



Beloit Area Communities Housing Demand Analysis

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I. Purpose and Scope of Housing Demand Analysis

The purpose of the Housing Demand Study is to develop a detailed understanding of the depth and nature of housing demand in the greater Beloit area. The study was initiated by the Greater Beloit Economic Development Corporation (GBEDC), and is additionally supported by a set of local communities—in particular the City of Beloit, the Town of Beloit, the Town of Turtle, the Village of Clinton, and the City of South Beloit.

Stantec was engaged by GBEDC to conduct market and development research and estimate housing demand. The project scope includes research and analysis in the following topical areas:

1. **Residential population & employment base.** This analysis looks at the sources of housing demand through characterizing the residential population and employment base of the Beloit area communities.
2. **Market and Development Demand Indicators.** This analysis looks at indicators and drivers of housing demand through research and analysis relative to the housing market and the housing development context.
3. **Demand projection.** This analysis estimates housing demand utilizing quantitative methodologies and findings from interviews.

Sources of data for this report include the following.

- U.S. Census Bureau, including its OnTheMap service which is a portal to Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics data
- ESRI, including its Business Analyst function
- Costar
- Building permit data from Beloit area communities
- Google Maps
- Structured individual interviews

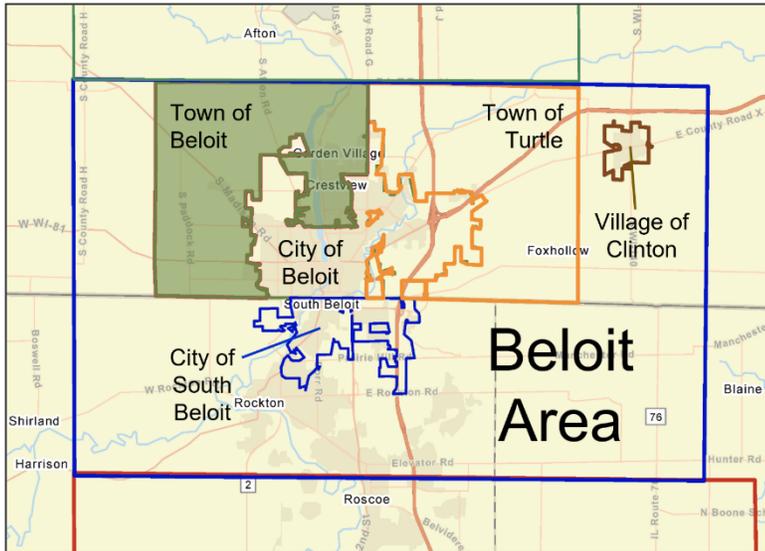
Acknowledgements

The project received important oversight and guidance from Jennifer Hall (CEO of GBEDC), as well as staff from the City of Beloit, the Town of Beloit, the Town of Turtle, the Village of Clinton, and the City of South Beloit.

II. Residential Population and Employment Base

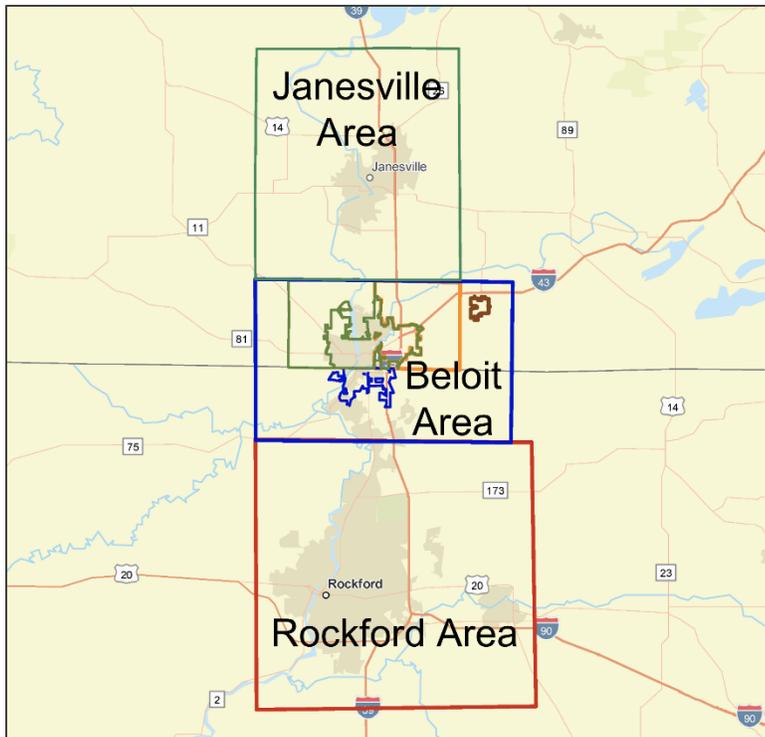
Understanding the nature of the Beloit area population and employment base is important because the residents and workers in the Beloit area are the primary source of demand for housing in Beloit.

Figure 1. Beloit Area



The City of Beloit is the center of civic and economic activity for an area that extends ten miles or so from the center of the community. This area of influence, which is simply termed “Beloit Area” for purposes of this study, is the primary geographic focus of this analysis. It includes parts of two counties—Rock County in Wisconsin, and Winnebago County in Illinois. Within this area are the five individual jurisdictions that, along with the GBEDC, are the primary stakeholders and sponsors of this housing demand analysis. Population and worker demographics are analyzed in this section for the Beloit Area overall, and for each of the five jurisdictions that are located within the Beloit Area.

Figure 2. Janesville, Beloit, Rockford Areas



Beloit is situated between Janesville to the north and Rockford to the south. The cities are very close. It’s about a 13 mile or 22 minute drive between the center of Beloit and the center of Janesville, and around 18 miles or 28 minute drive between the center of Beloit and the center of Rockford. These cities are the three biggest population centers on the Interstate 90 corridor between Madison and Chicago.

The three cities and their areas of influence comprise an integrated region on the one hand, but are also competitors in that they are competing for businesses and residents. There are many residents of the combined region who live in one of the three areas and work in another.

Because of the importance of each of these three areas to the other areas, the population demographics for the three

areas are analyzed in this section. The State of Wisconsin as a whole is also included in the analysis as a broader geographical point of reference.

Population Growth

Population growth can be a driver of new development, and particularly of housing, retail and office development. Population and household trends for the Beloit Area are noted in Tables 1 and 2 below. The population of the Beloit Area grew rapidly in the decade from 2000 to 2010. It has been roughly static from 2010 to 2021. A modest growth in the number of households was offset by a reduced average size of household. ESRI estimates that essentially no growth will occur over the next five years—although this analysis shows that there is potential demand for additional housing development.

Table 1. Population Summary – Beloit Area

	Population
2000	73,296
2010	81,461
2021 (Estimated)	81,435
2026 (ESRI Projection)	81,503
2000 – 2010 Growth Rate	11.1%
2010 - 2021 Growth Rate (Estimated)	0.0%
2021 Total Daytime Population	79,273

Source: US Census, ESRI Business Analyst

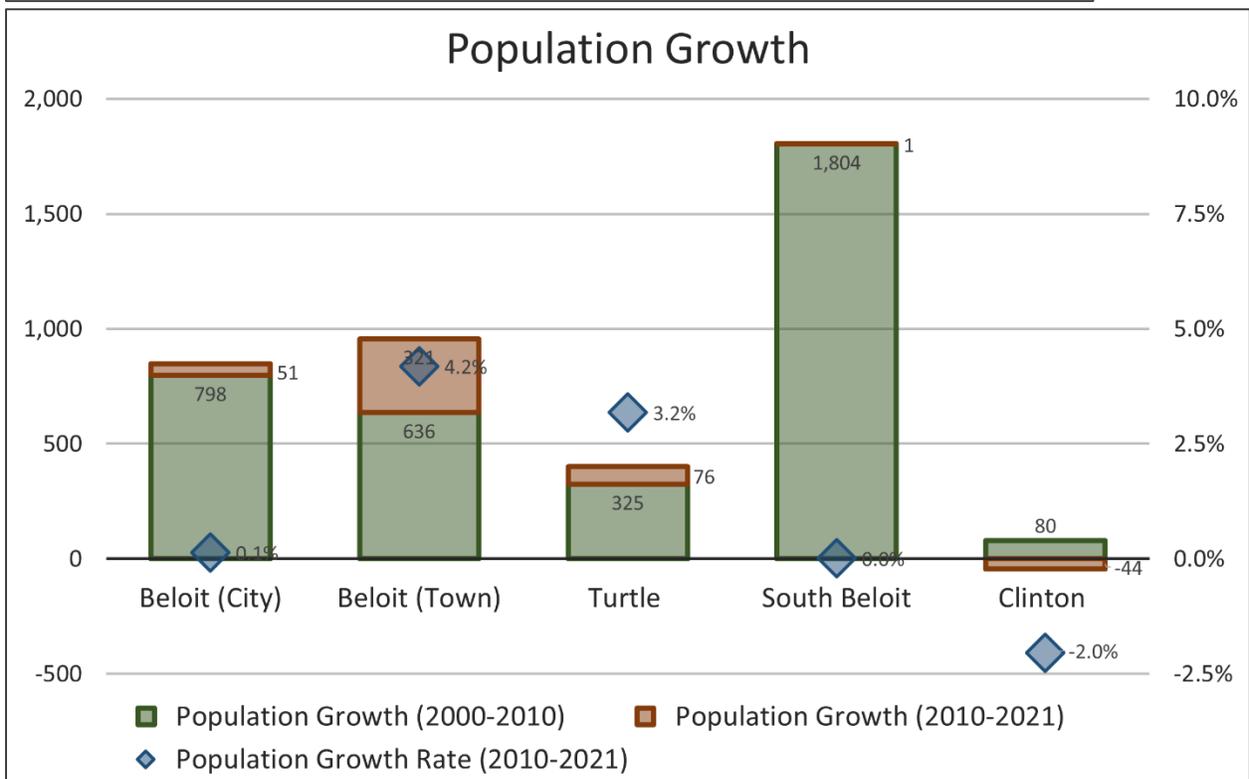
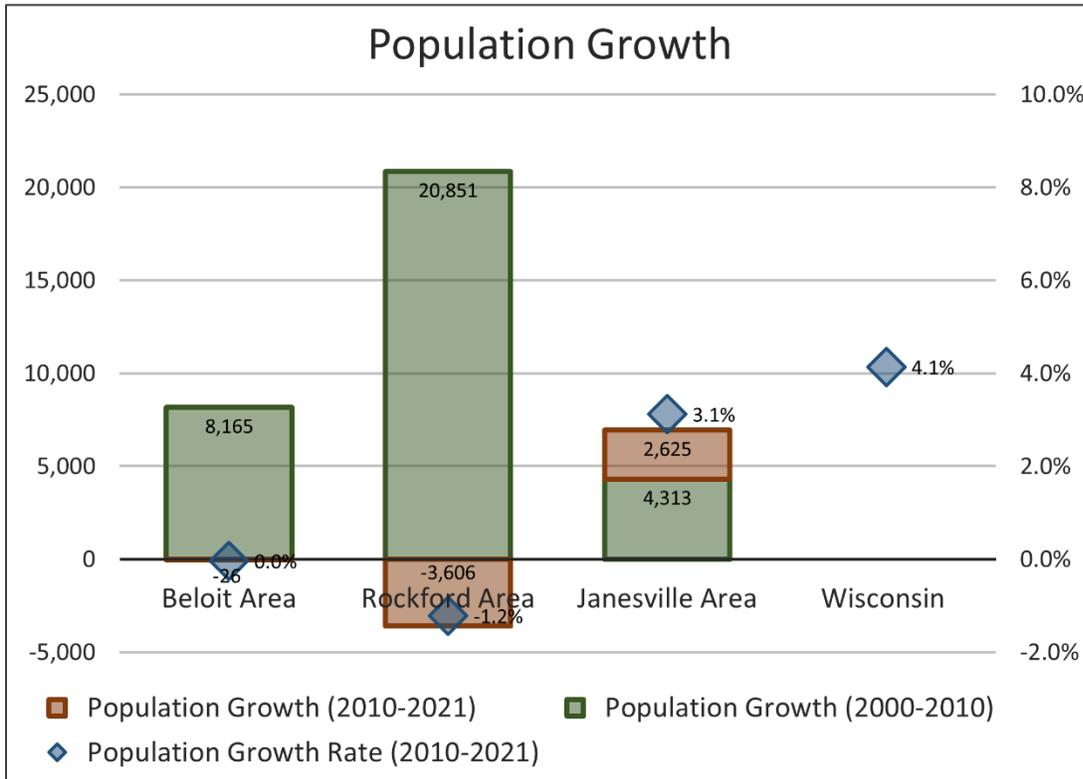
Table 2. Household Summary – Beloit Area

	Number of Households	Average Household Size
2000	27,352	2.62
2010	30,678	2.60
2021 (Estimated)	31,144	2.56
2026 (Projected)	31,342	2.55
2000 - 2010 Growth Rate	12.1%	-0.8%
2010 - 2021 Growth Rate (Estimated)	1.5%	-1.5%

Source: US Census, ESRI Business Analyst

Figures 3 and 4 illustrate the growth in population for the Beloit Area and five jurisdictions within the Beloit Area, with respect to one another and to the other comparison geographies.

Figures 3 & 4. Population Growth and Growth Rate, 2000 through 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

The Beloit Area’s growth since 2000 was at a healthy 11 percent rate, which surpassed the growth rate of both the Janesville Area (8.7 percent growth from 2000 to 2021) and the Rockford Area (6.2 percent growth from 2000 to 2021). However, essentially all of that growth occurred between 2000 and 2010. Since 2010 the population of the Beloit Area has essentially stayed the same.

Within the Beloit Area, population growth since 2010 was concentrated in the Town of Beloit and the Town of Turtle.

Employment Growth

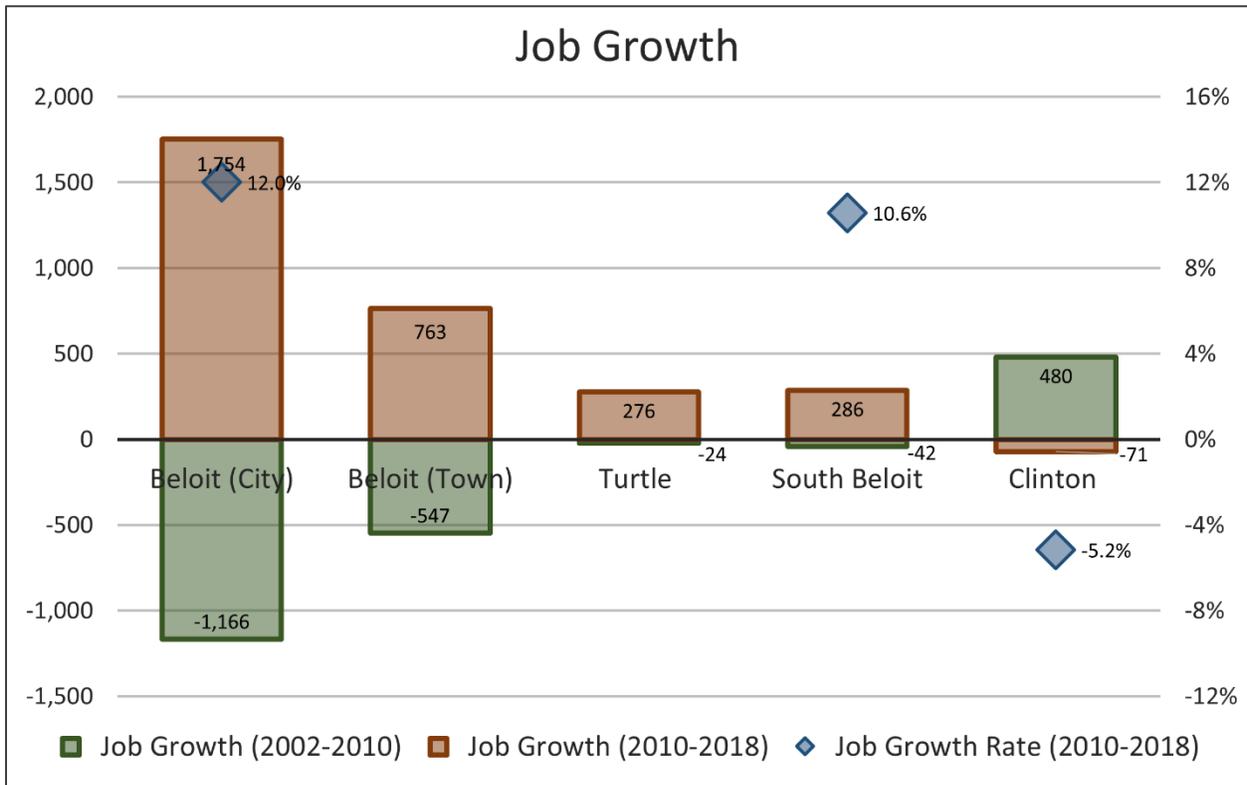
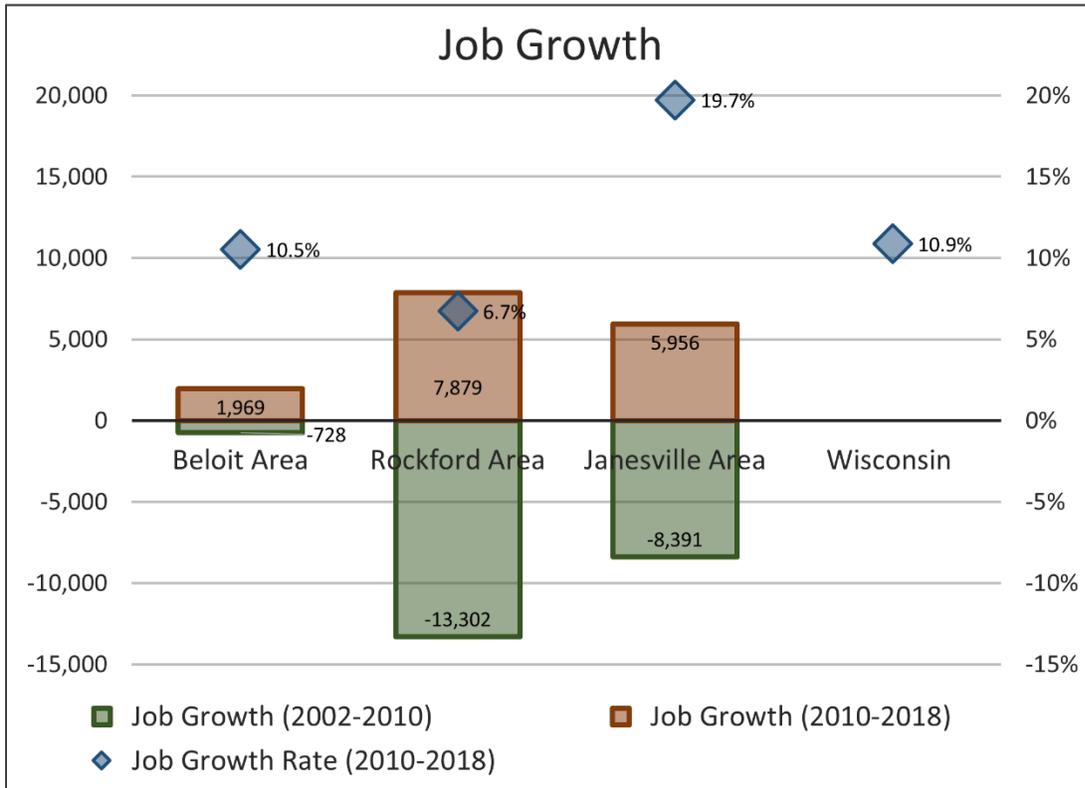
Employment growth can also drive housing demand. The Beloit Area, similar to the Rockford and Janesville Areas, had a decline in total jobs over the decade from 2002 to 2010. (See Figures 5 and 6.) But the Beloit Area gained enough jobs between 2010 and 2018 to more than offset its loss of jobs in the previous period. Its job growth outpaced the employment growth in the Rockford Area, and was on par with the overall job growth in the State of Wisconsin.

Employment in the Janesville Area grew the most quickly since 2010, but that growth was not sufficient to offset its losses in the previous eight years.

Among the five local jurisdictions, the City of Beloit and Town of Beloit reflect the regional pattern, with a job loss between 2002 and 2010, and a job gain from 2010 to 2018 that surpassed the loss. Job gains between 2010 and 2018 also occurred in the Town of Turtle and City of South Beloit. The Village of Clinton added 480 jobs between 2002 and 2010—the strongest employment growth of the five jurisdictions over that period—and declined slightly between 2010 and 2018.

The rate of employment growth over the last decade in the Town of Beloit and the Town of Turtle doesn’t appear on the chart because it was literally off the chart—partly due to those communities having a relatively low number of jobs as a starting point in 2010. The 763 jobs gained in the Town of Beloit represents a roughly 68 percent increase over the 2010 job level. The 276 jobs gained in the Town of Turtle represents a roughly 260 percent increase over the 2010 job level.

Figures 5 & 6. Job Growth and Growth Rate, 2002 through 2018 - Beloit Area and Comparisons



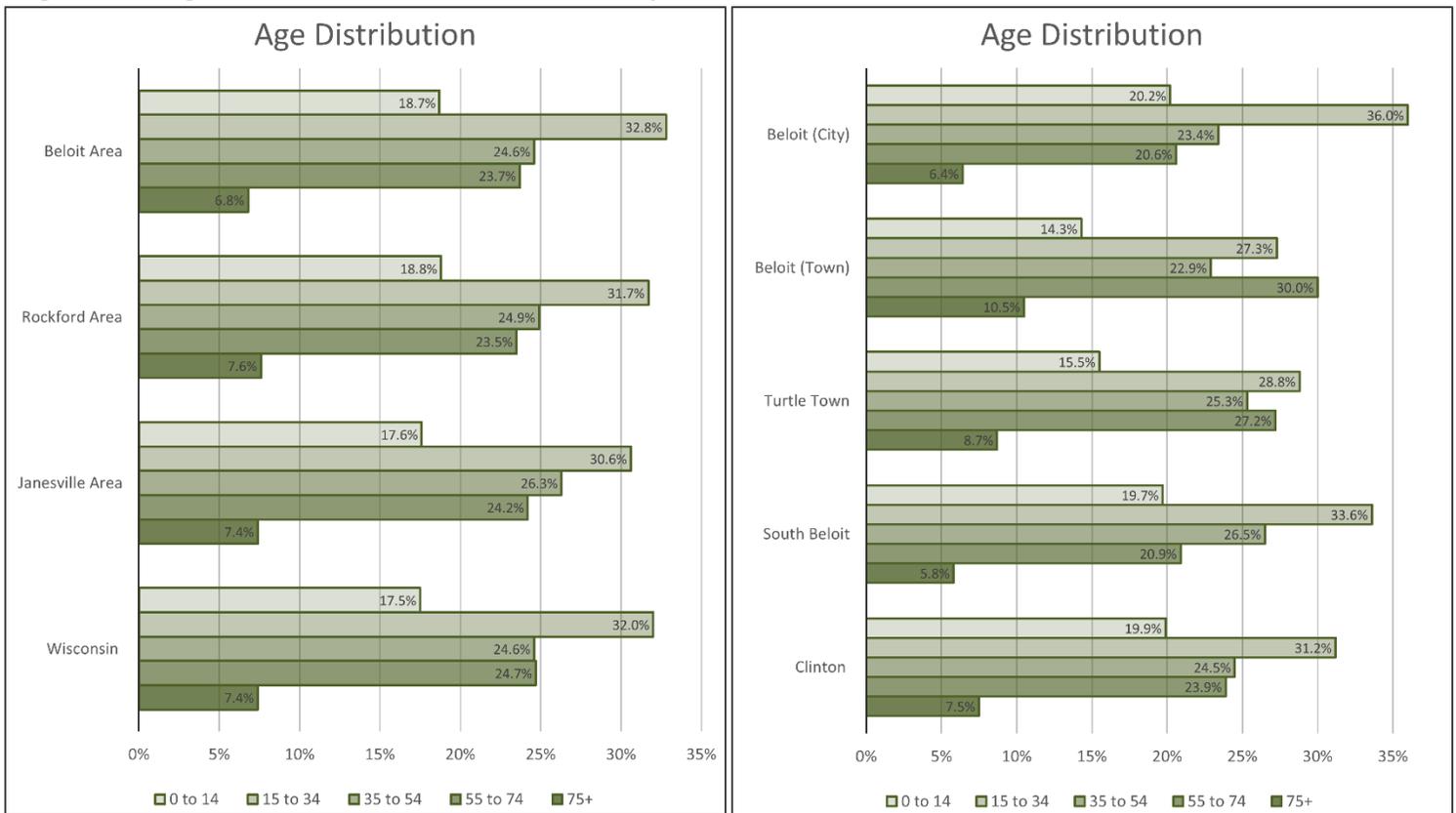
Source: US Census, ESRI Business Analyst

Demographics of Residents

The charts and tables in this section provide demographic detail relative to individuals and households that live in the Beloit Area and comparison areas.

Age. The Beloit Area population is in many respects demographically similar to the State of Wisconsin as a whole. Its age profile, as illustrated in Figure 7, is similar to but slightly younger than the State as a whole and the comparison areas—with a few more children and younger adults, and a smaller share of people in the 75+ age range. Within the Beloit area (see Figure 8), the Cities of Beloit and South Beloit have the greatest share of population that are 35 and younger, while the two townships have the highest share of population in the two oldest age brackets—that is, age 55 and up.

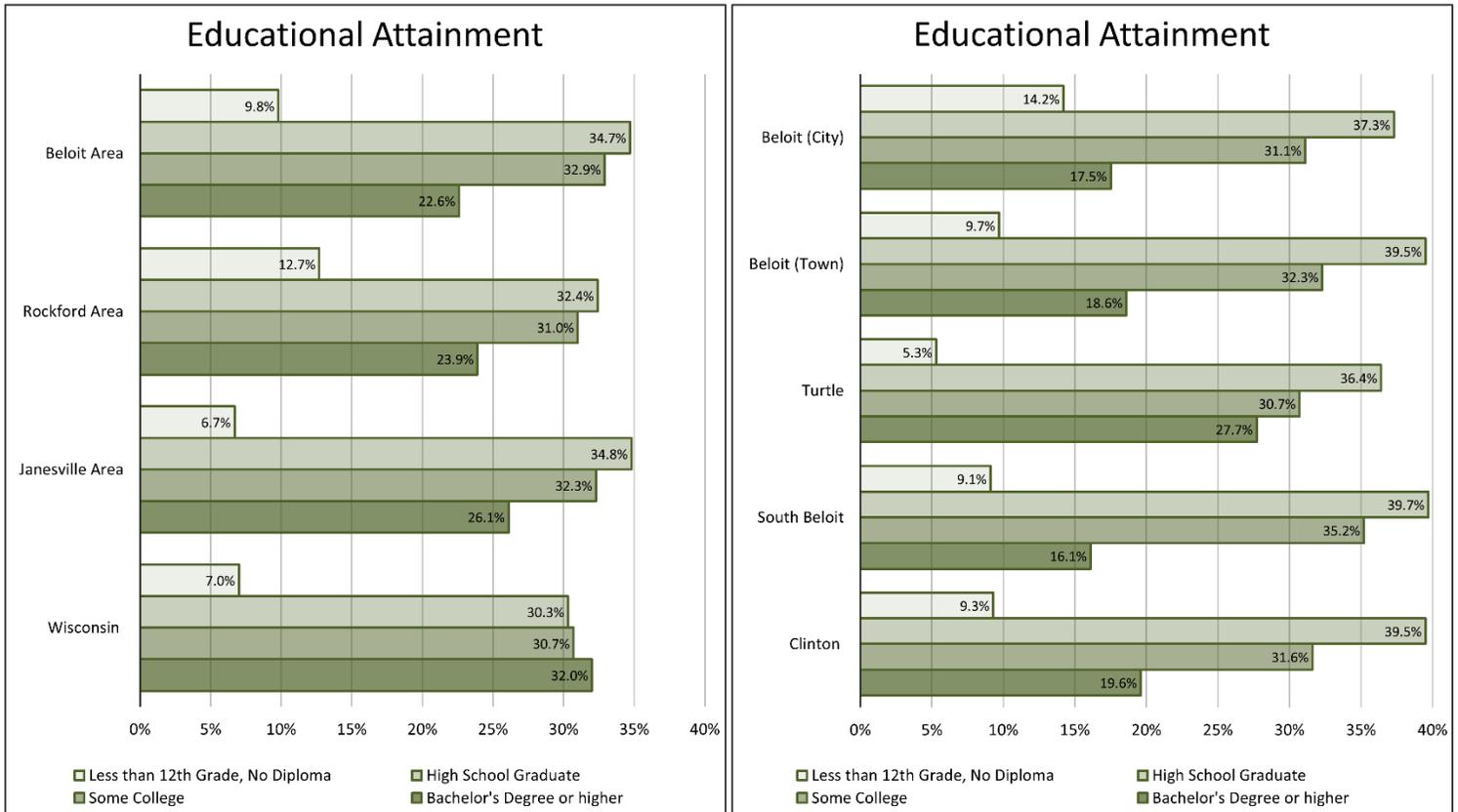
Figure 7 & 8. Age Distribution, 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

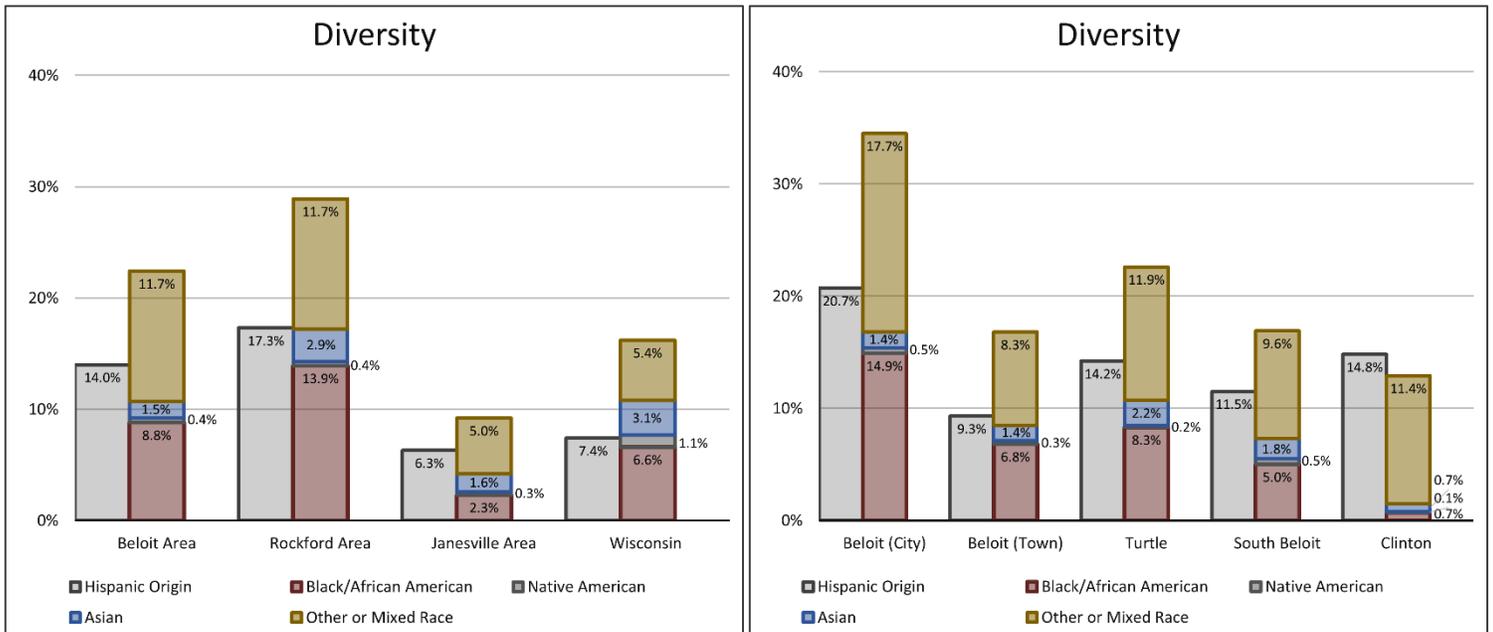
Education. Around 23 percent of the Beloit Area population 25 and older has earned a bachelors degree or higher. (See Figures 9 and 10.) That’s lower than the proportion for the State of Wisconsin as a whole (32 percent), a bit lower than the Janesville Area (around 26 percent), and similar to the population of the Rockford Area. Within the Beloit Area, the Town of Turtle has the highest rate of college graduates, with almost 28 percent of those 25 and older holding bachelors degrees.

Figure 9 & 10. Educational Attainment of Population Age 25+, 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

Figure 11 & 12. Race and Hispanic Origin, 2021 - Beloit Area and Comparisons

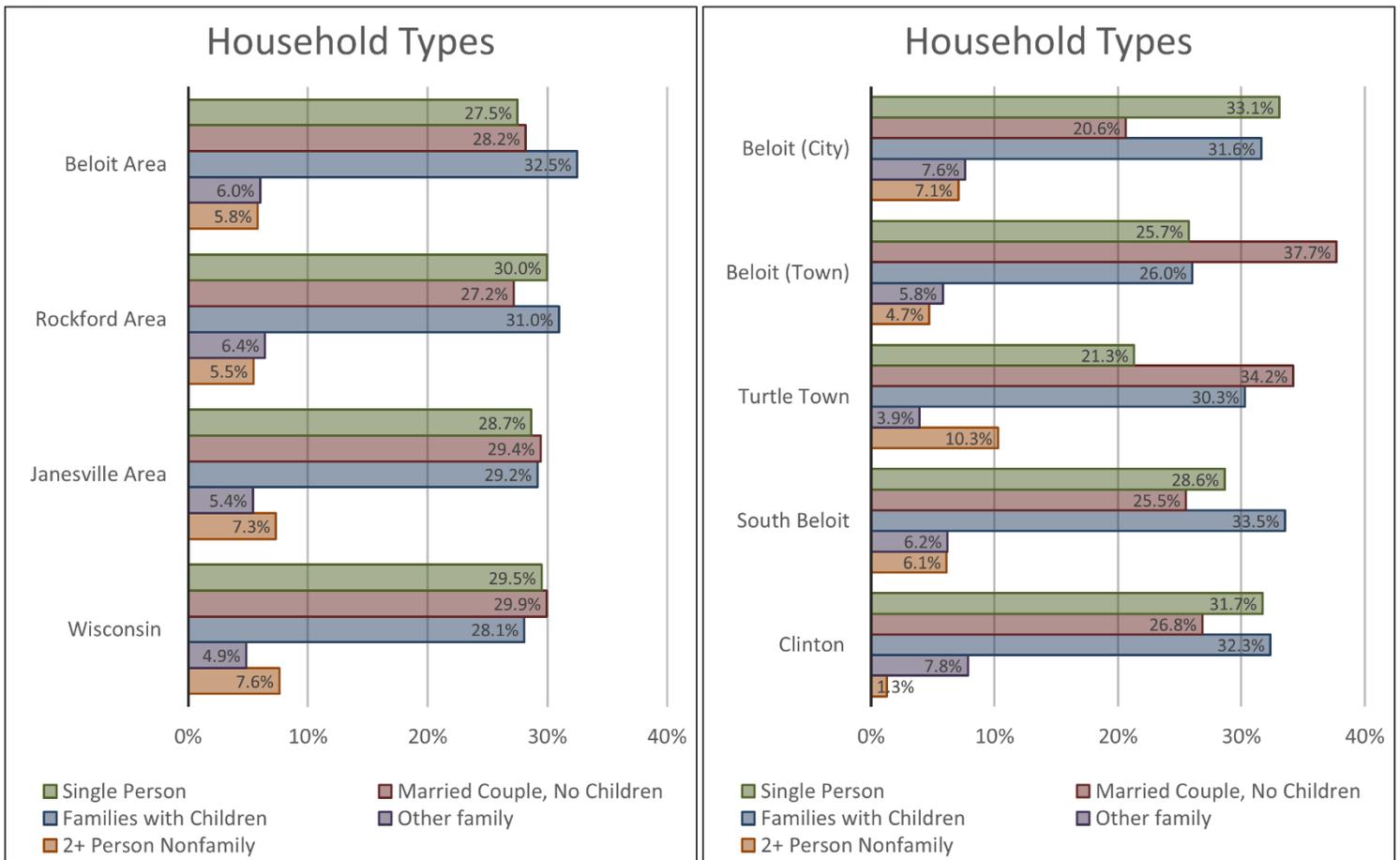


Source: US Census, ESRI Business Analyst

Diversity. The Beloit Area is more diverse than the State of Wisconsin as a whole. (See Figures 11 and 12.) Over 22 percent of its population identifies as Black, Asian, Native American or mixed race. And 14 percent of the population identify as being of Hispanic origin. The racial and ethnic composition of the region is distinct from both the Rockford Area, which has more Black and Hispanic residents, and the Janesville Area, which is less diverse than the State of Wisconsin as a whole. Within the Beloit Area, the City of Beloit has the highest proportion of the population that identifies as Black, Asian, Native American or mixed race—and the highest level of population that identifies as being of Hispanic origin.

Household types. In terms of household types, the Beloit Area is fairly similar to the comparison areas, and the State of Wisconsin as a whole. (See Figures 13 and 14.) Families with children area a little higher share of the household mix, while single households and nonfamily households are a bit lower share of the household mix. Within the Beloit area, the distinctions are a bit more apparent. The City of Beloit has the greatest share of single person households, and a high rate of families with children. The Town of Beloit has the greatest share of married couples without children. The City of South Beloit has the greatest share of families with children. The Town of Turtle has the highest share of 2+ person non-family households, which are generally roommate households or unmarried couples, a high rate of married couples without children, and the lowest share of single person households.

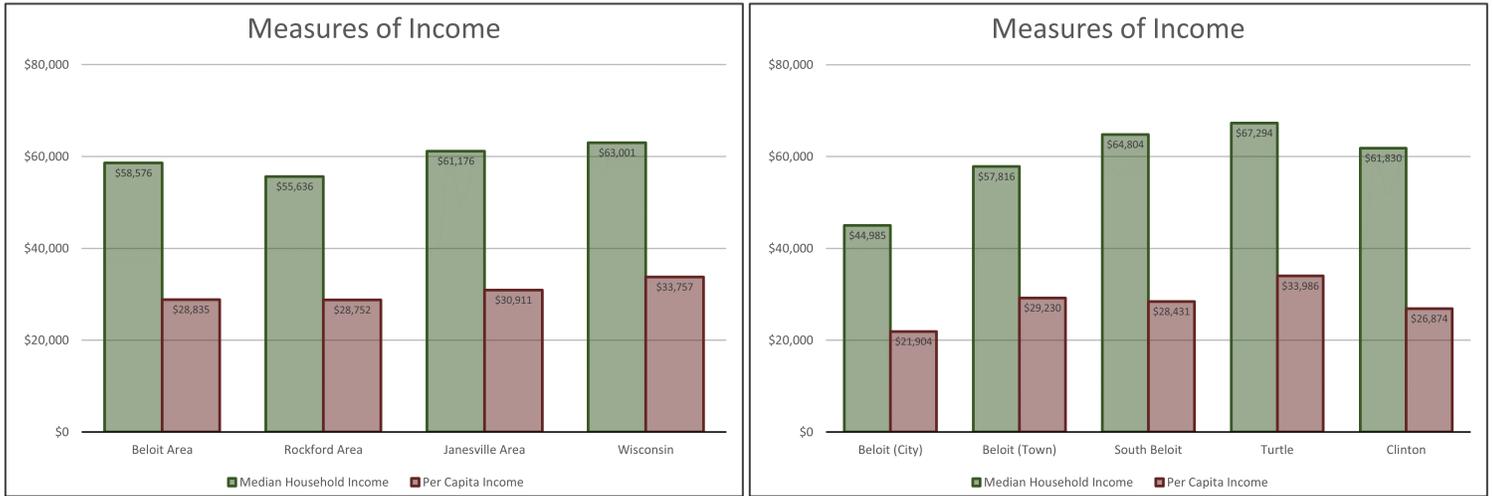
Figure 13 & 14. Household Types, 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

Measures of Income. The median household income in the Beloit Area of around \$58,600 is a bit lower than the state average, slightly above the median income in the Rockford Area, and slightly lower than the median income in the Janesville Area. (See Figures 15 and 16.) Within the Beloit Area, the median income in the City of Beloit is significantly lower than that of the other communities, which is likely to correlate with homes that are on the average older and smaller.

Figure 15 & 16. Median and Per Capital Income, 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

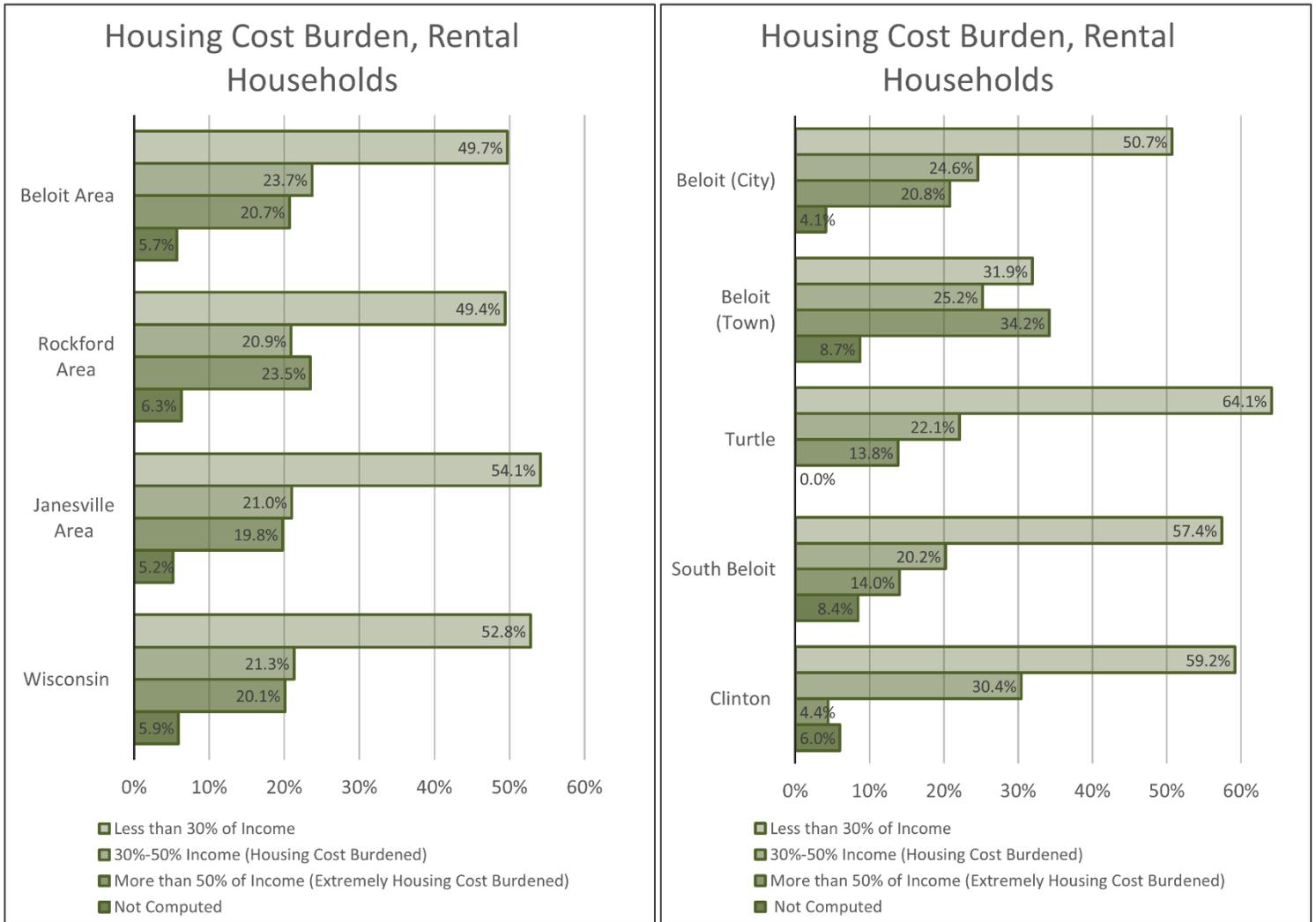
Median home value. The median value of existing homes in the Beloit Area, around \$147,500, is quite a bit lower than the median value of homes in Wisconsin as a whole. (See Figures 17 and 18.) Average home values in the Janesville Area are higher, with a median value of almost \$171,000. Home values in the Rockford Area are lower, with a median value of around \$130,000. Home values vary widely in the communities within the Beloit Area, which is likely to correlate with the time when most homes were constructed in each community. The median home value in the City of Beloit is under \$100,000, which is about half the median home value in the Town of Turtle. Median home values in South Beloit, the Town of Beloit and Clinton fall between those levels.

Figure 17 & 18. Median Home Value, 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

Figure 19 & 20. Housing Cost Burden for Renter Households, 2021 - Beloit Area and Comparisons



Source: US Census, ESRI Business Analyst

Housing cost burden. Households that spend more than 30 percent of their income on housing costs are considered to be housing cost burdened, because of how that constrains the amount of income that is available pay all other expenses. Households that spend more than 50 percent of their income on housing costs are considered to be extremely housing cost burdened. It is more common for rental households to be housing cost burdened than owner occupant households—although homeowners can also be housing cost burdened. Figures 19 and 20 show the percentage of renter households that are housing cost burdened and extremely housing cost burdened.

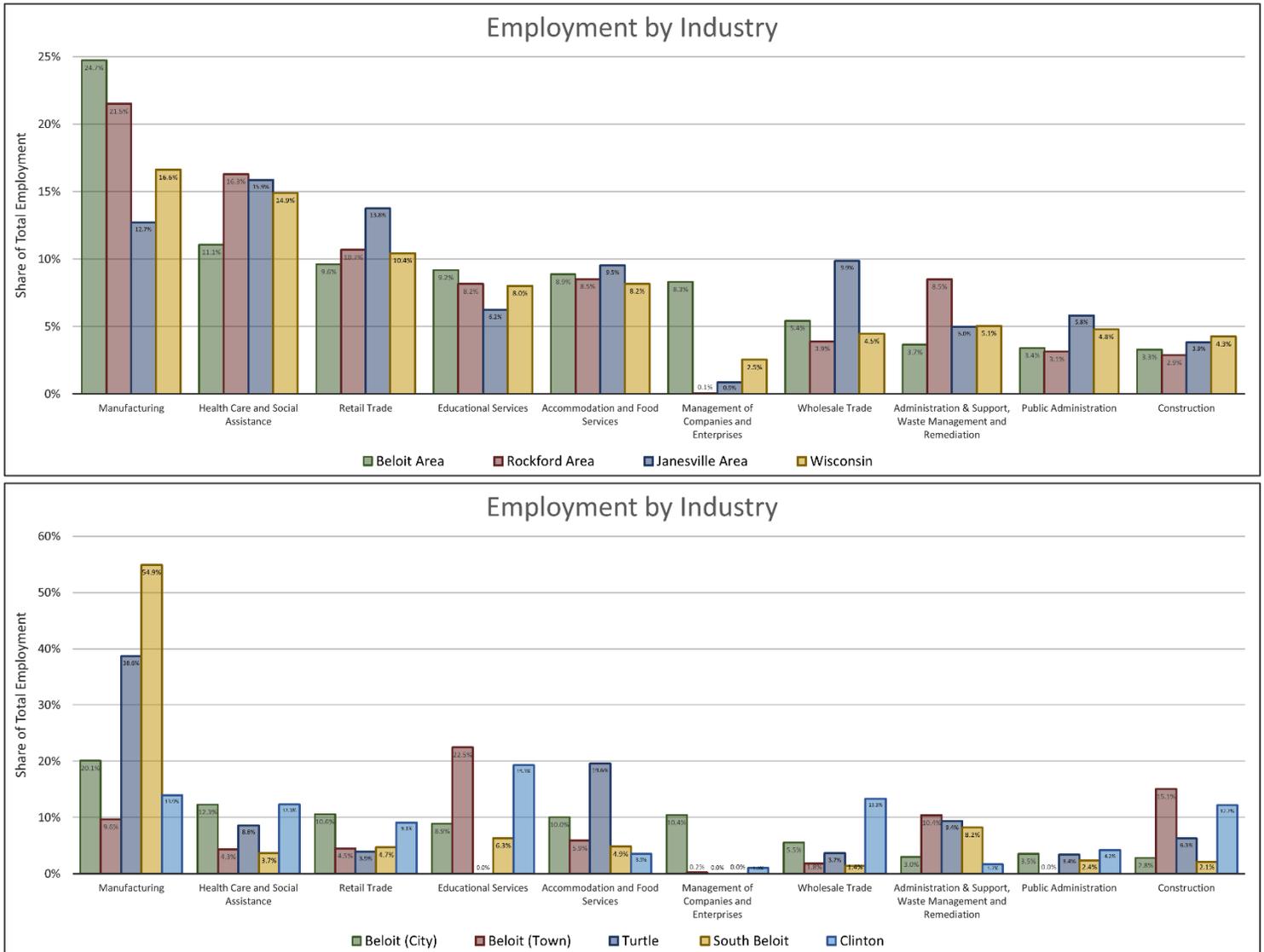
A good share of the population in every geography is housing cost burdened or extremely housing cost burdened, implying a widespread need for additional affordable housing options. The share of housing cost burden in the Beloit Area is similar to that of the comparison areas and the State of Wisconsin as a whole. Within the Beloit area, some greater distinctions are evident between the municipalities. The Town of Beloit has the greatest share of rental households that are cost burdened or extremely cost burdened—although it also has the lowest proportion of housing units that are rented. The Village of

Clinton has the lowest share of rental households that are extremely cost burdened. Note that some of the distinctions between jurisdictions reflect differences in whether rental units tend to be in apartment buildings or single family homes.

Beloit Area Economy

This section provides additional information relative to the nature of the economy of the Beloit Area.

Figure 21 & 22. Employment by Industry Sector, 2018 - Beloit Area and Comparisons



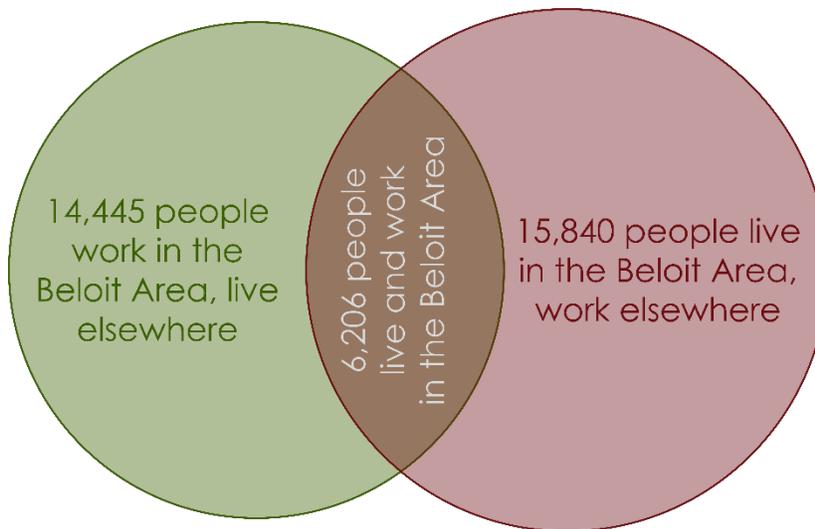
Source: OnTheMap, LEHD Origin-Destination Employment Statistics, US Census Bureau

Industry mix. Figures 19 and 20 above highlight the top ten industry sectors in the Beloit Area economy, based on the number of jobs in each industry sector that are located in the Beloit Area. Manufacturing is the strongest industry sector in the State of Wisconsin. It has an even greater predominance in the Beloit Area. Almost one in four jobs in the Beloit Area are with manufacturing

sector employers. After manufacturing employment, the employment profile in the Beloit Area largely follows the pattern of the State of Wisconsin as a whole. An exception is the relatively large share of jobs in the Management of Companies and Enterprises sector.

Within the Beloit Area, the industry mix varies between the municipalities. Manufacturing sector jobs are a great share (40 percent to 55 percent) of all jobs in the Town of Turtle and the City of South

Figure 23. Employment Inflow-Outflow from/to Beloit Area, 2018



Source: OnTheMap, LEHD Origin-Destination Employment Statistics, US Census Bureau

Beloit. The presence of Beloit College is evident in the City of Beloit, representing another economic anchor and base industry. (Higher education is a base industry because tuition comes into Beloit from outside the region, and when the faculty and staff who reside locally are paid wages those wages are recirculated through spending in the local economy.) The Village of Clinton has a relatively high share of jobs in the construction and wholesale trade industries.

Employment inflow and outflow.

The Beloit Area is the place of residence for many who work outside of the Area, and is the work

location for many who live outside of the Area. Figure 23 shows that, of around 22,000 employed people who lived in the Beloit Area in 2018, only 6,206 also worked in the Beloit Area, while almost 16,000 worked outside of the Beloit Area. There is a higher number of workers who live in the Beloit Area and work elsewhere, compared to workers who live outside the Beloit Area and are employed in the Beloit Area.

Key Findings

Population growth has been flat in the Beloit Area over the last decade, and more people commute out of the Beloit Area for work than commute into the Beloit area for work. On the other hand, the Beloit Area has experienced strong job growth in the past decade—and that pattern seems to be continuing. That’s a driver of housing demand because it generates demand for workers, some of whom will move to the area from elsewhere.

Beloit area households are a similar mix of household types to the State of Wisconsin as a whole. They are more diverse than the average Wisconsin community. Their household incomes are less, on average, than the median Wisconsin household. The high percentage of jobs in the manufacturing industry, and the education jobs at Beloit College, contribute to a good foundation of living wage employment opportunities—many of which don’t require a college degree.

Although median home values are quite a bit lower than the Wisconsin average, housing affordability is a challenge for Beloit Area rental households, with around 44 percent being housing cost burdened or extremely housing cost burdened.

III. Market and Development Demand Indicators

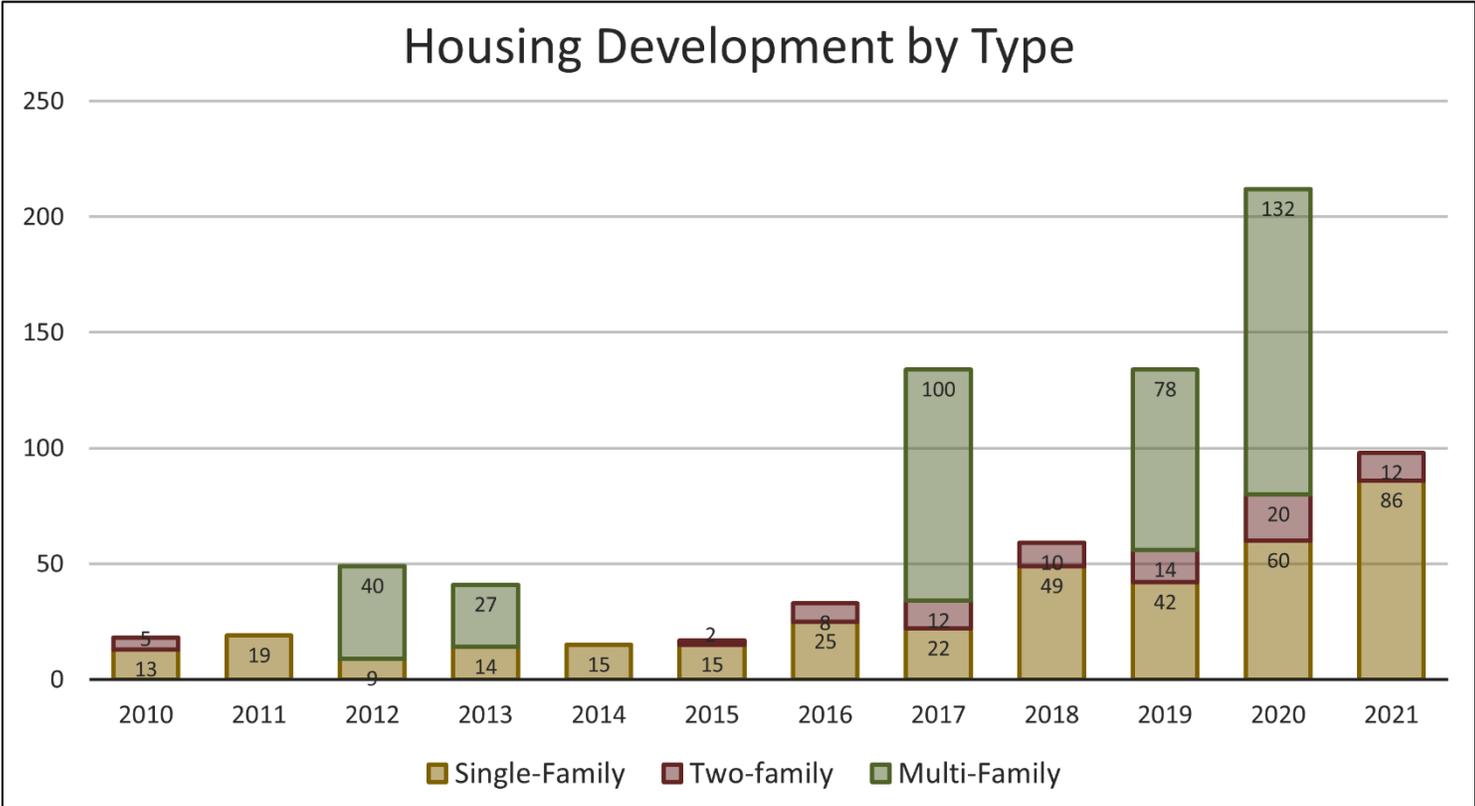
Housing Development Since 2010

An important and direct indicator of demand for new housing development is the development that has been occurring in recent years, and the performance of that housing.

Housing development per building permit records. New housing construction has been occurring in the Beloit Area. This can be documented through building permit records. Figure 24 shows the building permits for new housing issued in the five local communities since 2010. The chart shows that there has been balanced development between single/two-family homes and multifamily apartments. It also shows that the pace of development has increased over the period. From 2010 through 2016 the average number of dwelling units permitted per year was less than 30. From 2017 through 2021, the average number of permitted dwelling units per year was 127.

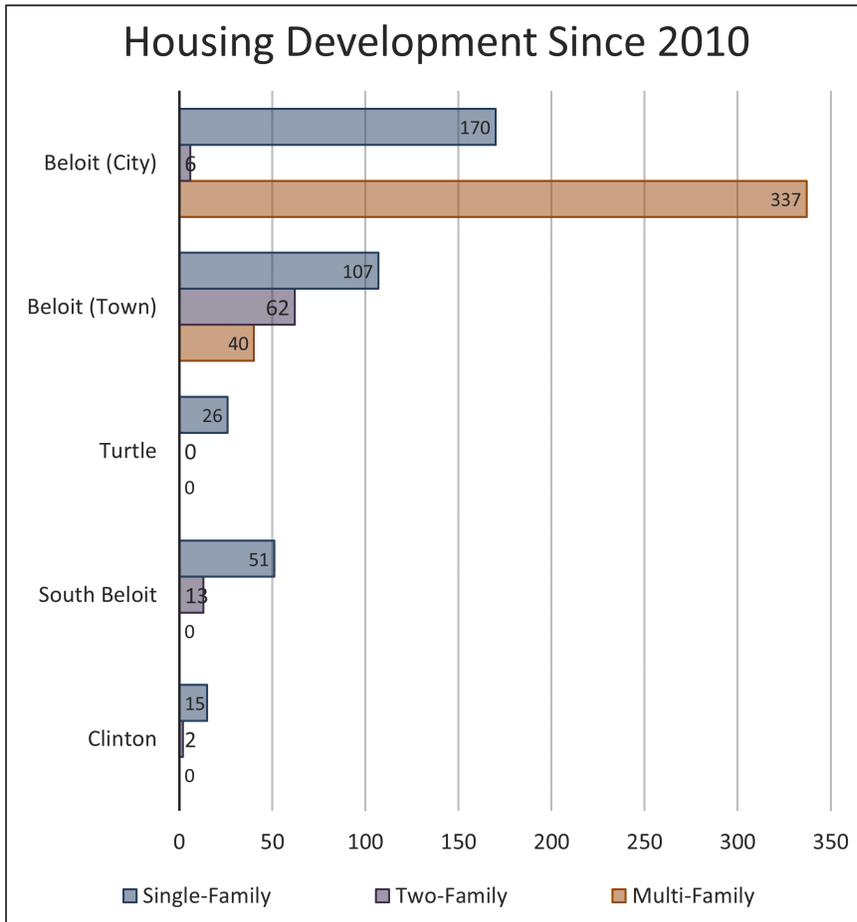
Figure 25 shows that the City of Beloit had the highest number of permitted single family and multifamily housing units. The Town of Beloit had the next highest level of housing development, in a mix of housing formats. The more modest growth in the Town of Turtle, City of South Beloit, and Village of Clinton was primarily in the form of single family homes.

Figure 24. Housing Development by Type, per Building Permit Records - Beloit Area



Source: Local Building Permit Data

Figure 25. Housing Development by Type, 2010 through 2021 per Building Permit Records - Beloit Area Communities

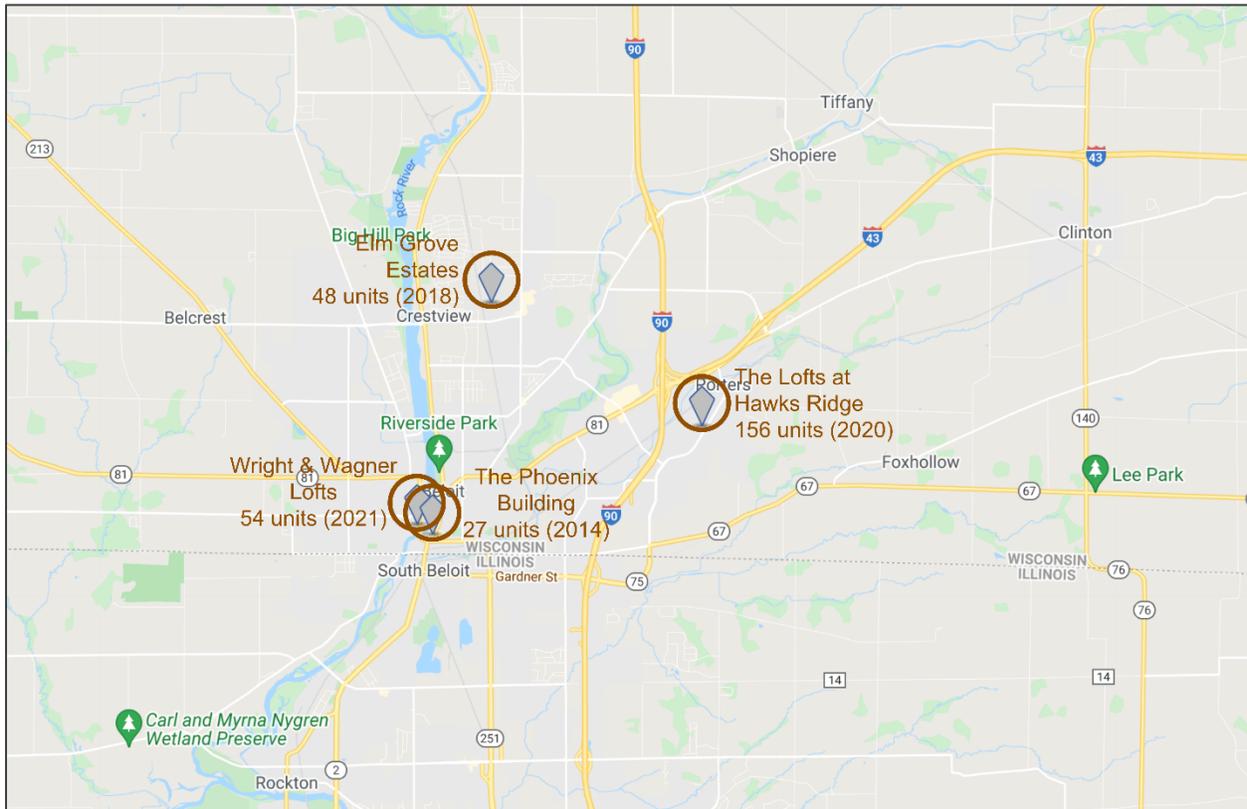


Source: Local Building Permit Data

Multifamily housing development per Costar records. Figure 26 shows the multifamily housing projects that were completed in the Beloit Area since 2010, according to the Costar development market database. The housing developments include two downtown projects and two projects closer to the edge of Beloit’s developed area. Their collective total of 285 housing units represents less than a 1 percent gain in total housing units over the decade for the Beloit Area. However, it appears the pace of development increased over the decade. Moreover, based on interviews with developers (see additional detail below) these projects have been successful, and so they build confidence for further development activity.

Table 3 provides more detailed information on the character of the recent housing developments, their unit mix, and average rents.

Figure 26. Multifamily Housing Development in Beloit Area Since 2010



Source: Costar

Table 3. Multifamily Housing Developments in Beloit Area since 2010

	The Phoenix Building	Elm Grove Estates	The Lofts at Hawks Ridge	Wright & Wagner Lofts
Property Address	430 E Grand Ave	2641 Kadlec Dr	1764 Gateway Blvd	200 W Grand Ave
Market Segment	General Occupancy	General Occupancy	General Occupancy	General Occupancy
Affordability	Market Rate	Market Rate	Market Rate	Market Rate
Developer Name	Hendricks Commercial Properties LLC	Pre / 3	Teronomy Builders, Inc.	Hendricks Commercial Properties LLC
Year Built	2014	2018	2020	2021
Number Of Units	27	48	156	54
Number of Buildings	1	5	3	1
Number Of Stories	2	2	4	4
Avg Asking/SF	2	1	1	1
1-Bedroom Units				
<i>Units</i>	10	0	65	54
<i>Rent</i>	\$1,335	n/a	\$1,010	\$1,329
<i>Area (sq. ft.)</i>	764	n/a	731	981

2-Bedroom Units				
<i>Units</i>	17	48	51	0
<i>Rent</i>	\$1,490	\$997	\$1,231	n/a
<i>Area (sq. ft.)</i>	1,038	1,065	1,011	n/a
3-Bedroom Units				
<i>Units</i>	0	0	35	0
<i>Rent</i>	n/a	n/a	\$1,390	n/a
<i>Area (sq. ft.)</i>	n/a	n/a	1247	n/a
4-Bedroom Units				
<i>Units</i>	0	0	5	0
<i>Rent</i>	n/a	n/a	\$1,625	n/a
<i>Area (sq. ft.)</i>	n/a	n/a	1,562	n/a

Source: Costar

Market Performance of Existing Properties

The market dynamics of existing housing provides signals relative to the demand for new housing. For owner occupied homes, rising home values or sale prices show that there is increasing demand for such homes. In the rental housing market, rising rents and low vacancy rates are indicators that there is increasing demand for rental housing.

Single family housing. The sale prices of homes and their trend lines are closely correlated with home values. If a representative group of homes sale prices are rising, that is strong evidence that home values are rising proportionately.

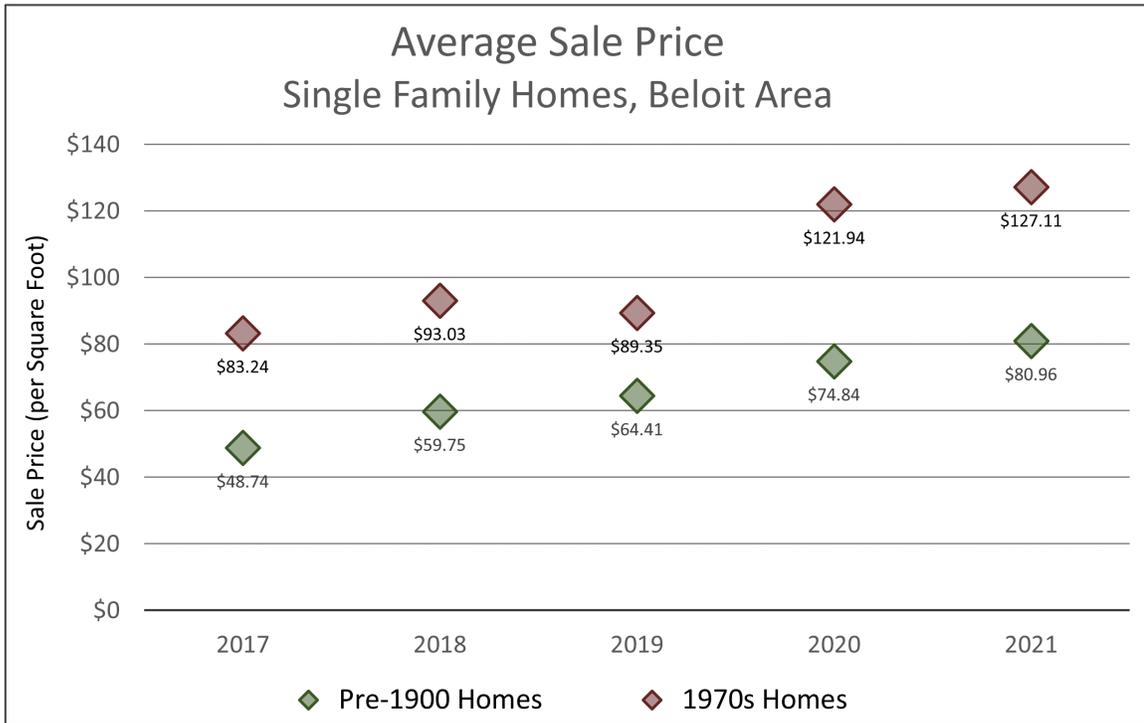
The chart in Figure 27 is based on over 500 home sale records, representing homes built in two different decades. The same pattern is evident for each group of homes. The average sale price increased dramatically over the period, and it did so in each year. The average sale price of 1970s era single family homes was 53 percent higher in 2021 than it was in 2017. The average sale price of pre-1900 homes was 66 percent higher in 2021 than it was in 2017. Nationwide, home sale prices only increased an average of 17 percent over the same period.

Multifamily housing. Figure 28 illustrates the trajectory of average rents and vacancy levels for all existing multifamily apartment properties in the Beloit Area. It also includes a projection of rent and vacancy levels for the next few years to 2025.

The average rent level rose from \$685 per month in 2010 to \$851 in the last quarter of 2021—a 24 percent overall increase. Meanwhile the vacancy rate declined dramatically to only 1 percent, a level well below the 5 percent vacancy rate that is considered an equilibrium vacancy level. The low vacancy rate signals demand for rental housing. If low vacancies persist, rent increases are likely to occur. And rising rents in existing apartment properties can prompt new apartment development.

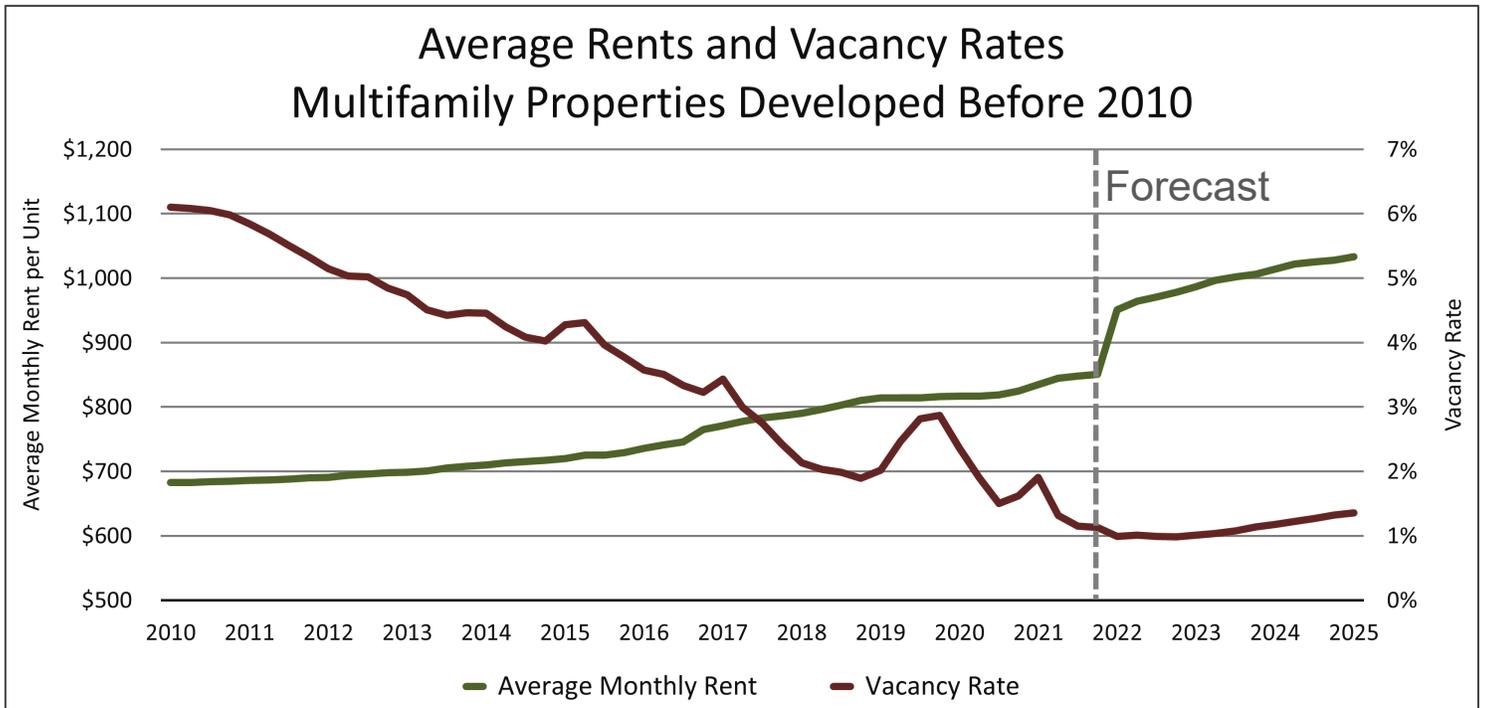
Table 4 provides some additional information about the multifamily apartment properties in the Beloit Area that are in the Costar database.

Figure 27. Average Single Family Home Sale Price by Year, in Two Construction Decades – Beloit Area



Source: Redfin

Figure 28. Average Single Family Home Sale Price by Year, in Two Construction Decades – Beloit Area



Source: Costar

Table 4. Characteristics of Beloit Area Existing Housing Stock

Units	3,209
Buildings	61
Avg Units per Building	53
Median Year of Construction	1975
Average Rents	
Studio	\$346
1 Bedroom	\$783
2 Bedroom	\$966
3 Bedroom	\$1,052
Current Vacancy Rate	1.0%

Source: Costar

Interviews with Local Developers and Stakeholders

The market context for Beloit Area housing development was explored in additional depth through a set of structured interviews. Conversations with developers, real estate professionals and other stakeholders focused on the strengths and weaknesses of the Beloit Area as a location for housing development, the prospective tenant base, and the financial viability of new multifamily housing.

Developer interviewees were in leadership positions with development firms that know the Beloit area. Each firm specializes in a different housing product. Most have been directly involved in Beloit Area development.

These individuals were interviewed:

- Chris Slater, PRE/3
- Dan Barkes, Hendricks Commercial Properties LLC
- Tyler Sheeran, Commonwealth Companies
- Mike Marquette, Century 21 Affiliated
- Joe Contarino, Contry Homes and New Leaf Homes
- Shawn Sullivan, The Morse Group

The following is a compilation of comments from the interviewees reflecting their own observations and opinions.

Level of housing demand. There is an insufficient supply of housing in the Beloit Area. Every developer who has constructed projects in the area reported that their projects have done well, meeting or exceeding expectations—and they saw a demand for additional development. One

developer said, “You cannot find housing. You can’t find apartments. Houses are for sale for a day and then they’re gone. We’re not even tipping the scales yet. The companies in Beloit have a lot of jobs available, and we’re trying to fill them.”

Businesses report that they need more housing for their employees. In particular, workers that are recruited to the area need a place to land initially. One business said most of their new recruits end up living in Roscoe, Rockton, or Janesville.

Hotel occupancy is also demonstrating the demand, because it has stayed at around 80 percent during the pandemic.

Sources of housing demand. New residents are drawn to the Beloit Area for a range of reasons. Significant business growth has occurred in the area, and that brings workers to Beloit. Some residents have moved to Wisconsin from Illinois to avoid paying the higher taxes in Illinois. There is demand from within the community for move-up or move-down housing, as well as aging into senior housing formats.

Area assets and barriers. There was a consensus among interviewees that the amenity investments that have been made in Beloit (including downtown revitalization, the new baseball stadium, the YMCA, the country club renovation) have been important in making the City attractive to prospective residents. The connectedness of the area via Interstate 90 and other highways is excellent. The quality of Beloit Area schools is a major consideration for some prospective residents. Some interviewees highlighted it as a barrier. There are important differences between the school districts in the area.

Single family home development. The single family home market is “pretty good” to strong. Spec homes and build-to-suit developments are viable. Different price points are in demand, from \$250,000 for working class households to \$600,000-plus executive homes. Different developers will specialize in different price points to achieve cost efficiencies.

Townhome development. There may be demand for townhome development, as a middle ground alternative between single family homes and apartments. There is an increasing population of younger millennials. They would be familiar with that type of housing and would enjoy it.

Multifamily development. Interviewees reported a demand for additional apartment development targeted to a range of income levels and age demographics. Since the improvements in the vibrancy of downtown Beloit, downtown apartments are definitely attractive to a group of tenants that skews toward people in their 20s and 30s. That demand will support additional downtown apartment projects.

There is also demand to support apartment developments in more suburban locations and formats, if and when appropriate locations are identified and secured. That demand encompasses upscale apartment developments with structured parking and a suite of onsite amenities, as well as lowrise workforce housing formats.

Affordable housing. There is a high demand for affordable housing options in the Beloit Area, both for the existing community, and for workers hired by area businesses. Interviewees talked about a couple of different development approaches to meeting that need.

- 1) Modest workforce market-rate housing can be built using cost-effective materials and efficient construction processes. Generally some local financial support will be needed. Buildings will tend to be lowrise, without elevators, and surface or garage parked.
- 2) Tax credit and related housing finance programs can be leveraged to create affordable housing that offers similar to slightly lower rent levels. Buildings are often three or four stories with elevators. They may have structured parking, and may also provide benefits in terms of quality and durability of materials.

Senior housing. The senior share of the population is continuing to grow. The demand for senior housing formats will grow as a result. There's definitely a demand for senior independent living.

There is not enough senior housing because I know that people are on wait lists. There has been new assisted living/nursing home, but independent/assisted is a need.

Some of the demand from seniors may also be addressed through market rate housing options that offer one-level and/or maintenance free living options.

Increasing production. Interviewees offered a range of ideas for increasing the production of housing to meet the area's needs.

Given the fact that local developers tend to specialize in a given development type, and each has their own constraints in terms of construction capacity, we might want to recruit developers to the area who are working in other parts of Wisconsin. That might both increase the overall production level, and generate new development types that are not currently being built in the Beloit Area.

For multifamily projects, the City might achieve more development if it was more willing to partner in the development financing—especially through using tax increment financing.

Single family home subdivisions might get boosted if cities were proactive in building the infrastructure. They could then recoup those costs through special assessment on the lots.

A high priority should be to focus attention on improving school district perception.

Key Findings

Building permit records show the development of a balanced mix of single family and multifamily housing in the Beloit Area over the past decade. The pace of development in aggregate has been modest, but it increased dramatically over that period.

A fairly limited number of apartment developments were built, mostly in the second half of the decade. They were diverse in their locations—two located in downtown Beloit and two elsewhere—and in their formats.

The market data signals high demand and heavy competition for existing single family homes as well as existing rental housing. Single family home values, as viewed through home sale prices, have increased dramatically over the last five years. Multifamily apartment rents have increased steadily, and the vacancy rate dropped to almost zero, over the last decade.

Interviews with people in real estate and development reinforced a heavy demand for both existing and new housing. Developers who have completed development projects in the area say those projects were successful, and there would be ample demand for that project to be replicated—and in some cases many times over. The demand for new housing cuts across almost the entire spectrum of housing types, encompassing high end to affordable housing, high density and low density, ownership and rental housing, senior and general occupancy.

Taken together, this analysis and interview research build a picture of a market context of high demand for new housing development.

IV. Projections and Estimated Housing Demand

Three methodologies are used in this section to project the level of future housing development that is expected or achievable. Each provides a window into what may occur.

- Housing Performance Model.** This methodology assumes the rate of housing development in the most recent period will continue in coming periods.
- Population Projection Model.** This methodology utilizes a long range population projection as its base assumption. Projected population growth is converted to housing demand.
- Employment Growth Model.** This methodology assumes the job growth in the most recent period will continue in coming periods. Projected job growth is converted to housing demand.

Housing Performance Model

The theory of the housing performance model is that the most recent housing development performance will continue into the foreseeable future. It is a straight line projection based on real world recent development patterns.

Table 5 shows the housing development performance over the past five years. If that performance were to continue into the future, around 65 single family homes would be built each year, and around 62 multifamily housing units would be produced. A total of around 637 housing units would be built each five year period.

Table 5. Projected Housing Growth, Past Performance Model - Beloit Area

Year	Single and Two-Family	Multi-Family	Total
2017	34	100	134
2018	59	0	59
2019	56	78	134
2020	80	132	212
2021	98	0	98
Average - 2017 to 2021	65.4	62	127.4
Housing Growth per Five Year Period	327	310	637

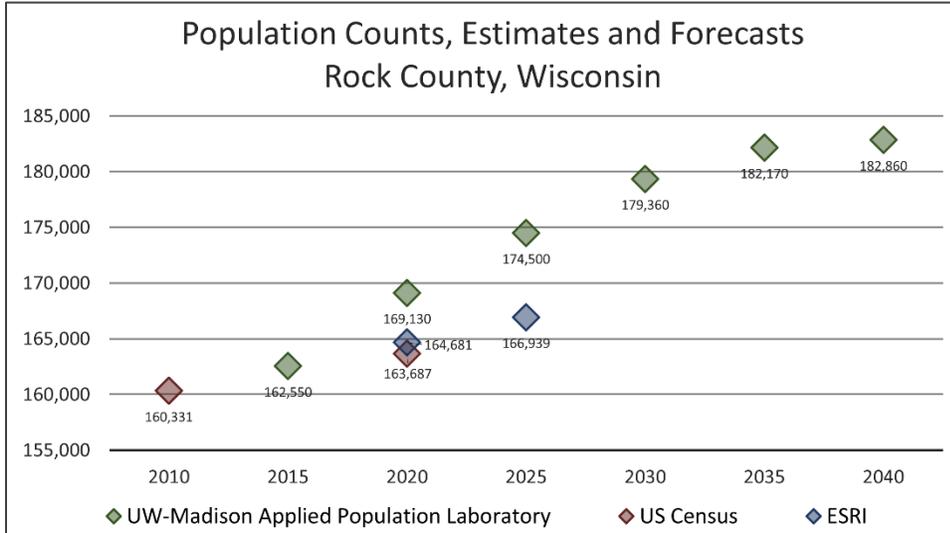
Source: Local Building Permit Data, Stantec

Population Projection Model

The population projection model utilizes a long range population or household growth forecast developed by others as its base assumption, and it assumes new housing will be constructed to support the projected growth.

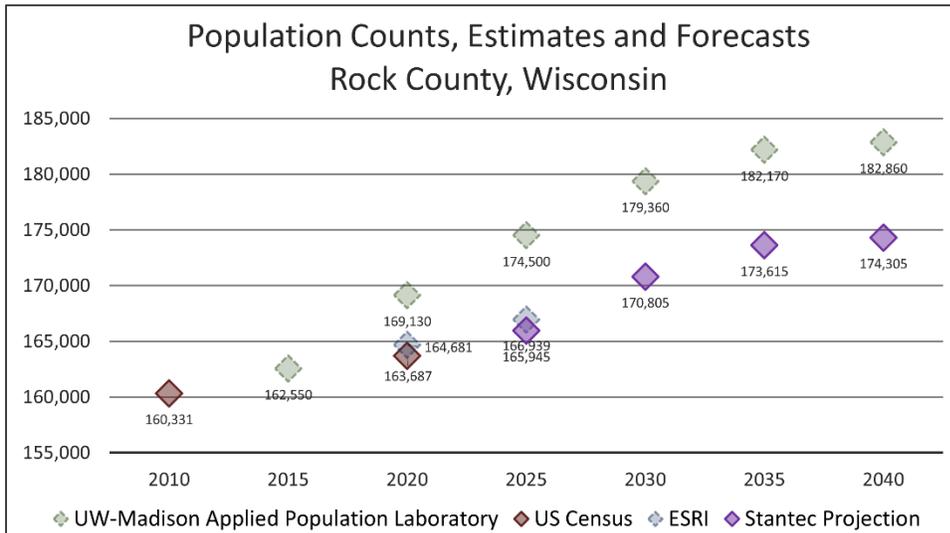
Rock County seems to be the smallest geography in the Beloit Area for which future population growth has been projected. In 2013, the UW-Madison Applied Population Laboratory completed a population forecast for all Wisconsin counties through 2040. The population for Rock County was counted through the Census in 2020, and the count is lower than the UW forecast for 2020. ESRI's algorithm shows an estimated 2020 population level that is also higher than the Census 2020 figure. It's projected growth between 2020 and 2025 is slower than the UW forecast. These counts, estimates and projections are illustrated in Figure 29.

Figure 29. Population Counts, Estimates and Forecasts, 2010 to 2040 – Rock County



Source: UW-Madison Applied Population Laboratory, US Census, ESRI Business Analyst

Figure 30. Stantec Population Forecast Assumption, 2010 to 2040 – Rock County



Source: UW-Madison Applied Population Laboratory, US Census, ESRI Business Analyst, Stantec

For purposes of this analysis, the Census 2020 figure is taken to be accurate. Using that 2020 population as a baseline, the growth in population from 2020 to 2025 follows ESRI's projected growth rate, because it is more current than the UW forecast. The growth in population from 2025 to 2040

follows the UW projected growth rate. Based on those assumptions, the projected growth from 2020 to 2040 is illustrated in Figure 30, labeled “Stantec Projection.”

In Table 6, the Stantec population projections for Rock County are put in tabular format, and are scaled to the Beloit Area. The growth in population in each five year period is converted to demand for new housing units, using the Beloit Area’s average household size as a conversion factor, and a 3 percent housing vacancy rate assumption.

Table 6. Projected Housing Growth, Population Projection Model - Beloit Area

Year	Rock County Population	Beloit Area Population	Time Period	Beloit Area Population Growth	Projected Housing Growth
2020	163,687	81,435			
2025	165,945	82,558	2021 to 2025	1,123	452
2030	170,805	84,976	2026 to 2030	2,418	973
2035	173,615	86,374	2031 to 2035	1,398	562
2040	174,305	86,718	2036 to 2040	343	138

Source: UW-Madison Applied Population Laboratory, US Census, ESRI Business Analyst, Stantec

This analysis indicates that if the Beloit Area captures its share of the projected Rock County growth, around 450 housing units will be demanded in the next five years, presumably divided between low density and multifamily formats. 973, 562, and 138 housing units will be demanded in the subsequent five-year periods.

Employment Growth Model

The theory of the employment growth model is that job growth drives housing demand, and the most recent job growth pattern will continue into the foreseeable future. Future increases in Beloit Area jobs are converted to the housing that is needed to support those who take the jobs. The conversion of job growth to housing growth is based on the ratio of housing units to total jobs for the State of Wisconsin.

Table 7 shows the job growth in the Beloit area over the past eight years. If job growth were to continue in the future at the same pace, and new housing kept up with the growing workforce, that translates to around 243 housing units that would be needed each year, or around 1,214 housing units in a five year period.

Table 7. Projected Housing Growth, Employment Growth Model - Beloit Area

Jobs, 2010	18,682
Jobs, 2018	20,651
Annual Job Growth, 2010 to 2018	246
Projected Job Growth, Five Year Period	1,231
Average Housing Units per Job, State of Wisconsin	98.7%
Housing Growth per Year	243
Housing Growth per Five Year Period	1,214

Source: OnTheMap, US Census, ESRI Business Analyst, Stantec

An important caveat to note is that the Beloit Area has a high existing ratio of housing units to jobs. It had an estimated 33,620 housing units in 2018, and an estimated 20,651 jobs. That yields a jobs to housing unit ratio of around 1.63—well over the .987 state average. The high ratio of existing housing to jobs may dampen the need for housing development to fully keep pace with job growth.

Key Findings

Projected housing production. Each of the three development projection models estimates future housing growth based on a different assumptions and observations.

- The Housing Performance Model projects a continuation of the housing development pattern of the last five years. On that basis it projects 637 new housing units in the coming five years.
- The Population Projection Model adapts the predictions of a set of population forecasts, and on that basis calculates the housing units needed to house that population increase. It predicts the development of between 138 and 973 housing units in each five year period to 2040, starting with 453 housing units in the coming five years.
- The Employment Growth Model projects a continuation in the employment growth that occurred between 2010 and 2018, and calculates the housing that is needed to support that increase in workforce. On that basis it projects 1,214 new housing units in the coming five years.

Table 8. Five Year Housing Growth, per 3 Projection Models

	Projected Housing Growth, Five Year Period (housing units)
Housing Performance Model	637
Population Projection Model	452 over the next five years 973, 563, 138 in subsequent five year periods
Employment Growth Model	1,214

Source: OnTheMap, US Census, ESRI Business Analyst, Stantec

If due consideration is given to an important caveat noted in the Employment Growth Model section above, the projection models can be taken together to suggest that 500 to 750 housing units is a likely range of housing production in the next five years, under current conditions.

Estimated housing demand. The projection models are all ultimately rooted in historical trends in one way or another. For that reason they are stronger indicators of the *level of expected housing production* than they are of the *level of housing demand*. Housing demand is greater than housing production when housing production is not sufficient to accommodate all of the ownership and rental households who would occupy such housing.

The research conducted in this demand analysis supports a finding that Beloit Area housing demand has not been fully met by the housing that has been produced in recent years, and that the projected level of housing production would also be lower than what is needed to satisfy future demand.

In order to estimate the Beloit Area housing demand, the housing growth projections are taken in combination with the research findings related to:

- The response of the market to the housing that has been built over the last five years.
- The consensus view of the developers of recent projects that the demand for new housing exceeds what they have been able to produce

Based on the objective performance of recent developments, and the informed judgments of developers who are in a strong position to make such assessments, Stantec estimates the demand for housing production over the next five years is about twice the level of projected housing production. Stated differently, if the rate of estimated housing production were to be doubled, there would be sufficient numbers of owner occupants and tenants to occupy those housing units without significantly reducing rents and sale prices. Specifically, the Beloit Area housing demand is estimated to support the production of 1,000 to 1,500 housing units over the next five years.

Housing products. The people who were interviewed in this demand analysis also emphasized that the strong housing demand pertained to a broad range of housing types. This included ownership and rental housing, multifamily housing of different formats and targeted to different household income levels, and senior housing. The need for workforce housing in a range of formats is a particularly important priority, given the role of that housing in supporting the continued vibrancy of Beloit’s robust business sector.

Based on the mix of housing that has been recently developed, and observations from interviewees about housing types that are needed, the following is an estimated breakdown of housing demand in the Beloit Area over the next five years.

Single Family	Duplex, Townhome	Other Multifamily		
		Market Rate		Rent-restricted Affordable
		General Occupancy	Senior	
400	200	400	100	150

Strategic action. A final important consideration is the role of strategic action. As discussed above, the level of projected housing production would have to increase in order to match the demand for housing and advance important Beloit Area priorities. This analysis doesn’t include the identification and proposal of such strategies. But intentional strategies can be undertaken by local governments and others to increase housing production through such approaches as recruiting additional developer interest, reducing barriers to development, and providing strategic financial and non-financial support to development projects.

The development of a strategic action plan for housing production would be an appropriate follow-up to this analysis.

Appendix

	Beloit Area	Rockford Area	Janesville Area	Wisconsin	Beloit (City)	Beloit (Town)	Turtle	South Beloit	Clinton
Population and Households									
2000 Total Population	73,296	276,694	79,696	5,363,675	36,168	7,026	2,063	6,185	2,074
2010 Total Population	81,461	297,545	84,009	5,686,986	36,966	7,662	2,388	7,989	2,154
2021 Total Population	81,435	293,939	86,634	5,922,426	37,017	7,983	2,464	7,990	2,110
2026 Total Population	81,503	285,375	88,037	6,045,275	37,174	8,083	2,525	7,913	2,097
2000 Households	27,352	106,764	31,176	2,084,544	13,565	2,817	759	2,459	751
2000 Average Household Size	2.62	2.54	2.50	2.50	2.57	2.49	2.64	2.49	2.68
2010 Households	30,678	114,657	33,705	2,279,768	13,781	3,119	956	3,044	801
2010 Average Household Size	2.60	2.55	2.46	2.43	2.57	2.46	2.48	2.60	2.58
2021 Households	31,144	114,846	35,283	2,404,113	13,992	3,295	1,005	3,056	799
2021 Average Household Size	2.56	2.52	2.43	2.40	2.55	2.42	2.40	2.59	2.56
2026 Households	31,342	111,877	35,987	2,462,852	14,115	3,348	1,032	3,065	797
2026 Average Household Size	2.55	2.51	2.42	2.40	2.54	2.41	2.40	2.56	2.55
2021 Housing Characteristics									
Number of Housing Units	33,774	125,292	37,827	2,781,889	15,452	3,439	1,052	3,451	874
Median Home Value	\$147,520	\$130,059	\$170,852	\$210,060	\$98,724	\$154,293	\$196,393	\$132,427	\$157,143
Owner Occupied Housing Units	63.4%	61.0%	64.4%	58.0%	51.7%	73.6%	67.8%	63.3%	58.9%
Renter Occupied Housing Units	28.8%	30.6%	28.9%	28.5%	38.9%	22.2%	27.8%	25.2%	32.5%
Vacant Housing Units	7.8%	8.3%	6.7%	13.6%	9.4%	4.2%	4.5%	11.4%	8.6%
2021 Population by Age									
0 - 4	6.0%	6.2%	5.6%	5.6%	6.9%	4.4%	4.9%	6.7%	6.4%
5 - 9	6.2%	6.3%	5.9%	5.8%	6.8%	4.8%	5.2%	6.6%	6.6%
10 - 14	6.5%	6.3%	6.1%	6.1%	6.5%	5.1%	5.4%	6.4%	6.9%
15 - 24	13.6%	12.2%	11.7%	13.1%	15.7%	10.6%	10.4%	12.6%	11.3%
25 - 34	12.7%	13.2%	12.8%	12.8%	13.8%	11.6%	13.0%	14.6%	13.0%
35 - 44	11.9%	12.5%	13.3%	12.4%	12.1%	9.8%	12.4%	13.3%	13.4%
45 - 54	12.7%	12.4%	13.0%	12.2%	11.3%	13.1%	12.9%	13.2%	11.1%
55 - 64	13.6%	13.2%	13.8%	14.0%	11.8%	16.5%	14.5%	12.5%	13.7%
65 - 74	10.1%	10.3%	10.4%	10.7%	8.8%	13.5%	12.7%	8.4%	10.2%
75 - 84	4.8%	5.3%	5.4%	5.1%	4.3%	7.4%	6.4%	4.1%	4.7%
85 +	2.0%	2.3%	2.0%	2.3%	2.1%	3.1%	2.3%	1.7%	2.8%
18 +	77.4%	77.5%	78.7%	78.9%	75.9%	82.4%	80.7%	76.5%	76.1%
2021 Households by Income									
<\$15,000	10.9%	11.6%	8.8%	8.3%	16.1%	9.0%	9.8%	8.1%	6.9%
\$15,000 - \$24,999	7.8%	10.0%	6.1%	8.3%	9.1%	8.0%	5.0%	9.7%	5.9%
\$25,000 - \$34,999	9.7%	10.0%	8.8%	8.6%	12.6%	9.8%	8.7%	6.7%	11.8%
\$35,000 - \$49,999	13.4%	12.6%	15.3%	13.0%	16.7%	14.4%	12.5%	10.7%	10.2%
\$50,000 - \$74,999	18.8%	19.1%	20.2%	19.0%	19.8%	21.2%	18.4%	21.7%	26.0%

\$75,000 - \$99,999	13.7%	12.2%	16.4%	14.2%	11.3%	16.0%	16.1%	15.0%	17.9%
\$100,000 - \$149,999	16.4%	15.5%	16.2%	16.9%	10.3%	16.0%	17.7%	21.2%	16.1%
\$150,000 - \$199,999	5.8%	5.3%	5.2%	6.2%	2.8%	3.2%	8.1%	5.2%	3.5%
\$200,000+	3.6%	3.8%	3.0%	5.3%	1.5%	2.3%	3.8%	1.7%	1.8%
Median Household Income	\$58,576	\$55,636	\$61,176	\$63,001	\$44,985	\$57,816	\$67,294	\$64,804	\$61,830
Per Capita Income	\$28,835	\$28,752	\$30,911	\$33,757	\$21,904	\$29,230	\$33,986	\$28,431	\$26,874
2021 Population by Race/Ethnicity									
White Alone	77.6%	71.2%	90.9%	83.8%	65.7%	83.2%	77.4%	83.2%	87.1%
Black Alone	8.8%	13.9%	2.3%	6.6%	14.9%	6.8%	8.3%	5.0%	0.7%
American Indian Alone	0.4%	0.4%	0.3%	1.1%	0.5%	0.3%	0.2%	0.5%	0.1%
Asian Alone	1.5%	2.9%	1.6%	3.1%	1.4%	1.4%	2.2%	1.8%	0.7%
Pacific Islander Alone	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%
Some Other Race Alone	7.7%	7.8%	2.4%	3.0%	12.2%	5.1%	9.2%	5.7%	9.3%
Two or More Races	4.0%	3.9%	2.5%	2.4%	5.4%	3.1%	2.7%	3.8%	2.1%
Hispanic Origin	14.0%	17.3%	6.3%	7.4%	20.7%	9.3%	14.2%	11.5%	14.8%

Source: US Census, ESRI Business Analyst