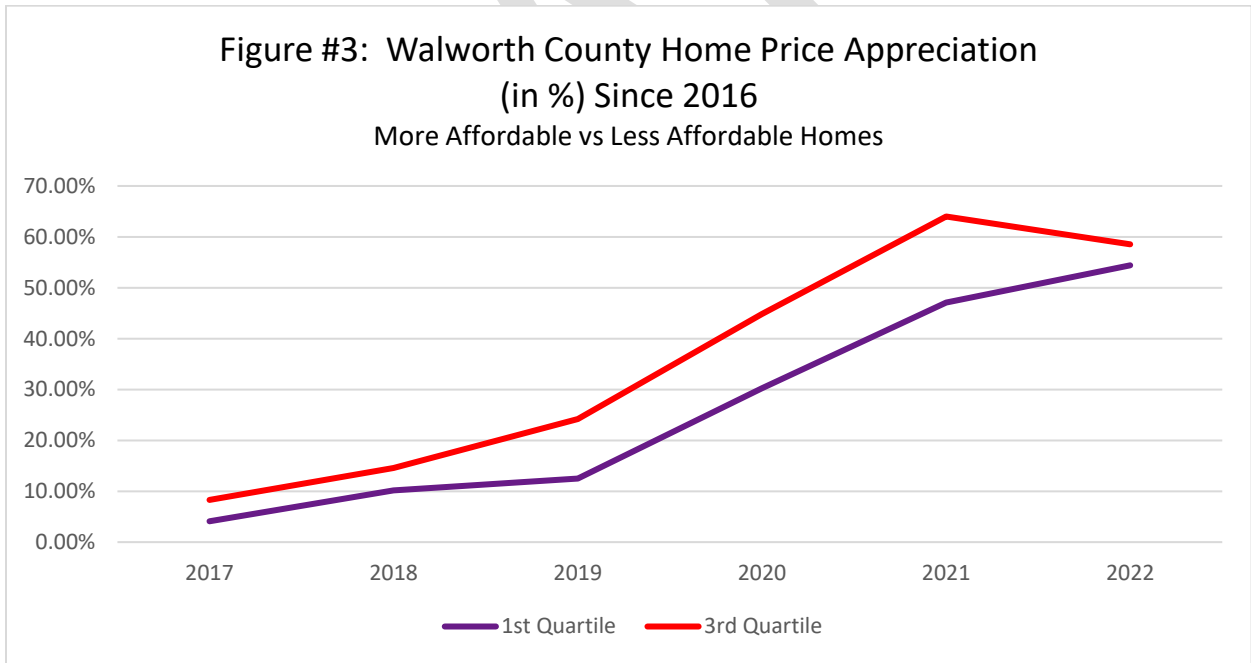
Table 5: Walworth County Single Family Median Close Price (No Condos)			
Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$280,500	33.6%	115.8%
2022	\$299,900	6.9%	130.7%

**2022 includes January-August

Median Close Price Quartiles

Table 6: Walworth County Close Price Quartiles						
Year	1st Quartile			3rd Quartile		
	Estimate	Increase from Previous Year	% Appreciated Since 2016	Estimate	Increase from Previous Year	% Appreciated Since 2016
2016	\$135,975	-	-	\$261,750	-	-
2017	\$141,500	4.1%	4.1%	\$283,350	8.3%	8.3%
2018	\$149,900	5.9%	10.2%	\$299,900	5.8%	14.6%
2019	\$153,000	2.1%	12.5%	\$325,000	8.4%	24.2%
2020	\$177,000	15.7%	30.2%	\$379,000	16.6%	44.8%
2021	\$200,000	13.0%	47.1%	\$429,225	13.3%	64.0%
2022	\$210,000	5.0%	54.4%	\$415,000	-3.3%	58.5%

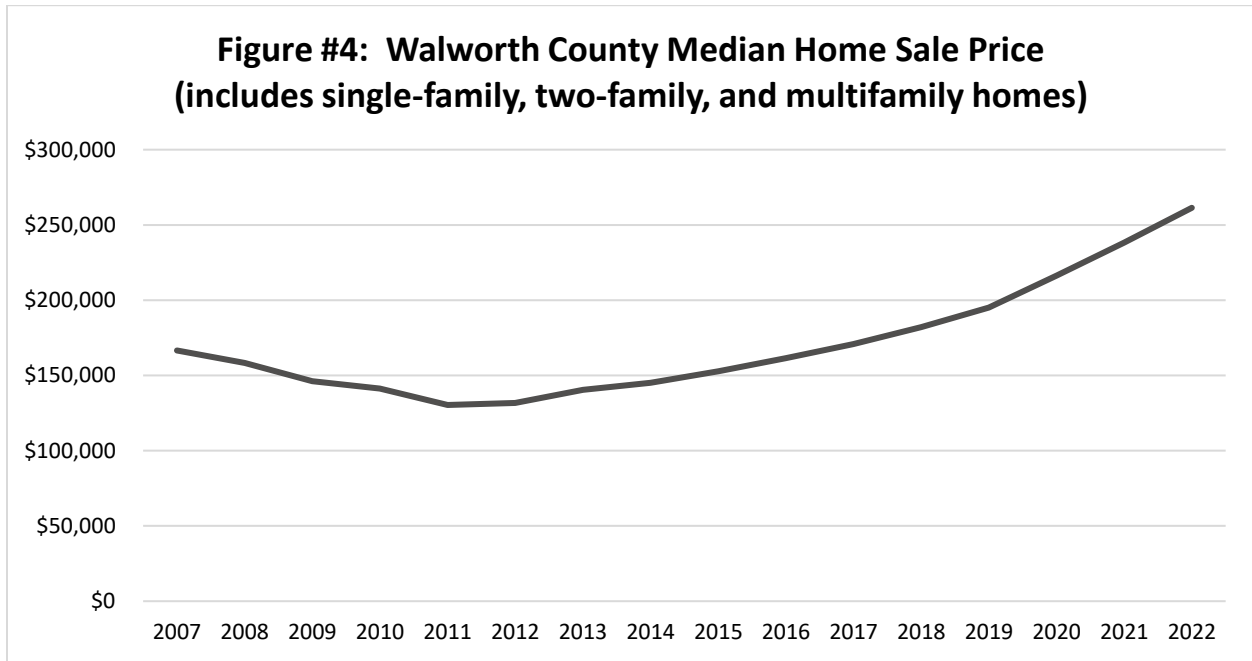
*2021 includes the months of January-August



**2022 includes January-August

2007 to 2021: Trend of All Residential Sales

A comparison between the residential sale price over time shows that in Walworth County, the current (2022) median residential sale is \$94,740 higher than it was in 2007.



***2022 includes January-August*

The median home price and home close price data suggest that Walworth County single-family housing prices have appreciated faster than statewide increases. In 2021 alone, the median home prices in Walworth County increased by 23.3%. Walworth County home prices have even slightly outpaced the state of Wisconsin’s home price appreciation over the past five years. In total, the home prices for Walworth County are suggestive of excess demand (i.e., a shortage of supply), and this demand appears concentrated around workforce housing.

D. Single-Family Housing Availability to Homebuyers

One consideration of a housing market is the availability of workforce housing to new potential homebuyers. The National Association of Realtors 2020 Profile of Home Buyers and Sellers found that nationally, the typical homebuyer in 2019 had a median income of \$94,500 and was age 47. For comparison, the median household income according to the American Community Survey (ACS) in 2019 for Walworth County was \$63,776 and the median household income for Wisconsin was \$61,747. Of homebuyers, first-time homebuyers accounted for 31% of all home sales in 2021, the same as 2020.

Table 7: Typical Household Profile of a Homebuyer in 2019	
Median Householder age	47 years old
Median Household Income	\$94,500 per year
First-time Home Buyer	31% Chance

To compare the availability of workforce housing based on payments that are 30% or greater than household income for first-time homebuyers, imagine a hypothetical three-person homeowner household at various levels of income. As can be seen in tables 10 and 11, prospective homebuyers with an income just under the poverty line (which, according to Wisconsin Department of Health Services as of February 1, 2022, is \$23,030 for a family of 3) and up to the median income of a typical homebuyer in 2019 will find homeowner housing in Walworth County to be less cost-efficient in comparison to the rest of Wisconsin.

Table 8: Percent of Homeowner Households within each Income Bracket whose Housing Costs are 30 Percent or More of Household Income			Table 9: Percent of Homeowner Households within each income Bracket whose Housing Costs are 20 Percent or More of Household Income		
Household Income Bracket	Walworth County	Wisconsin	Household Income Bracket	Walworth County	Wisconsin
\$20,000 to \$34,999	66%	61%	\$20,000 to \$34,999	92%	85%
\$35,000 to \$49,999	39%	30%	\$35,000 to \$49,999	75%	66%
\$50,000 to \$74,999	15%	14%	\$50,000 to \$74,999	51%	46%

E. Workforce Housing: Walworth vs. Wisconsin

In addition to the prior analysis of home values, the Study also analyzed the availability of workforce housing using American Community Survey data. Specifically, the Study analyzed the average monthly housing costs for homeowners across various income brackets, as a percentage of their monthly income. This analysis was completed for both Walworth County and the State of Wisconsin. In *Table 10* and *Table 11*, cost-efficiency for homeowner households in Walworth County and the State are shown. Both the State of Wisconsin and Walworth County are facing similar issues of lower income earning housing spending the largest percent of their income on housing costs. The housing cost challenge in Walworth County is slightly higher than the State of Wisconsin overall.

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Table 10: Walworth County: Homeowner Costs by Income Bracket

Yearly Income	% Homeowner Households in Income Bracket	Monthly Housing Costs as a Percentage of Average Monthly Income	Percentage of Owner-Occupied Households for Specified Income Bracket
Less than \$20,000	10.5%	Housing Costs are Less Than 20 Percent of Income	1%
		Housing Costs are 20 to 29 Percent of Income	7%
		Housing Costs are 30 Percent or More of Income	92%
\$20,000 to \$34,999	11.7%	Housing Costs are Less Than 20 Percent of Income	8%
		Housing Costs are 20 to 29 Percent of Income	26%
		Housing Costs are 30 Percent or More of Income	66%
\$35,000 to \$49,999	12.6%	Housing Costs are Less Than 20 Percent of Income	24%
		Housing Costs are 20 to 29 Percent of Income	37%
		Housing Costs are 30 Percent or More of Income	39%
\$50,000 to \$74,999	19.4%	Housing Costs are Less Than 20 Percent of Income	49%
		Housing Costs are 20 to 29 Percent of Income	36%
		Housing Costs are 30 Percent or More of Income	15%
\$75,000 or more	43.1%	Housing Costs are Less Than 20 Percent of Income	79%
		Housing Costs are 20 to 29 Percent of Income	18%
		Housing Costs are 30 Percent or More of Income	3%

*Zero or negative income: <2%

Table 11: Wisconsin Homeowner Costs by Income Bracket

Yearly Income	% Homeowner Households in Income Bracket	Monthly Housing Costs as a Percentage of Average Monthly Income	Percentage of Owner-Occupied Households for Specified Income Bracket
Less than \$20,000	11.6%	Housing Costs are Less Than 20 Percent of Income	3%
		Housing Costs are 20 to 29 Percent of Income	10%
		Housing Costs are 30 Percent or More of Income	87%
\$20,000 to \$34,999	13.2%	Housing Costs are Less Than 20 Percent of Income	15%
		Housing Costs are 20 to 29 Percent of Income	24%
		Housing Costs are 30 Percent or More of Income	61%
\$35,000 to \$49,999	12.7%	Housing Costs are Less Than 20 Percent of Income	34%
		Housing Costs are 20 to 29 Percent of Income	36%
		Housing Costs are 30 Percent or More of Income	30%
\$50,000 to \$74,999	18.7%	Housing Costs are Less Than 20 Percent of Income	54%
		Housing Costs are 20 to 29 Percent of Income	32%
		Housing Costs are 30 Percent or More of Income	14%
\$75,000 or more	41.5%	Housing Costs are Less Than 20 Percent of Income	80%
		Housing Costs are 20 to 29 Percent of Income	17%
		Housing Costs are 30 Percent or More of Income	3%

*Zero or negative income: <1%

Walworth County Homeowner Housing Costs Based on Income

The total number of homeowner households in Walworth County was broken down based on income level and housing cost. The highest concentration of homeowners spending 30% or more of their average monthly income on housing costs are in the lower income brackets.

Table 12: Walworth County Homeowner Household Spending on Housing			
Yearly Income	Total Homeowner Households	Number of Households Spending More Than 30% of Average Monthly Income on Housing Costs	Number of Households Spending More Than 20% of Average Monthly Income on Housing Costs
Less than \$20,000	4,359	4,000	4,296
\$20,000 to \$34,999	4,861	3,206	4,486
\$35,000 to \$49,999	5,200	2,014	3,925
\$50,000 to \$74,999	8,029	1,237	4,112
\$75,000 or more	14,058	667	3,802
Total	36,507	11,124	20,621

*Zero or negative income: <2%

Housing Costs that Burden a Household

A brief review of the idea of the “housing burden” is necessary to provide context to the concept. The idea of the “housing-cost burdened” individual (the 30 percent threshold) stems from the 1937 National Housing Act. This public housing program sought to serve lower income families in need. It called for income limits as opposed to rent limits; in other words, an individual’s income could not exceed five to six times the rent.

Following World War II, this system was inverted into a maximum rent standard in which rent could not exceed 20 percent of a household’s income. Later, in The Housing Act of 1959, the maximum rent percent was maintained, but local public housing authorities were given more leeway in establishing what the percent amount would be. Ten years later in 1969, rent controls, mixed with rising costs associated with maintaining buildings, began taking a toll on those willing to rent and, in doing so, effectively began to undo the public housing program.

To combat this growing issue, the Brooke Amendment of 1969 was added to the 1968 Housing and Urban Development Act, which raised the percent threshold to 25 percent of a family’s income. By 1981, this had been raised to 30 percent. This became the general rule of thumb and spread across the housing industry. Even federal housing institutions like Fannie Mae and Freddie Mac would not purchase regular mortgages if the underlying costs were more than 28 percent of the borrower’s income (or 29 percent if it was an FHA insured loan). The 30 percent

rule of thumb has remained since 1981 and has continued to provide a valuable guide when considering analytical reports or policy proposals.

Housing Cost Calculation

The housing costs themselves are typically calculated by tabulating data acquired from the American Community Survey (ACS). For owners, costs are derived by asking questions about their: mortgages, second mortgages or home equity loans, real estate taxes, homeowners insurance, condo fees (if applicable), manufactured home costs (if applicable), and utilities (electric, gas, water, and sewer, etc.). For renters, the gross rent costs come from a simpler list of questions: the amount of their contract rent and their utilities. Both metrics are divided by the monthly income of that house to determine whether the homeowner or renter is spending 30 percent or more on housing expenses. When this is the case, the owner or renter is determined to be “housing-cost burdened.”

DRAFT

F. United for ALICE: Walworth County Housing Cost-Efficiency

United For ALICE measures household financial hardship on a state and county level. It seeks to reveal segments of households in a community who struggle to afford basic needs. United For ALICE uses a standardized methodology to assess the cost of living in a community and to identify struggling or ALICE (Asset Limited, Income Constrained, Employed) households. The most recent ALICE report for Wisconsin was completed in 2020 based upon 2018 Census data. In the initial Walworth County analysis, costs of single-family homes in the County was examined using federal data collected by the US Census American Community Survey. The US Census data estimates household income and housing costs. This offers a picture of which households are bearing the heaviest housing costs as a proportion of income. However, this data is collected on a federal level and, therefore, may not directly capture the distinctive living situation in Walworth County. United For ALICE data takes into consideration the cost of living in different states, counties, and municipalities, providing further insight into the costs of housing in Walworth County.

The ALICE Threshold/standard is derived from the Household Survival Budget; a standardized budget used by ALICE to measure the cost of living in a particular community. The Household Survival Budget estimates the minimal cost of the five basic household necessities—housing, childcare, food, transportation, and health care—to formulate a monthly budget that covers essentials, taxes, and an additional 10% for miscellaneous needs. Households are designated as ALICE if they fall below the ALICE Threshold but are above the Federal Poverty Line. Based on calculations from the American Community Survey and the ALICE Threshold in 2018, Walworth County had 9,807 households (24%) classified as ALICE and an additional 3,677 households (9%) fall below the Federal Poverty Line, meaning 31% of all Walworth County households are below the ALICE Threshold.

Households Below the ALICE Threshold in Walworth County

Households below the ALICE threshold fall short of meeting the minimal annual income required to meet costs of basic identified necessities. The ALICE threshold is adjusted based on household size and composition. The ALICE data suggest that a household with two adults and two school age children earning less than \$57,012 a year will struggle to find adequate housing they can afford.

Table 13: Walworth County Households Below the Alice Threshold						
	Single or Cohabiting		Families With Children		65 and Older	
Total Households in Category	19,144		10,527		11,193	
Number of Households Below ALICE Threshold*	5,989		3,013		4,773	
Example Households	Single Adult	Two Adults	Two Adults, Two School-Age Children	Two Adults, Two Children in Child Care	Single Senior	Two Seniors
Monthly Housing Cost Allocated by ALICE	\$542	\$638	\$849	\$849	\$542	\$638
Monthly Cost of Other Necessities Allocated by ALICE**	\$1,274	\$2,228	\$3,902	\$4,652	\$1,457	\$2,542
Monthly Total	\$1,816	\$2,866	\$4,751	\$5,869	\$1,999	\$3,180
Annual Total (ALICE Threshold)	\$21,792	\$34,392	\$57,012	\$70,428	\$23,988	\$38,160

United For ALICE uses HUD Fair Market Rent to calculate housing costs for different housing types based on household size. The cost is set to the market rent price in Walworth County calculated by HUD. The market rent price includes the cost of utilities (electricity, gas, water, sewer, and trash removal), but not telephone or internet service, and is set in Walworth County at the 40th percentile of market rent prices, which is below the median rental price.

United For ALICE assumes housing needs based on household size:

- Single Person – efficiency apartment
- Head of household with a child or a household with two adults – one-bedroom apartment
- Household with three or more people – two-bedroom apartment

Households below the ALICE threshold either must find housing below the fair market rent rate in Walworth County or are forced to cut back on other necessities. For example, consider a household with two adults and two school age children earning \$54,161 annually, which is 95% of the ALICE threshold. If the household’s monthly spending on necessities besides housing remains unchanged at \$3,902, the household would be left with \$611 per month to spend on

housing. This household would be unable to afford even a one-bedroom apartment at the market price of \$638 per month and be unable to afford a two-bedroom apartment at the market price of \$849 unless the household cut back on other necessity spending such as food, childcare, or healthcare.

Cost-Efficient Housing Unit Stock

The number of housing units in Walworth County that would be cost-efficient for households below the ALICE threshold can be calculated using home values and rent costs. Using American Community Survey data, the number of homes available to single or cohabiting households and family households was estimated.

Mortgage Monthly Cost Approximation

There are some assumptions that need to be made in this calculation. The first assumption is that the home mortgage is a 30-year fixed mortgage with a 4% rate. Recently, mortgage rates have fallen to all-time lows below 3%, however, 30-year mortgage rates over the past decade have averaged around 4%. Note that a higher rate exacerbates the challenges to cost-efficiency, while a lower rate increases the quantity of homes income constrained households can afford. While property tax rates vary between communities, the model uses a total combined mill rate of \$19.00. The average insurance rate in Walworth County of \$774 is used, and the model also anticipates a 20% down payment (a lower down payment also increases the challenges to the family). As a result, a family with two children is allocated \$849 in the 2018 ALICE survival budget to spend on monthly housing costs. This family can afford a mortgage on a home that is valued at approximately \$146,000.

Single or Cohabiting Households

Single and cohabiting households are allocated \$542 and \$638 respectively to cover housing costs under the ALICE survival budget in 2018. Households under the ALICE Threshold will either be unable to afford these monthly costs or will be required to forgo other necessities to afford housing. Therefore, in order for these households to acquire cost-efficient housing, monthly housing costs for these households must be under \$638.

The American Community Survey does not directly estimate the number of homes with housing costs below \$638. Although the exact number of homes with housing costs below \$638 could not be calculated, a close estimation can be produced by extrapolating estimates for homes with housing costs below \$650. Additionally, the ALICE data is from 2018, and to remain consistent, the American Community Survey housing data is therefore from the 2014-2018 five-year average estimate.

Using American Community Survey data, the approximate number of housing units with monthly housing costs under \$638 was estimated using the criteria specified above. The number of housing units rented below \$638 was added to the number of housing units with mortgage payments under approximately \$638 to estimate the total housing stock that is available to single and cohabiting households below the ALICE Threshold. There are a total of 10,762 single and cohabiting households below the ALICE Threshold and 6,040 housing units with monthly housing costs below approximately \$638. This suggests there is a shortage of 4,722 adequate housing units for these households.

Table 14: Housing for Households that are Single or Cohabiting Below the Alice Threshold						
Households Under 65 Years Below ALICE Threshold	Households 65 Years and Older Below ALICE Threshold	Total Single and Cohabiting Households Below ALICE Threshold	HUD Market Price for One-Bedroom Apartment	Housing Units with Rent Below \$638	Housing Units Valued < \$107,000 (Mortgage Payment Under Approximately \$638)	Total Housing Units with Monthly Housing Cost Under Approximately \$638
5,989	4,773	10,762	\$638	2,779	3,261	6,040

Households with Children

Households with two children are allocated \$849 to cover housing costs under the ALICE survival budget in 2018. Households under the ALICE Threshold will either be unable to afford these monthly costs or will be required to forgo other necessities to afford housing. Therefore, in order for these households to acquire cost-efficient housing, monthly housing costs for these households must be under \$849.

The American Community Survey does not directly estimate the number of homes with housing costs below \$849. Although the exact number of homes with housing costs below \$849 could not be calculated, a close estimation can be produced by extrapolating estimates for homes with housing costs below \$899. Additionally, the ALICE data is from 2018, and to remain consistent, the American Community Survey housing data is therefore from the 2014-2018 five-year average estimate.

Using American Community Survey data, the approximate number of housing units with monthly housing costs between \$638-\$849 was estimated using the mortgage calculation criteria specified above. The number of housing units rented between \$638-\$849 was added to the number of housing units with mortgage payments between approximately \$638-\$849 to estimate the total housing stock that is available to households with children below the ALICE Threshold. There is a total of 3,013 households with children below the ALICE Threshold and 7,213 housing units with monthly housing costs between approximately \$638-\$849. This suggests there is a surplus of 4,200 housing units available for households with children.

Table 15: Housing for Households with Children Below the ALICE Threshold

Households with Children Below the ALICE Threshold	HUD Market Price for Two-Bedroom Apartment	Housing Units with Rent \$638-\$849	Housing Units Valued at \$107,000-\$146,000 (Mortgage Payments Approximately \$638-\$849)	Total Housing Units with Monthly Housing Cost Approximately \$638-\$849
3,013	\$849	3,245	3,968	7,213

Housing Stock Available to Alice Households

Table 16: Cost-Efficient Housing Units & ALICE Households				
	HUD Market Price for Adequate Apartment	Households	Housing Units Below HUD Market Price	Household & Housing Unit difference
Single and Cohabiting Households Below ALICE Threshold	\$638	10,762	6,040	(4,722)
Households With Children Below the ALICE Threshold	\$849	3,013	7,213	4,200

The number of single and cohabiting households below the ALICE Threshold exceeds the number of homes that are cost-efficient for these households. The data indicate that there are 4,722 households who cannot afford a \$638 monthly home payment. The supply of available units is inadequate to serve these households. Presumably, these households are spending more than \$638 on housing per month and are forgoing other necessities.

It appears that there are adequate housing options for households with children below the ALICE Threshold. Even assuming that single and cohabiting ALICE households unable to find housing below \$638 are spending more on housing, there still seems to be inadequate housing options for ALICE households. If a comparison of the total number of households below the ALICE Threshold to the total number of housing units with monthly housing costs below \$849 is completed, there appears to be inadequate housing to meet ALICE household needs. The data indicates that a shortage of 522 housing units with monthly housing costs below \$849 after accounting for each ALICE household.

Table 17: Cost-Efficient Housing Units & ALICE Households		
Households Below the ALICE Threshold	Housing Units with Monthly Costs Below \$849	Housing Unit & Household difference
13,775	13,253	(522)

This comparison between cost-efficient housing units and ALICE identified households is included to provide context to the supply and demand for cost-efficient housing in Walworth County. Households below the ALICE Threshold presumably require access to less expensive housing. However, other households (who are above the ALICE threshold) may also be reliant on less expensive housing options. Households whose annual income is just above the ALICE Threshold, and not counted as an ALICE household, will still seek more cost-efficient housing options. Households under the ALICE Threshold may also receive additional monetary or housing assistance, allowing them to live in more expensive housing units. For example, there are programs in place to assist seniors with finding adequate housing. Although there is some ambiguity surrounding the exact number of households who require cost-efficient housing,

demand for the most cost-efficient homes (monthly housing payment under \$849) exceeds the current supply of such housing units in Walworth County.

ALICE Households in Walworth County

ALICE provides an idea of which types of households are most in need of cost-efficient housing by comparing annual incomes to annual necessity expenses, which includes housing. Although the ALICE data does not pinpoint the exact households that lack cost-efficient housing options, it does provide an idea of the type and quantity of households in need of these housing units. Looking closely at households with children, the largest concentration of households with children below the ALICE threshold are single-parent, or more specifically, single female-headed, households.

Table 18: Walworth County Households with Children			
	Total	Below ALICE Threshold	% Below ALICE Threshold
Married	7,354	1,008	13.7%
Single Female-Headed	2,061	1,612	78.2%
Single Male-Headed	1,112	393	35.3%

Looking at the working age population (under 25-64 years old), 6,989 households in Walworth County are classified as ALICE. Households in the youngest age group (under 25 years old) and those in the oldest age group (65 years and over) have the highest chance of being classified as ALICE in Walworth County.

Table 19: Walworth County Households by Age			
	Total	Below ALICE Threshold	% Below ALICE Threshold
Under 25 Years Old	2,933	2,013	68.6%
25-44 Years Old	10,584	2,372	22.4%
45-64 Years Old	16,154	4,617	28.6%
65 and Older	11,193	4,773	42.6%

G. Summary: Current Demand for Single-Family Housing

Walworth County's housing supply and demand was estimated by examining the months' supply of housing and home values over time.

The Months' Supply of Housing captures how long the current supply of available homes will remain on the market given the current demand. This rate can be used to determine the speed at which available housing will be depleted from the market. Walworth County has a 1.07 months' supply of housing, which is below the six months' typical of market equilibrium (Findwell). As of August 2021, Walworth County had 276 single-family homes for sale. The months' supply of housing analysis is suggestive of a lack of supply for single-family housing in Walworth County. Home prices have risen in Walworth County. Between 2016-2021, home prices in Walworth County have risen 43.3%, compared to the State of Wisconsin's overall home price growth of 34% over the same time period. The median close price of sold homes in Walworth County is also rising quickly. Over the past year, the median home sale price on homes (not including condos) has risen 24.1%. Quickly rising home values and a low months' supply of housing both coincide with strong demand. Recent data regarding home sales in Walworth County show that the number of home sales and their price continue to follow the nationwide trend of rising home prices. As the sales numbers continue to be elevated, prices are rising. Without rising supply, this will continue to put pressure on the price of housing for the workforce and families.

Walworth County is facing a shortage of single-family housing. Home prices have increased quickly in the last few years, and the current inventory of homes on the market is low. In particular, the evidence indicates a more prominent shortage of the types of homes that would be considered the available to working households. Single and cohabiting households below the ALICE Threshold may struggle to find cost-efficient housing. Estimates indicate there are 4,722 single and cohabiting households under the ALICE Threshold unable to afford adequate housing without forgoing other living necessities or receiving additional monetary assistance. If the analysis is expanded to include all households below the ALICE Threshold, the data suggest that the composition of housing units in Walworth County is currently inadequate to provide housing for lower income earners. Furthermore, a homebuyer in Walworth County will find fewer cost-efficient and workforce housing options compared to the rest of the State of Wisconsin as a whole. Limited housing supply and recent price appreciation may lead to an increase of the shortage imbalance in the future.

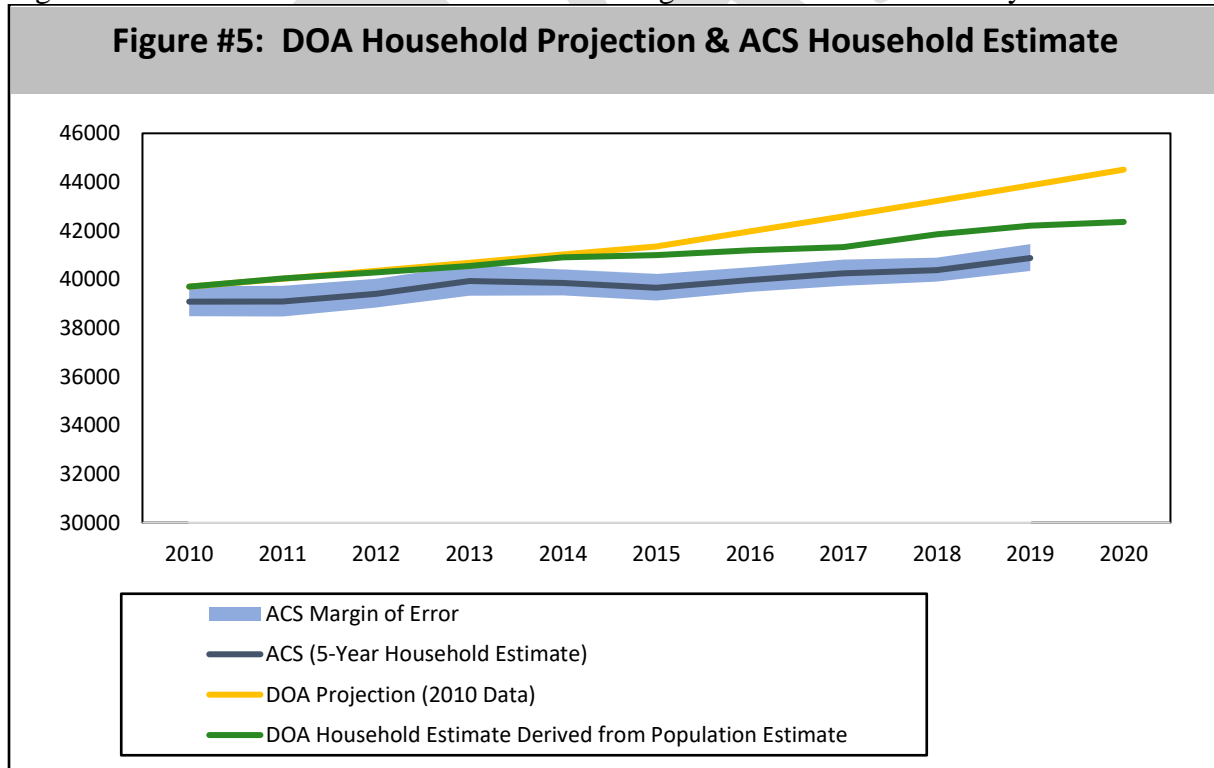
Part 1.1: Population Projections and the Outlook of Walworth County’s Homeowner Housing Market

As the population and demographics of Walworth County change, so will the single-family housing market. The Study compiled various household projections and completed an in-depth analysis using the Wisconsin Department of Administration projection scenario. Also, the increase in the population of households for recent years was compared to recent housing unit growth rates. Lastly, results from this section are interpreted to provide insight into the recent and future state of the Walworth County single-family housing supply and projected demand.

A. Household Population Projections

In terms of demand, the Study analyzed household population projections. The estimated population of Walworth County as of January 1, 2022 was 106,129 (according to Wisconsin Department of Administration (DOA) estimates). More important for housing demand and housing needs, however, is the total number of households (i.e., the household population). *Figure 5* shows a comparison of the DOA household estimate, the ACS household estimate, and the DOA household projection. The DOA household projection was developed in 2013 using 2010 Census data by the Wisconsin Department of Administration.

Figure #5: shaded blue area indicates the 90% Margin of Error for the ACS 5-year estimate.



DOA Household Projection and ACS Household Estimate Growth

The ACS growth rates for households in Walworth County over the past ten years have remained below the DOA’s household projections. The DOA projected that the number of households in Walworth County would increase 12.1% from 2010 to 2020. According to the ACS household estimates, households have only grown 5.9% from 2010 to 2020. The DOA estimated that households grew 6.7% from 2010-2020. For the purposes of this report, the DOA household estimates will be used to estimate households and household growth.

Table 20: DOA Household Projection & ACS Household Estimate						
Year	ACS - 5-Year Household Estimate	Total % Grown Since 2010	DOA Household Estimate	Total % Grown Since 2010	DOA Projection (2010 Data)	Total Projected Growth in % Since 2010
2010	39,082	-	39,699	-	39,699	-
2011	39,083	0.0%	-	-	-	-
2012	39,407	0.8%	-	-	-	-
2013	39,929	2.2%	-	-	-	-
2014	39,846	2.0%	-	-	-	-
2015	39,648	1.4%	40,999	3.3%	41,353	4.2%
2016	39,967	2.3%	-	-	-	-
2017	40,246	3.0%	-	-	-	-
2018	40,372	3.3%	-	-	-	-
2019	40,874	4.6%	-	-	-	-
2020	41,414	5.9%	42,359	6.7%	44,507	12.1%

B. Single-Family Construction and Development

Distribution of Housing Types

Residential housing can be categorized in three groups: Single-family, Multi-family, and Manufactured Homes. It should be noted that single-family housing can be owner occupied or renter occupied. The American Community Survey defines single-family homes as including fully detached, semi-detached (semi-attached, side-by-side), and row houses. Detached homes are not connected to another housing unit and have open space on all four sides of the structure. Attached homes are adjoined through a least one common ground to roof wall and include housing such as townhouses, double houses, or houses attached to a nonresidential structure. In *Table 21*, attached single-family housing units are separated from detached single-family housing units.

The American Community Survey classifies single-family structures as units that:

- Are separated by a ground-to-roof wall
- Have a separate heating system
- Have individual meters for public utilities
- Have no units located above or below

If each unit within the building does not meet the conditions above, the building is considered multi-family. Multi-family housing is defined as units in structures containing two or more apartments.

Table 21: Walworth County Percentage of Housing by Units		
Type of Housing	Quantity of Units	% of Total Units
Total Housing Units	52,595	100%
Single-Family Housing		
One-Unit, Detached	37,101	70.5%
One-Unit, Attached	2,617	4.9%
Total Single-Family Housing	39,718	75.5%
Multi-Family Housing		
Two Units	1,961	3.7%
Three - Four Units	2,183	4.2%
Five Or More Units	7,394	14.1%
Total Multi-Family Housing	11,538	21.9%
Mobile Home	1,339	2.6%

Owner-Occupied and Renter Housing Distribution

Owner-occupied homes are classified by the American Community Survey as housing units where the owner lives in the unit. The unit may have a mortgage, loan, or other debt arrangement. The unit is also considered owner-occupied if it resides on leased land, but the occupant has a mortgage on the unit. Manufactured homes with a loan balance are also included in this category. Renter-occupied units encompass any housing units not considered owner-occupied. Renter-occupied unit counts include continuing care or life care arrangements where a health services provider assists with shelter and other necessities.

Table 22: Walworth County Occupied Housing Units			
	Household Estimate	Margin of Error	% of Occupied Housing
Occupied housing units	41,414	±610	100%
Owner-occupied	28,454	±702	68.7%
Renter-occupied	12,960	±653	31.3%

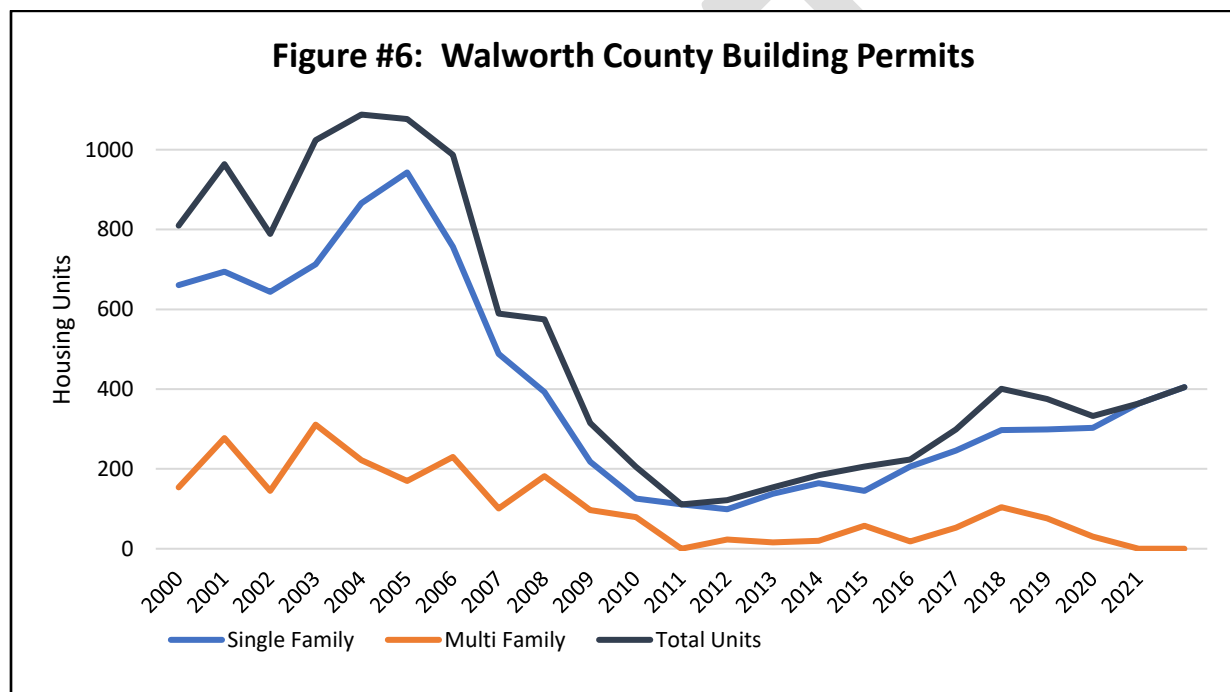
C. Seasonal, Recreation, and Occasional Use Homes

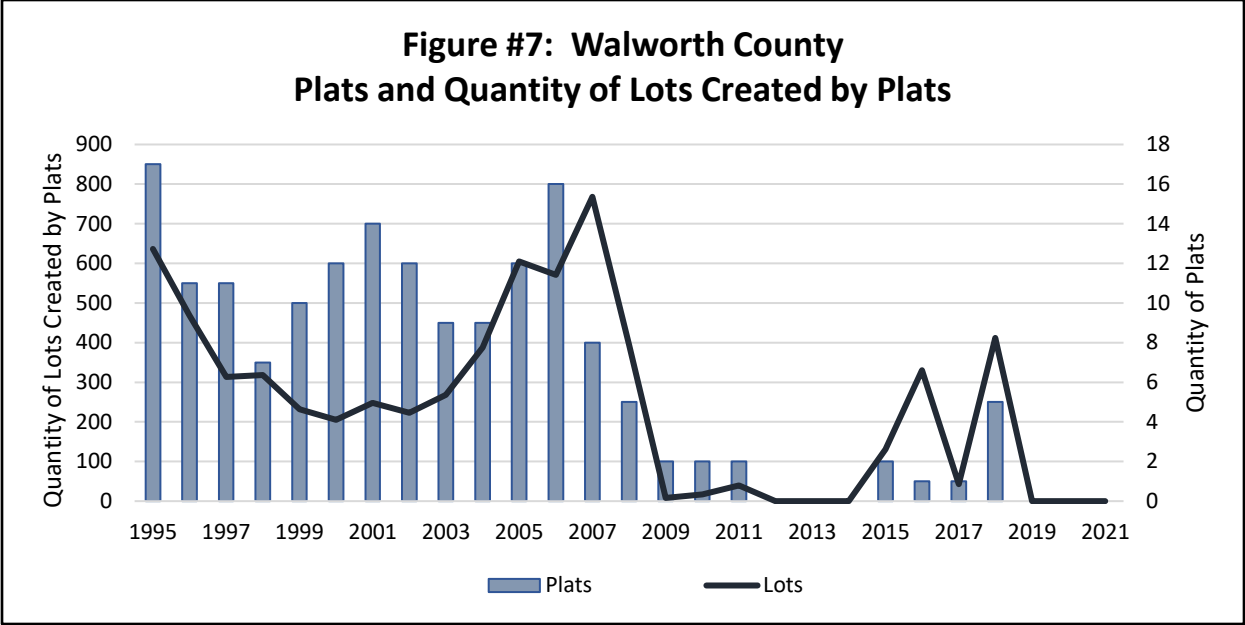
Walworth County has a high percentage of homes listed as vacant, and this can be attributed to a high number of seasonal, recreational, and occasional use homes. The ACS designates homes used for seasonal, recreation, or occasional use as vacant homes. Thus, these homes and the households that own these homes are not counted in the ACS’s other statistics. From 2015 to 2020, the number of seasonal, recreation, and occasional use homes has remained relatively constant at around 9,000. The variation in seasonal homes can be attributed to the ACS’s margin of error.

Table 23: Homes Used for Seasonal, Recreational, or Occasional Use		
Year	Vacant Homes	For Seasonal, Recreational, or Occasional Use
2015	12,003	8,864
2016	11,737	8,857
2017	11,747	9,030
2018	11,805	9,193
2019	11,505	8,870
2020	11,181	8,576

Platted Lots and Building Permits Over Time

While Walworth County's construction rates declined during the 2007-2009 recession, there has been a slow increase since 2012. Construction rates, however, have not returned to pre-recession levels. As measured by building permits, the number of housing units planned for 2020 construction (364 units) was still only around half the number of housing units planned for construction in either 2001 or 2000 (which had 964 and 810 units, respectively), and were the lowest rates of construction prior to 2006. Similar trends are apparent when looking only at permits for single-family and two-family homes. This trend is also reflected in both the number of subdivision plats and the number of lots created by subdivision plats within Walworth County.





Household Trends Compared to Lots and Building Permits

The average increase in households per year over the past five years has remained on average above the number of building permits issued. However, the full picture of current household growth and building permit trends may be misinterpreted if only the past five years are considered. If household growth and building permits are compared over the last ten years (2010-2020), the number of building permits issued appears to be below the demand for new homes. The DOA estimates that the number of households in Walworth County increased by 2,660 from 2010-2020, and the number of building permits issued during that period equals 2,614. Note that building permits can overestimate new housing starts and do not reflect housing unit demolition rates. If household growth rates continue their current trajectory, the current rate of new construction would be inadequate to meet demand.

Table 24: Walworth County Households, Lots, Building Permits			
	Average Household Increase Per Year Over Last 5 Years	Number of Lots Created by Plats	Number of Building Permits Issued
2015	353	131	224
2016	353	330	299
2017	353	43	401
2018	353	412	375
2019	353	0	333
2020	353	0	364
2021	353	0	405

Housing Built Since 2010

Worth noting is actual new housing construction over the past ten years. The American Community Survey collects data on the year a housing unit is built. The data is collected for both occupied and vacant housing units. Year built refers to when the building was first built and does not record remodeling, additions, or building conversions. It should be noted that the data has limitations since questioned respondents must rely on their memory or on estimations based on when the housing around them was built. Therefore, year-to-year estimates tend to have a wide margin of error. However, this datum serves as an approximation of new construction. The ACS's five-year estimation helps to smooth out some of the variation year-to-year. As seen in *Table 25*, the five-year (2016-2020) estimate indicates 1,854 housing units have been built since 2010, and the one-year (2019) estimate indicates 2,317 housing units have been built. The DOA housing data is also included. The DOA estimates housing units based on census data and analysis of contemporary data. From 2010-2020, the DOA estimates that the number of housing units in Walworth County grew by 2,084 units.

Table 25: Walworth County Housing Construction Since 2010			
	Housing Units Built 2010-2013	Housing Units Built 2014- 2020	Total Units Built 2010- 2020
ACS 5-Year Estimate	849	1,005	1,854
ACS1-Year Estimate <i>(high margin of error)</i>	973	1,344	2,317
	Housing Units Built 2010-2013	Housing Units Built 2014- 2020	Total Units Built 2010- 2020
DOA	371	1,713	2,084

Comparing Housing Unit Construction and Household Growth

The Department of Administration estimates that from January 01, 2010 through January 01, 2020, the number of households in Walworth County increased by 2,660. This household growth provides an estimation for the increase in housing demand in Walworth County.

Table 26: Walworth County Household Growth 2010-2020		
Total Households in 2010	Total Households in 2020	Household Growth 2010-2020
39,699	42,359	2,660

By comparing the number of new housing units built since 2010 to the household growth during this period, it becomes evident that the supply of new housing is inadequate for the increase in demand for housing in Walworth County. The five-year ACS estimate, one-year ACS estimate, and DOA housing unit estimate all suggest that housing unit growth has not kept pace with household growth. It is also critical to recognize the limited number of “for sale” properties on the market.

Table 27: Walworth County Household and Housing Units (5-Year ACS)		
Housing Units Built Since 2010	Household Growth Since 2010	Housing Unit Shortage
1,854	2,332	(478)

Table 27.1: Walworth County Household and Housing Units (1-Year ACS)		
Housing Units Built Since 2010	Household Growth Since 2010	Housing Unit Shortage
2,317	2,660	(343)

Table 28: Walworth County Household and Housing Units (DOA)		
Housing Units Growth between 4/2010 - 4/2020	Household Growth Since 2010	Housing Unit Shortage
2,084	2,660	(576)

D. Estimated & Projected Number of Homeowner Households

As presented in *Table 29*, the projections for the total number of households in Walworth County constructed by the DOA in 2013 (which used 2010 census data) overestimated the actual increase in the number of households over recent years. Both the ACS household estimate and the DOA household estimate fall below the DOA projection. *Table 29* highlights the differences between the DOA and ACS household estimates. The DOA estimate remained fairly close to the DOA projection during the 2010 decade before diverging. The ACS estimate quickly diverged from the DOA projection in the first half of the 2010 decade and seemed to correct slightly during 2018. The projection from the DOA for the increase in total number of households has been outside the 90% margin of error of the ACS estimates since 2011. Due to the large variation between household projections and estimates, the study analyzed several possibilities for household growth over the next ten years (see *Figure 8*).

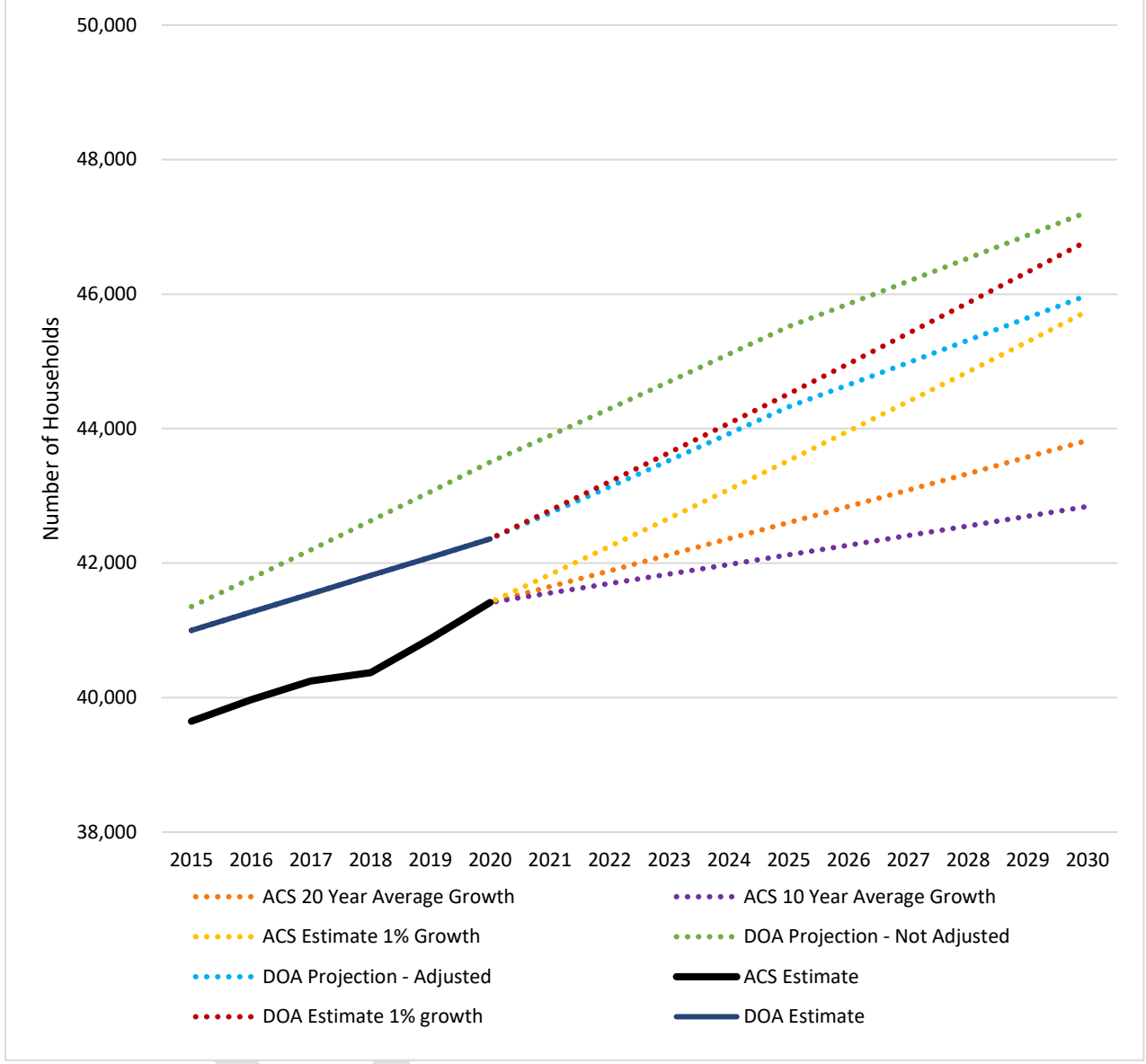
Table 29: Walworth County Household and Housing Unit Growth Compared						
	ACS Household Estimated Growth		DOA Household Estimate		DOA Projected Household Growth	
	Average Change Year Over Year	Average % Change Year Over Year	Average Change Year Over Year	Average % Change Year Over Year	Average Change Year Over Year	Average % Change Year Over Year
2011-2015	113	0.29%	241	0.55%	331	0.82%
2016-2020	353	0.89%	293	0.65%	631	1.47%
2021-2025	-	-	-	-	695	1.51%
2026-2030	-	-	-	-	595	1.20%

Household Growth Rate Projections

The FERC calculated several potential household growth rates using data from the ACS and DOA recorded household estimates and the DOA household projection. The growth rates were then compounded year-over-year to demonstrate different scenarios for Walworth County's household growth through 2030.

- **ACS 20 Year Average Growth**: The average household growth per year over the past twenty years was calculated using ACS household estimates. Over the past twenty years, the quantity of households grew on average 0.57% year-over-year.
- **ACS 10 Year Average Growth**: The average household growth per year over the past ten years was calculated using ACS household estimates. Over the past ten years, the quantity of households grew on average 0.34% year-over-year.
- **1% Growth**: A constant 1% increase in households year-over-year which can be used as a reference. A 1% year-over-year growth rate was applied to both the ACS and DOA household estimates.
- **DOA Projection – Not Adjusted**: The original projection calculated by the DOA in 2013 using 2010 data.
- **DOA Projection – Adjusted**: The household growth rates from the original DOA projection calculated in 2013 were applied to the current estimate for the number of households in Walworth County according to the DOA estimates.
- **ACS Estimate**: Household estimate recorded by the American Community Survey.
- **DOA Estimate**: Household estimate recorded by the Department of Administration.

Figure #8: Walworth County Household Projections



⁵
* Growth Rates are compounded year-over-year

Future Renter vs Owner-Occupied Unit Composition Demand

The different household projections were used to calculate the average increase of households per year over the next five and ten years. Using the ACS (2015-2019) estimate of a 70.4% owner-occupied household rate, estimates for the increase in homeowner vs. renter households were completed. This estimate assumes that the owner-occupied household rate (70.4%) in Walworth County will not change significantly in the future. The owner-occupied household rate is the current percentage of all homes in Walworth County classified as owner-occupied. As mentioned earlier, the ACS classifies any unit where the owner lives in the unit as owner-occupied. Owner-occupied units may have a debt arrangement and includes units with a mortgage on leased land. Owner-occupied units therefore may be detached, attached, condos, townhomes, or manufactured homes.

Household Projections (2025)

WISDOA Projection: The estimated difference between the number of households in 2025 and 2020 is calculated to be 2,018 households, according to the Wisconsin Department of Administration for Walworth County. This corresponds to about a 1,385 increase in the number of homeowner households from 2020 to 2025 (the majority of the rest are renter households).

Table 30: 2020-2025 Homeowner & Renter Household Projection				
	Total Household Increase	Average Household Growth Per Year	Projected Increase in the Number of Homeowner Households Per Year	Projected Increase in the Number of Renter Households Per Year
ACS 20 Year Average Growth	1,187	237	163	74
ACS 10 Year Average Growth	708	142	97	44
ACS Estimates 1% Growth	2,113	423	290	132
DOA Projection - Not Adjusted	2,018	404	277	126
DOA Projection - Adjusted	1,965	393	270	123
DOA Estimate 1% Growth	2,161	432	297	135

Household Projections (2030)

WISDOA Projection: The estimated difference between the number of households in 2030 and 2020 is calculated to be 3,721 households, according to the Wisconsin Department of Administration for Walworth County. This corresponds to about a 1,265 homeowner household population increase from 2020 to 2030 (the majority of the rest are renter households).

Table 31: 2020-2030 Homeowner & Renter Household Projection				
	Total Household Increase	Average Household Growth Per Year	Projected Increase in the Number of Homeowner Households Per Year	Projected Increase in the Number of Renter Households Per Year
ACS 20 Year Average Growth	2,409	241	168	73
ACS 10 Year Average Growth	1,428	143	100	43
ACS Estimates 1% Growth	4,333	433	302	131
DOA Projection - Not Adjusted	3,721	372	259	113
DOA Projection - Adjusted	3,623	362	253	110
DOA Estimate 1% Growth	4,432	443	309	134

Current Construction Rates Compared to Household Projections

Returning to the post 2010 construction rates, the current pace of new housing unit construction will be unable to meet the DOA projected increase in new households. Assuming that new housing unit construction rates will remain relatively constant over the next ten years, the current housing shortage in Walworth County will be compounded. Looking at the DOA household projection, the current rate of construction will be 4,364 housing units short of meeting future demand.

Table 32: Walworth County Housing Construction and Projected Households		
Total Housing Units Built 2010-2020*	DOA Projected Household Growth 2020-2030	Projected Housing Shortage if Construction Rates Remain Unchanged
2,084	6,448	(4,364)

Adapting the data to the most conservative household growth projection estimates, the current rate of construction would be inadequate to meet future housing demand. The American Community Survey (ACS) recent household estimates suggest the number of households in Walworth County has grown slower than the DOA projection. The ACS is conducted by the Census Bureau gathering demographic data by surveying about 3.5 million housing units each year. If the current household growth rate, as suggested by the ACS data, were to remain unchanged over the next ten years, and housing unit construction remain at similar rates, Walworth County would see housing units built from 2020-2030 not keep pace with household growth. The ACS 10 Year Average Growth Projection indicates the number of households will increase by 2,098 between 2020-2030, while the number of new housing units built between 2010-2020 is equal to 2,084. Keep in mind that this is the most conservative household growth projection using the ACS household data.

Table 33: Walworth County Housing Construction and Projected Households		
Total Housing Units Built 2010-2020*	ACS 10 Year Average Growth Projected Household Growth 2020-2030	Projected Housing Shortage if Construction Rates Remain Unchanged
2,084	2,098	(14)

Recent construction rates have been unable to keep up with household growth, and current construction rates will be unable to keep up with household growth over the next 10 years. As a result, careful monitoring can assess changes. In addition, the declining inventory of “for sale” properties positions the County on the verge of a potential shortage, should demand increase. Recent building permit records indicate that construction rates have been increasing slightly over the past five years but remain inadequate to keep pace with recent low household growth rates. New plats and lots created by plats remain suppressed and have not recovered since the 2007-2009 recession. If household growth rates begin to increase in the next few years to be closer to the DOA’s household projections, the current new housing construction rate will be quickly surpassed. The outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power which will further exacerbate the issues of supplying adequate workforce housing, especially housing for Asset Limited, Income Constrained, Employed (ALICE) Households.

Part 2: Analysis of Rental-Occupied Housing

Part two of the report examines rental-occupied housing consisting of any household that is not owned by the residents.

A. Number of Rental-Occupied Households

Table 34 exhibits the outlook of total rental-occupied households from 2015 to 2020. As seen in Table 34, the ACS estimates suggest that the number of renting households in Walworth County increased by 300 over the past five years. Referring back to the building permits in Walworth County (Figures 6 and 7), Walworth County has witnessed a slow increase in building permits. Breaking it down further, in 2019 only twelve 3- or 4-unit and eighteen 5+ unit permits were issued for the year. In 2020, there were zero 3- or 4-unit permits and zero 5+ unit permits issued. In general, the supply side of the equation for rental-occupied housing seems rather low, but there does not seem to be too much surge in demand either based on population estimates.

Year	Households
2015	12,630
2016	12,868
2017	12,709
2018	13,026
2019	12,830
2020	12,960

B. Median Gross Rent

Median gross rents have trended upwards since 2013. Median rental prices for Walworth County have appreciated at a slightly slower pace to Wisconsin as a whole (*Table 35*). The total percent appreciation estimate demonstrates an 9.7% increase in the median gross rent for Walworth County from 2015 to 2020.

Table 35: Walworth County Median Gross Rent						
Year	Walworth			Wisconsin		
	Median	Yearly Increase	Total % Rent Appreciation Since 2015	Median	Yearly Increase	Total % Rent Appreciation Since 2015
2015	\$812	-	-	\$776	-	-
2016	\$828	2.0%	2.0%	\$789	1.7%	1.7%
2017	\$833	0.6%	2.6%	\$813	3.0%	4.8%
2018	\$861	3.4%	6.0%	\$837	3.0%	7.9%
2019	\$880	2.2%	8.4%	\$856	2.3%	10.3%
2020	\$899	2.2%	9.7%	\$872	1.9%	11.0%

As median gross rent has increased, so too has rental-occupied household median income. *Table 36* below shows the changes in rental-occupied median household income year-by-year from 2015 to 2020. By 2020, the median income has risen faster than rent, and while Rental Occupied Median Household Income remains above the rest of Wisconsin, it is growing at a slower rate in Walworth County. Rental Occupied Median Household Income in Wisconsin grew by 32.1% since 2015 and currently sits at \$38,287 in 2020 (compared to 29.25% and \$40,751 respectively in Walworth County). Once again, the limitations of the ACS data are recognized—however, there appears to have been a rise in household incomes over the five-year period.

Table 36: Walworth County Rental-Occupied Median Household Income			
Year	Median	Yearly Increase	Total % Increase Since 2015
2015	\$31,530	-	-
2016	\$32,339	2.57%	2.57%
2017	\$33,602	3.91%	6.57%
2018	\$36,904	9.83%	17.04%
2019	\$38,218	3.56%	21.21%
2020	\$40,751	6.63%	29.25%

C. Cost-Efficiency of Rental-Occupied Housing

As a percentage of household income, rental costs in Walworth County are slightly more cost-efficient than the State of Wisconsin as a whole. This indicates that there are more workforce options for rental housing in Walworth County compared to the entirety of Wisconsin.

According to the U.S. Department of Housing and Urban Development (HUD), housing is considered cost-efficient to a household if housing costs are 30% or less of the household's income. Using this standard, the percentage of renter-occupied housing in Walworth County that is considered cost-efficient is 54.31% as compared to 56% for the State of Wisconsin.

Households that must spend more than 30% of their income on housing costs may be using other forms of assistance to meet basic needs. In Walworth County, there are 5,476 renter households spending 30% or more of household income on housing costs.

	Estimate Number of Renter Households Spending X% of Income on Housing	Walworth County households in %	State of WI households in %
Occupied Units Paying Rent*	12,004	100%	-
Less than 15.0 percent of Household Income is Spent on Housing Costs	1,880	15.7%	17.0%
15.0 to 19.9 percent	1,658	13.8%	14.9%
20.0 to 24.9 percent	1,942	16.2%	13.5%
25.0 to 29.9 percent	1,527	12.7%	11.4%
30.0 to 34.9 percent	816	6.8%	8.3%
35.0 percent or more	4,181	34.8%	34.9%

The ACS median household income level for all households living in Walworth County in 2020 is reported as \$66,034, while the median income of households living in renter-occupied homes is \$40,751. Using the HUD housing metric, which assumes housing is cost-efficient for its occupants if costs are 30% or less than income, a household earning around the median income of \$66,034 can spend up to \$1,650 per month on housing without experiencing housing expense stress. Likewise, a household earning the median renter-occupied household income of \$40,751 can spend up to \$1,018 on rent for their housing costs to be considered cost-efficient. HUD compiles data on household income levels on a county level. With the above data, 41.6% of rental-occupied households (4,997 households) are currently living over the benchmark for workforce housing set by HUD. The following *tables 38-40* clearly indicate that the lowest income earning households are spending the highest percent of their income on housing.

Table 38: Walworth County Renter-Occupied Household Spending on Housing			
Yearly Income	Total Rent-Occupied Households	Number of Households Spending More Than 30% of Average Monthly Income on Housing Costs	Number of Households Spending More Than 20% of Average Monthly Income on Housing Costs
Less than \$20,000	2,621	2,505	2,621
\$20,000 to \$34,999	2,324	1,753	2,248
\$35,000 to \$49,999	2,081	610	1,812
\$50,000 to \$74,999	2,679	126	1,404
\$75,000 or more	2,299	3	381
Total	12,004	4,997	8,466

*Zero or negative income: = 2.5%

Table 39: Walworth County Gross Rent of Occupied Units		
	Estimate	% of Total Units Paying Rent
Median (dollars)	\$899	-
Occupied units paying rent	12,330	100%
Less than \$500	958	7.8%
\$500 to \$999	6,566	53.3%
\$1,000 to \$1,499	3,525	28.6%
\$1,500 to \$1,999	1,006	8.2%
\$2,000 to \$2,499	208	1.7%
\$2,500 to \$2,999	31	0.3%
\$3,000 or more	36	0.3%

Table 40: Walworth County Renter-Occupied Housing Costs by Income Bracket			
Yearly Income	% of Renter-Occupied Households in Income Bracket	Monthly Housing Costs as a Percentage of Average Monthly Income	% of Renter-Occupied Households for Specified Housing Cost
Less than \$20,000	20.2%	Housing Costs are Less Than 20 Percent of Income	0%
		Housing Costs are 20 to 29 Percent of Income	4%
		Housing Costs are 30 Percent or More of Income	96%
\$20,000 to \$34,999	17.9%	Housing Costs are Less Than 20 Percent of Income	3%
		Housing Costs are 20 to 29 Percent of Income	21%
		Housing Costs are 30 Percent or More of Income	76%
\$35,000 to \$49,999	16.1%	Housing Costs are Less Than 20 Percent of Income	13%
		Housing Costs are 20 to 29 Percent of Income	58%
		Housing Costs are 30 Percent or More of Income	29%
\$50,000 to \$74,999	20.7%	Housing Costs are Less Than 20 Percent of Income	48%
		Housing Costs are 20 to 29 Percent of Income	48%
		Housing Costs are 30 Percent or More of Income	4%
\$75,000 or more	17.7%	Housing Costs are Less Than 20 Percent of Income	83%
		Housing Costs are 20 to 29 Percent of Income	16%
		Housing Costs are 30 Percent or More of Income	1%
No Cash Rent	4.9%	-	-

*Zero or negative income: = 2.5%

Tables 38-40 indicate that rental-occupied households with less than \$50,000 in income have limited rental resources. Also, 58.5% of rental-occupied households fall under the \$50,000 income mark, representing a large share of the rental market in Walworth County. Furthermore, the majority (81.8%) of rent prices fall within the \$500-\$1,500 range. The demographics struggling the most with workforce housing options are rental households earning less than \$20,000, of which 96% spend more than 30% of their income on housing costs. Of those earning between \$20,000 and \$34,999, 76% are spending more than 30% of their income on housing costs.

Based on the slow building permit trends in Walworth County, in combination with the number of renters in lower income brackets paying more than what is considered appropriate for workforce households, there may be an opportunity in the rental market to offer lower cost units to households earning less than \$50,000. However, on its face, the data further suggest that the population of Walworth County has increased slowly since 2010, indicating a low influx of demand.

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Part 3: Municipalities Within Walworth County

Methodology & Section Overview

For thirteen municipalities within Walworth County, measures similar to those used in the county-wide section are analyzed to determine the state of the housing market. The municipalities analyzed are the Cities of Delavan, Elkhorn, Lake Geneva, and Whitewater. In addition, the Villages of East Troy, Bloomfield, Darien, Fontana, Genoa City, Mukwonago, Sharon, Walworth, and Williams Bay are analyzed. While a number of these communities occupy more than one county, the entire municipality boundary area is included in this analysis. Specifically, for each municipality, the following metrics are calculated and interpreted where appropriate:

1. Median home sale price over time
2. Current months' supply of housing
3. Household income
4. Gross Rent and Rent cost-efficiency
5. Housing cost-efficiency for workforce households (ALICE)
6. Projected household and housing unit growth

Please keep in mind the smaller sample sizes of municipalities compared to the County. Measures on a municipality level are more limited and have wider margin of error. Interpretation of metrics are included where possible.

Measures

Home Sale Price

Home price appreciation for municipalities is calculated using home sale data from the Wisconsin Department of Revenue which records real estate transfers. The median home sale prices for the last five years are also calculated using the home sales records. This data is narrow capturing actual single-family home sales within a given time period. The municipalities' median home prices are then compared to Walworth County median home prices. Unlike Walworth County, the sample size of homes sold in a year is much smaller for the municipalities, and therefore, the estimate of the median home price is more sensitive to random variation in the sample from year to year.

Months' Inventory

The Months' Supply of Housing is important for estimating housing demand because it provides insight on the rate at which houses are selling compared to the unused supply of homes. For municipalities in Walworth County, the Months' Supply of Housing is calculated using data from Realtor.com and the Wisconsin Department of Revenue. The Months' Supply of Housing is calculated by taking the number of for-sale homes and dividing it by the number of sales per month over a certain period (in this case 1 year). This metric can also be reframed as the Absorption Rate, which just describes the percent of the existing for-sale homes that would be sold in 1 month if homes continued to sell at the same rate (e.g., a 3 months' supply of housing corresponds to a 33.3% absorption rate, as $1 \text{ month supply} / 3 \text{ months' supply} = 33\%$ sold in a single month).

The Average # of Homes for Sale figure is recorded on a zip code basis while home sales are recorded based on municipality boundaries. Zip codes often do not correspond to jurisdiction boundaries, and in Walworth County's case, can extend beyond jurisdiction boundaries.

Therefore, the Average # of Homes for Sale metric may be slightly overstated for each municipality. This would result in an overestimate of the inventory.

Household Income

Using data from the U.S. Census Bureau's American Community Survey (ACS), the distribution of household income is analyzed for each municipality.

The historical and projected trends of the distribution of household income is also analyzed. However, due to the small sample sizes of available data, the historical and projected trends should be taken as very rough estimates.

Gross Rent

Using data from the American Community Survey, the cost of rent for each municipality is analyzed by looking at the distribution of Gross Rent across 5 price brackets. In other words, what proportion of all renter-occupied units had a Gross Rent of less than \$500, what proportion of all renter-occupied housing units had a Gross Rent between \$500 and \$999, and so on for other price brackets.

For each City and Village, the distribution of gross rent is estimated for the five-year time period of 2010-2014 as well as the five-year time period of 2015-2019. The change in the distribution of gross rent between these two time periods is compared.

Gross Rent as a Percentage of Household Income

Similar to the method used for Walworth County as a whole, the cost-efficiency of rent for each municipality is analyzed by looking at the proportion of renter households that pay less than 15% of their household income towards rent, the proportion of renter households that pay between 15% and 19% of their household income towards rent, and so on for additional brackets.

For each City and Village, the distribution of gross rent is estimated for the five-year time period of 2010-2014 as well as the five-year time period of 2015-2019. The change in the distribution of gross rent as a percentage of household income between these two time periods is compared for these municipalities.

United For ALICE Households

In addition to looking at gross rent as a percentage of income, the number of Assist Limited, Income Constrained, Employed (ALICE) households in each municipality was also analyzed. United For ALICE data takes into consideration the cost of living in different states, counties, and municipalities, providing further insight into households' ability to afford housing in each municipality. Based upon the cost of living, ALICE compiles a survival budget which estimates the annual income required to afford the most basic of living expenses, including housing. For example, a household with two adults and two school aged children require a minimum annual income of \$55,212 to afford housing and other basic living necessities.

In the Walworth County ALICE Survival Budget, single adult households are allocated \$542 to spend on monthly housing costs, cohabiting adults are allocated \$638, and households with children are allocated \$849. These numbers come from the 2018 Housing and Urban Development's fair market renter pricing for efficient, single-bedroom, and two-bedroom apartments. Households are designated as ALICE if they fall below the ALICE Threshold but are above the Federal Poverty Line. Households with income that falls below the threshold set by the ALICE survival budget will either be unable to afford these fair market housing prices and require housing with lower monthly costs, will need to forgo other necessities to afford housing, or will need additional monetary support.

The most recent ALICE report for Wisconsin was completed in 2020 and made use of 2018 Census data.

Projected Household and Housing Unit Growth

The projected increase in households between 2020 and 2030 was compared to current new housing construction rates for each of the municipalities. The DOA's household projections were used to estimate household growth over the next ten years. To estimate recent construction rates, the ACS's estimates for the number of new housing units built in each municipality since 2010 were used. Keep in mind that due to the smaller sample sizes, the municipality projections tend to have a wide margin of error.

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A. City of Delavan

Home Sale Price

The City of Delavan witnessed a 10.7% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the City of Delavan at a slower rate compared to Walworth County as a whole.

Table 41: City of Delavan Median Close Price			
Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$140,000	-	-
2017	\$130,000	-7.1%	-7.1%
2018	\$153,950	18.4%	10.0%
2019	\$155,000	0.7%	10.7%
2020	\$155,000	0.0%	10.7%
2021	\$200,000	29.0%	42.9%

*2021 data includes January-August

Table 42: Walworth County Median Close Price			
Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the City of Delavan are selling quickly. The City of Delavan has a months' supply of housing of 2.55. Six months of supply is considered the optimal months' supply in a balanced market. The City of Delavan is below this threshold.

Table 43: City of Delavan Months' Inventory: Single-Family Homes						
	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	72	12	12	174	29.00	3.4%
2017	124	12	10	128	12.39	8.1%
2018	128	12	11	77	7.22	13.9%
2019	140	12	12	82	7.03	14.2%
2020	137	12	11	58	5.08	19.7%
2021	116	8	15	37	2.55	39.2%

*2021 data includes January-August

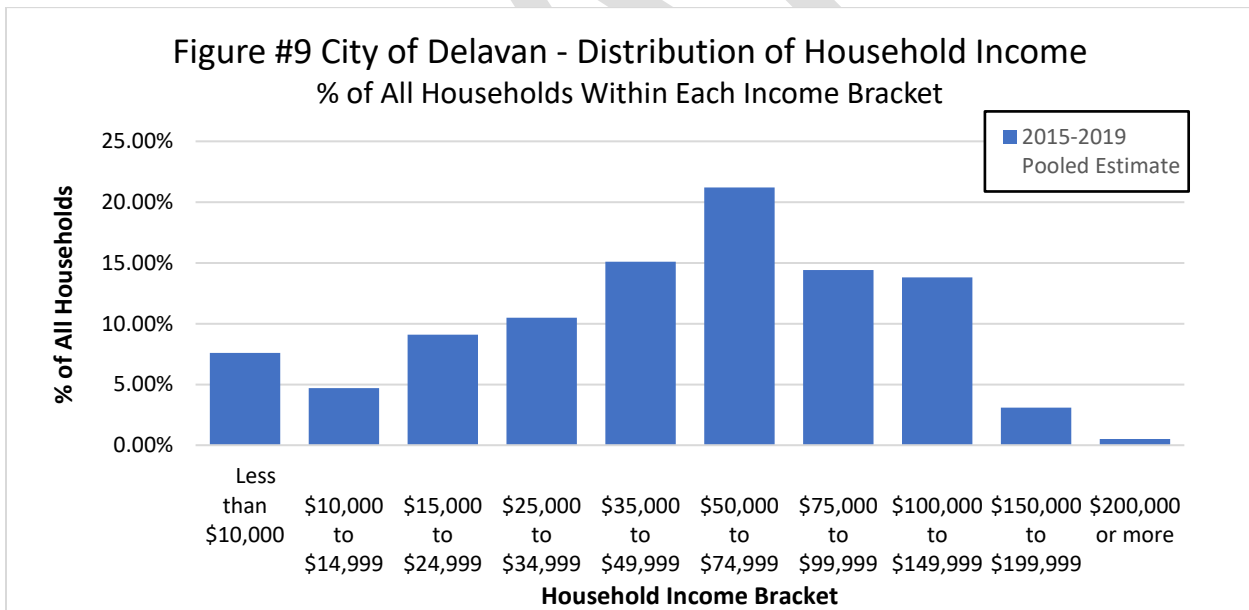
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 14 total units were authorized by building permits in Delavan.

Table 44: Delavan Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	0	0	0
2015	6	0	6
2016	5	0	5
2017	2	0	2
2018	8	0	8
2019	1	0	1
2020	14	0	14

Household Income

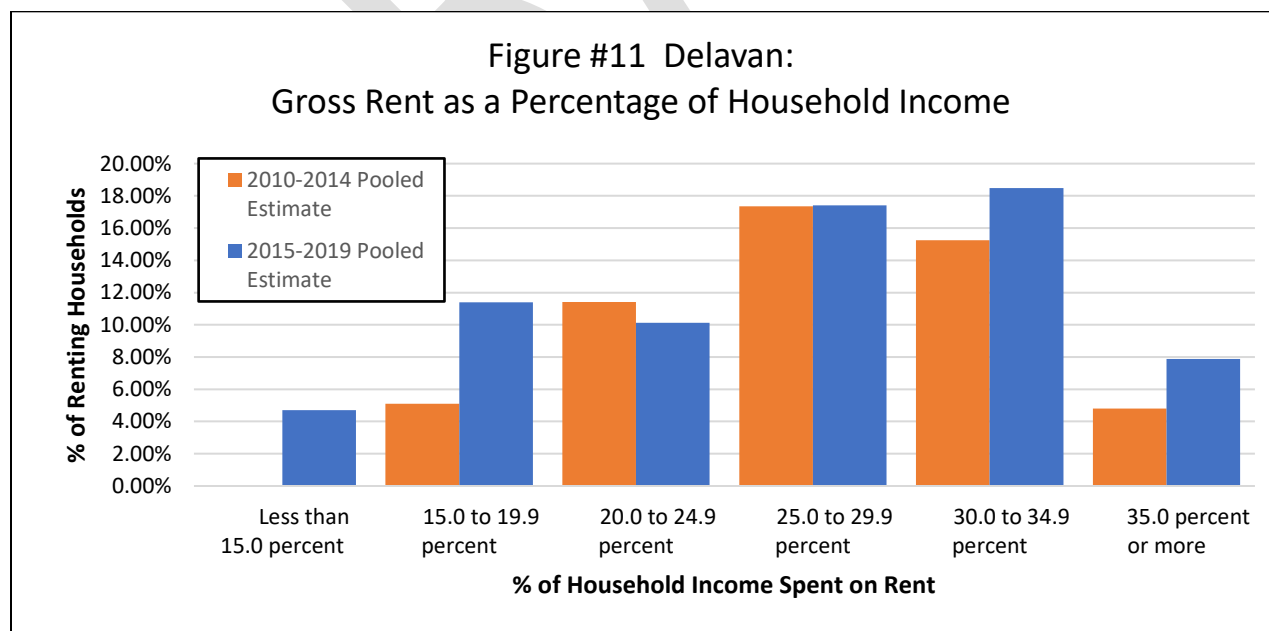
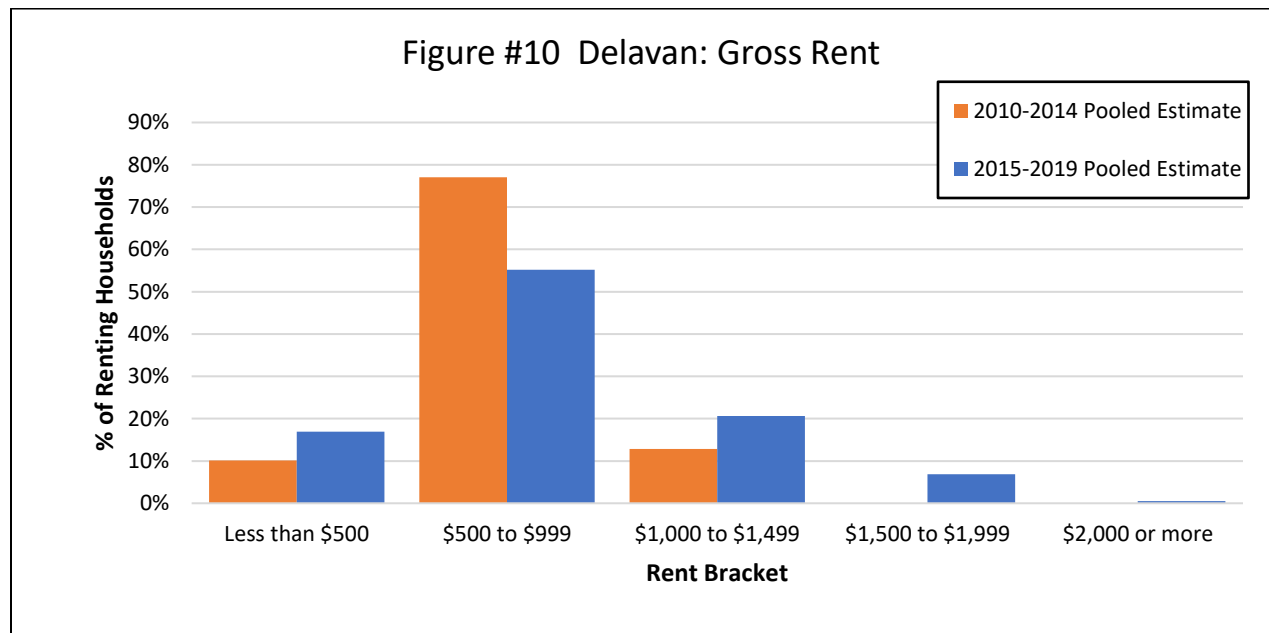
The distribution of household income for the City of Delavan is shown below (*Figure 9*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

The distribution of gross rent shifted from the first half of the decade to the second half of the decade. *Figure 10* shows a shift in that a larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's. Note that the data is not inflation adjusted.

Figure 11 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the City of Delavan had 989 households (31%) classified as ALICE and an additional 448 households (14%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in the City of Delavan is 1,437, which makes up 45% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, the City of Delavan has a notably higher concentration of ALICE households.

Table 45: ALICE Households in Delavan: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
3,186	448	989	1,437	45%

Projected Household and Housing Unit Growth

According to the ACS, 58 units have been built in the City of Delavan since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the City of Delavan between the years 2020 to 2030. The DOA projected that households in the City of Delavan will increase by 444 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the City of Delavan will grow by 412 households between 2020 and 2030. If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the City of Delavan is on track to have a housing shortage of 354 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the City of Delavan continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the City of Delavan may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 46: Delavan City Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
3,444	3,287	58	157

Table 47: Delavan City Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
58	412	(35)	(354)

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B. City of Elkhorn

Home Prices

Elkhorn had a high rate of home price appreciation in 2020. The estimate indicates a 45.8% increase in the median single-family home value price from 2016 to 2020. Home values appreciated in Elkhorn at a slower rate than Walworth County as a whole, however, Elkhorn does have higher median home prices overall.

Table 48: City of Elkhorn Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$169,000	-	-
2017	\$176,000	4.1%	4.1%
2018	\$199,900	13.6%	18.3%
2019	\$224,950	12.5%	33.1%
2020	\$246,450	9.6%	45.8%
2021	\$249,500	10.9%	57.6%

*2021 data includes January-August.

Table 49: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the City of Elkhorn are selling quickly. The City of Elkhorn has a months' supply of housing of 1.49. Six months of supply is considered the optimal months' supply in a balanced market. The City of Elkhorn is below this threshold.

Table 50: City of Elkhorn Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	139	12	12	186	16.06	6.2%
2017	179	12	15	123	8.25	12.1%
2018	165	12	14	91	6.62	15.1%
2019	196	12	16	92	5.63	17.8%
2020	188	12	16	60	3.83	26.1%
2021	140	8	18	26	1.49	67.3%

*2021 data includes January-August

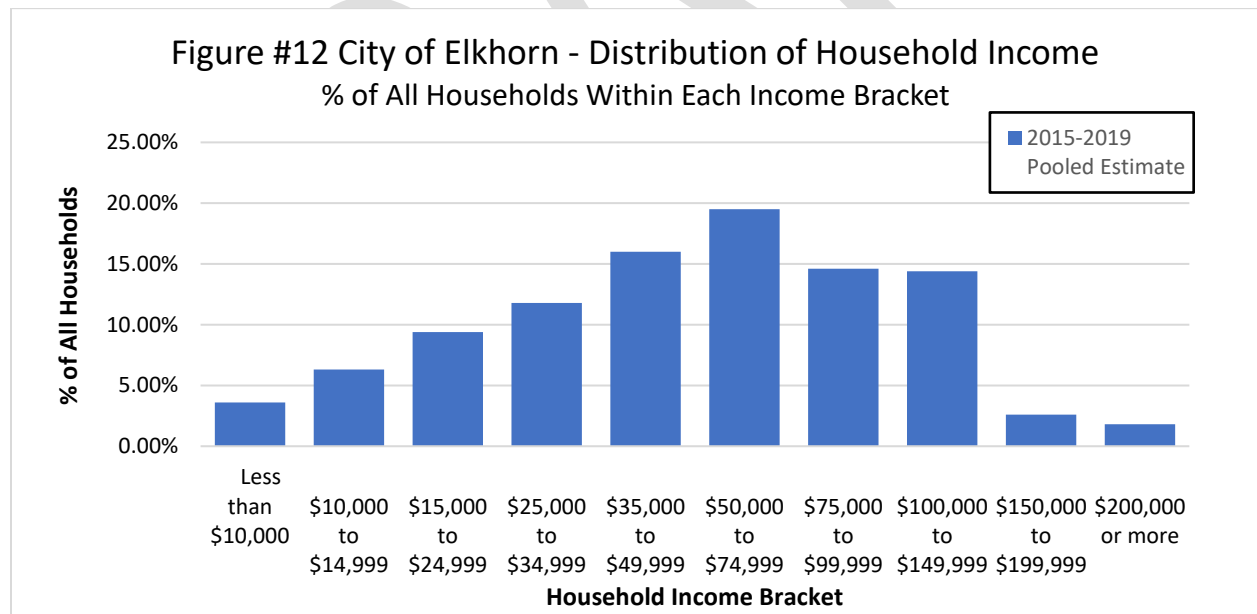
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 27 total units were authorized by building permits in Elkhorn.

Table 51: Elkhorn Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	6	0	6
2015	11	0	11
2016	29	24	53
2017	32	0	32
2018	24	8	32
2019	21	8	29
2020	27	0	27

Household Income

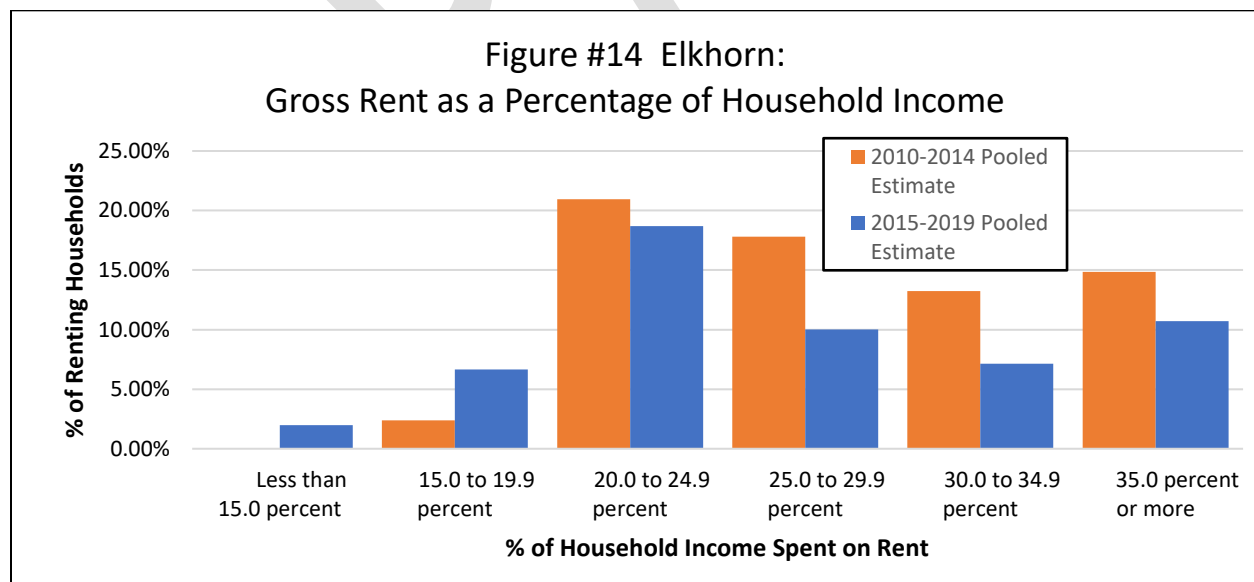
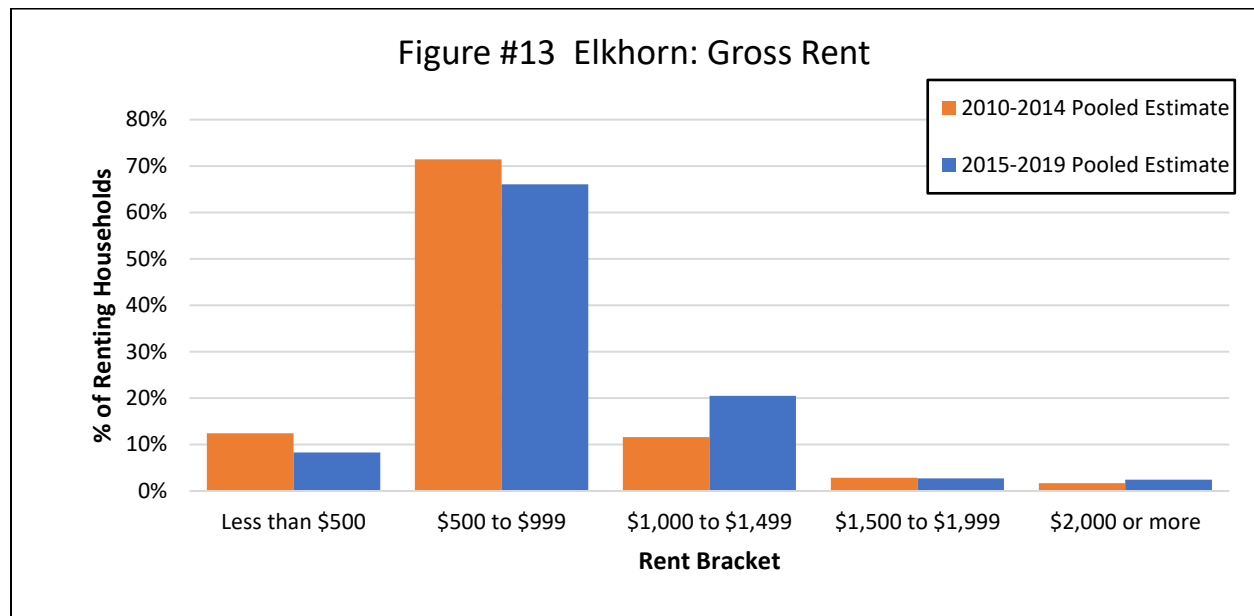
The distribution of household income for the City of Elkhorn is shown below (*Figure 12*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

The distribution of gross rent shifted from the first half of the decade to the second half of the decade. *Figure 13* shows the shift such that a larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's. Note that the data is not inflation adjusted.

Figure 14 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the early 2010's as compared to the late 2010's. This indicates an increase in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the City of Elkhorn had 1,074 households (27%) classified as ALICE and an additional 472 households (12%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Fox Lake is 1,546, which makes up 39% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Elkhorn has a higher distribution of ALICE households.

Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
3,946	472	1,074	1,546	39%

Projected Household and Housing Unit Growth

According to the ACS, 54 units have been built in the City of Elkhorn since 2010.

Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the City of Elkhorn between the years 2020 to 2030. The DOA projected that households in the City of Elkhorn will increase by 725 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the City of Elkhorn will grow by 553 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the City of Elkhorn is on track to have a housing shortage of 499 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the City of Elkhorn continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand.

Households unable to find adequate available housing in the City of Elkhorn may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 53: Elkhorn City Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
4,179	4,044	54	135

Table 54: Elkhorn City Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
54	553	(49)	(499)

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C. City of Whitewater

Home Prices

The City of Whitewater had a low rate of home price appreciation in 2020. The estimate indicates a 28.6% increase in the median single-family home value price from 2016 to 2020. Home values appreciated in Whitewater at a slower rate than Walworth County as a whole.

Table 55: City of Whitewater Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$146,950	-	-
2017	\$159,000	8.2%	8.2%
2018	\$178,200	12.1%	21.3%
2019	\$166,500	-6.6%	13.3%
2020	\$189,000	13.5%	28.6%
2021	\$190,950	14.7%	29.9%

*2021 data includes January-August

Table 56: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the City of Whitewater are selling quickly. The City of Whitewater has a months' supply of housing of 1.26. Six months of supply is considered the optimal months' supply in a balanced market. The City of Whitewater is below this threshold.

Table 57: City of Whitewater Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	96	12	8	125	15.63	6.4%
2017	117	12	10	63	6.46	15.5%
2018	113	12	9	53	5.63	17.8%
2019	126	12	11	50	4.76	21.0%
2020	132	12	11	27	2.45	40.7%
2021	114	8	14	18	1.26	79.2%

*2021 data includes January-August

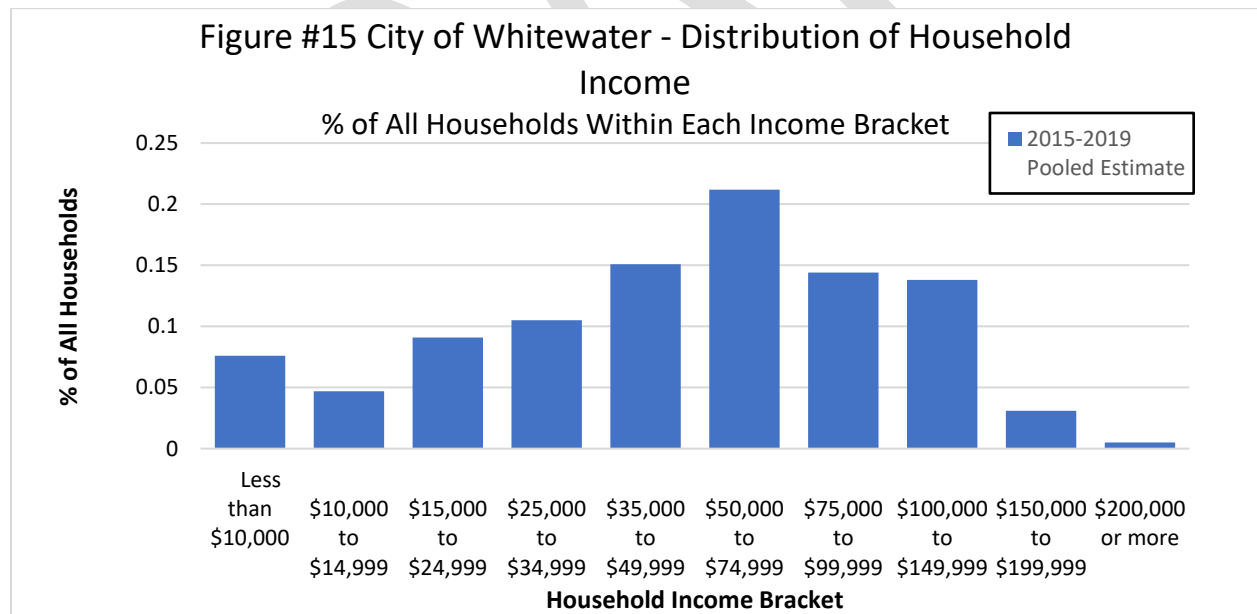
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 12 total units were authorized by building permits in Whitewater.

Table 58: Whitewater Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	7	36	43
2015	28	6	34
2016	22	0	22
2017	15	64	79
2018	14	0	14
2019	13	0	13
2020	12	0	12

Household Income

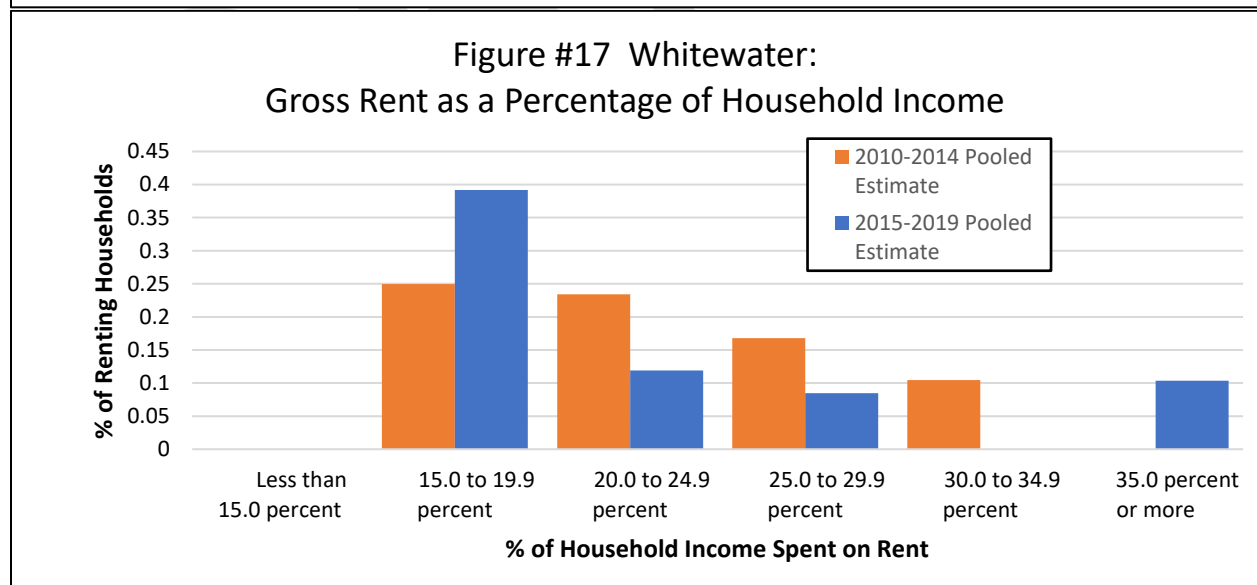
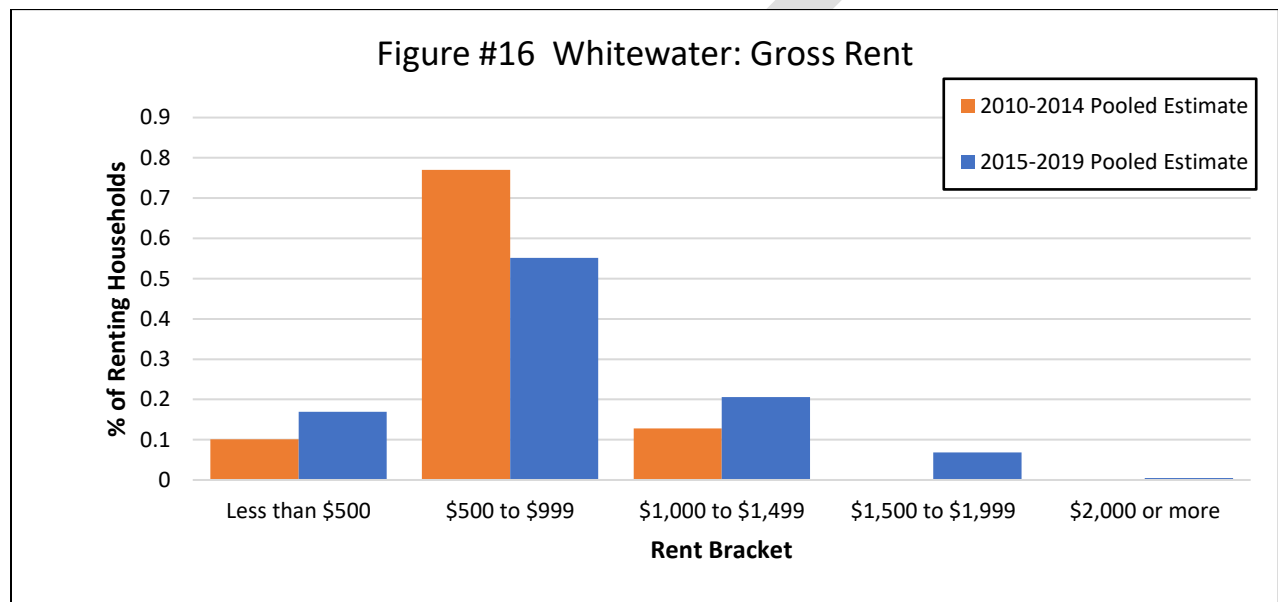
The distribution of household income for the City of Whitewater is shown below (*Figure 15*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 16*). Note that the data is not inflation adjusted.

Figure 17 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the early 2010's as compared to the late 2010's. Even so, a larger proportion of renters paid 35% or more of their income in the late 2010's as compared to the early 2010's. *Figure 17* indicates a slight increase in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the City of Whitewater had 818 households (18%) classified as ALICE and an additional 1,887 households (41%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Whitewater is 2,705 which makes up 58% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Whitewater has a much larger distribution of ALICE households. This can be attributed to a large percentage of college students and student housing.

Table 59: ALICE Households in Whitewater: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
4,616	1,887	818	2,705	58%

Projected Household and Housing Unit Growth

According to the ACS, 243 units have been built in the City of Whitewater since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the City of Whitewater between the years 2020 to 2030. The DOA projected that households in the City of Whitewater will increase by 966 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the City of Whitewater will grow by 782 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the City of Whitewater is on track to have a housing shortage of 539 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the City of Whitewater continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the City of Whitewater may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 60: Whitewater City Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
5,297	4,686	243	611

Table 61: Whitewater City Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
243	782	(53)	(539)

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D. City of Lake Geneva

Home Sale Price

The City of Lake Geneva had a high rate of home price appreciation in 2020. The estimate indicates a 43.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the City of Lake Geneva at a slightly lower rate compared to Walworth County as a whole.

Table 62: Lake Geneva Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$185,000	-	-
2017	\$190,000	2.7%	2.7%
2018	\$210,000	10.5%	13.5%
2019	\$225,000	7.1%	21.6%
2020	\$265,000	17.8%	43.2%
2021	\$307,817	36.8%	66.4%

**2021 data includes January-August*

Table 63: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

**2021 data includes January-August*

Months' Inventory

The data indicate that homes in the City of Lake Geneva are selling quickly. The City of Lake Geneva has a months' supply of housing of 3.28. Six months of supply is considered the optimal months' supply in a balanced market. The City of Lake Geneva is below this threshold. It is important to note that Lake Geneva was above this threshold from 2016 through 2020.

Table 64: Lake Geneva Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	145	12	12	388	32.11	3.1%
2017	169	12	14	296	21.02	4.8%
2018	201	12	17	257	15.34	6.5%
2019	269	12	22	237	10.57	9.5%
2020	303	12	25	155	6.14	16.3%
2021	232	8	29	95	3.28	30.5%

**2021 data includes January-August*

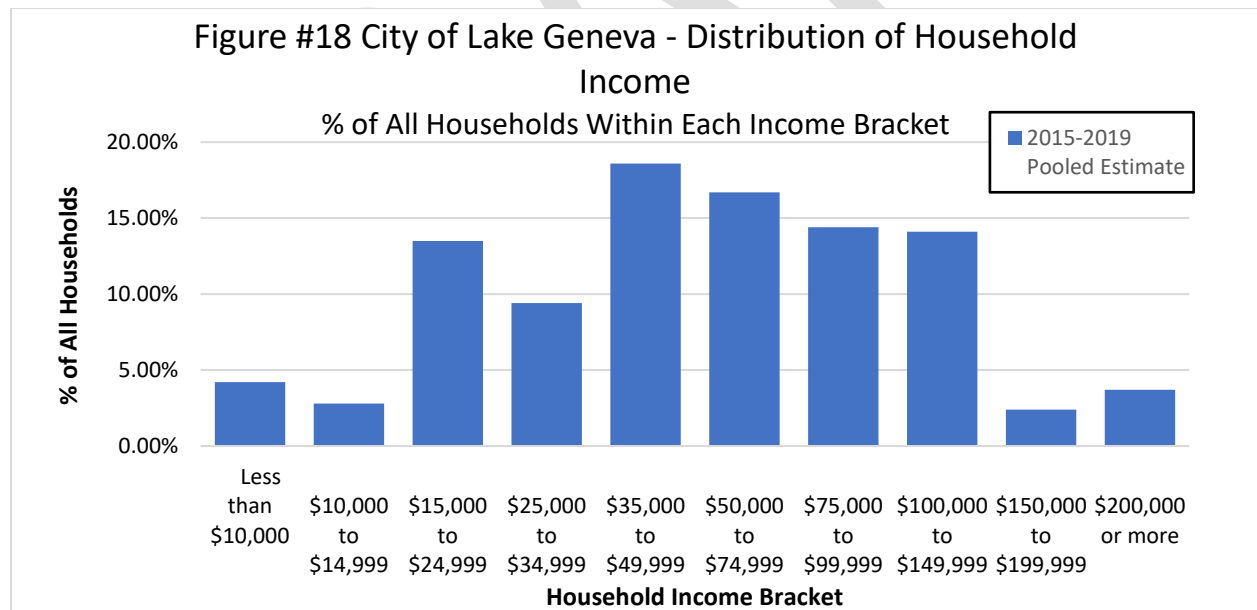
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 89 total units were authorized by building permits in Lake Geneva.

Table 65: Lake Geneva Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	24	17	41
2015	28	12	40
2016	27	29	56
2017	26	40	66
2018	42	68	110
2019	49	18	67
2020	89	0	89

Household Income

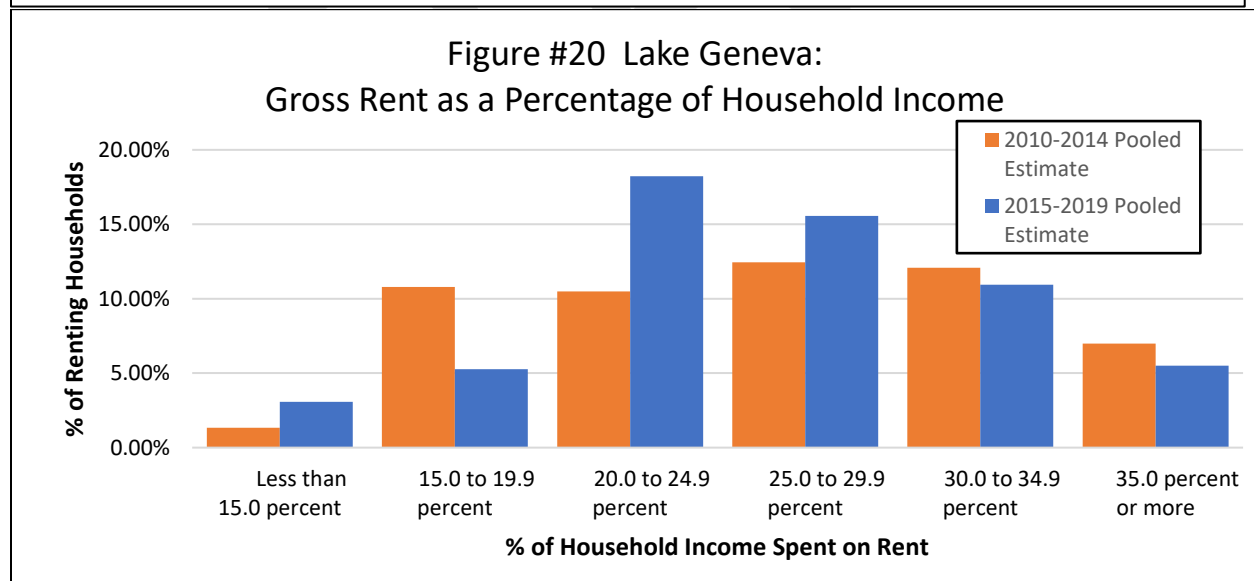
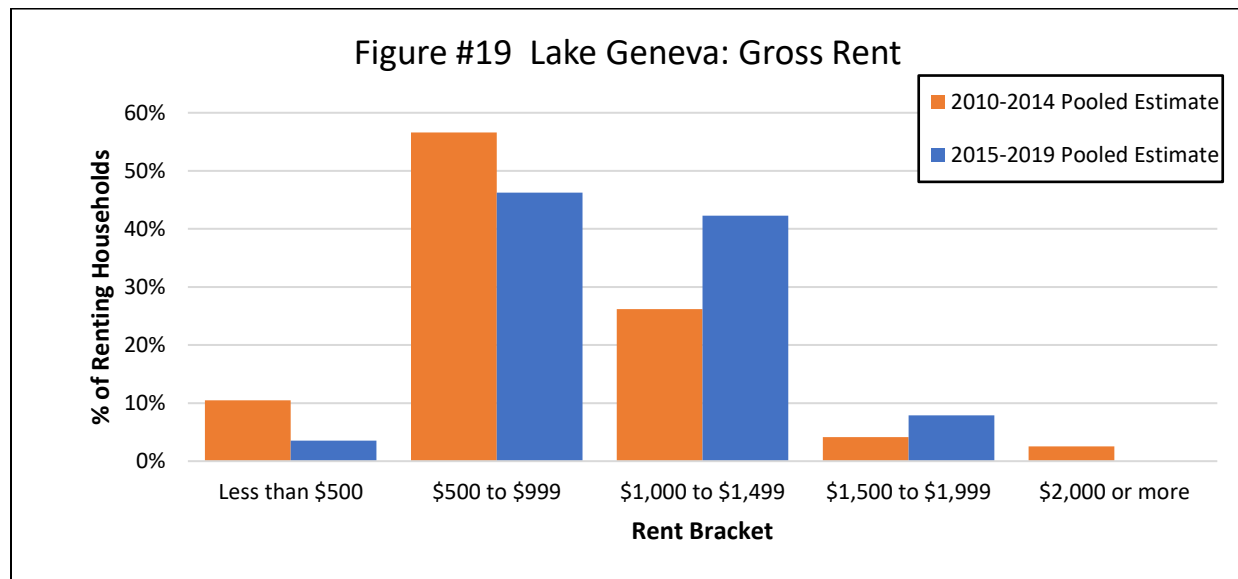
The distribution of household income for the City of Lake Geneva is shown below (*Figure 18*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 19*). Note that the data is not inflation adjusted.

Figure 20 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the early 2010's as compared to the late 2010's. This indicates an increase in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, Lake Geneva had 1,062 households (31%) classified as ALICE and an additional 424 households (12%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Lake Geneva is 1,486, which makes up 43% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Lake Geneva has a higher concentration of ALICE households.

Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
3,461	424	1,062	1,486	43%

Projected Household and Housing Unit Growth

According to the ACS, 148 units have been built in the City of Lake Geneva since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the City of Lake Geneva between the years 2020 to 2030. The DOA projected that households in the City of Lake Geneva will increase by 469 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the City of Lake Geneva will grow by 415 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the City of Lake Geneva is on track to have a housing shortage of 267 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the City of Lake Geneva continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the City of Lake Geneva may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 67: Lake Geneva City Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
4,507	3,531	148	976

Table 68: Lake Geneva City Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
148	415	(26)	(267)

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E. Village of East Troy

Home Sale Price

The Village of East Troy had a high rate of home price appreciation in 2020. The estimate indicates a 32.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in East Troy at a slower rate compared to Walworth County as a whole.

Table 69: East Troy Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$191,000	-	-
2017	\$203,500	6.5%	6.5%
2018	\$200,000	-1.7%	4.7%
2019	\$222,000	11.0%	16.2%
2020	\$252,500	13.7%	32.2%
2021	\$240,000	8.1%	25.7%

*2021 data includes January-August

Table 70: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the Village of East Troy are selling quickly. The Village of East Troy has a months' supply of housing of 1.36. Six months of supply is considered the optimal months' supply in a balanced market. The Village of East Troy is below this threshold.

Table 71: Village of East Troy Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	64	12	5	69	12.94	7.7%
2017	68	12	6	46	8.12	12.3%
2018	77	12	6	34	5.30	18.9%
2019	78	12	7	38	5.85	17.1%
2020	67	12	6	15	2.69	37.2%
2021	53	8	7	9	1.36	73.6%

*2021 data includes January-August

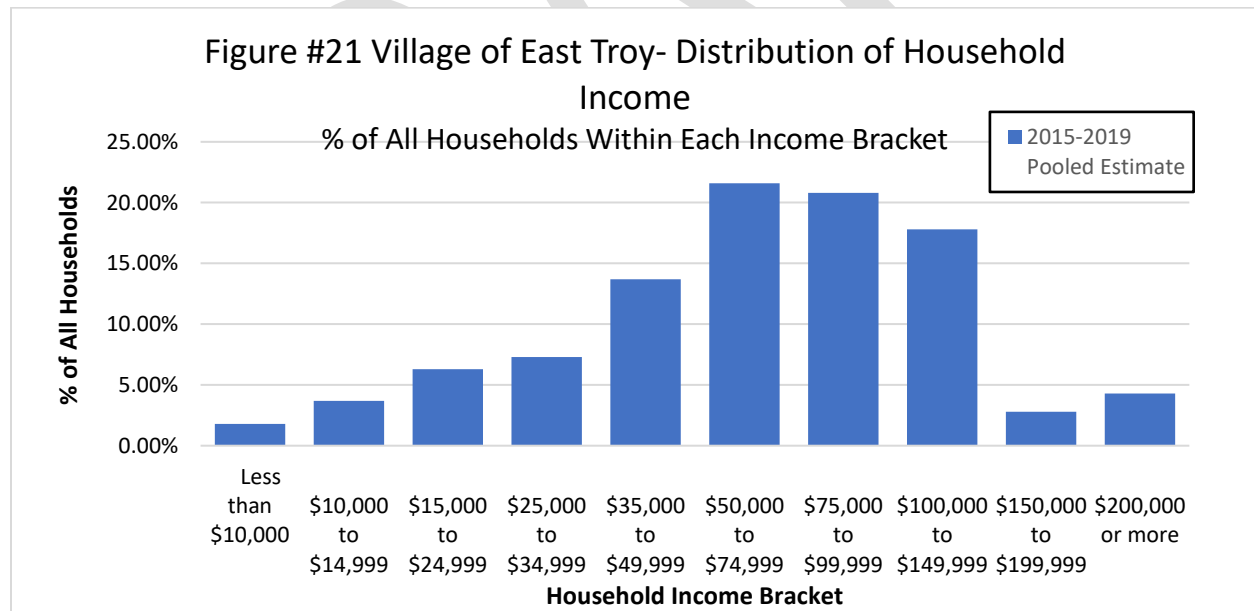
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 11 total units were authorized by building permits in East Troy.

Table 72: East Troy Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	5	0	5
2015	0	0	0
2016	13	0	13
2017	5	0	5
2018	5	0	5
2019	6	0	6
2020	11	0	11

Household Income

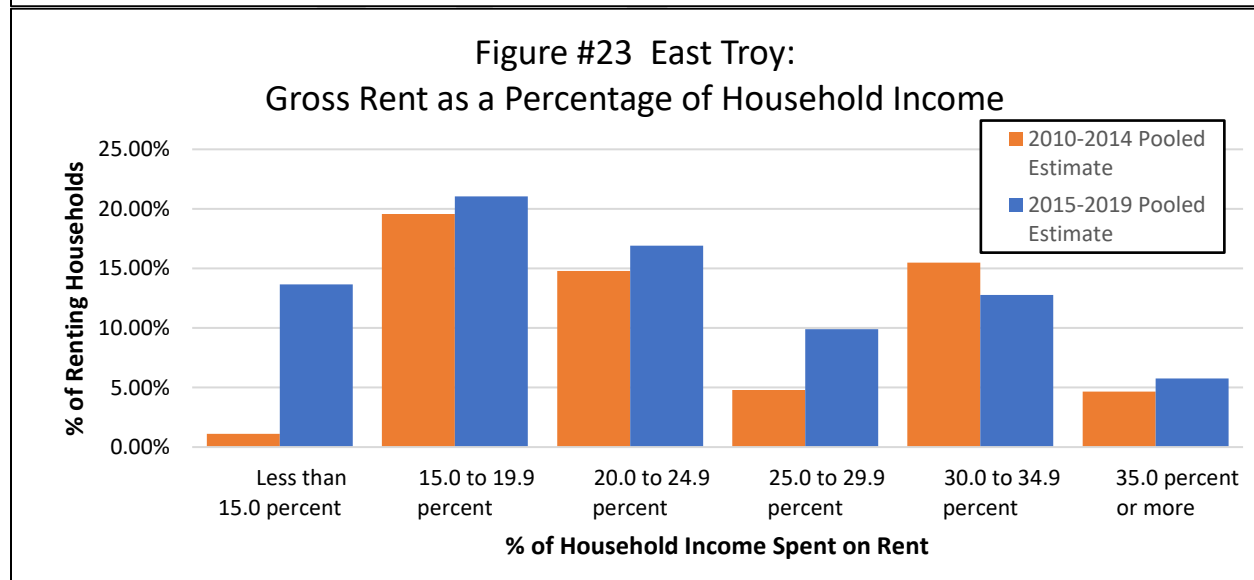
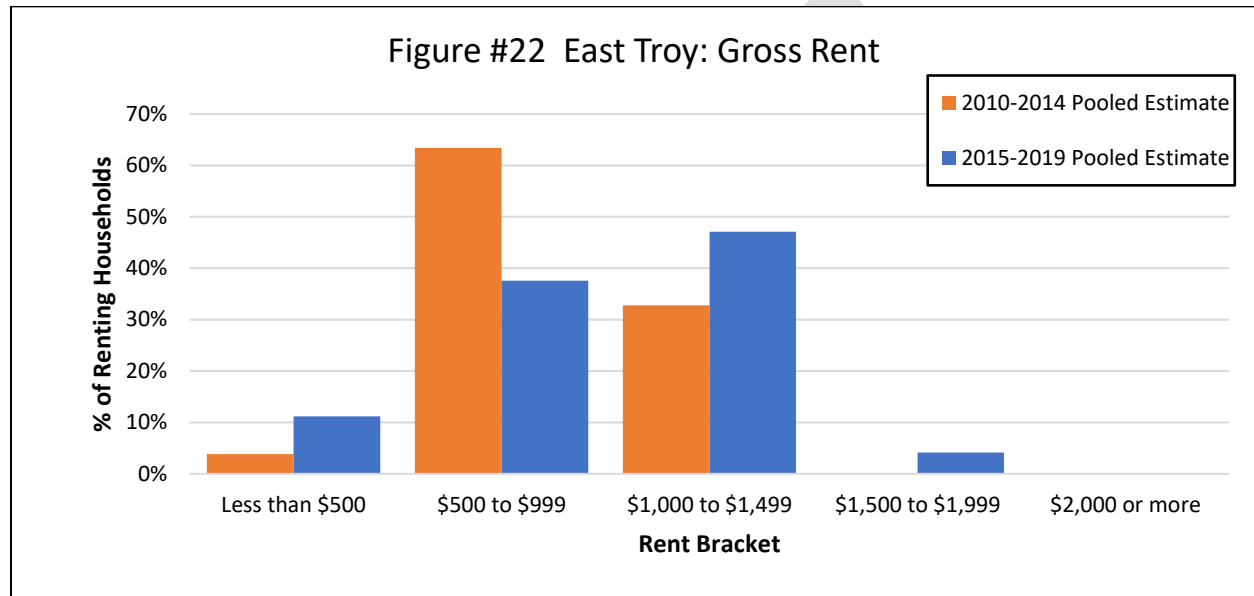
The distribution of household income for the Village of East Troy is shown below (*Figure 21*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 22*). Note that the data is not inflation adjusted.

Figure 23 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the Village of East Troy had 284 households (15%) classified as ALICE and an additional 140 households (7%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in East Troy is 424, which makes up 23% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, East Troy has a lower concentration of ALICE households.

Table 73: ALICE Households in East Troy: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
1,871	140	284	424	23%

Projected Household and Housing Unit Growth

According to the ACS, 73 units have been built in the Village of East Troy since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of East Troy between the years 2020 to 2030. The DOA projected that households in the Village of East Troy will increase by 342 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of East Troy will grow by 324 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of East Troy is on track to have a housing shortage of 251 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of East Troy continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of East Troy may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 74: East Troy Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
1,943	1,871	73	81

Table 75: East Troy Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage per year	Projected Housing Shortage by 2030
73	324	(25)	(251)

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F. Village of Bloomfield

Home Prices

The Village of Bloomfield had a low rate of home price appreciation in 2020. The estimate indicates a 32.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in Bloomfield at a slower rate than Walworth County as a whole.

Table 76: Village of Bloomfield Single Family Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$120,000	-	-
2017	\$140,700	17.3%	6.5%
2018	\$149,950	6.6%	4.7%
2019	\$161,000	7.4%	16.2%
2020	\$182,000	13.0%	32.2%
2021	\$193,900	6.5%	61.6%

*2021 data includes January-August

Table 77: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The months' supply of housing in Bloomfield could not be estimated with any certainty due to the low number of home sales each year. On average over the past six years, 92 homes are sold in Bloomfield each year.

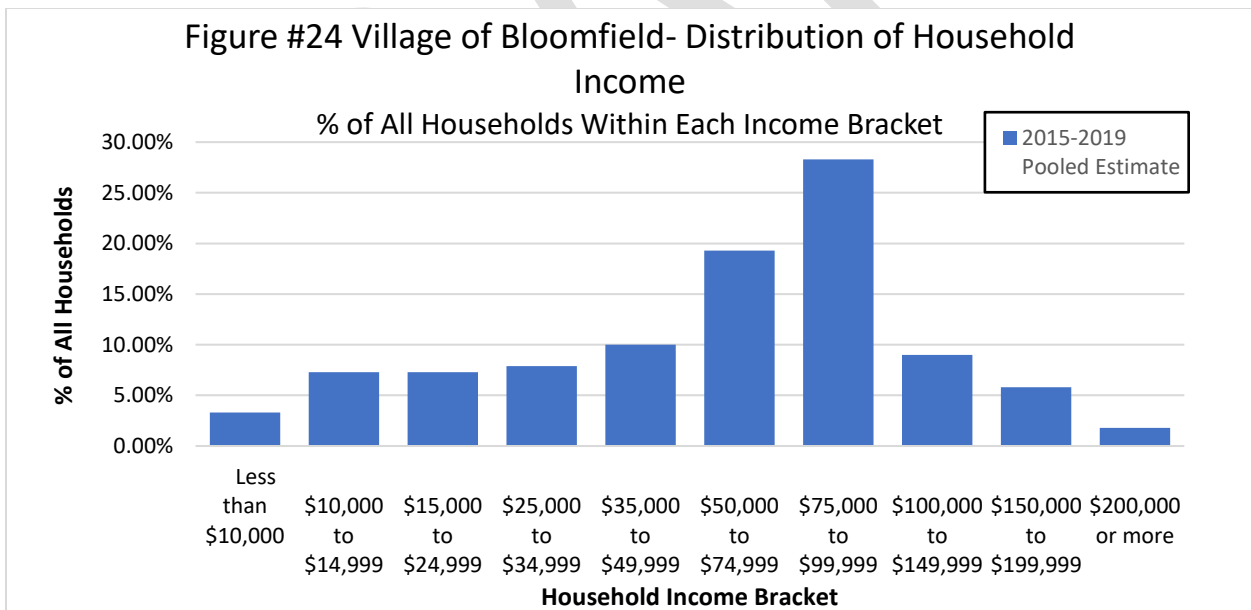
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 15 total units were authorized by building permits in Bloomfield.

Table 78: Bloomfield Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	8	0	8
2018	12	0	12
2019	18	0	18
2020	15	0	15

Household Income

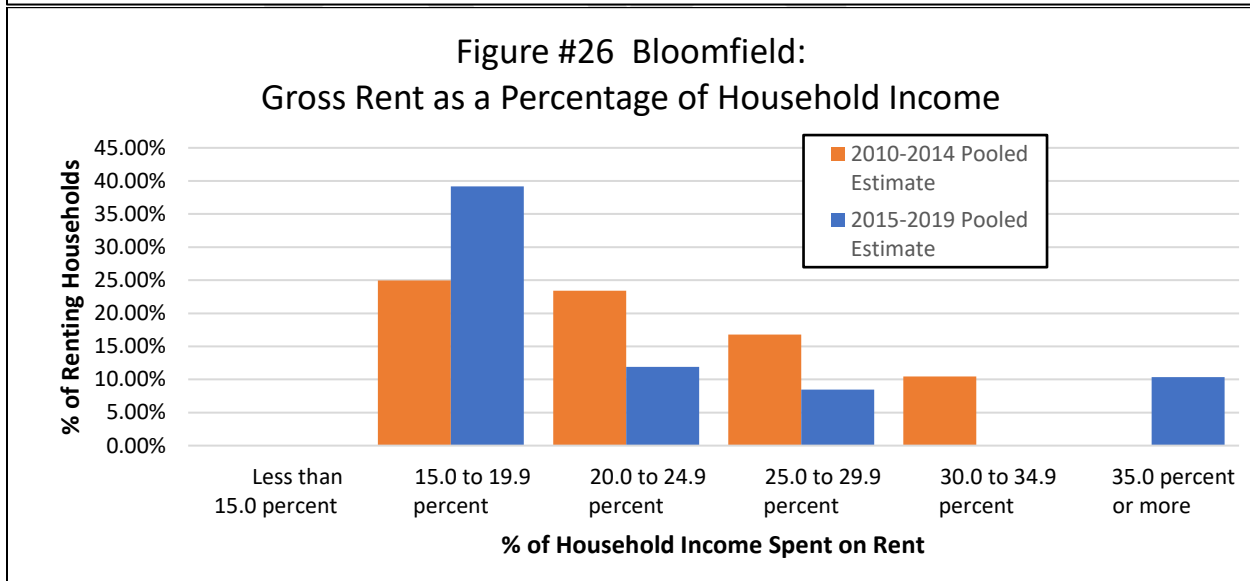
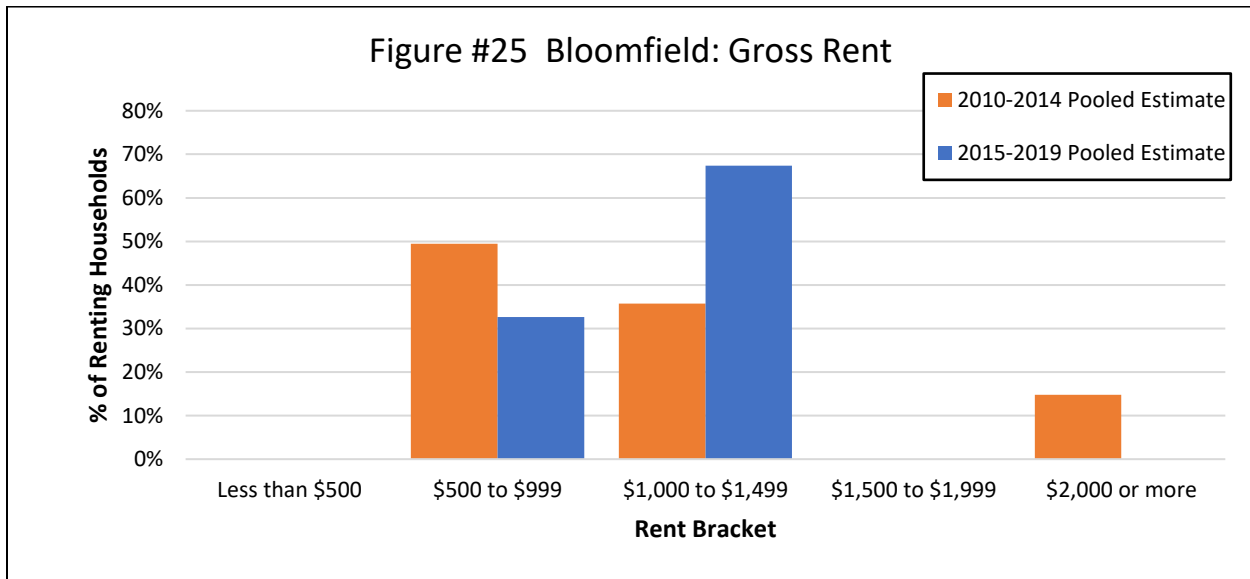
The distribution of household income for the Village of Bloomfield is shown below (Figure 24). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 25*). Note that the data is not inflation adjusted.

Figure 26 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the early 2010's as compared to the late 2010's. This indicates an increase in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the Village of Bloomfield had 378 households (24%) classified as ALICE and an additional 252 households (16%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Bloomfield is 630, which makes up 40% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Bloomfield has a higher distribution of ALICE households.

Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
1,557	252	378	630	40%

Projected Household and Housing Unit Growth

According to the ACS, 0 units have been built in the Village of Bloomfield since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Bloomfield between the years 2020 to 2030. The DOA projected that households in the Village of Bloomfield will increase by 329 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of Bloomfield will grow by 60 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Bloomfield is on track to have a housing shortage of 260 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Bloomfield continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Bloomfield may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 80: Bloomfield Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
1,949	1,528	0	421

Table 81: Bloomfield Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage per Year	Projected Housing Shortage by 2030
0	260	(26)	(260)

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G. Village of Darien

Home Prices

The Village of Darien had a low rate of home price appreciation in 2020. The estimate indicates a 11.9% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in Darien at a much slower rate compared to Walworth County as a whole. There is a good possibility that this home price appreciation is understated due to the lack of home sale data.

Table 82: Village of Darien Single Family Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$134,000	-	-
2017	\$147,950	10.4%	10.4%
2018	\$186,250	25.9%	39.0%
2019	\$151,250	-18.8%	12.9%
2020	\$150,000	-0.8%	11.9%
2021	\$214,000	42.7%	59.7%

**2021 data includes January-August*

Table 83: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

**2021 data includes January-August*

Months' Inventory

The months' supply of housing in Darien could not be estimated with any certainty due to the low number of home sales each year. On average over the past six years, 32 homes are sold in Darien each year.

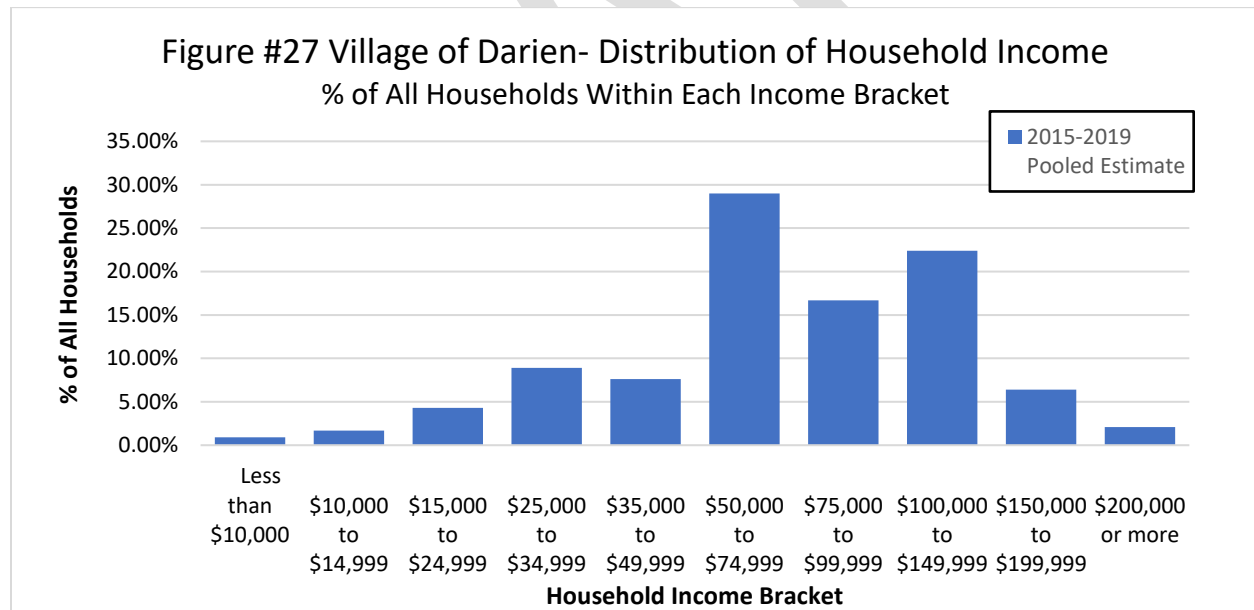
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 4 total units were authorized by building permits in Darien.

Table 84: Darien Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	5	0	5
2015	1	0	1
2016	0	0	0
2017	2	0	2
2018	3	0	3
2019	1	0	1
2020	4	0	4

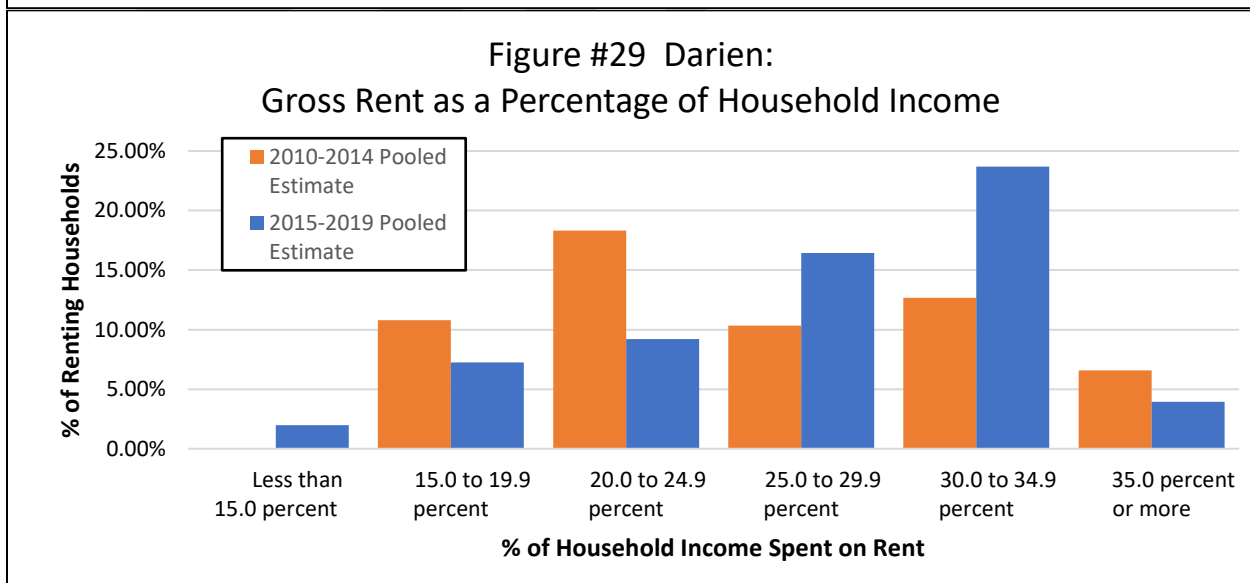
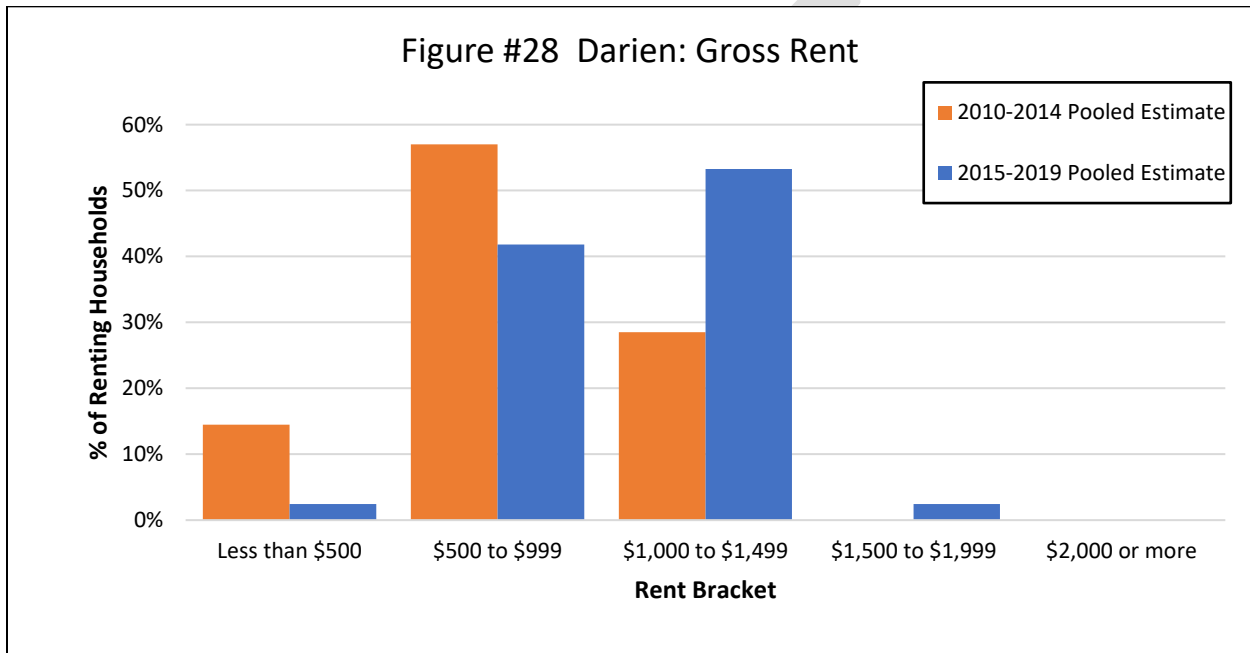
Household Income

The distribution of household income for the Village of Darien is shown below (Figure 27). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 or \$1,500+ in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 28*). Note that the data is not inflation adjusted. *Figure 29* shows a significant shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the Village of Darien had 78 households (13%) classified as ALICE and an additional 52 households (8%) fall below the Federal Poverty Level. The total number of households in 2018 is 600. The number of households in 2018 below the ALICE Threshold in Darien is 130, which makes up 22% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Darien has a lower distribution of ALICE households.

Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
600	52	78	130	22%

Projected Household and Housing Unit Growth

According to the ACS, 15 units have been built in the Village of Darien since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Darien between the years 2020 to 2030. The DOA projected that households in the Village of Darien will increase by 75 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of Darien will grow by 71 households between 2020 and 2030. If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Darien is on track to have a housing shortage of 56 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Darien continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Darien may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 86: Darien Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
621	576	15	45

Table 87: Darien Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
15	71	(5)	(56)

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H. Village of Fontana

Home Sale Price

The Village of Fontana had a high rate of home price appreciation in 2020. The estimate indicates a 47.0% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the Village of Fontana at a comparable rate to Walworth County as a whole.

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$253,750	-	-
2017	\$285,000	12.3%	12.3%
2018	\$339,250	19.0%	33.7%
2019	\$360,000	6.1%	41.9%
2020	\$373,000	3.6%	47.0%
2021	\$480,000	33.3%	89.2%

*2021 data includes January-August

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the Village of Fontana are selling quickly. The Village of Fontana has a months' supply of housing of 1.82. Six months of supply is considered the optimal months' supply in a balanced market. The Village of Fontana is below this threshold.

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	100	12	8	111	13.32	7.5%
2017	113	12	9	101	10.73	9.3%
2018	134	12	11	79	7.07	14.1%
2019	179	12	15	72	4.83	20.7%
2020	187	12	16	42	2.70	37.1%
2021	119	8	15	27	1.82	55.1%

*2021 data includes January-August

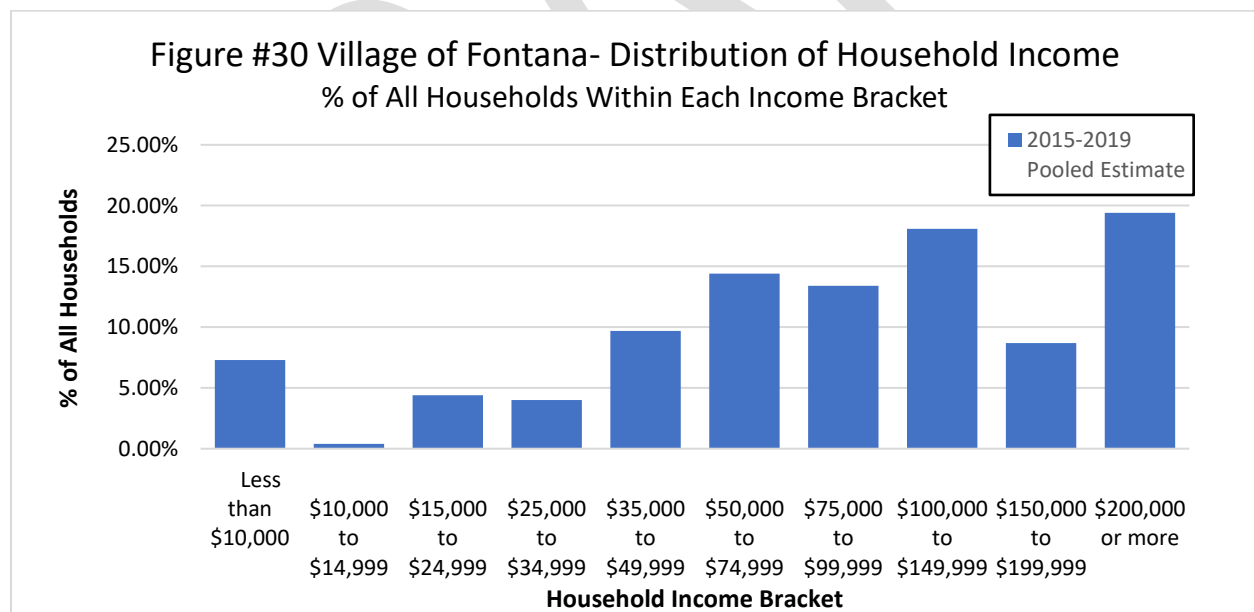
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 15 total units were authorized by building permits in Fontana.

Table 91: Fontana Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	7	0	7
2015	25	0	25
2016	21	0	21
2017	22	0	22
2018	25	0	25
2019	8	4	12
2020	15	0	15

Household Income

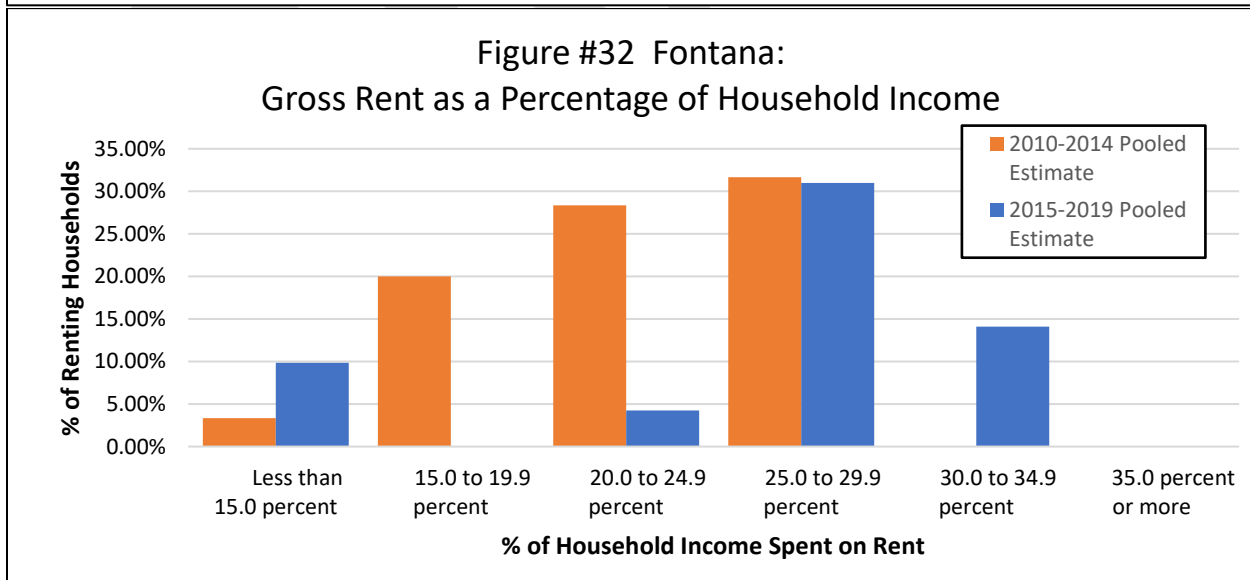
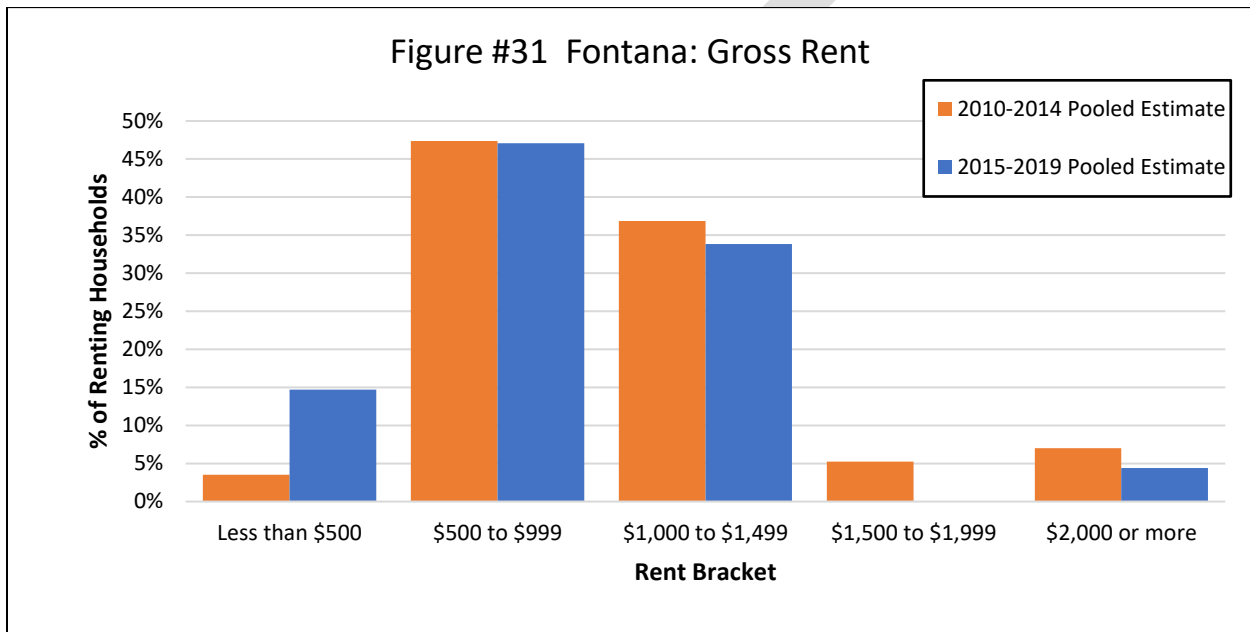
The distribution of household income for the Village of Fontana is shown below (*Figure 30*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 or \$1,500+ in the early 2010's than in the late 2010's, and a very similar proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's. However, a larger proportion of renters paid less than \$500 in the late 2010's than in the early 2010's (*Figure 31*). Note that the data is not inflation adjusted.

Figure 32 shows a shift in that a larger proportion of renters paid over 30% of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, Fontana had 254 households (23%) classified as ALICE and an additional 69 households (6%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Fontana is 323, which makes up 29% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Fontana has a slightly lower concentration of ALICE households.

Table 92: ALICE Households in Fontana: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
1,109	69	254	323	29%

Projected Household and Housing Unit Growth

According to the ACS, 107 units have been built in the Village of Fontana since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Fontana between the years 2020 to 2030. The DOA projected that households in the Village of Fontana will increase by 46 from 2020-2030. The DOA's household population projection was accurate for Fontana over the last ten years.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Fontana is on track to have a housing surplus of 65 units. This does not include the additional 1,656 vacant housing units currently in the Village of Fontana. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant.

Table 93: Fontana Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
2,356	700	107	1656

Table 94: Fontana Village Projected Household Growth			
Housing Units Built Since 2010	DOA Projection for Household Growth 2020-2030	Projected Housing Surplus Per Year	Projected Housing Surplus by 2030
107	46	10	69

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I. Village of Genoa City

Home Sale Price

The Village of Genoa City had a high rate of home price appreciation in 2020. The estimate indicates a 38.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the Village of Genoa City at a slower rate compared to Walworth County as a whole.

Table 95: Village of Genoa City Single Family Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$134,000	-	-
2017	\$149,900	11.9%	11.9%
2018	\$156,500	4.4%	16.8%
2019	\$181,750	16.1%	35.6%
2020	\$185,250	1.9%	38.2%
2021	\$192,000	5.6%	43.3%

*2021 data includes January-August

Table 96: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the Village of Genoa City are selling quickly. The Village of Genoa City has a months' supply of housing of 2.81. Six months of supply is considered the optimal months' supply in a balanced market. The Village of Genoa City is below this threshold.

Table 97: Village of Genoa City Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	32	12	3	75	28.13	3.6%
2017	65	12	5	47	8.68	11.5%
2018	60	12	5	32	6.40	15.6%
2019	50	12	4	27	6.48	15.4%
2020	66	12	6	17	3.09	32.4%
2021	37	8	5	13	2.81	35.6%

*2021 data includes January-August

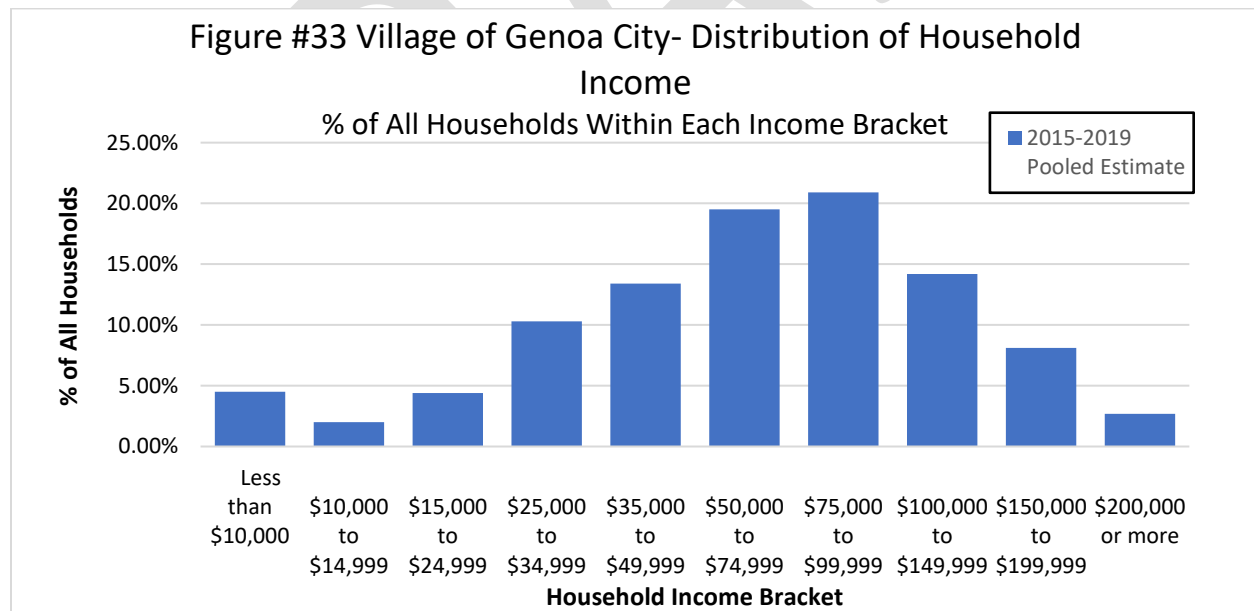
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 0 total units were authorized by building permits in Genoa City.

Table 98: Genoa City Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	1	0	1
2018	0	0	0
2019	1	0	1
2020	0	0	0

Household Income

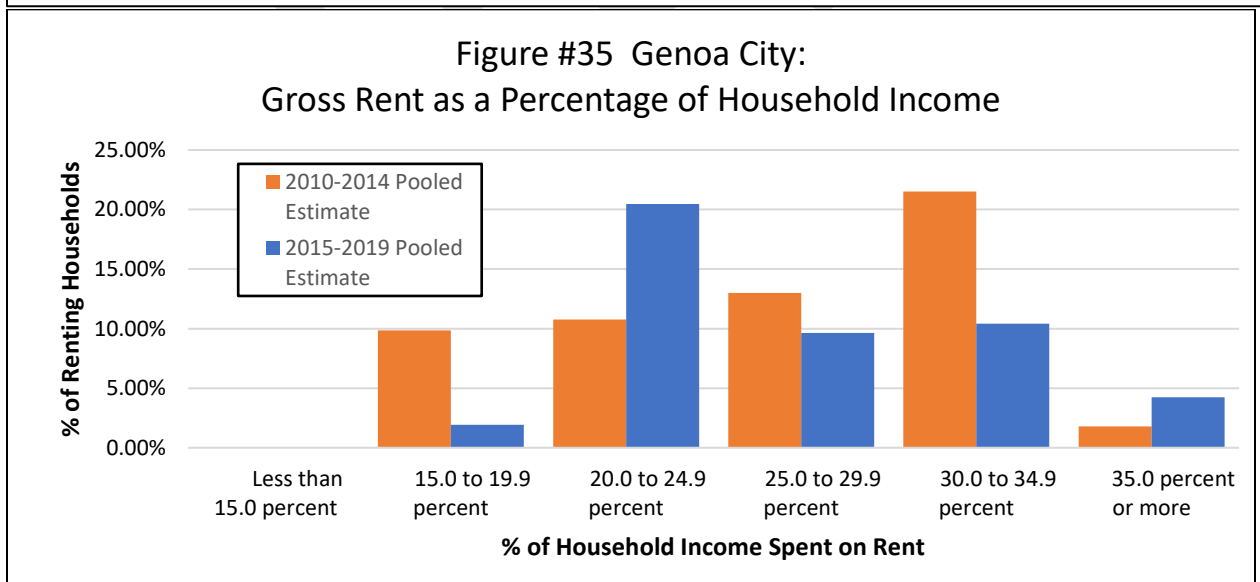
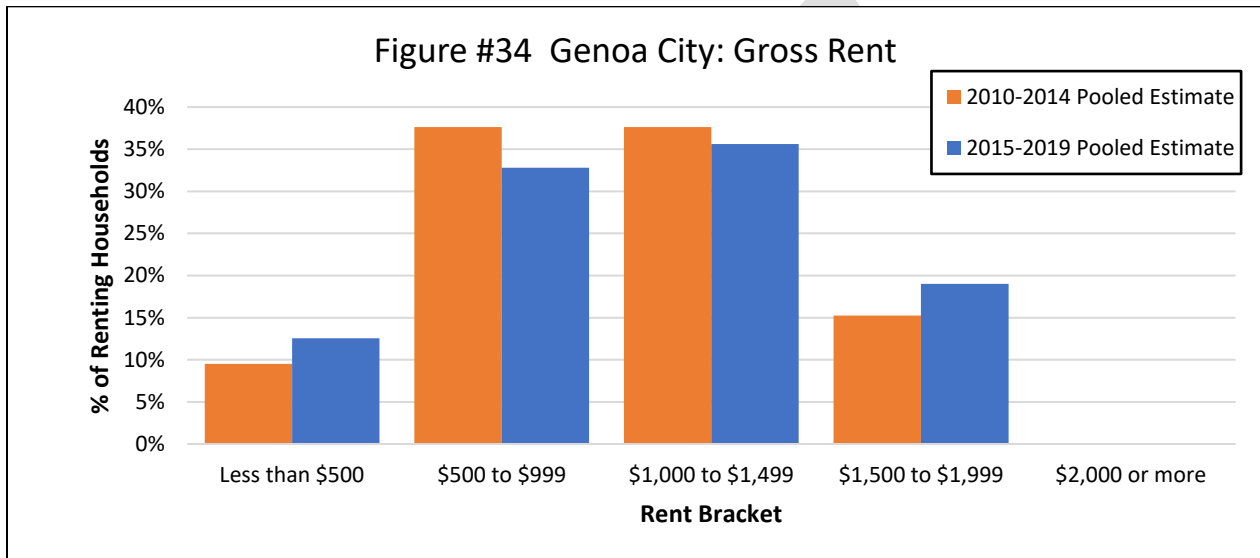
The distribution of household income for the Village of Genoa City is shown below (Figure 33). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. *Figure 34* shows that larger proportion of renters paid \$1500-\$1999 in the late 2010's than in the early 2010's and a larger proportion of renters paid \$500-\$999 in the early 2010's than in the late 2010's. Note that the data is not inflation adjusted.

Figure 35 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the early 2010's as compared to the late 2010's. This indicates a slight increase in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the Village of Genoa City had 244 households (22%) classified as ALICE and an additional 120 households (11%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Genoa City is 364, which makes up 33% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Genoa City has a slightly higher distribution of ALICE households.

Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
1,105	120	244	364	33%

Projected Household and Housing Unit Growth

According to the ACS, 0 units have been built in the Village of Genoa City since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Genoa City between the years 2020 to 2030. The DOA projected that households in the Village of Genoa City will increase by 319 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of Genoa City will grow by 273 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Genoa City is on track to have a housing shortage of 273 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Genoa City continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Genoa City may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 100: Genoa City Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
1,199	1,110	0	89

Table 101: Genoa City Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
0	273	(27)	(273)

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J. Village of Mukwonago

Home Sale Price

The Village of Mukwonago had a low rate of home price appreciation in 2020. The estimate indicates a 20.8% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the Village of Mukwonago at a slower rate compared to Walworth County as a whole.

Table 102: Village of Mukwonago Single Family Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$232,000	-	-
2017	\$245,000	5.6%	5.6%
2018	\$248,000	1.2%	6.9%
2019	\$260,000	4.8%	12.1%
2020	\$280,200	7.8%	20.8%
2021	\$322,500	24.0%	39.0%

*2021 data includes January-August

Table 103: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the Village of Mukwonago are selling quickly. The Village of Mukwonago has a months' supply of housing of 2.16. Six months of supply is considered the optimal months' supply in a balanced market. The Village of Mukwonago is below this threshold.

Table 104: Village of Mukwonago Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	139	12	12	137	11.83	8.5%
2017	155	12	13	62	4.80	20.8%
2018	135	12	11	42	3.73	26.8%
2019	143	12	12	46	3.86	25.9%
2020	146	12	12	52	4.27	23.4%
2021	126	8	16	34	2.16	46.3%

*2021 data includes January-August

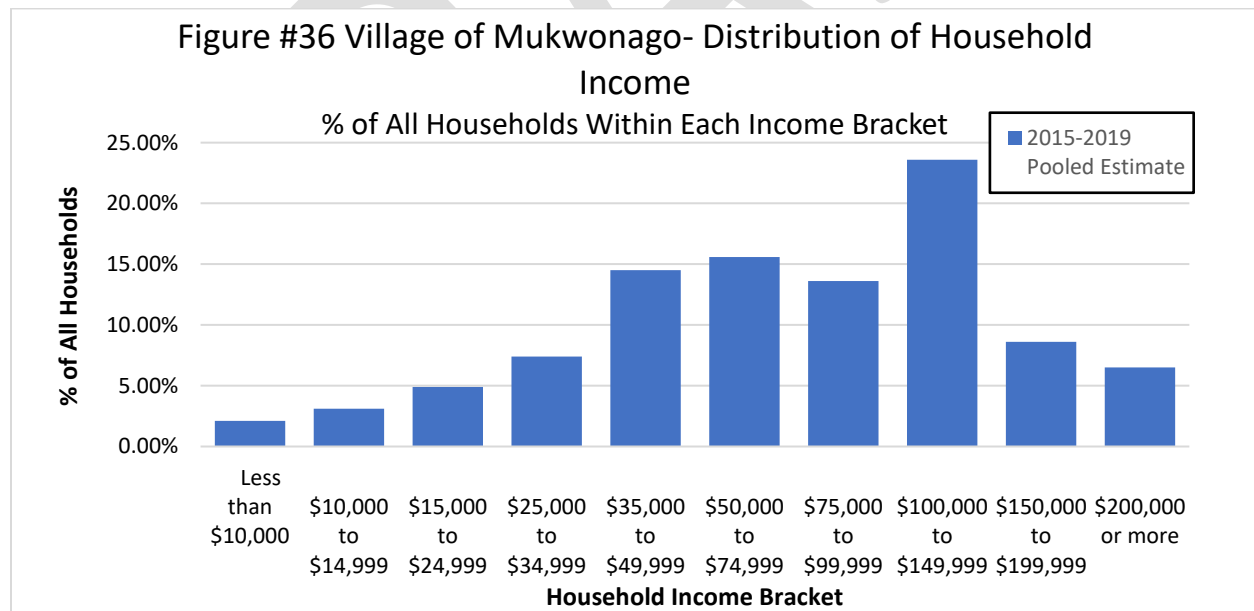
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 55 total units were authorized by building permits in Mukwonago.

Table 105: Mukwonago Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	61	0	61
2015	47	0	47
2016	27	36	63
2017	29	20	49
2018	22	0	22
2019	15	6	21
2020	39	16	55

Household Income

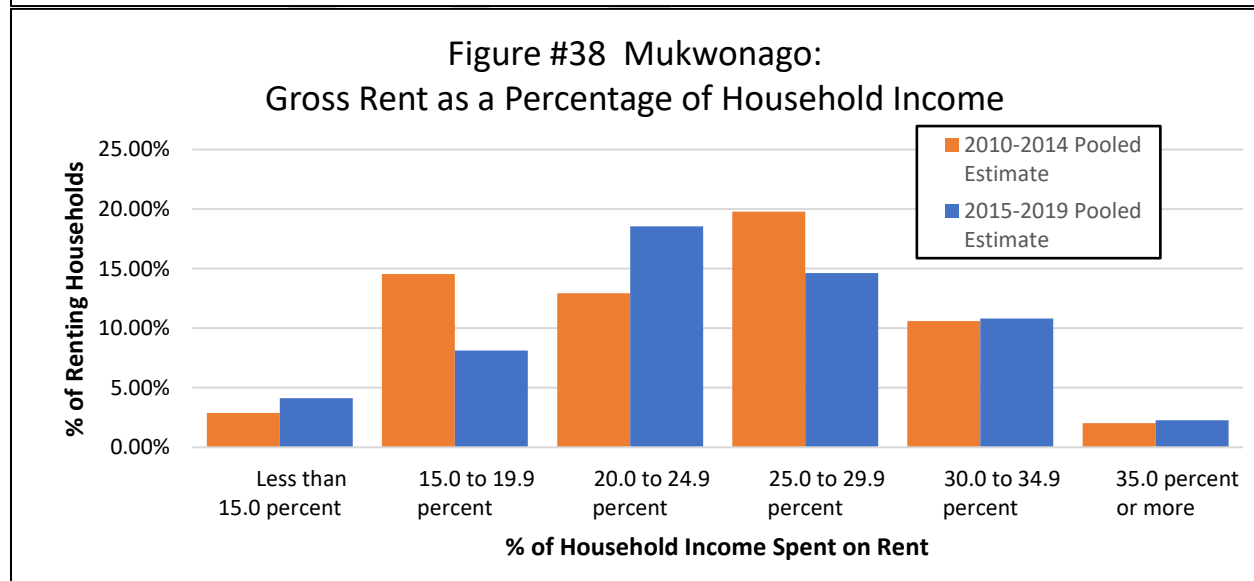
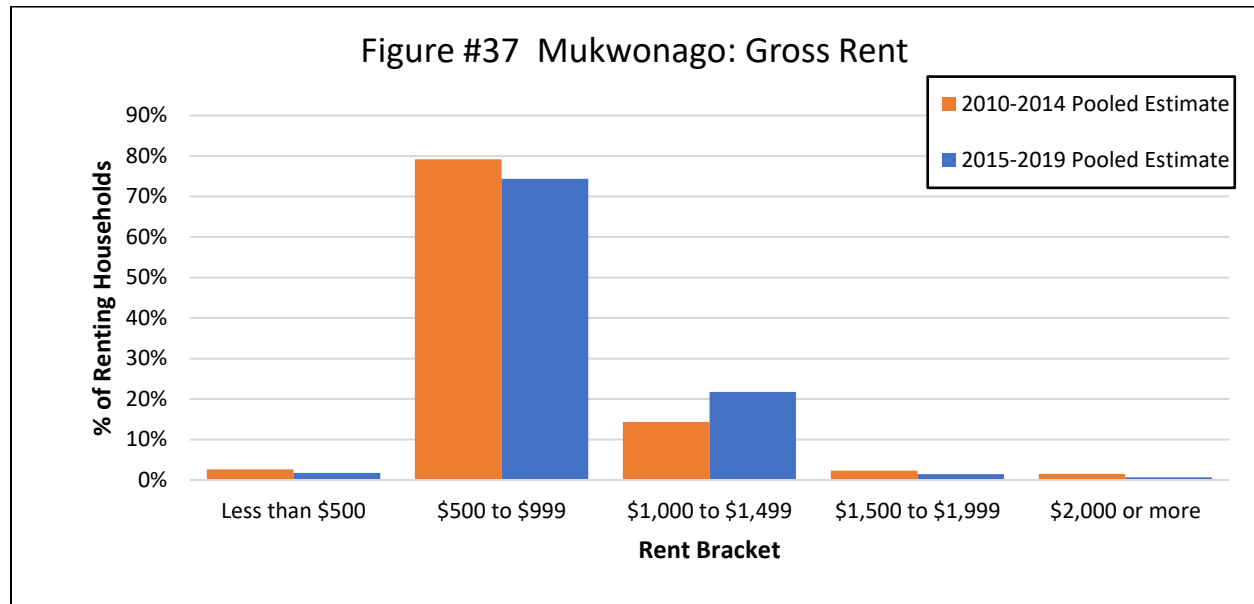
The distribution of household income for the Village of Mukwonago is shown below (*Figure 36*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 37*). Note that the data is not inflation adjusted.

Figure 38 shows a shift in that a slightly larger proportion of renters paid a larger percentage of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a slight decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, Mukwonago had 708 households (23%) classified as ALICE and an additional 232 households (7%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Mukwonago is 940, which makes up 31% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, Mukwonago has the same concentration of ALICE households.

Table 106: ALICE Households in Mukwonago: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
3,068	232	708	940	31%

Projected Household and Housing Unit Growth

According to the ACS, 273 units have been built in the Village of Mukwonago since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Mukwonago between the years 2020 to 2030. The DOA projected that households in the Village of Mukwonago will increase by 535 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of Mukwonago will grow by 494 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Mukwonago is on track to have a housing shortage of 221 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Mukwonago continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Mukwonago may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 107: Mukwonago Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
3,249	3,113	273	136

Table 108: Mukwonago Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
273	494	(22)	(221)

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K. Village of Sharon

Home Sale Price

The Village of Sharon had a high rate of home price appreciation in 2020. The estimate indicates a 101.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the Village of Sharon at a higher rate compared to Walworth County as a whole. There is a good possibility that this home price appreciation is overstated due to the lack of home sale data.

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$74,500	-	-
2017	\$110,000	47.7%	47.7%
2018	\$124,000	12.7%	66.4%
2019	\$103,500	-16.5%	38.9%
2020	\$149,900	44.8%	101.2%
2021	\$178,000	72.0%	138.9%

**2021 data includes January-August*

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

**2021 data includes January-August*

Months' Inventory

The months' supply of housing in Sharon could not be estimated with any certainty due to the low number of home sales each year. On average over the past six years, 21 homes are sold in Sharon each year.

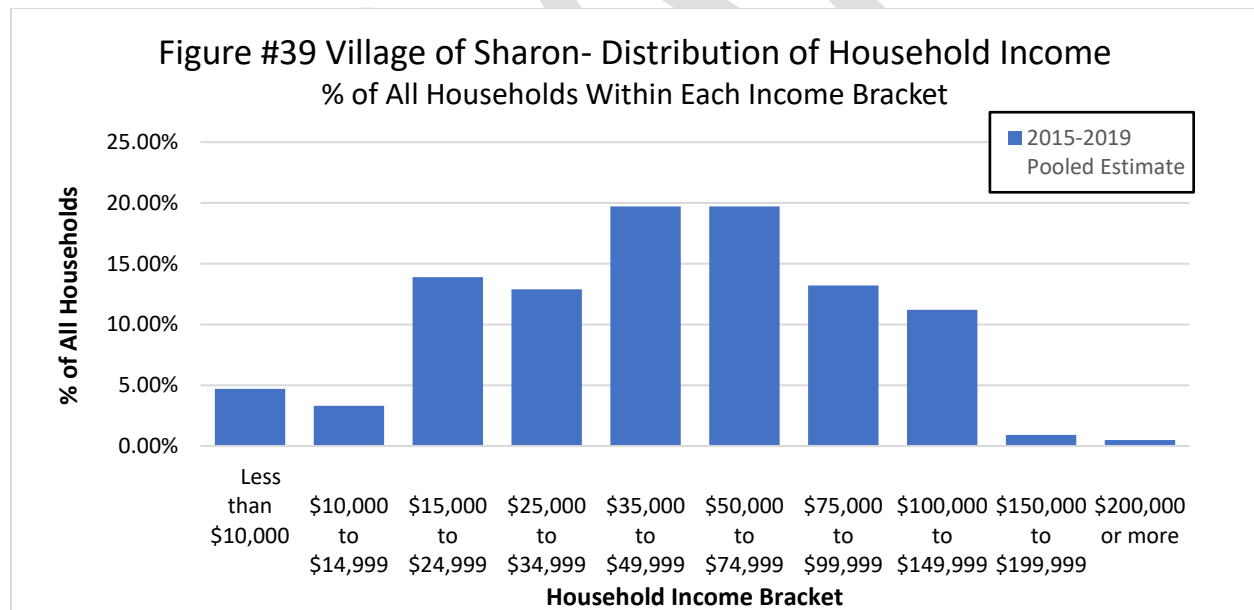
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 0 total units were authorized by building permits in Sharon.

Table 111: Sharon Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0

Household Income

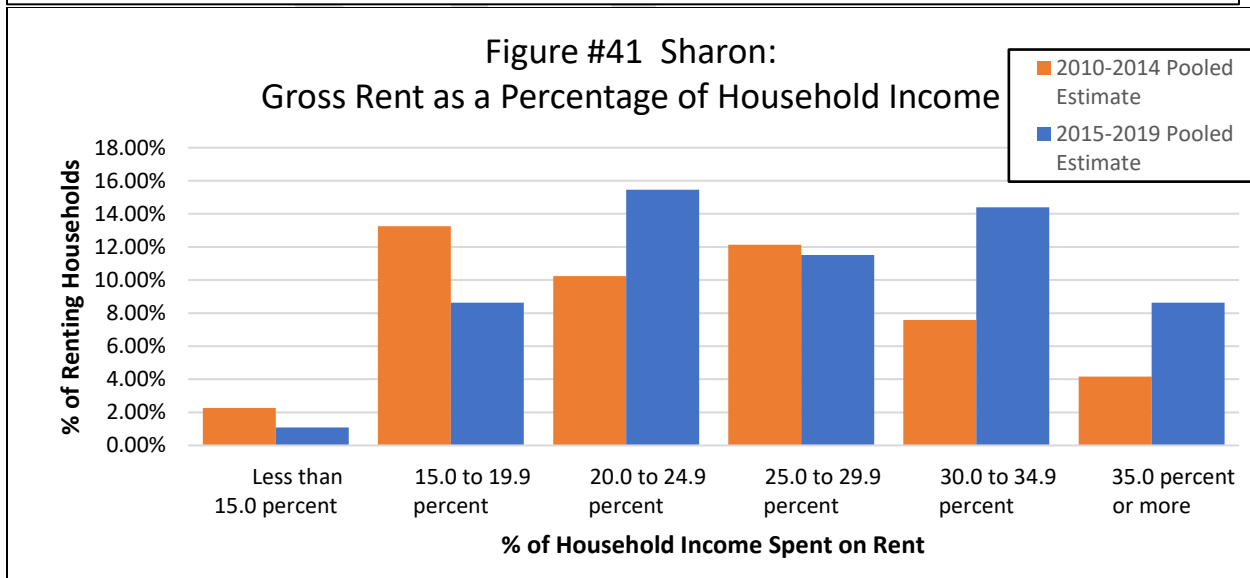
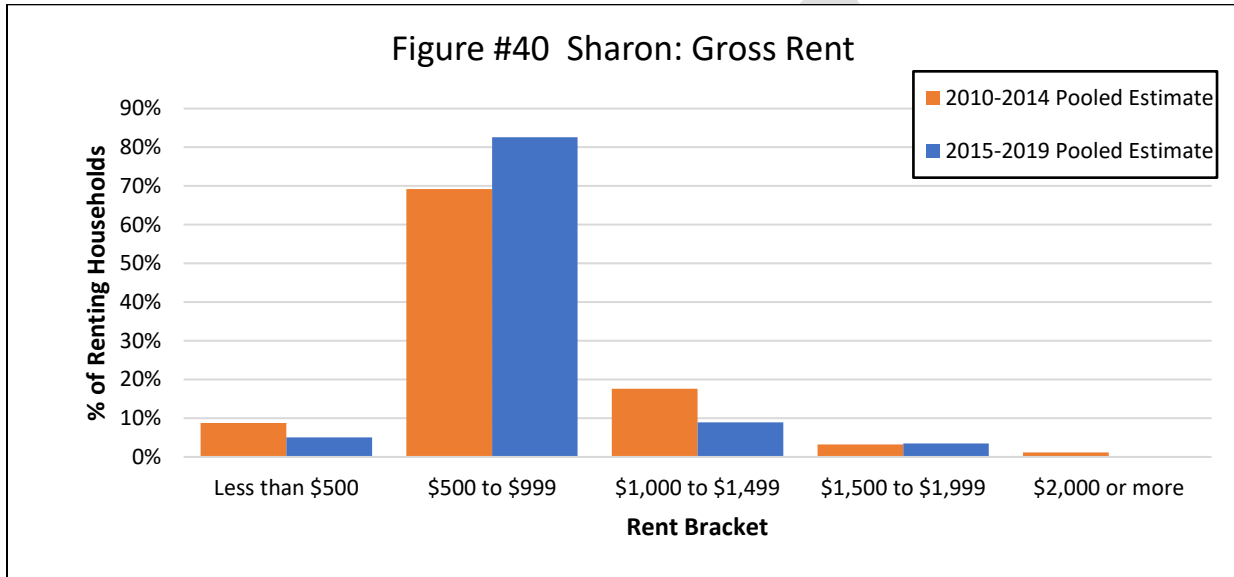
The distribution of household income for the Village of Sharon is shown below (*Figure 39*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is some evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$500-\$999 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid less than \$1000-\$1499 in the late 2010's as compared to the early 2010's (*Figure 40*). Note that the data is not inflation adjusted.

Figure 41 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, Sharon had 213 households (32%) classified as ALICE and an additional 116 households (18%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in Sharon is 329, which makes up 50% of all households in the municipality.

Compared to Walworth County, which had 31% of households below the ALICE Threshold, Sharon has a much higher concentration of ALICE households.

Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
656	116	213	329	50%

Projected Household and Housing Unit Growth

According to the ACS, 0 units have been built in the Village of Sharon since 2010.

Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Sharon between the years 2020 to 2030. The DOA projected that households in the Village of Mukwonago will increase by 66 from 2020-2030. The DOA's household population projection was accurate for Sharon over the last ten years.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Sharon is on track to have a housing shortage of 66 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Sharon continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Sharon may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 113: Sharon Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
727	635	0	92

Table 114: Sharon Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
0	66	6	(66)

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L. Village of Walworth

Home Sale Price

The Village of Walworth had a high rate of home price appreciation in 2020. The estimate indicates a 43.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the Village of Walworth at a lower rate compared to Walworth County as a whole.

Table 115: Village of Walworth Single Family Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$155,000	-	-
2017	\$151,000	-2.6%	-2.6%
2018	\$166,000	9.9%	7.1%
2019	\$195,500	17.8%	26.1%
2020	\$222,000	13.6%	43.2%
2021	\$252,000	28.9%	62.6%

*2021 data includes January-August

Table 116: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the Village of Walworth are selling quickly. The Village of Walworth has a months' supply of housing of 2.55. Six months of supply is considered the optimal months' supply in a balanced market. The Village of Walworth is below this threshold.

Table 117: Village of Walworth Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	38	12	3	26	8.21	12.2%
2017	43	12	4	22	6.14	16.3%
2018	41	12	3	20	5.85	17.1%
2019	60	12	5	24	4.80	20.8%
2020	59	7	8	19	2.25	44.4%
2021	47	8	6	15	2.55	39.2%

*2021 data includes January-August

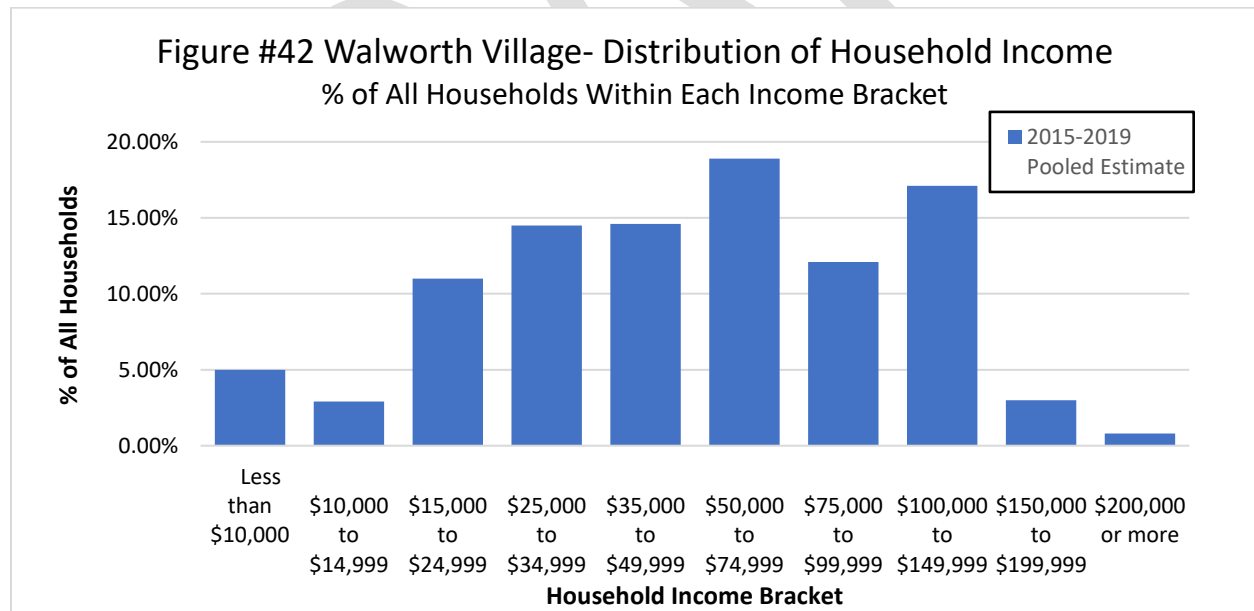
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 2 total units were authorized by building permits in Walworth Village.

Table 118: Walworth Village Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	4	5	9
2015	3	0	3
2016	10	0	10
2017	2	0	2
2018	4	0	4
2019	5	0	5
2020	2	0	2

Household Income

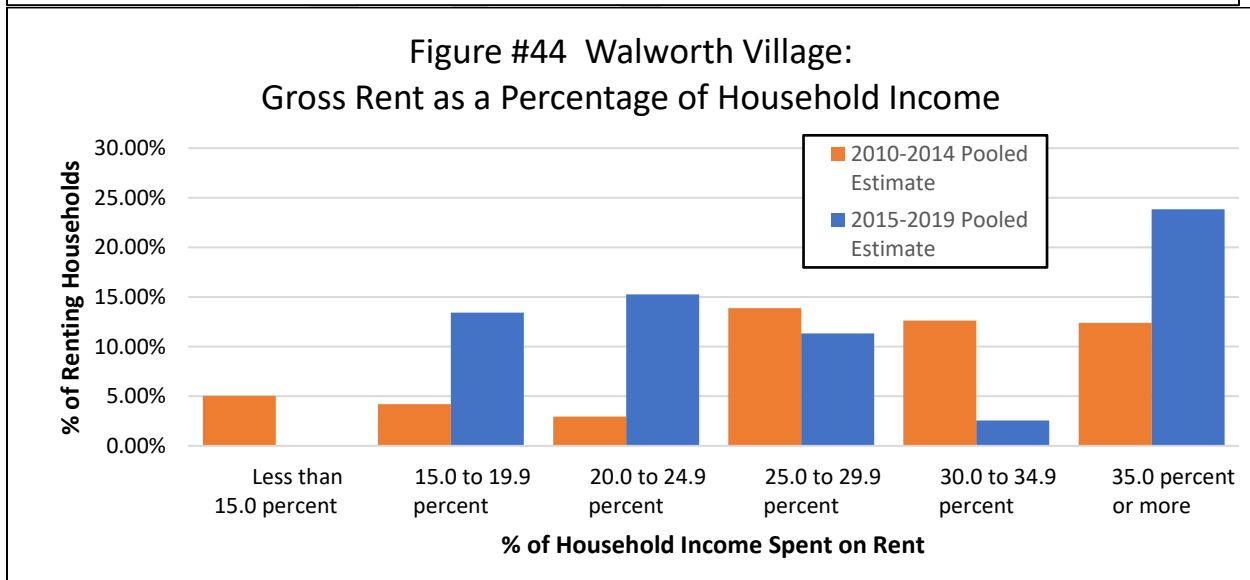
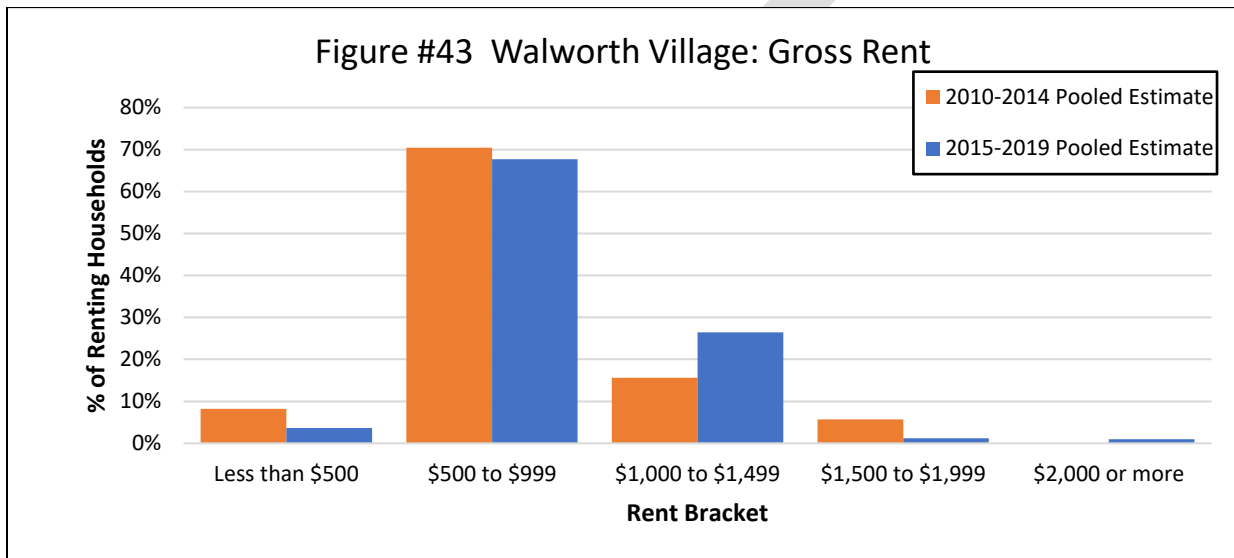
The distribution of household income for the Village of Walworth is shown below (*Figure 42*). Household income in an area has important implications for the availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the late 2010's than in the early 2010's, and a smaller proportion of renters paid less than \$500 or \$500-\$999 in the late 2010's as compared to the early 2010's (*Figure 43*). Note that the data is not inflation adjusted.

Figure 44 shows a shift in that a larger proportion of renters paid a smaller percentage of their household income on rent in the late 2010's as compared to the early 2010's. However, a larger proportion of renters paid 35% or more of their income on rent in the late 2010's as compared to the early 2010's. *Figure 44* indicates a slight increase in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the Village of Walworth had 291 households (27%) classified as ALICE and an additional 162 households (15%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in the Village of Walworth is 453, which makes up 42% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, the Village of Walworth has a higher concentration of ALICE households.

Table 119: ALICE Households in Walworth Village: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
1,066	162	291	453	42%

Projected Household and Housing Unit Growth

According to the ACS, 56 units have been built in the Village of Walworth since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Walworth between the years 2020 to 2030. The DOA projected that households in the Village of Walworth will increase by 226 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of Walworth will grow by 193 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Walworth is on track to have a housing shortage of 137 units. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Walworth continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Walworth may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 120: Walworth Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
1,165	1,051	56	114

Table 121: Walworth Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage
56	193	(13)	(137)

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M. Village of Williams Bay

Home Sale Price

The Village of Williams Bay had a high rate of home price appreciation over the past five years. The estimate indicates a 44.2% increase in the median single-family home sale price from 2016 to 2020. Home values appreciated in the Village of Williams Bay at a slower rate compared to Walworth County as a whole.

Table 122: Village of Williams Bay Single Family Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$248,500	-	-
2017	\$277,500	11.7%	11.7%
2018	\$300,000	8.1%	20.7%
2019	\$271,250	-9.6%	9.2%
2020	\$358,250	32.1%	44.2%
2021	\$373,980	37.9%	50.5%

*2021 data includes January-August

Table 123: Walworth County Median Close Price

Year	Median Home Price	Increase from Previous Year	Total % Appreciation Since 2016
2016	\$130,000	-	-
2017	\$169,900	30.7%	30.7%
2018	\$118,250	-30.4%	-9.0%
2019	\$175,000	48.0%	34.6%
2020	\$210,000	20.0%	61.5%
2021	\$248,250	41.9%	91.0%

*2021 data includes January-August

Months' Inventory

The data indicate that homes in the Village of Williams Bay are selling quickly. The Village of Williams Bay has a months' supply of housing of 2.29. Six months of supply is considered the optimal months' supply in a balanced market. The Village of Williams Bay is below this threshold.

Table 124: Village of William's Bay Months' Inventory: Single-Family Homes

	Homes Sold	Months	Average Sold Per Month	Average Available to be Sold	Month's Supply of Housing	Absorption Rate
2016	66	12	6	78	14.18	7.1%
2017	106	12	9	57	6.45	15.5%
2018	129	12	11	51	4.74	21.1%
2019	134	12	11	41	3.67	27.2%
2020	128	12	11	36	3.38	29.6%
2021	105	8	13	30	2.29	43.8%

*2021 data includes January-August

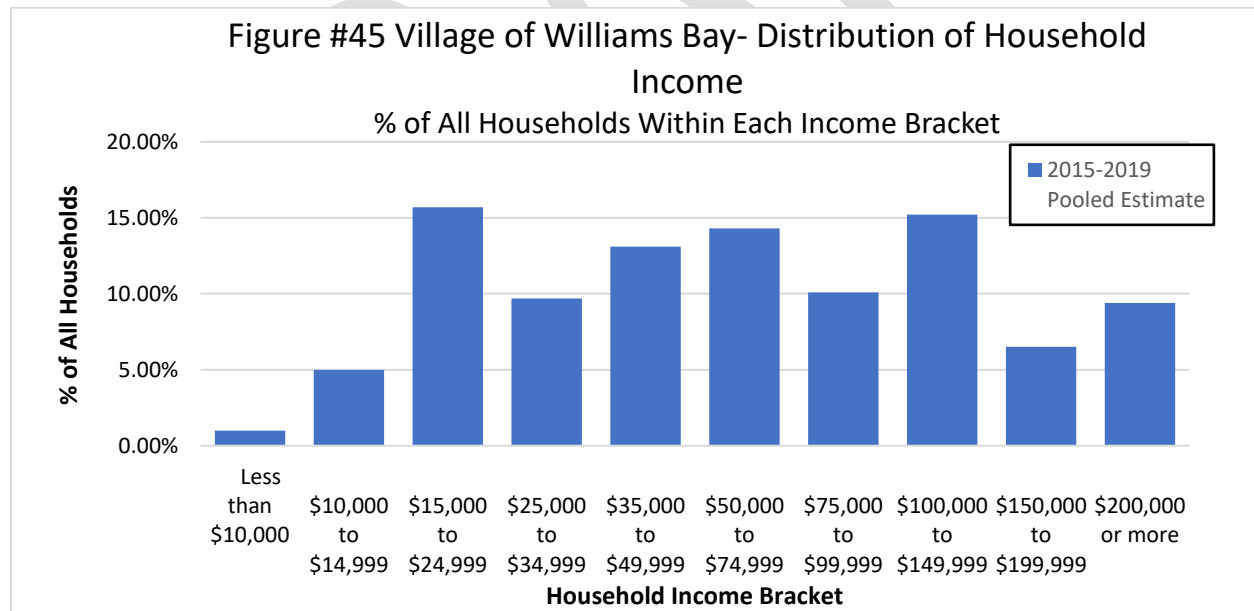
Building Permits

Building permits are recorded by the US Census for each municipality. In 2020, 20 total units were authorized by building permits in Williams Bay.

Table 125: Williams Bay Building Permits			
Year	Single-Family + Two-Family Total Units	Multifamily (3+) Total Units	Total Units Authorized by Permits
2014	6	0	6
2015	0	0	0
2016	14	0	14
2017	38	0	38
2018	19	0	19
2019	29	0	29
2020	20	0	20

Household Income

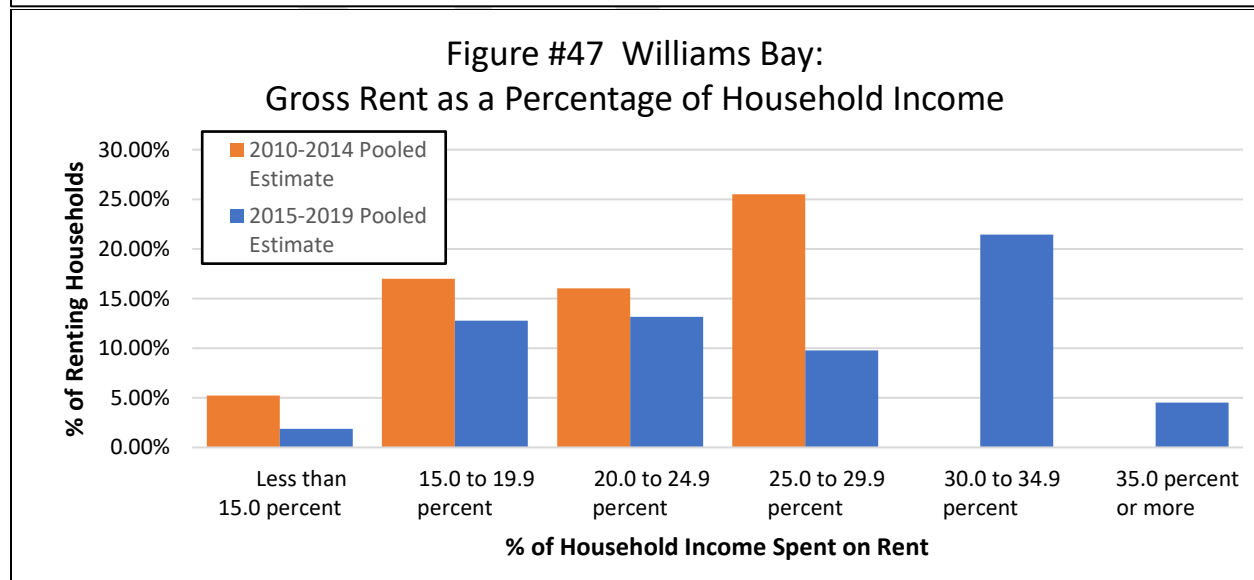
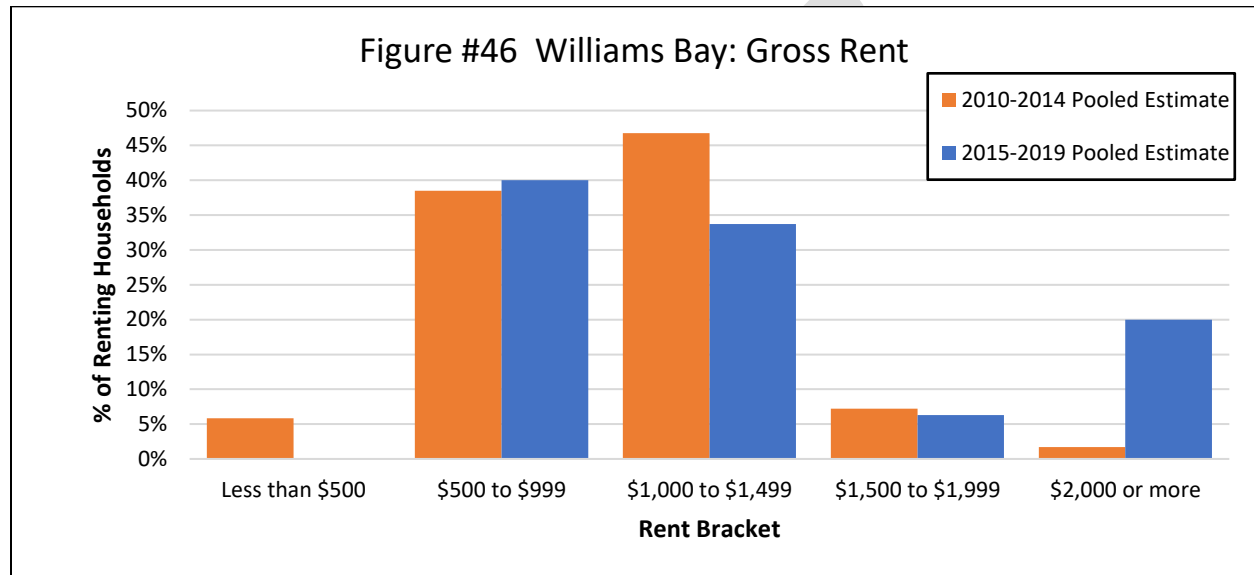
The distribution of household income for the Village of Williams Bay is shown below (Figure 45). Household income in an area has important implications for availability of workforce housing, both for renter households and homeowner households.



Gross Rent & Gross Rent as a Percentage of Household Income

There is evidence that the distribution of gross rent shifted from the first half of the decade to the second half of the decade. A larger proportion of renters paid \$1000-\$1499 in the early 2010's than in the late 2010's, and a smaller proportion of renters paid \$500-\$999 in the early 2010's as compared to the late 2010's (*Figure 46*). Note that the data is not inflation adjusted.

Figure 47 shows a shift in that a larger proportion of renters paid a larger percentage of their household income on rent in the late 2010's as compared to the early 2010's. This indicates a significant decrease in cost-efficiency.



United For ALICE Households

Based on calculations from the American Community Survey and the ALICE Threshold in 2018, the Village of Williams Bay had 348 households (31%) classified as ALICE and an additional 64 households (6%) fall below the Federal Poverty Level. The total number of households in 2018 below the ALICE Threshold in the Village of Williams Bay is 412, which makes up 37% of all households in the municipality. Compared to Walworth County, which had 31% of households below the ALICE Threshold, the Village of Williams Bay has a higher concentration of ALICE households.

Table 126: ALICE Households in Williams Bay: 2018				
Total Households	Households Below the Poverty Line	ALICE Households	Total Households Below ALICE Threshold	% of Households Below ALICE Threshold
1,126	64	348	412	37%

Projected Household and Housing Unit Growth

According to the ACS, 114 units have been built in the Village of Williams Bay since 2010. Household population growth projections can be used to estimate the future demand for new housing units. The Wisconsin Department of Administration (DOA) household growth projections, which were completed in 2013 using 2010 census data, provide an estimate for the projected increase in the number of households in the Village of Williams Bay between the years 2020 to 2030. The DOA projected that households in the Village of Williams Bay will increase by 147 from 2020-2030. However, the DOA projections have overestimated household growth over recent years. If the DOA's projection is adjusted to reflect current household estimates, it indicates that households in the Village of Williams Bay will grow by 141 households between 2020 and 2030.

If the number of new housing units built from 2020-2030 mirrors the number of housing units built since 2010, the Village of Williams Bay is on track to have a housing shortage of 27 units. This does not consider the 938 vacant housing units in the Village of Williams Bay. This projection assumes the number of households will grow according to DOA projections, and that new housing construction and home vacancy rates remain relatively constant. As the number of households in the Village of Williams Bay continues to increase, the current available housing supply will become further depleted as new construction rates fall short of keeping up with demand. Households unable to find adequate available housing in the Village of Williams Bay may begin to expand their search beyond the municipality to find housing that meets their needs. This outlook indicates that home prices will continue to rise and the number of homes available for-sale on the market will continue to decrease. Buyers will have very little bargaining power, which will further exacerbate the issues of supplying adequate housing, especially for Asset Limited, Income Constrained, Employed (ALICE) households.

Table 127: Williams Bay Village Housing Units and Households			
Housing Units	Household Estimate	Housing Units Built Since 2010	Vacant Housing Units
2,067	1,129	114	938

Table 128: Williams Bay Village Projected Household Growth			
Housing Units Built Since 2010	Adjusted DOA Projection for Household Growth 2020-2030	Projected Housing Shortage Per Year	Projected Housing Shortage by 2030
114	141	(2)	(27)

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Conclusion and Findings

Several considerations may be addressed by the data provided in this study. Note that these observations are only a portion of the take-aways. Individuals and communities may also find other valuable information specific to their concerns.

An initial issue is the tenuous equilibrium of supply and demand in the Walworth County housing market. The result of rising demand combined with slow rising supply has led to home price appreciation. The dwindling availability of housing options will present a challenge if demand were to accelerate, potentially causing prices to rise more quickly. Ultimately, this will cause stress on the lower cost portion of the market, as lower priced housing will be pushed into higher price markets. This can exacerbate the challenges presented to a younger, less affluent population. This can also limit potential economic growth within the county.

The issue of economic growth is connected to the idea of housing. Firms seeking to expand or relocate into Walworth County may not explicitly inquire about housing availability for the workforce. However, available housing is a determinant of the labor force. While other factors of production can be imported from long distances, labor needs to be local. It also needs to have a relationship to the wages an expanding or relocating firm will offer. As housing prices increase, the availability of labor will contract. As a result, the potential for these industries is limited. Ultimately, this is both a social and economic determination the community needs to address—how much economic growth the County desires. If the County decides that it desires expansion, housing needs to be available to serve this goal.

Finally, Walworth County's housing challenges are not unique. Counties and municipalities throughout Wisconsin and the nation are confronting these issues. Walworth County, however, has an opportunity to assess ideas that can prevent a housing gap through a clear recognition of the challenge and the development of processes that can begin to address an increase in demand that exceeds the increase in supply.