

# HOUSING NEEDS ASSESSMENT

---

Muhlenberg County,  
Kentucky



**BOWEN**  
NATIONAL  
RESEARCH

2024

## TABLE OF CONTENTS

- I. Introduction
  - II. Executive Summary
  - III. County Overview and Study Areas
  - IV. Demographic Analysis
  - V. Economic Analysis
  - VI. Housing Supply Analysis
  - VII. Other Housing Market Factors
  - VIII. Housing Gap/Demand Estimates
  - IX. Community Input Results and Analysis
- Addendum A – Field Survey of Conventional Rentals
- Addendum B – Non-Conventional Rental Survey
- Addendum C – Methodology and Limitations
- Addendum D – Qualifications
- Addendum E – Glossary

Note: For-Sale housing data provided upon request.

# I. INTRODUCTION

## A. PURPOSE

Muhlenberg Economic Growth Alliance retained Bowen National Research in November of 2023 for the purpose of conducting a Housing Needs Assessment of Muhlenberg County, Kentucky and its municipalities.

With changing demographic and employment characteristics and trends expected over the years ahead, it is important for the local government, stakeholders and its citizens to understand the current market conditions and projected changes that are anticipated to occur that will influence future housing needs. Toward that end, this report intends to:

- Provide an overview of present-day Muhlenberg County.
- Present and evaluate past, current and projected detailed demographic characteristics.
- Present and evaluate employment characteristics and trends, as well as the economic drivers impacting the area.
- Determine current characteristics of major housing components within the market (for-sale/ownership and rental housing alternatives).
- Review other housing factors such as resources that could contribute to the development and preservation of housing within the county (identification of potential developer/investor partners and identification of housing programs).
- Provide housing gap estimates by tenure (renter and owner) and income segment.
- Collect input from community members including area stakeholders and employers in the form of online surveys.

By accomplishing the study's objectives, government officials, area stakeholders, and area employers can: (1) better understand the county's evolving housing market, (2) establish housing priorities, (3) modify, expand, or introduce local government housing policies, and (4) enhance and/or expand the county's housing market to meet current and future housing needs.

## B. GEOGRAPHIC SCOPE

### Study Area Delineation

The primary geographic scope of this study is Muhlenberg County, Kentucky. Additionally, supplemental data and analysis is provided for the cities of Greenville and Central City. A full description of the market areas and corresponding maps are included in Section III.

## II. EXECUTIVE SUMMARY

The purpose of this report is to evaluate the housing needs of Muhlenberg County, Kentucky and to recommend priorities and strategies to address such housing needs. To that end, we have conducted a comprehensive Housing Needs Assessment that considered the following:

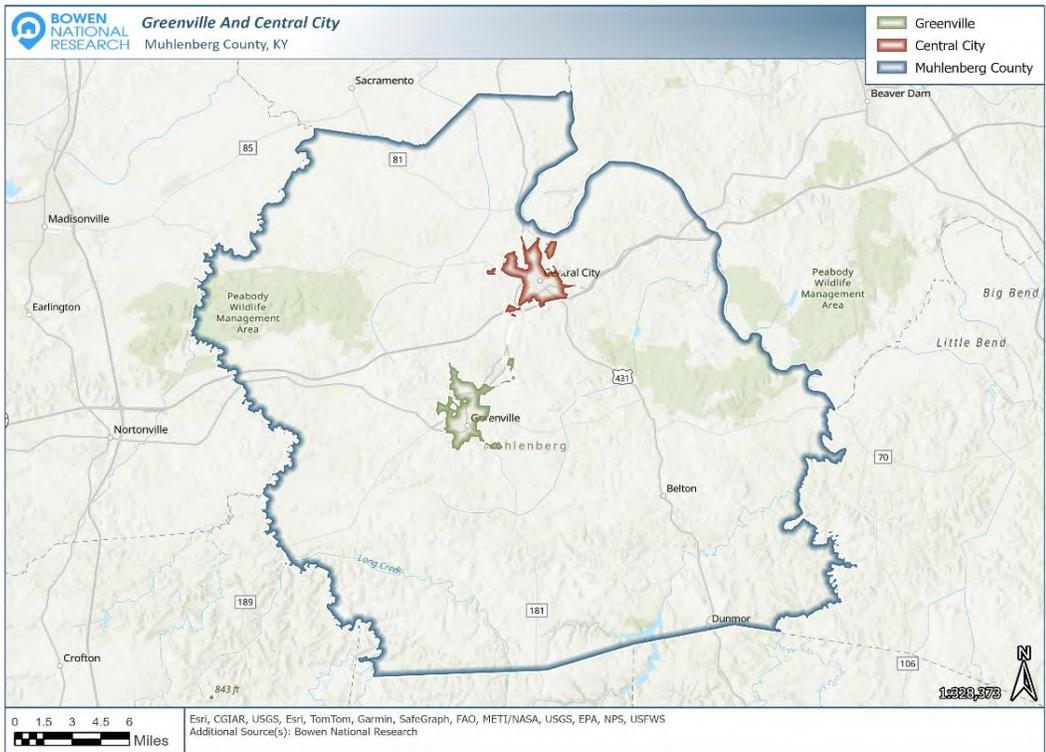
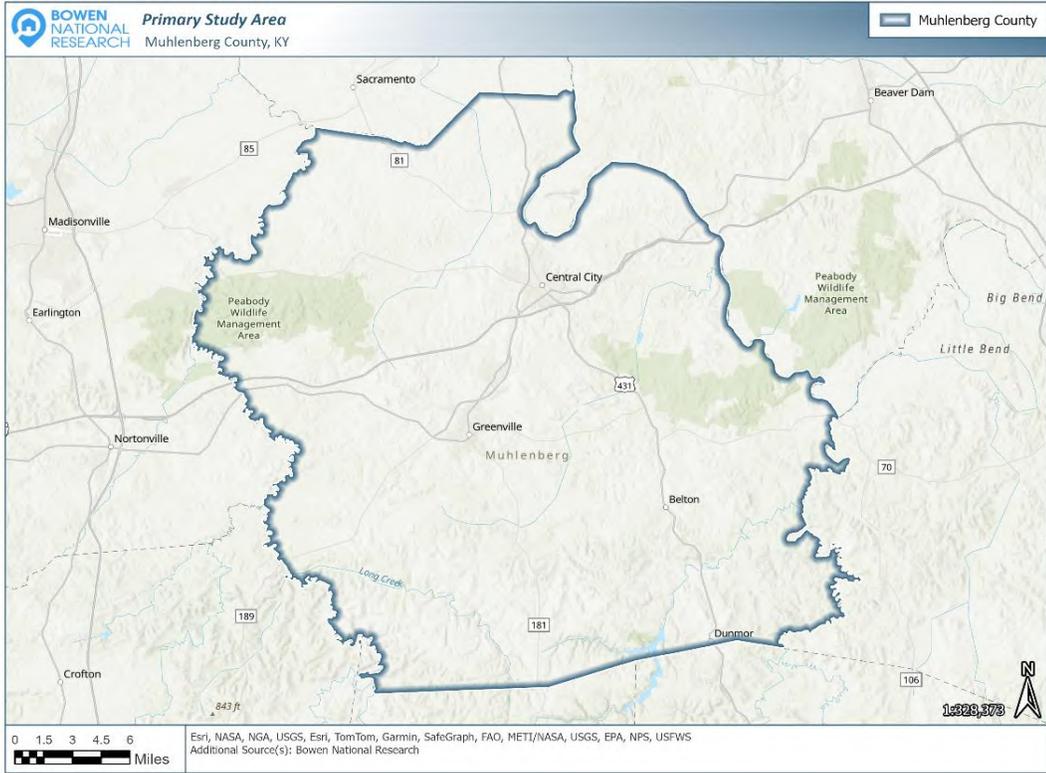
- Demographic Characteristics and Trends
- Economic Conditions and Initiatives
- Existing Housing Stock Costs, Performance, Conditions and Features
- Community Input (via Online Surveys of Stakeholders and Employers)
- Submarket Analysis for the cities of Greenville and Central City, as well as the balance of Muhlenberg County (areas outside of Greenville and Central City)

Based on these metrics and input, we were able to identify housing needs by affordability and tenure (rental vs. ownership). Using these findings, we developed an outline of strategies that could be considered for implementation. This Executive Summary provides key findings and recommended strategies. Detailed data analysis is presented within the individual sections of this Housing Needs Assessment.

### Geographic Study Areas

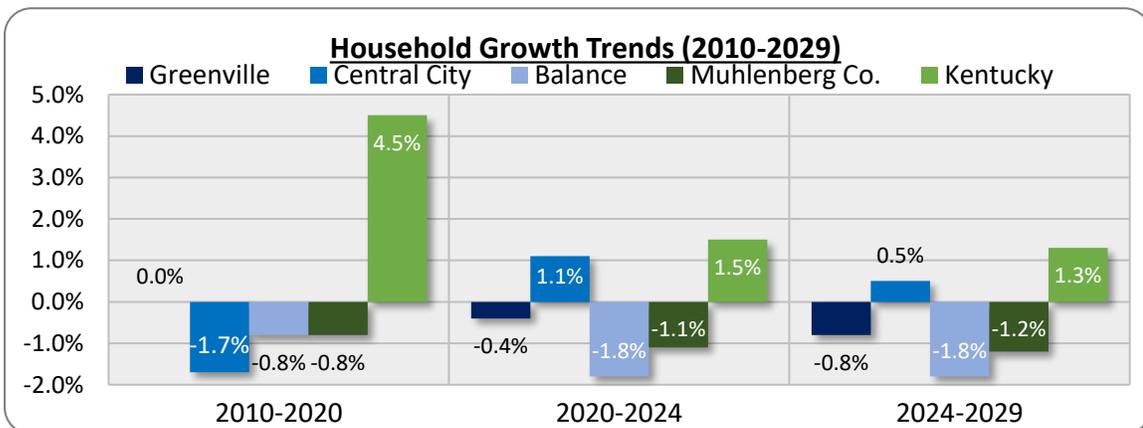
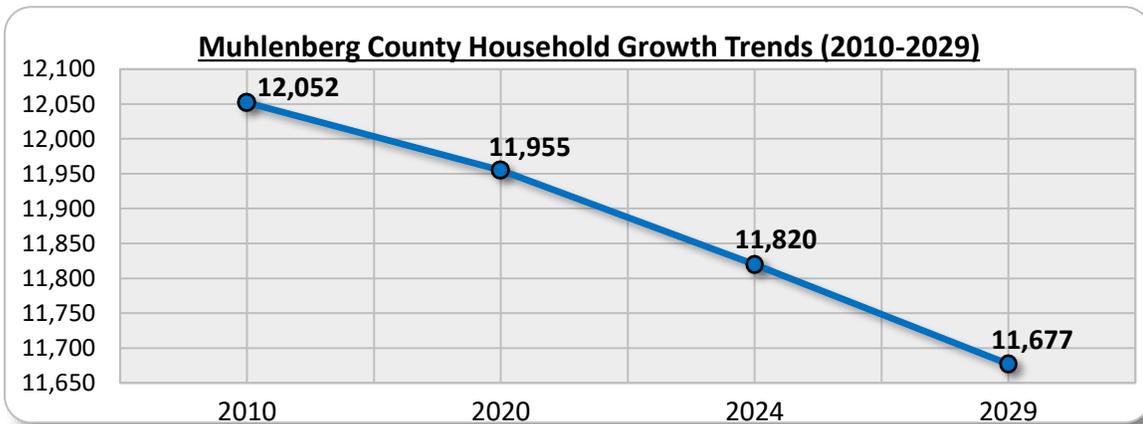
This report focuses on the Primary Study Area (PSA), which consists of Muhlenberg County, Kentucky. *Note that the terms “PSA” and “Muhlenberg County” represent the same area and are used interchangeably throughout this report.* Additionally, supplemental data and analysis are provided for the Greenville, Central City, and Balance of Muhlenberg County submarkets.

Maps of the PSA and the various submarket areas are shown on the following page.



## Demographics

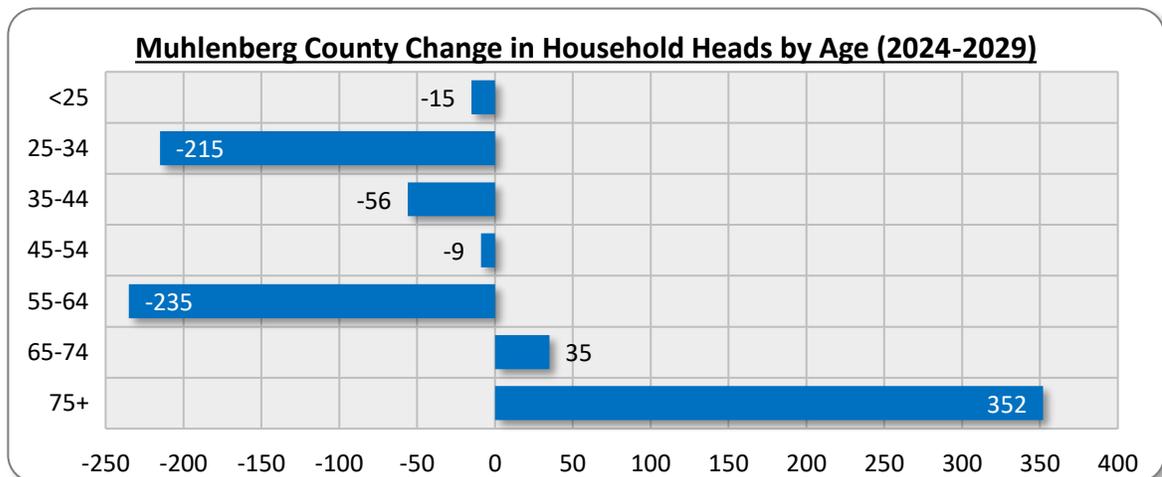
**Households within the PSA (Muhlenberg County) have been declining since 2010, a trend which is projected to continue through 2029.** Between 2010 and 2020, the number of households within the PSA decreased slightly by 97 (0.8%). This contrasts with the 4.5% increase in the number of households for the state of Kentucky during this time period. While the number of households in the Greenville Submarket remained unchanged, households within the Central City Submarket decreased by 1.7% (35 households). In 2024, there is an estimated total of 11,820 households in the PSA, of which 17.4% are within the Central City Submarket and 15.6% are within the Greenville Submarket. Between 2024 and 2029, the number of households in the PSA is projected to decrease by 143 (1.2%). Although households are projected to decline in the Greenville Submarket and the Balance of County, the Central City Submarket is projected to experience a 0.5% increase in households over the next five years.



While households are projected to decline within Muhlenberg County between 2024 and 2029, household growth or decline alone does not dictate the total housing needs of a market. Other factors that influence housing needs, which are addressed throughout this report, include: households living in substandard or cost-burdened housing, commuting patterns, pent-up demand, availability of existing housing, and product in the development pipeline.

**Projected growth and distribution of households among select age cohorts will contribute to ongoing demand for housing among senior households within the PSA (Muhlenberg County).** In 2024, household heads between the ages of 65 and 74 within the PSA comprise the largest share (20.4%) of all households in the PSA, closely followed by households between the ages of 55 and 64 (19.7%). Overall, senior households (age 55 and older) constitute over one-half (55.1%) of all households within the PSA. This represents a larger share of senior households when compared to the share within the state (48.5%). Household heads under the age of 35, which are typically more likely to be renters or first-time homebuyers, comprise 14.2% of PSA households, while those between the ages of 35 and 54 account for 30.8% of Muhlenberg County households. The distribution of households by age within the PSA submarkets is generally similar. Senior households (ages 55 and older) comprise 57.2% of households in the Greenville Submarket and 54.0% of households in the Central City Submarket. Conversely, households under the age of 35 comprise notably smaller shares (14.3% and 16.6%, respectively) of the total households in both submarkets.

Between 2024 and 2029, projections indicate significant household growth (19.9%) in the PSA among household heads ages 75 and older. While a modest increase (1.5%) is projected for households between the ages of 65 and 74, all age cohorts less than 65 years of age are projected to decline in Muhlenberg County over the next five years. The largest decrease (15.8%) is projected for households between the ages of 25 and 34 years. Although the notable increase among households ages 65 and older in the PSA is consistent with statewide projections, it is noteworthy that households less than 25 years of age and those between the ages of 35 and 54 are projected to increase statewide over the next five years. This contrasts with the declines projected in the PSA for these age cohorts. Projections for the Greenville and Central City submarkets are largely consistent with the projections for the PSA. However, both submarkets are projected to have increases in households between the ages of 45 and 54, with the Greenville Submarket projected to have a 13.3% increase in households within this age cohort. The aforementioned changes in households by age in the PSA and each submarket will likely have an impact on the area housing market, particularly the demand for senior-oriented housing.



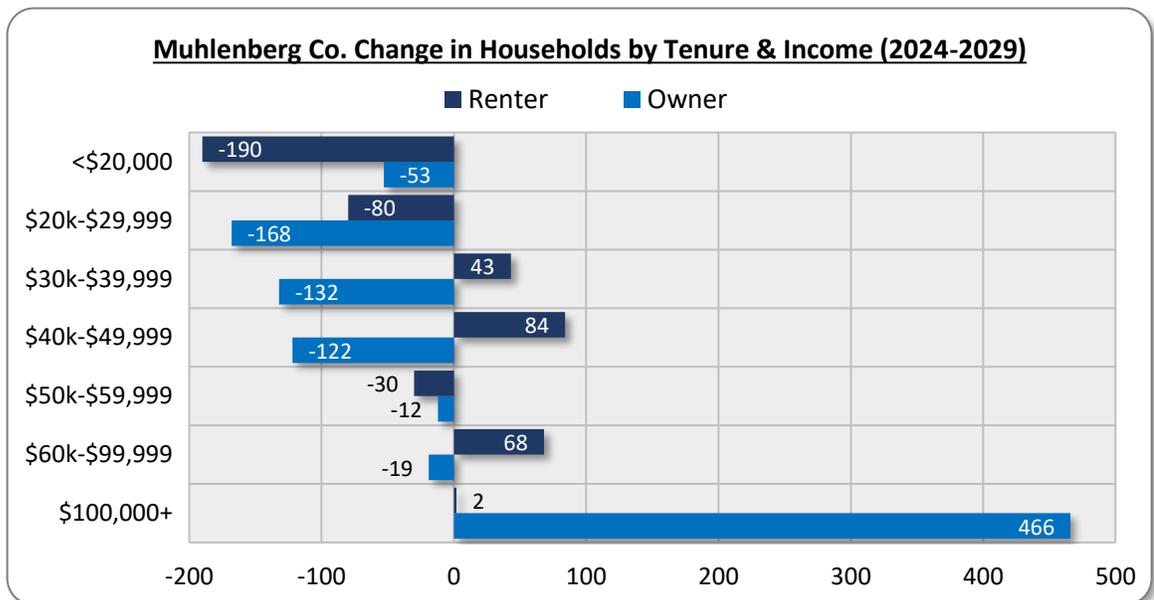
**The persistence of poverty and lack of education among the adult population within the PSA (Muhlenberg County) likely contribute to housing affordability challenges for area residents as compared to the state.** While the 16.3% share of the PSA’s population living below poverty is comparable to that of the state (16.1%), the share of children under the age of 18 living in poverty (21.9%) in the PSA is slightly higher than that of the state (21.1%). The shares of the population living in poverty within the county are more prevalent within the Central City and Balance of County submarkets, particularly among children under the age of 18 (23.4% and 22.1%, respectively). Additionally, among the adult population of the PSA, 13.0% lack a high school diploma, which is a higher share than that of the state (9.7%), and 26.8% have a college degree, which is a notably lower share than that of the state (38.3%). Similarly, the Balance of County Submarket’s share of the adult population lacking a high school diploma is 15.0%, with only 24.0% having a college degree. The higher rates of poverty among children under the age of 18 and lower rates of educational attainment indicate that affordable housing alternatives will remain an important component of the area housing stock for the foreseeable future.

**The PSA (Muhlenberg County) comprises a notably larger share of owner-occupied housing as compared to the state of Kentucky.** In 2024, there is a 77.6% share of *owner* households and a 22.4% share of *renter* households in the PSA. Owner households in the PSA comprise a notably higher share of the total households as compared to the corresponding share in the state (68.4%). Specifically, the Balance of County Submarket has an owner household share of 83.7%. Although the shares of owner households in the Greenville (67.8%) and Central City (63.0%) submarkets are notably less than the PSA share, both submarkets are somewhat similar to the statewide share. Between 2024 and 2029, the number of owner and renter households in the PSA are projected to decrease (0.4% and 3.9%, respectively). Within the Greenville and Central City submarkets, owner households are projected to increase (1.0% and 1.3%, respectively) over the next five years. Conversely, renter households within both of the aforementioned submarkets are projected to decline (4.4% and 0.8%, respectively), whereas the Balance of County Submarket is the only submarket within the county projected to experience declines among *both* owners and renters (1.0% and 5.5%, respectively) during the same timeframe.

**Despite overall declines among renter and owner households, growth is projected to occur among various income segments of renter households within the PSA (Muhlenberg County), while growth among owner households is projected to be exclusively among those earning \$100,000 or more.** Between 2024 and 2029, all *renter* household income cohorts earning less than \$30,000 in the PSA are projected to decrease, while nearly all of the income cohorts earning more than \$30,000 are projected to increase. The largest increase (25.2%) of renter households by income in the PSA over the next five years is projected among those earning between \$40,000 and \$49,999, although noteworthy increases are also projected for renter households earning between \$30,000 and \$39,999 (11.7%) and

those earning between \$60,000 and \$99,999 (16.7%). While the increase among higher earning renter households in the PSA over the next five years likely indicates an increase in demand for market-rate rental product, it is critical to understand that nearly 40% of renter households in the PSA will continue to earn less than \$30,000 annually. As such, the need for affordable rental alternatives will persist within Muhlenberg County.

Projected growth among *owner* households in the PSA during this same time period is isolated to households earning \$100,000 or more annually, increasing by 20.1%. All owner household income cohorts earning less than \$100,000 are projected to decline in the PSA between 2024 and 2029. While the overall number of owner households in the PSA is projected to decrease by 0.4% between 2024 and 2029, there is a notable shift in the distribution of owner households by income toward the higher earning cohorts. These projected changes will influence the for-sale housing market in Muhlenberg County.



Additional demographic data and analysis are included in Section IV of this report.

## Economy & Workforce

**Opportunities exist within the PSA (Muhlenberg County) to diversify the local economy, and recent job announcements will aid in continued economic recovery growth.** The economy in the PSA has experienced a number of challenges in recent years, including the COVID-19 pandemic in 2020, multiple tornados that occurred in December 2021, and the ongoing transition from a historically mining-based economy. While each of these factors have impeded recent growth in the local economy to some degree, they have also created an opportunity to diversify employment within the county. Because the diversification of employment among various sectors can help insulate an economy from largescale downturns, this represents a significant opportunity to improve the long-term position of the economy within Muhlenberg County. The economy is heavily influenced by the retail trade, healthcare and the public administration sectors, which collectively account for 42.6% of the total employment, although it was noted by a local economic representative that there is increased interest in the county's manufacturing sector. Additionally, Muhlenberg County ranks in the top 10 counties in Kentucky for poultry and hog/pig production. As a result, the county has a relatively high share of migrant farmworkers (17.4%) among its total hired farm workforce compared to that of the state (12.6%). Overall, wages within the PSA are lower than wages at the state level, and housing affordability, particularly home ownership, is an issue for a significant share of individuals working within the most common occupations in the area. Total employment in the PSA as of April 2024 has recovered to only 94.9% of the 2019 level, likely indicating the area was disproportionately affected by the COVID-19 pandemic, and this was compounded by multiple tornados that occurred in late 2021. While the yearly unemployment rate through April 2024 was 7.1%, it is noteworthy that at-place employment (total jobs in the county regardless of the employee's county of residence) through the end of 2023 is at 99.2% of the 2019 level. As such, job creation within Muhlenberg County has been positive since 2020, and approximately 350 new jobs are expected to be created based on recent economic development announcements. These economic investments, along with the announced infrastructure improvements, will advance the competitive position of the PSA and increase the likelihood that some of the 2,900 non-residents commuting into the county daily for employment might relocate to Muhlenberg County. However, it is critical that an adequate supply of income-appropriate housing is available to potentially capture new residents and retain existing residents.

Additional economic data and analysis is included in Section V of this report.

## Housing Supply

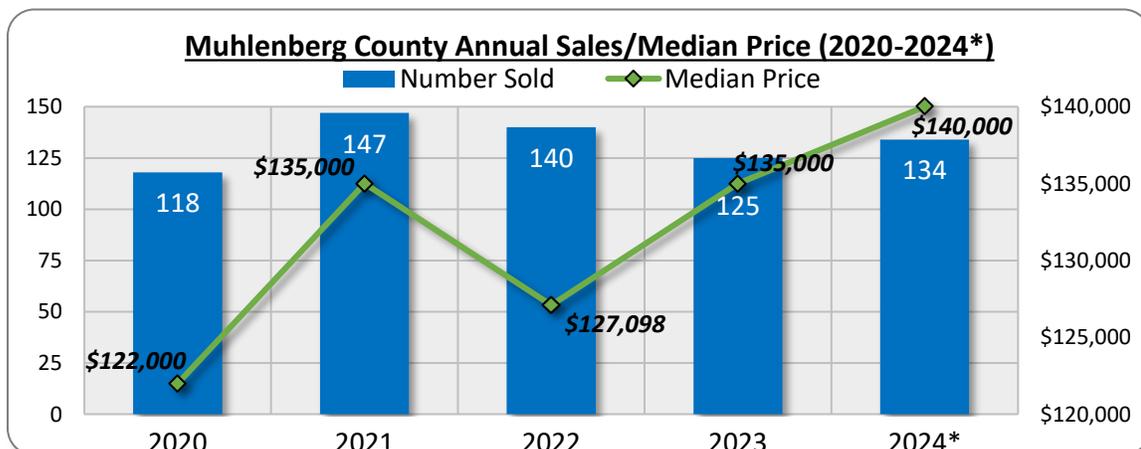
**Despite the number of older and lower priced housing options, there are approximately 2,500 cost burdened households in the PSA (Muhlenberg County).** The PSA's median home value of \$125,247 is 34.5% lower than the state's estimated median home value of \$191,091. The average gross rent of \$676 in the PSA is approximately 29.4% lower than the state's average gross rent of \$958. Overall, these factors result in lower shares of cost burdened renter households (37.3%) and owner households (16.5%) in the PSA compared to the shares within the state (39.4% and 17.3%, respectively), although the share of *severe* cost burdened owner households in the PSA (7.4%) is slightly higher than the state share (7.0%). Regardless of the lower shares of cost burdened households, there are approximately 988 renter households and 1,513 owner households in the PSA that are housing cost burdened (paying more than 30% of income toward housing costs). Of these, approximately 463 renter households and 679 owner households are *severe* housing cost burdened (paying 50% or more of their income toward housing costs). Overall, this data illustrates the importance of affordable rental and for-sale housing for the residents of Muhlenberg County.

**High demand appears to exist for rental housing product within the PSA (Muhlenberg County), especially rental housing affordable to low-income renters.** Given the rural nature of the county, only six rental properties were identified and surveyed within the PSA, offering a total of 251 *marketed* units (excludes units currently offline for renovations). Typically, healthy, well-balanced markets have rental housing occupancy rates generally between 94% and 96%. All rental properties surveyed in the PSA are affordable (government-subsidized or Tax Credit) and 100.0% occupied. Notably, all rental properties surveyed maintain a waiting list for the next available unit. These trends illustrate that pent-up demand exists for additional affordable rental housing and that the PSA has the capacity to support additional low-income apartments. The fact that limited market-rate rental product was identified within the PSA (though we were unable to survey) may also present an opportunity to develop additional rental units that target moderate- to high-income renters within the county.

**Non-conventional rental units, such as houses, duplexes and mobile homes, dominate the overall rental housing market within the PSA (Muhlenberg County) and have limited availability.** Non-conventional rentals with four or fewer units per structure and mobile homes comprise a vast majority of the local rental housing market, as they represent 82.4% of rental units in the PSA. This is a significantly larger share of non-conventional rentals as compared to the share for the state (67.2%). During May and June 2024, Bowen National Research identified only two non-conventional rentals in the PSA that were listed as *available* for rent. When compared to the overall non-conventional inventory of the PSA (1,717 units), these two units represent an overall vacancy rate of 0.1%, which is considered extremely low. Additionally, rental units with gross rents below \$1,000 account for 77.0% of all PSA rentals, which is a much larger share of such units when

compared to the state (56.1%). While the aforementioned trend is reflective of the universe of rental housing within the PSA, non-conventional rentals represent the most common rental housing type. Therefore, this trend likely reflects the composition of gross rents charged among non-conventional rentals and demonstrates the dominance of lower and moderately priced product among the non-conventional rental units in the county. It is also notable to point out that 16.1% of rental units, which represents the third highest share of rental units within the PSA, consisted of “No Cash Rent,” which can include units that are owned by family members or friends of residents which pay no rent and/or rent-free units to compensate farmworkers, caretakers, property managers, etc. This share is nearly twice as high as the state’s share of 8.8%. Based on this analysis, while the majority of gross rents within the PSA are considered affordable to low- and moderate-income renters, the inventory of available non-conventional rentals is extremely limited.

**While the number of homes sold on an annual basis since 2021 has generally declined, the annual median sales price has generally increased within the PSA (Muhlenberg County).** The median sales price of homes sold within the PSA increased by 10.7% between 2020 and 2023, with the largest annual increase occurring in 2021. While the number of homes sold annually in the PSA increased by 24.6% between 2020 and 2021, the number of homes sold annually in 2022 and 2023 decreased each year. Notably, the county’s median sales price of \$140,000 in 2024 represents the highest price since 2020. While projections indicate that 134 homes will be sold within the PSA by the end of 2024 (based on the 47 homes sold through May 2024), which represents a potential increase from the 125 homes sold in 2023, as noted, the number of homes sold annually has decreased each year between 2021 and 2023. The decrease in sales volume is likely attributed to diminished demand for for-sale housing over the past three years due, in part, to rapidly rising home costs and mortgage interest rates during this period. Note that a comparison analysis was conducted between relevant residential sales data provided by the MLS and the county assessor. Due to the similarities in sales characteristics and trends, it is believed that the MLS data illustrated within this report is an accurate reflection of the overall for-sale housing market of Muhlenberg County.



\*2024 full year projection

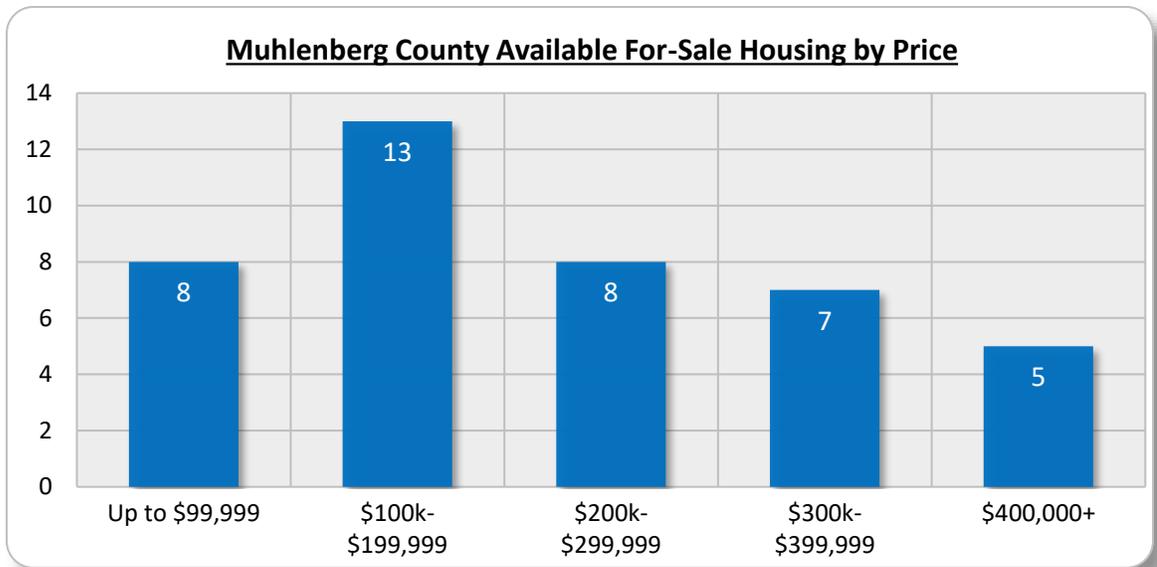
**Overall, there is a relatively limited amount of for-sale housing available for purchase in the PSA (Muhlenberg County), which may present an opportunity to develop additional for-sale housing.** There are two inventory metrics most often used to evaluate the health of a for-sale housing market. These metrics include *Months Supply of Inventory* (MSI) and availability rate. Overall, based on the average monthly absorption rate of 11.1 homes, the 41 homes listed as available for purchase in the PSA represent approximately 3.7 months of supply. Typically, healthy and well-balanced markets have an available supply that should take about four to six months to absorb (if no other units are added to the market). Therefore, the overall PSA inventory is considered nearly optimal and is only marginally lower than the low end of the four-to-six-month range. When comparing the 41 available units with the overall inventory of 9,172 owner-occupied units, the PSA has a vacancy/availability rate of 0.4%, which is well below the normal range of 2.0% to 3.0% for a well-balanced for-sale/owner-occupied market.

The following table summarizes the distribution of available for-sale residential units by *price point* for the study areas.

Available For-Sale Housing by Price (As of May 8, 2024)								
List Price	Central City		Greenville		Balance of County		Muhlenberg County (PSA)	
	Number Available	Percent of Supply	Number Available	Percent of Supply	Number Available	Percent of Supply	Number Available	Percent of Supply
Up to \$99,999	6	54.5%	0	-	2	9.0%	8	19.5%
\$100,000 to \$199,999	3	27.3%	4	50.0%	6	27.3%	13	31.7%
\$200,000 to \$299,999	2	18.2%	2	25.0%	4	18.2%	8	19.5%
\$300,000 to \$399,999	0	-	1	12.5%	6	27.3%	7	17.1%
\$400,000+	0	-	1	12.5%	4	18.2%	5	12.2%
Total	11	100.0%	8	100.0%	22	100.0%	41	100.0%

Source: Multiple Listing Service (MLS) and Bowen National Research

The largest share (31.7%) of available homes in the PSA as of May 8, 2024 are priced between \$100,000 and \$199,999. The balance of homes is relatively well-distributed among the remaining price cohorts, with individual shares ranging between 12.2% and 19.5%. Overall, homes priced below \$200,000 represent over one-half (51.2%) of the available supply, with homes priced between \$200,000 and \$299,999 comprising 19.5%, and those priced at \$300,000 accounting for the remaining 29.3%. While this indicates the available homes in the PSA can accommodate a wide range of affordability levels, which includes lower-income households and first-time homebuyers, the overall limited availability and varying concentrations of supply by price point in specific areas of the PSA may limit options for many homebuyers. For example, 81.8% of the available supply in the Central City Submarket is priced below \$200,000; whereas, nearly one-half (45.5%) of the supply in the Balance of County is priced at \$300,000 or higher. It is important to point out that although a notable portion of the available supply is priced below \$200,000 and may be affordable to lower income households, many of these homes were built well over 40 years ago. As is often the case with older homes, such housing likely requires additional costs for repairs, modifications and weatherization that make the units unaffordable to many lower income households.



Additional housing supply information, including data and analysis of age of product, bedroom types, average square footage and prices per-square-foot, is included in Section VI.

### Community Input

To gain information, perspective and insight about Muhlenberg County housing issues and the factors influencing housing decisions by its residents, developers and others, our firm conducted targeted surveys of area stakeholders and employers. A total of 23 survey responses were received from a broad cross section of the community. The following is a summary of **key** responses from each survey group:

**Stakeholders:** Based on the feedback provided by area stakeholders, it appears that Muhlenberg County is most in need of housing that is affordable to lower income households (i.e., rentals priced below \$1,250/month and for-sale housing priced below \$200,000), while for-sale housing priced between \$200,000 and \$299,999 also appears to be a significant need. Multifamily apartments and ranch homes/single floor plan units were rated as the top housing styles needed within the county, with duplex/triplex/townhomes and traditional two-story single-family homes also ranking as some of the top housing styles needed. Limited availability is one of the most common housing issues experienced in Muhlenberg County. Home purchase affordability and rent affordability were also cited as some of the most common housing issues within the area. Stakeholder respondents indicated that new construction, the repair/renovation/revitalization of existing housing and the clearing of blighted/unused structures to create land for new development should be priorities in the county. Overall, the cost of labor and materials, development costs, cost of land and neighborhood blight were cited as the most common barriers to residential development within Muhlenberg County. In terms of infrastructure issues within the county, lack of access to public sewer utilities and developer fees to access sewer services were cited as the most common issues that limit residential

development. Stakeholder respondents noted that the collaboration between public and private sectors, housing gap/bridge financing and government assistance with infrastructure are the best options to reduce or eliminate barriers to residential development within the county. Access to infrastructure (water/sewer/high-speed internet), quality of life and proximity to community services (shopping, entertainment, recreation, etc.) are cited as the most critical factors to the geographical location of new residential development. Notably, all stakeholder respondents cited the development of new housing as the top area of focus within Muhlenberg County, with the removal/mitigation of residential blight also cited as a top area of focus.

**Employers:** Based on the feedback provided by employers of Muhlenberg County, the majority of respondents cited the affordability and availability of housing within the county as being the main housing issues impacting their employees. This, in turn, has presented difficulties for area employers to attract and retain employees. The majority of employer respondents indicated that their company has no direct involvement with housing (e.g., funding, relocation packages, placement services, etc.). Over half of respondents indicated that they *may* consider being involved with housing assistance in the future. Some of the housing assistance initiatives that respondents indicated they would consider being involved in include participating in a housing resource center/website, developing employee housing, offering employee relocation services or reimbursements or purchasing housing to rent or sell to employees. Lastly, over a quarter of the employer respondents indicated that they *would* consider hiring more staff if additional housing that adequately served the needs of their employees was made available in the county.

#### Housing Gap Estimates

**Muhlenberg County has an overall housing gap of 1,110 units for rental and for-sale product at a variety of affordability levels.** It is projected that Muhlenberg County has a five-year **rental housing gap of 334 units** and a **for-sale housing gap of 776 units**. While there are housing gaps among all affordability levels of both rental and for-sale product, the rental housing gap is primarily for product with rents between \$918 and \$1,468 and the for-sale housing gap is primarily for product priced between \$195,734 and \$293,600. Details of this analysis, including our methodology and assumptions, are included in Section VIII.

The table on the following page summarizes the approximate housing gap estimates in the PSA (Muhlenberg County) over the next five years.

PSA (Muhlenberg County) Housing Gap Estimates (2024 to 2029) - Number of Units Needed		
	Housing Segment	Number of Units*
Rentals	Extremely/Very Low-Income Rental Housing ( $\leq$ \$917/Month Rent)	63
	Low-Income Rental Housing (\$918-\$1,468/Month Rent)	157
	Moderate-Income Rental Housing (\$1,469-\$2,202/Month Rent)	90
	Higher-Income Rental Housing (\$2,203+/Month Rent)	24
	<b>Total Units</b>	<b>334</b>
For-Sale	Entry-Level For-Sale Homes ( $\leq$ \$122,333)	77
	Lower-Income For-Sale Homes (\$122,334-\$195,733)	62
	Moderate-Income For-Sale Homes (\$195,734-\$293,600)	394
	Higher-Income For-Sale Homes (\$293,601+)	243
	<b>Total Units</b>	<b>776</b>

\*Number of units assumes product is marketable, affordable and in a marketable location. Variations of product types will impact the actual number of units that can be supported. Additionally, incentives and/or government policy changes could encourage support for additional units that exceed the preceding projections.

The preceding estimates are based on current government policies and incentives, recent and projected demographic trends, current and anticipated economic trends, and available residential units. While residential housing within the development pipeline is another critical demand component in determining the housing needs for a given area, it is important to note that, based on our interviews with planning/zoning representatives of each jurisdiction within the county, it was determined that there are no housing projects planned for the region. Numerous factors impact a market's ability to support new housing product. This is particularly true of individual housing projects or units. Certain design elements, pricing structures, target market segments (e.g., seniors, workforce, families, etc.), product quality and location all influence the actual number of units that can be supported. Demand estimates could exceed those shown in the preceding table if the county and/or its incorporated municipalities changed its policies or offer incentives to encourage people to move into the market or for developers to develop new housing product.

### Recommended Housing Strategies

The following summarizes key strategies for Muhlenberg County that should be considered to address housing issues and needs of the market. These strategies do not need to be done concurrently, nor do all strategies need to be implemented to create an impact. Instead, the following housing strategies should be used as a guide by the local government, stakeholders, developers and residents to help inform housing decisions.

***Set Realistic/Attainable Short-Term Housing Goals, Outline Long-Term Objectives and Monitor Progress*** – Using the housing needs estimates and recommendations provided in this report as a guide, the county could set realistic short-term (two to three years) housing development goals along with long-term (five years or longer) objectives to support housing. Short-term goals could focus on establishing an Action Plan that outlines priorities, such as broad housing policies, initiatives, and incentives that support the preservation and development of residential units. The recommendations included in this section could serve as a

guide for developing an Action Plan. Long-term objectives could include establishing a goal for the number of housing units that could be built or repaired and broadly outline the types of housing that could be considered, such as rentals and for-sale housing, as well as geographical locations (e.g., within areas near established community services, selected neighborhoods, etc.). The goals could also broadly outline affordability (e.g., income levels) objectives and market segments (e.g., families, seniors, etc.) that could be served. From such goals, the county could periodically collect key metrics (e.g., vacancy rates, changes in rents/prices, reassess cost burdened and substandard housing, evaluate housing cost increases relative to income/wage growth, etc.) so that they can monitor progress and adjust efforts to support stated goals.

***Consider Establishing a Housing Committee and/or Hiring a Housing Director to Help Define and Implement Housing Policies, Programs and Goals for the County*** – Given the scope and complexity of housing issues and needs facing the county, the county should consider establishing a housing committee to provide oversight on various housing issues and efforts. This committee would be responsible for collecting and assessing information on housing issues, providing direction and/or recommendations to the county, and helping coordinate housing efforts within the county. Consideration should be given to expanding housing committee representation to include persons and organizations from various municipalities throughout Muhlenberg County. Such a committee should be comprised of a broad mix of both public and private sector representatives. The county may also want to explore hiring a housing director with knowledge and experience in overseeing housing programs, developing policies, and securing housing funding. This position may be merged with an existing position already within the local government and/or could be a part-time or short-term position (e.g., one- or two-year contract).

***Consider Implementing/Modifying Policies to Encourage or Support the Development of New Housing and the Preservation of Existing Housing*** – One of the key findings from this report is that there is *limited availability* among the existing housing stock in the county and *no* residential development currently in the development pipeline. The lack of available housing likely limits demographic growth within the county, as many residents seeking new housing, as well as persons/households looking to relocate to the area, have very few options from which to choose. Local government could consider supporting housing policies such as expanding residential density to allow for more units, modifying unit size requirements (allowing for smaller units), supporting or leveraging developer incentives (e.g., Qualified Opportunity Zones, TIF districts, tax abatements, etc.), waiving/deferring/lowering government fees, and exploring other measures specifically targeted to the types of housing (e.g., affordable, senior, etc.) that lead to meeting housing goals. In an effort to support more affordable housing alternatives, the county should consider supporting projects being developed with affordable housing development programs (e.g., Tax Credit and HUD programs), providing pre-development financial assistance, supporting a Housing Trust Fund,

exploring the establishment of a land bank to acquire, improve and convey tax delinquent and neglected properties, and providing low-interest or forgivable loans and grants to lower income households that can be used to cover costs directly associated with the repairs and maintenance of the existing housing stock. Overall, focus should be placed on programs that support low-income households (seniors and families), workforce households, and first-time homebuyers. Additional housing is needed in order to have a healthy housing market, which will ultimately contribute to the local economy, quality of life and overall prosperity of Muhlenberg County.

***Explore Efforts to Encourage the Development of Senior-Oriented Housing to Enable Seniors to Transition into More Maintenance-Free Housing*** – Muhlenberg County has a large and growing base of seniors. Currently, there is a limited inventory of *available* housing in the market, and the few senior-restricted rental housing projects in the county are typically fully occupied with waiting lists. As a result, seniors in the county who wish to downsize into smaller, more maintenance-free independent housing, or seniors seeking affordable rentals will have difficulty finding housing that meets their needs, allowing them to age in place. It is recommended that the development of senior-oriented housing be supported, with possible incentives to encourage such development.

***Formulate Education and Outreach Campaign to Help Support Housing Initiatives*** – Using both existing and newly created housing education initiatives, local stakeholders could develop an overarching education program with a more unified objective that ultimately supports local housing efforts. The program could, for example, include educating landlords on the Housing Choice Voucher program, informing potential homebuyers about homebuying requirements and assistance (credit repair, down payments, etc.), and advising existing homeowners on home repair assistance. Additional outreach efforts should involve both informing and engaging area residents, elected officials, area employers and other stakeholders on the benefits of developing affordable housing. Such efforts could help to mitigate stigmas associated with affordable housing, illustrate the benefits such housing has on the local economy, and help to get the community to “buy in” on housing initiatives. Annual or other periodic housing forums, or workshops, preparing annual reports or marketing material could be used to help communicate housing advocate messaging.

***Explore and Encourage Development Partnerships*** – Government entities within the county may want to establish formal relationships with other entities to support housing development efforts. This may include relationships with nonprofit groups (e.g., Community Action Agency, Habitat for Humanity, etc.) local businesses and private sector developers. The consolidation of the public and private sectors for certain housing initiatives can lead to improved efficiencies, larger financial capacities, and more cohesive residential development efforts. For example, this could include a large employer providing financial benefits (e.g., down payment assistance) to its qualified employees (possibly those earning below a certain

income level) to reside at a residential development in which the county is providing tax abatements or other incentives for the developer/property owner. There are numerous examples around the country of public-private sector partnerships that could be explored further for potential replication in Muhlenberg County.

***Market Muhlenberg County's Housing Needs and Opportunities to Potential Residential Development Partners and Develop a Centralized Housing Resource Center*** – Using a variety of sources, the county should attempt to identify and market itself to the residential developers (both for-profit and nonprofit), real estate investors, housing advocacy groups and others active in the region. Identification could be through trade associations, published lists of developers, real estate agents or brokers, and other real estate entities in the region. Marketing of the county through trade publications, direct solicitation or public venues (e.g., housing and economic conferences) should be considered. The promotion of market data (including this Housing Needs Assessment), development opportunities, housing programs and incentives should be the focus of such efforts. It is common for economic development organizations to have a website that educates potential developers of industrial, manufacturing or warehouse space on such things as potential development sites, profiles of the local workforce, local tax rates and other pertinent factors that may influence building or investment decisions. This same approach can be used for promoting *residential* development and investment opportunities in Muhlenberg County. The development of an online *residential* resource center should be considered that includes or directs people to development and housing resources such as:

- Potential Residential Sites
- Building & Zoning Regulations
- Development Incentives
- Demographic & Economic Data
- Local Housing Assistance Programs
- Local Housing Supply Data
- Government & Advocate Contacts
- Infrastructure & Public Works Information

This website can also provide housing counseling service links or contacts, fair housing information, and resident housing assistance programs. This website could be an addition to an existing government website or the creation of a new website through a housing or economic advocacy organization.

***Consideration Should be Given to Improving the Education Level of Adult Residents that Raise Earning Capacity and to Expand the Skilled Labor Force Associated with the Construction Industry*** – While not a specific housing initiative, the community may benefit from enhanced education and job training that could increase residents' earning capacity, which will likely result in increased housing affordability. This could include a focus on expanding GED programs or skilled worker training programs, particularly those that involve construction, carpentry, masonry, plumbing and electrician trade skills. Some consideration should be given to providing assistance or incentives for entrepreneurs to start businesses that involve residential construction and development.

***Consider Implementing a Marketing Plan and Developing Housing that Will Attract Some of the Nearly 3,000 Commuters that Travel into the County to Become Permanent Residents*** – Approximately 2,900 people commute to Muhlenberg County for employment, with nearly 1,100 of these commuters traveling more than 50 miles each way. These commuters represent a large base of potential household growth for Muhlenberg County should housing that meets their needs become available within the area.

### III. COUNTY OVERVIEW AND STUDY AREAS

#### A. MUHLENBERG COUNTY, KENTUCKY

This report focuses on the housing needs of Muhlenberg County, Kentucky. Founded in 1798, Muhlenberg County is approximately 479 square miles and is located in the western portion of Kentucky. The county seat, the city of Greenville, is approximately 53 miles northwest of Bowling Green, Kentucky and approximately 72 miles southeast of Evansville, Indiana. The main thoroughfares that serve Muhlenberg County include U.S. Highways 62 and 431, State Route 189 and the Western Kentucky Parkway.

Muhlenberg County has an estimated population of 30,407 in 2024, a decrease of 521, or 1.7%, from 2020. The county's estimated population density is 63.4 persons per square mile in 2024, which is lower compared to the state of Kentucky (115.4 persons per square mile). The county's notable incorporated communities include the cities of Greenville and Central City. There are also various villages and unincorporated areas within Muhlenberg County. The city of Greenville, which serves as the county seat, is home to the county courthouse, various commercial businesses, employment opportunities, and a hospital. Notable attractions within the county include the Lake Malone State Park and several national historic locations and trails.

Central City is located in the northern portion of Muhlenberg County. Central City contains approximately 5.25 square miles and has an estimated population of 5,799 in 2024, which is representative of approximately 19.1% of the total population in Muhlenberg County. Major arterials that serve the city include U.S. Highways 62 and 431, State Routes 70 and 1031 and the Western Kentucky Parkway.

Greenville is more centrally located in Muhlenberg County. Greenville contains approximately 5.27 square miles and has an estimated population of 4,464 in 2024, which is representative of approximately 14.7% of the total population in Muhlenberg County. The major arterial that serves the city are U.S. Highway 62 and State Routes 181, 189 and 601.

Based on 2024 estimates, 77.6% of the county's households are owner households, with the remaining 22.4% comprised of renter households. Over three quarters (82.4%) of rental units are within structures of four or fewer units (including mobile homes), while 100% of the owner-occupied units are within these smaller structures (primarily single-family homes) and mobile homes. As shown in the supply section (Section VI) of this report, the market offers a variety of price points and rents. Additional information regarding the county's demographic characteristics and trends, economic conditions, housing supply, and other factors are included throughout this report.

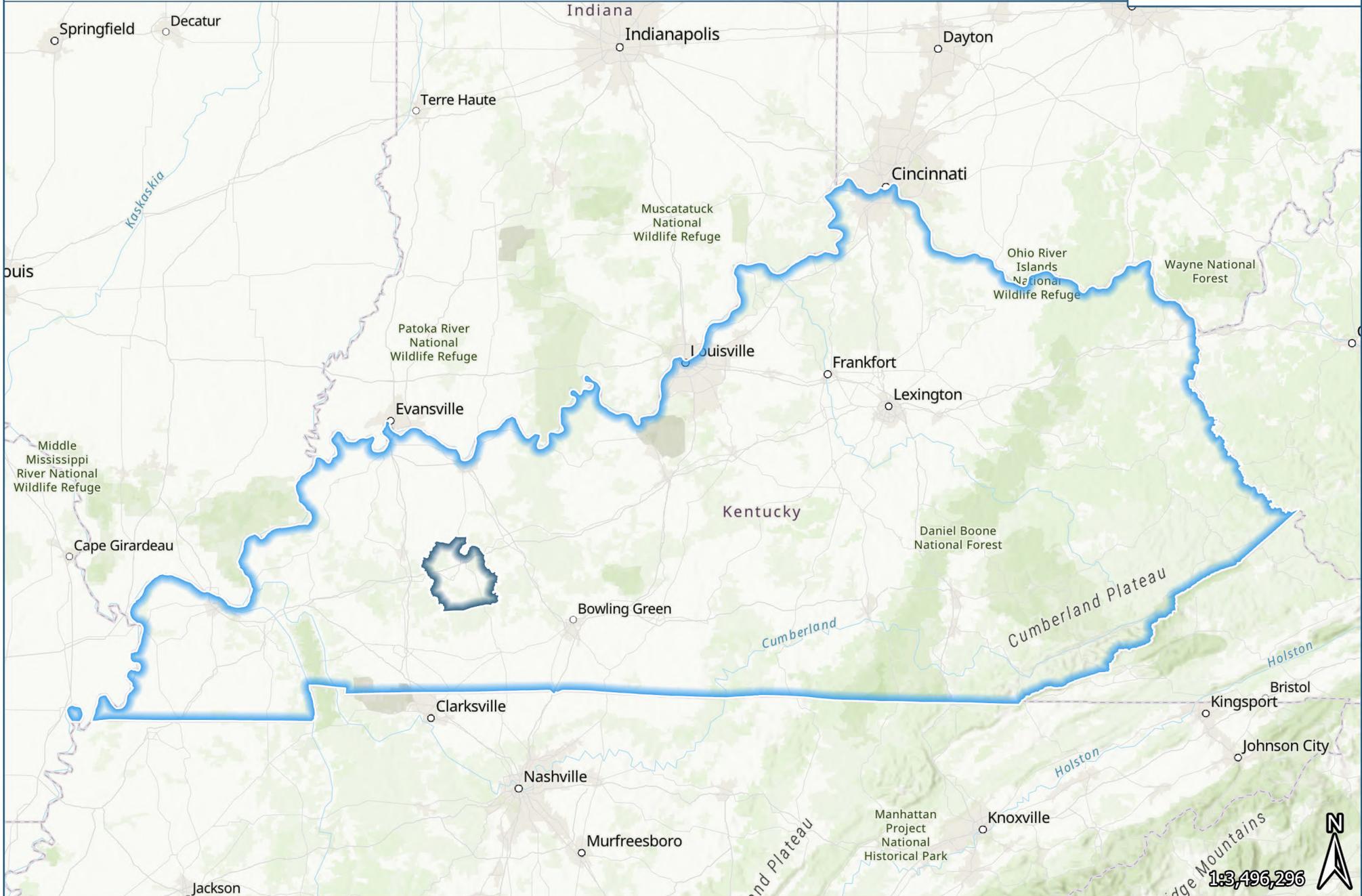
## **B. STUDY AREA DELINEATIONS**

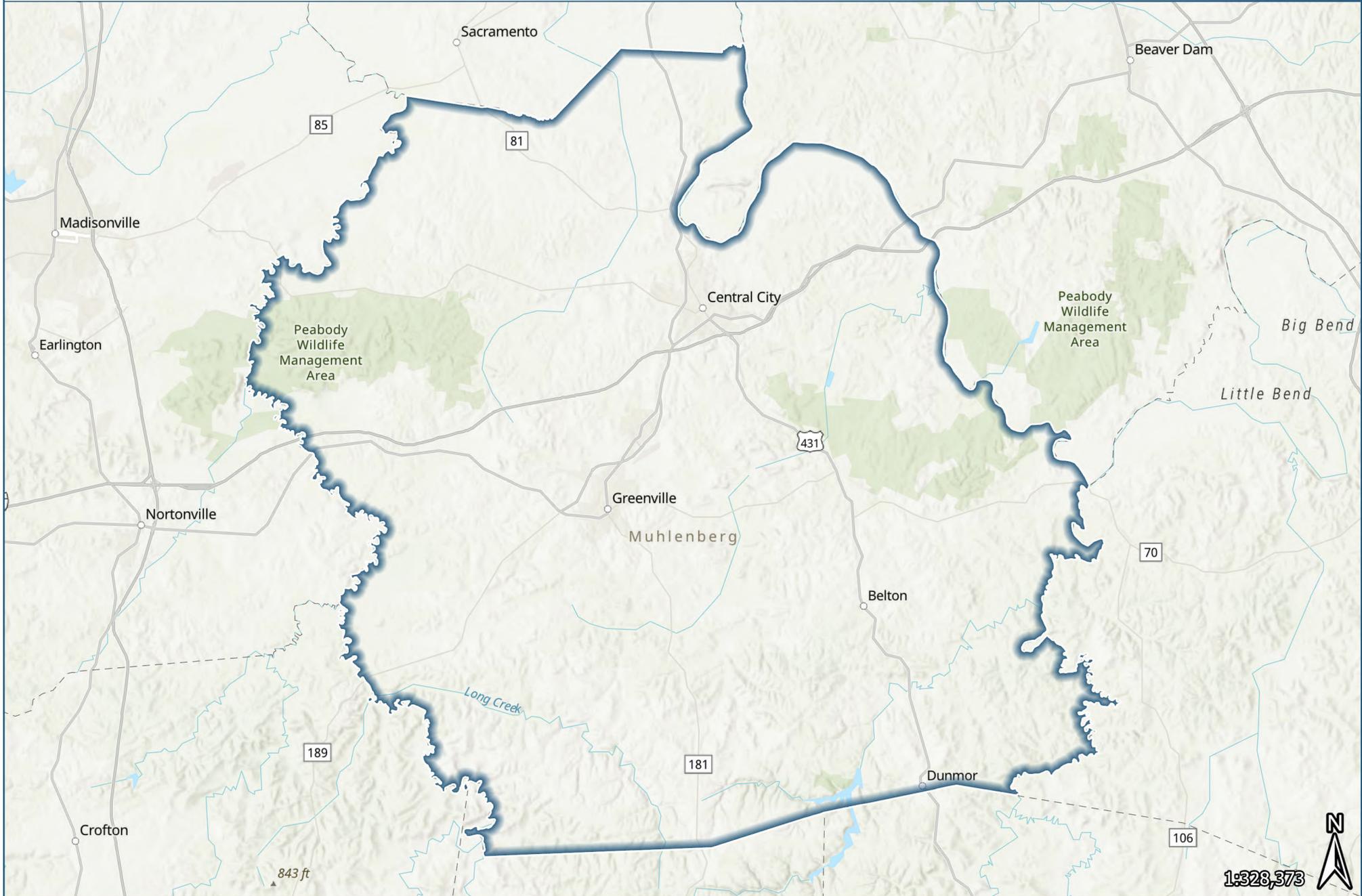
This report addresses the residential housing needs of Muhlenberg County, Kentucky. To this end, the evaluation is focused on the demographic and economic characteristics, as well as the existing housing stock, of areas within Muhlenberg County. Additionally, supplemental data and analysis are provided for the cities of Central City and Greenville, as well as the balance of Muhlenberg County (area outside of Central City and Greenville) to understand trends and attributes that affect these designated areas. The following summarizes the various study areas used in this analysis.

*Primary Study Area* – The Primary Study Area (PSA) includes all of Muhlenberg County.

*Submarkets* – The submarkets are comprised of the area within the city limits of Central City, the area within the city limits of Greenville, and the remaining Balance of Muhlenberg County.

Maps delineating the boundaries of the various study areas are shown on the following pages.

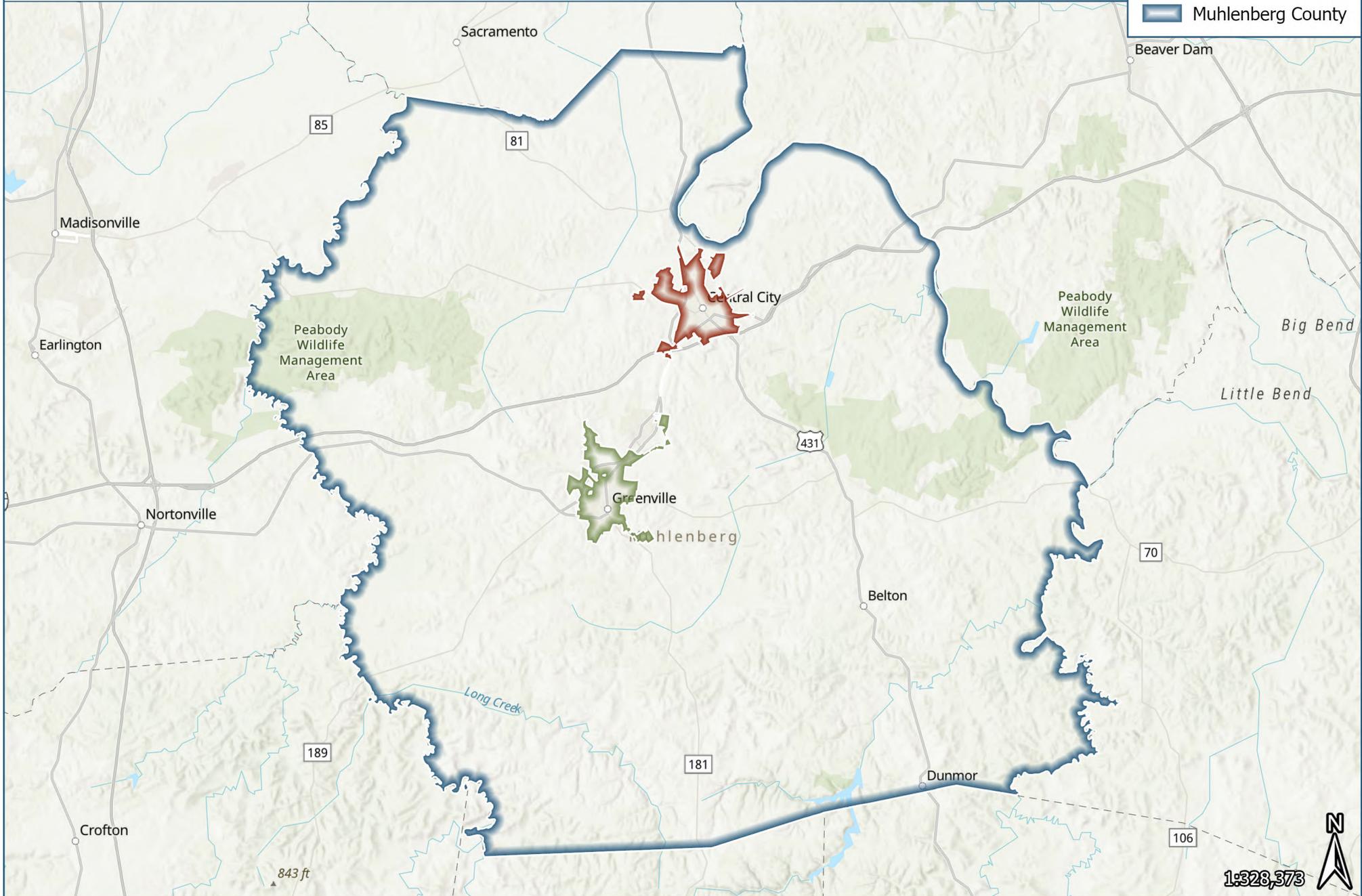




Esri, NASA, NGA, USGS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS  
Additional Source(s): Bowen National Research

1:328,373

-  Greenville
-  Central City
-  Muhlenberg County



## IV. DEMOGRAPHIC ANALYSIS

### A. INTRODUCTION

This section of the report evaluates key demographic characteristics for the Primary Study Area (PSA; Muhlenberg County) and the select submarkets of Greenville and Central City, as well as the remaining Balance of County. Through this analysis, unfolding trends and unique conditions are often revealed regarding populations and households residing in the selected geographic areas. Demographic comparisons between these geographies and the state of Kentucky provide insights into the human composition of housing markets. Critical questions, such as the following, can be answered with this information:

- Who lives in Muhlenberg County and what are these people like?
- In what kinds of household groupings do Muhlenberg County residents live?
- What share of people rent or own their Muhlenberg County residence?
- Are the number of people and households living in Muhlenberg County increasing or decreasing over time?
- How has migration contributed to the population changes within Muhlenberg County in recent years, and what are these in-migrants like?
- How do Muhlenberg County residents, submarket residents and residents of the state compare with each other?

This section is comprised of three major parts: population characteristics, household characteristics, and demographic theme maps. Population characteristics describe the qualities of individual people, while household characteristics describe the qualities of people living together in one residence. Demographic theme maps graphically show varying levels (low to high concentrations) of a demographic characteristic across a geographic region.

It is important to note that 2010 and 2020 demographics are based on U.S. Census data (actual count), while 2024 and 2029 data are based on calculated estimates provided by ESRI, a nationally recognized demographic firm. The accuracy of these estimates depends on the realization of certain assumptions:

- Economic projections made by secondary sources materialize.
- Governmental policies with respect to residential development remain consistent.
- Availability and general terms of financing for residential development (i.e., mortgages, commercial loans, subsidies, Tax Credits, etc.) remain consistent.
- Sufficient housing and infrastructure are provided to support projected population and household growth.

Significant unforeseen changes or fluctuations among any of the preceding assumptions could have an impact on demographic estimates/projections.

## B. POPULATION CHARACTERISTICS

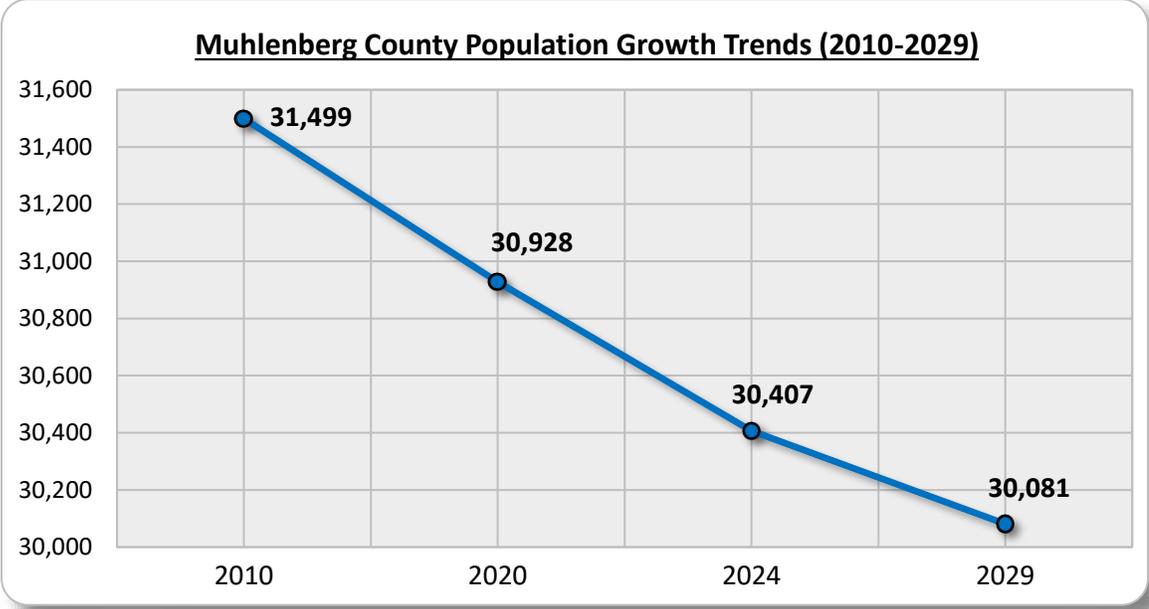
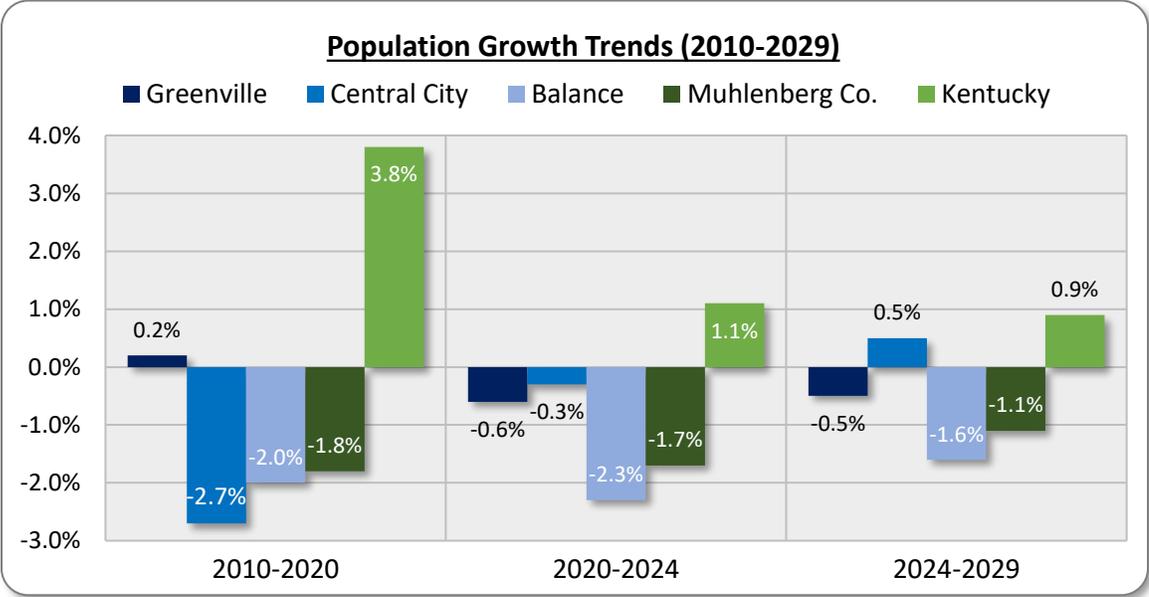
Population by numbers and percent change (growth or decline) for selected years is shown in the following table. It should be noted that some total numbers and percentages may not match the totals within or between tables in this section due to rounding. Positive changes between time periods in the following table are illustrated in green, while negative changes are illustrated in red.

	Total Population									
	2010 Census	2020 Census	Change 2010-2020		2024 Estimated	Change 2020-2024		2029 Projected	Change 2024-2029	
			Number	Percent		Number	Percent		Number	Percent
<b>Greenville</b>	4,482	4,492	10	0.2%	4,464	-28	-0.6%	4,440	-24	-0.5%
<b>Central City</b>	5,978	5,819	-159	-2.7%	5,799	-20	-0.3%	5,827	28	0.5%
<b>Balance of County</b>	21,039	20,617	-422	-2.0%	20,144	-473	-2.3%	19,814	-330	-1.6%
<b>Muhlenberg County</b>	31,499	30,928	-571	-1.8%	30,407	-521	-1.7%	30,081	-326	-1.1%
<b>Kentucky</b>	4,339,367	4,505,836	166,469	3.8%	4,556,825	50,989	1.1%	4,595,873	39,048	0.9%

Source: 2010, 2020 Census; ESRI; Urban Decision Group; Bowen National Research

Between 2010 and 2020, the population within the PSA (Muhlenberg County) decreased by 1.8%, which contrasts with the 3.8% increase within the state of Kentucky during this time period. While the submarket of Greenville experienced a slight increase (0.2%) in population between 2010 and 2020, the population in Central City declined by 2.7%. In 2024, the total estimated population of Muhlenberg County is 30,407. The Greenville Submarket, which has an estimated population of 4,464 in 2024, comprises 14.7% of the total population in the PSA, while the population of 5,799 in Central City represents 19.1% of the total population in Muhlenberg County. Between 2024 and 2029, the population of the PSA is projected to decrease by 1.1%, or 326 individuals. Over the next five years, the population in Greenville is projected to decline by 0.5%, while the population in Central City is projected to increase by 0.5%. However, the population increase projected in Central City is below the 0.9% population increase projected for the state of Kentucky during this time period. It should be noted that a vast majority of the total population decline projected within the PSA is attributed to the Balance of County (areas outside of Greenville and Central City). However, it is critical to point out that *household* changes, as opposed to population, are more material in assessing housing needs and opportunities. Historical and projected household changes for the PSA and the submarkets are covered later in this section starting on page IV-12.

The following graphs illustrate the change in population since 2010 and projected through 2029.



Population densities for selected years are shown in the following table:

		Population Densities			
		2010	2020	2024	2029
<b>Greenville</b>	Population	4,482	4,492	4,464	4,440
	Area in Square Miles	5.27	5.27	5.27	5.27
	Density	850.1	852.0	846.7	842.1
<b>Central City</b>	Population	5,978	5,819	5,799	5,827
	Area in Square Miles	5.25	5.25	5.25	5.25
	Density	1,139.3	1,109.0	1,099.9	1,105.2
<b>Balance of County</b>	Population	21,039	20,617	20,144	19,814
	Area in Square Miles	468.88	468.88	468.88	468.88
	Density	44.9	44.0	43.2	42.5
<b>Muhlenberg County</b>	Population	31,499	30,928	30,407	30,081
	Area in Square Miles	479.40	479.40	479.4	479.4
	Density	65.7	64.5	63.4	62.7
<b>Kentucky</b>	Population	4,339,367	4,505,836	4,556,825	4,595,873
	Area in Square Miles	40,407.65	40,407.65	40,407.65	40,407.65
	Density	107.4	111.5	115.4	116.4

Source: 2010, 2020 Census; ESRI; Urban Decision Group; Bowen National Research

With a population density of 63.4 persons per square mile in 2024, the PSA (Muhlenberg County) is less densely populated than the state (115.4 persons per square mile), overall. However, this is primarily due to the population density within the Balance of County (43.2 persons per square mile). By comparison, the population densities in both Greenville (846.7 persons per square mile) and Central City (1,099.9 persons per square mile) are significantly higher than both the PSA and state. Overall, this illustrates the diverse composition of Muhlenberg County.

Noteworthy population characteristics for each area are illustrated in the following table. Note that data included within this table is derived from multiple sources (2020 Census, ESRI, American Community Survey) and is provided for the most recent time period available for the given source.

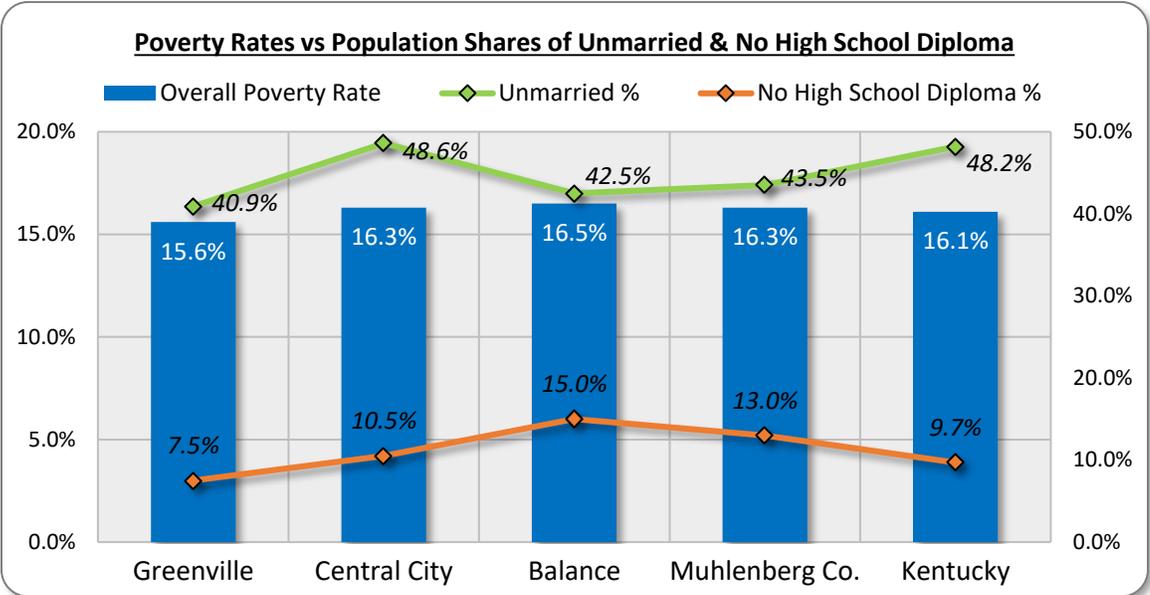
		Population Characteristics (Year)						
		Minority Population (2020)	Unmarried Population (2024)	No High School Diploma (2024)	College Degree (2024)	< 18 Years Below Poverty Level (2022)	Overall Below Poverty Level (2022)	Movership Rate (2022)
<b>Greenville</b>	Number	487	1,522	240	1,229	156	685	619
	Percent	10.8%	40.9%	7.5%	38.3%	18.5%	15.6%	13.5%
<b>Central City</b>	Number	883	2,368	439	1,138	323	885	1,295
	Percent	15.2%	48.6%	10.5%	27.2%	23.4%	16.3%	23.1%
<b>Balance of County</b>	Number	1,192	7,033	2,098	3,360	889	3,268	2,212
	Percent	5.8%	42.5%	15.0%	24.0%	22.1%	16.5%	11.1%
<b>Muhlenberg County</b>	Number	2,562	10,923	2,777	5,727	1,369	4,840	4,126
	Percent	8.3%	43.5%	13.0%	26.8%	21.9%	16.3%	13.7%
<b>Kentucky</b>	Number	794,582	1,799,965	303,799	1,200,137	209,149	704,758	596,463
	Percent	17.6%	48.2%	9.7%	38.3%	21.1%	16.1%	13.4%

Source: U.S. Census Bureau; 2020 Census; 2018-2022 American Community Survey; ESRI; Urban Decision Group; Bowen National Research

As the preceding table illustrates, minorities in the PSA (Muhlenberg County) comprise a notably smaller share (8.3%) of the overall population as compared to the state (17.6%). Among the adult population of the PSA, 43.5% of the population is unmarried, which is a smaller share than that of the state (48.2%). The share of the adult population in the PSA that lacks a high school diploma (13.0%) is higher than the share within the state (9.7%), and the share of individuals in Muhlenberg County with a college degree (26.8%) is notably less than the corresponding share in the state (38.3%). Overall, 16.3% of the population within the PSA lives in poverty, which is comparable to the share for the state of Kentucky (16.1%). The share of children under the age of 18 years in the PSA living in poverty (21.9%) is slightly higher than the corresponding state share (21.1%). The movership rate (the share of the population moving within or to a given area year over year) of the PSA is 13.7%, which is marginally higher than the 13.4% rate reported within the state.

Within the Greenville and Central City submarkets, minorities comprise comparably larger shares (10.8% and 15.2%, respectively) of the total population as compared to the PSA. The shares of individuals lacking a high school diploma in Greenville and Central City (7.5% and 10.5%, respectively) are smaller than that of the PSA, although this share in Central City is slightly higher than the state. The shares of individuals with a college degree in Greenville and Central City (38.3% and 27.2%, respectively) are higher than that of the PSA. While poverty is less pervasive in Greenville as compared to the state, the share of children under the age of 18 living in poverty (23.4%) and the overall poverty rate (16.3%) in Central City are slightly higher than state levels. Additionally, the movership rate within Central City (23.1%) is notably higher than the corresponding rate in any of the other study areas. Many of these factors, particularly marital status and educational attainment, can significantly affect household income and play an important role in the overall housing affordability of an area.

The following graph compares the overall poverty rate for each study area and the shares of each population that is unmarried and that lacks a high school diploma.



Migration Patterns

While the analysis on the preceding pages illustrates recent population changes, future population projections, and population characteristics such as age, marital status, and educational attainment, the following addresses where people *move* to and from, referred to as migration patterns. For the purposes of this analysis, the Census Bureau’s Population Estimates Program (PEP) is considered the most reliable source for the total *volume* of domestic migration. To evaluate migration *flows* between counties and mobility patterns by age and income at the county level, we use the U.S. Census Bureau’s migration estimates published by the American Community Survey (ACS) for 2022 (latest year available). It is important to note that while county administrative boundaries are likely imperfect reflections of commuter sheds, moving across a county boundary is often an acceptable distance to make a meaningful difference in a person’s local housing and labor market environment. The data provided by the PEP is intended to provide general insight regarding the contributing factors of population change (natural change, domestic migration, and international migration), and as such, gross population changes within this data should not be compared to other tables which may be derived from alternate data sources such as the Decennial Census or American Community Survey.

The following table illustrates the cumulative change in total population for the PSA (Muhlenberg County) between April 2010 and July 2023.

Estimated Components of Population Change for Muhlenberg County April 1, 2010 to July 1, 2023							
	Years	Population Change*	Percent Change	Natural Change	Net Domestic Migration	Net International Migration	Total Net Migration
Muhlenberg County	2010-2020	-1,044	-3.3%	-370	-666	-3	-669
	2020-2023	-365	-1.2%	-421	28	6	34

Source: U.S. Census Bureau, Population Division, March 2024

\*Includes residuals of (-5) and (22) representing the change that cannot be attributed to any specific demographic component

Based on the preceding data, the population decline within Muhlenberg County from 2010 to 2020 was primarily the result of a combination of negative net domestic migration and natural decrease (more deaths than births). Nearly two-thirds of the overall decline can be attributed to negative net domestic migration, while slightly over one-third is the result of natural decrease. However, the county experienced positive net domestic migration between 2020 and 2023, while the trend of natural decrease has continued. It is apparent that the overarching population trends for Muhlenberg County are indicative of notable natural decrease, and domestic migration trends may be improving. In order for Muhlenberg County to improve population trends, it is important that an adequate supply of income-appropriate rental and for-sale housing is available to continue attracting domestic and international migrants, and to retain and attract young adults and families in the area, which contributes to natural increase of a population. Other factors such as job availability, wage competitiveness, and housing conditions can substantially impact population change, as well.

The following table details the *shares* of domestic in-migration by three select age cohorts for the PSA (Muhlenberg County) from 2013 to 2022.

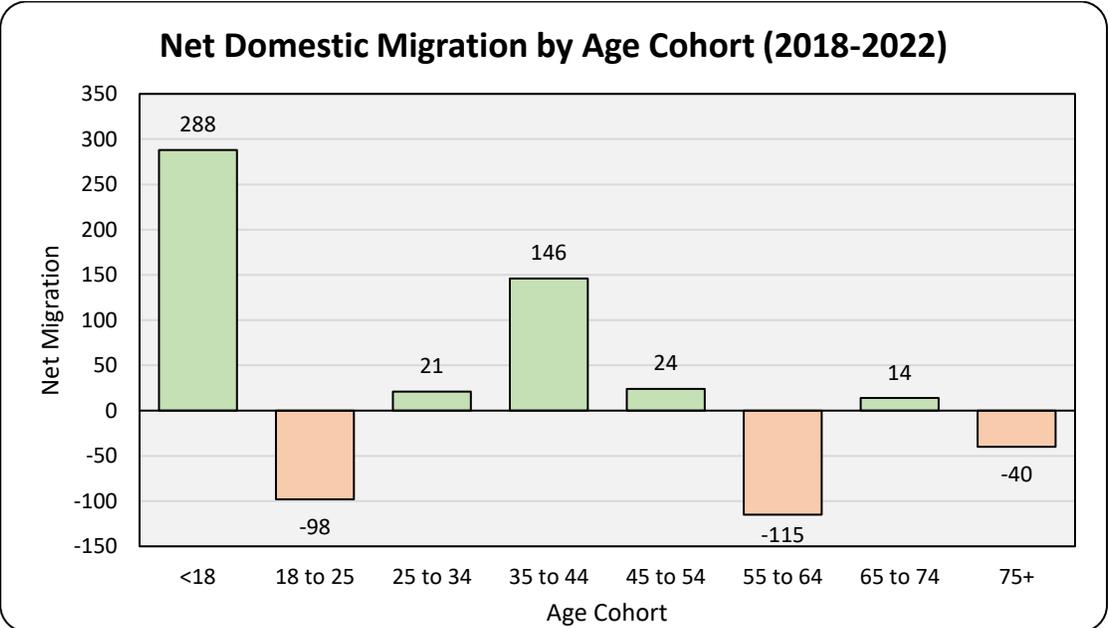
Muhlenberg County, Kentucky Domestic County Population In-Migrants by Age, 2013 to 2022		
Age	2013-2017	2018-2022
1 to 34	60.7%	57.2%
35 to 54	25.2%	32.3%
55+	14.1%	10.5%
Median Age (In-state migrants)	33.2	31.3
Median Age (Out-of-state migrants)	21.6	39.0
Median Age (Muhlenberg County)	42.2	43.9

Source: U.S. Census Bureau, 2017 & 2022 5-Year ACS Estimates (S0701); Bowen National Research

According to 2013-2017 American Community Survey estimates, 60.7% of domestic in-migrants to Muhlenberg County were less than 35 years of age, and 25.2% were between the ages of 35 and 54. Between 2018 and 2022, the share of in-migrants less than 35 years of age (57.2%) decreased slightly, while the share of in-migrants between the ages of 35 and 54 (32.3%) increased. The median age of in-state migrants (originating from a different county in

Kentucky) decreased from 33.2 years to 31.3 years between the two time periods, while the median age of out-of-state migrants increased from 21.6 years to 39.0 years. Overall, the data suggests that in-migrants, regardless of place of origin, are generally younger than the existing population of Muhlenberg County. Although the portion of in-migrants between the ages of 35 and 54 has increased over time, the share of in-migrants less than 35 years and those 55 years and older have decreased.

To gain additional perspective on area migration by age trends, the following graph illustrates the net domestic migration (difference between in-migration and out-migration) by age based on the 2018-2022 American Community Survey.



Source: U.S. Census Bureau, 2022 5-Year ACS Estimates (B07001 & B07401); Bowen National Research

As the preceding illustrates, annual positive net domestic migration during the time period primarily occurred for the cohorts less than 18 years of age and those between the ages of 25 and 54. Conversely, the age cohorts between 18 and 25 years of age and between 55 and 64 years had notable negative net domestic migration. While not conclusive, this suggests that more young adults (ages 18 to 25), who likely have not yet started a family, move *from* the county than move *to* the county. Additionally, it is likely that many of the individuals that move to the county between the ages of 25 and 54 have dependents under the age of 18 relocating with them. This would help to explain the recent trend of an increase in net domestic migration with a concurrent natural decrease in population shown in the components of change data. Regardless, an improvement in the retention of young individuals and families in the area can contribute to natural increase, and housing alternatives that target this population can aid in this retention process.

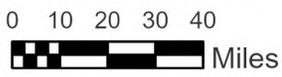
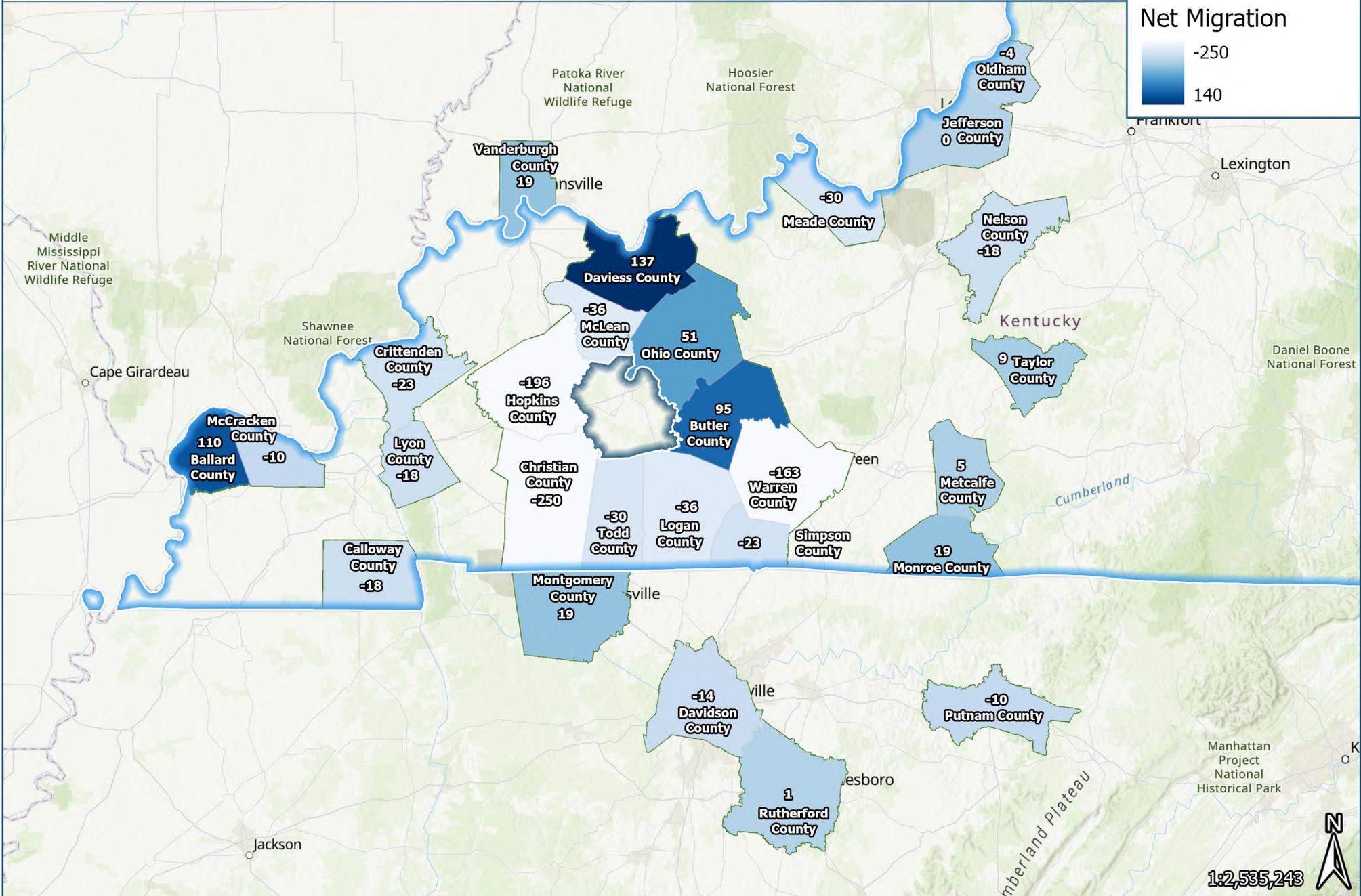
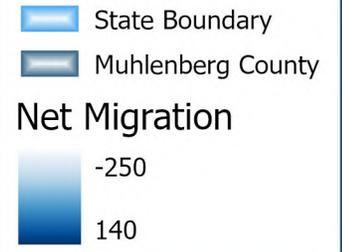
To further illustrate migration patterns for the county, the following table summarizes the top 10 counties from which the subject county attracts residents and to which it exports residents. Note that the table only lists regional counties within Kentucky and nearby bordering states (Illinois, Indiana, Missouri, and Tennessee). Counties which directly border the PSA are highlighted in **red** text.

County-to-County Migration (2016-2020) Top 10 Migration Counties			
Inflow Counties		Outflow Counties	
County	Percent	County	Percent
Daviess County, KY	14.7%	<b>Christian County, KY</b>	10.9%
Ballard County, KY	10.8%	<b>Hopkins County, KY</b>	8.1%
<b>Butler County, KY</b>	10.8%	Warren County, KY	8.1%
<b>Ohio County, KY</b>	5.9%	Tipton County, TN	4.4%
<b>Logan County, KY</b>	4.1%	<b>Logan County, KY</b>	3.1%
<b>Hopkins County, KY</b>	3.6%	<b>McLean County, KY</b>	2.7%
Fayette County, KY	3.3%	Morgan County, KY	2.4%
Montgomery County, KY	2.9%	Elliott County, KY	2.1%
<b>McLean County, KY</b>	2.8%	Crittenden County, KY	2.1%
Wolfe County, KY	2.3%	Meade County, KY	1.7%
All Other Counties	38.8%	All Other Counties	54.5%

Source: U.S. Census Bureau, 2020 5-Year American Community Survey; Bowen National Research

As the preceding table illustrates, the top 10 inflow counties account for 61.2% of the total inflow for the PSA (Muhlenberg County), while the top 10 outflow counties comprise only 45.5% of the total outflow. The counties of Daviess (which includes the city of Owensboro), Ballard, and Butler collectively comprise over one-third (36.3%) of the total inflow for the PSA. Christian County, which directly borders the PSA to the southwest, accounts for the single largest share (10.9%) of the total outflow for Muhlenberg County. In total, five of the top inflow counties and four of the top outflow counties directly border the PSA, illustrating the notable regional influence on migration.

A map illustrating the regional net migration (difference between inflow and outflow) for Muhlenberg County for 2020 is shown on the following page.



While the data contained in the previous pages illustrates the recent migration trends for the PSA (Muhlenberg County) and gives perspective about the age profile and place of origin of in-migrants, it is also equally important to understand the income levels of these individuals as it directly relates to affordability of housing. The following table illustrates the *per-person* income distribution by geographic mobility status for Muhlenberg County in-migrants. Note that this data is provided for the county *population*, not households, ages 15 and above:

Muhlenberg County: Income Distribution by Mobility Status for Population Age 15+ Years*						
2022 Inflation Adjusted Individual Income	Moved Within Same County		Moved From Different County, Same State		Moved From Different State	
	Number	Percent	Number	Percent	Number	Percent
<\$10,000	395	21.2%	176	35.5%	62	21.7%
\$10,000 to \$14,999	321	17.2%	42	8.5%	45	15.7%
\$15,000 to \$24,999	318	17.0%	63	12.7%	62	21.7%
\$25,000 to \$34,999	307	16.5%	104	21.0%	2	0.7%
\$35,000 to \$49,999	147	7.9%	87	17.5%	24	8.4%
\$50,000 to \$64,999	217	11.6%	24	4.8%	15	5.2%
\$65,000 to \$74,999	13	0.7%	0	0.0%	11	3.8%
\$75,000+	148	7.9%	0	0.0%	65	22.7%
Total	1,866	100.0%	496	100.0%	286	100.0%

Source: U.S. Census Bureau, 2022 5-Year American Community Survey (B07010); Bowen National Research

\*Excludes population with no income

According to data provided by the 2022 American Community Survey, over one-half (56.7%) of the population that moved to Muhlenberg County from a different county within Kentucky earned less than \$25,000 per year. This is a slightly smaller share of such individuals when compared to the share (59.1%) of individuals migrating from outside the state that earn less than \$25,000 per year. By comparison, the share of individuals earning \$50,000 or more per year is smaller for both in-migrants from a different county within Kentucky (4.8%) and those from outside the state (31.7%). Although it is likely that a significant share of the population earning less than \$25,000 per year consists of children over the age of 15 and young adults considered to be dependents within a larger family, this illustrates that affordable housing options are likely important for a significant portion of in-migrants to Muhlenberg County.

Based on our evaluation of the components of population change between 2010 and 2020, the population decrease during this time in Muhlenberg County was due to a combination of natural decrease and negative net domestic migration. Although net domestic migration improved significantly between 2020 and 2023, natural decrease continues to affect the area. The data also illustrates that a majority (57.2%) of in-migrants to Muhlenberg County in recent years are less than 35 years of age, while approximately one-third (32.3%) are between the ages of 35 and 54. However, it is important to note that within the age cohort of 18 to 25 years, more individuals move from the area than move to the

area. This is likely contributing to the natural decrease that has occurred in the PSA since 2010. Over one-half of in-migrants from another county in Kentucky (56.7%) and those from another state (59.1%) earn less than \$25,000 annually. As such, affordable housing alternatives are likely an important factor for many of the in-migrants to the area.

### C. HOUSEHOLD CHARACTERISTICS

Households by numbers and percent change (growth or decline) for selected years are shown in the following table. Note that decreases are illustrated in red text, while increases are illustrated in green text:

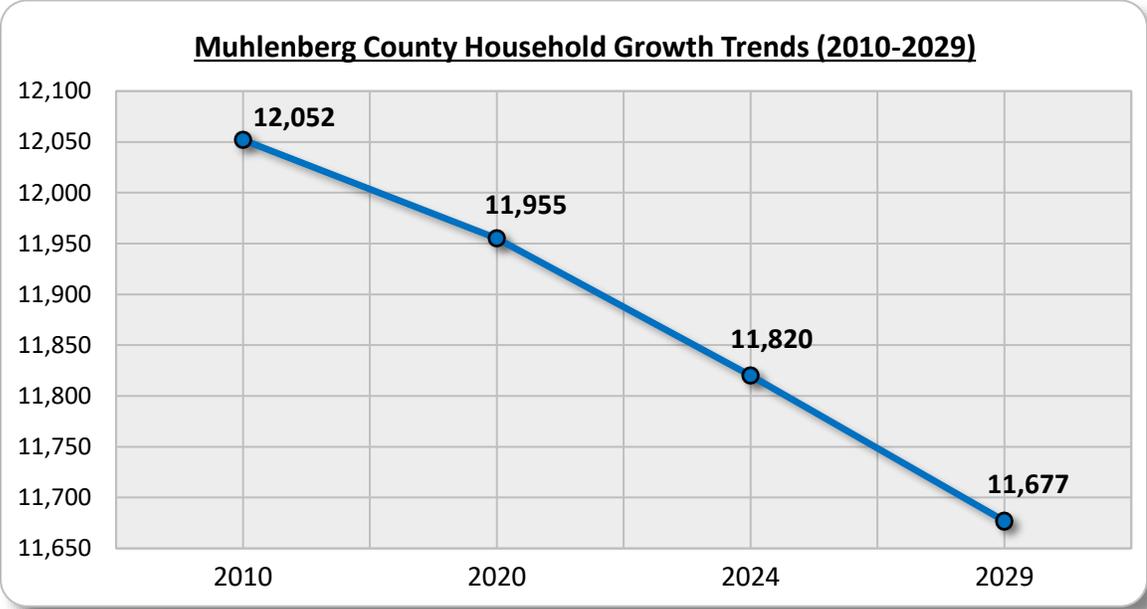
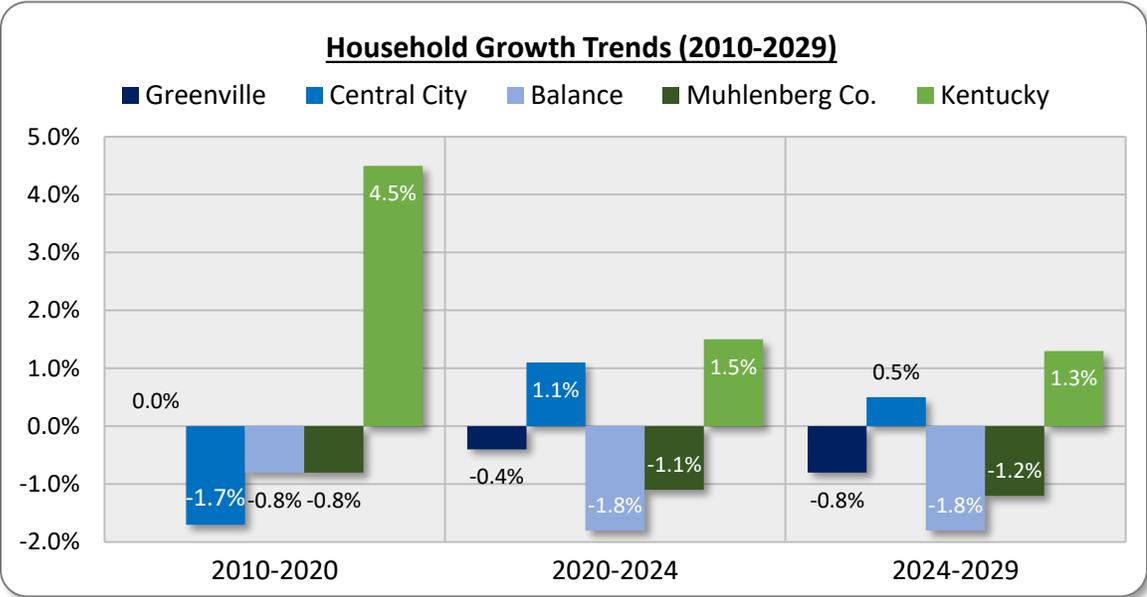
	Total Households									
	2010 Census	2020 Census	Change 2010-2020		2024 Estimated	Change 2020-2024		2029 Projected	Change 2024-2029	
			Number	Percent		Number	Percent		Number	Percent
<b>Greenville</b>	1,855	1,855	0	0.0%	1,847	-8	-0.4%	1,833	-14	-0.8%
<b>Central City</b>	2,069	2,034	-35	-1.7%	2,056	22	1.1%	2,067	11	0.5%
<b>Balance of County</b>	8,128	8,066	-62	-0.8%	7,917	-149	-1.8%	7,777	-140	-1.8%
<b>Muhlenberg County</b>	12,052	11,955	-97	-0.8%	11,820	-135	-1.1%	11,677	-143	-1.2%
<b>Kentucky</b>	1,719,962	1,797,937	77,975	4.5%	1,824,471	26,534	1.5%	1,848,756	24,285	1.3%

Source: 2010, 2020 Census; ESRI; Urban Decision Group; Bowen National Research

Between 2010 and 2020, the number of households within the PSA (Muhlenberg County) decreased slightly by 97 (0.8%). This contrasts with the 4.5% increase in the number of households for the state of Kentucky during this time period. While the number of households in the Greenville Submarket remained unchanged, households within the Central City Submarket decreased by 1.7% (35 households). In 2024, there is an estimated total of 11,820 households in the PSA, of which 17.4% are within the Central City Submarket, and 15.6% are within the Greenville Submarket. Between 2024 and 2029, the number of households in the PSA is projected to decrease by 143 (1.2%). Although households are projected to decline in the Greenville Submarket and the Balance of County, the Central City Submarket is projected to experience a 0.5% increase in households over the next five years.

While households are projected to decline within Muhlenberg County between 2024 and 2029, household growth or decline alone does not dictate the total housing needs of a market. Other factors that influence housing needs, which are addressed throughout this report, include: households living in substandard or cost-burdened housing, commuting patterns, pent-up demand, availability of existing housing, and product in the development pipeline.

The following graphs compare household growth between 2010 and 2029:



Household heads by age cohorts for selected years are shown in the following table. Note that five-year projected declines are in red, while increases are in green:

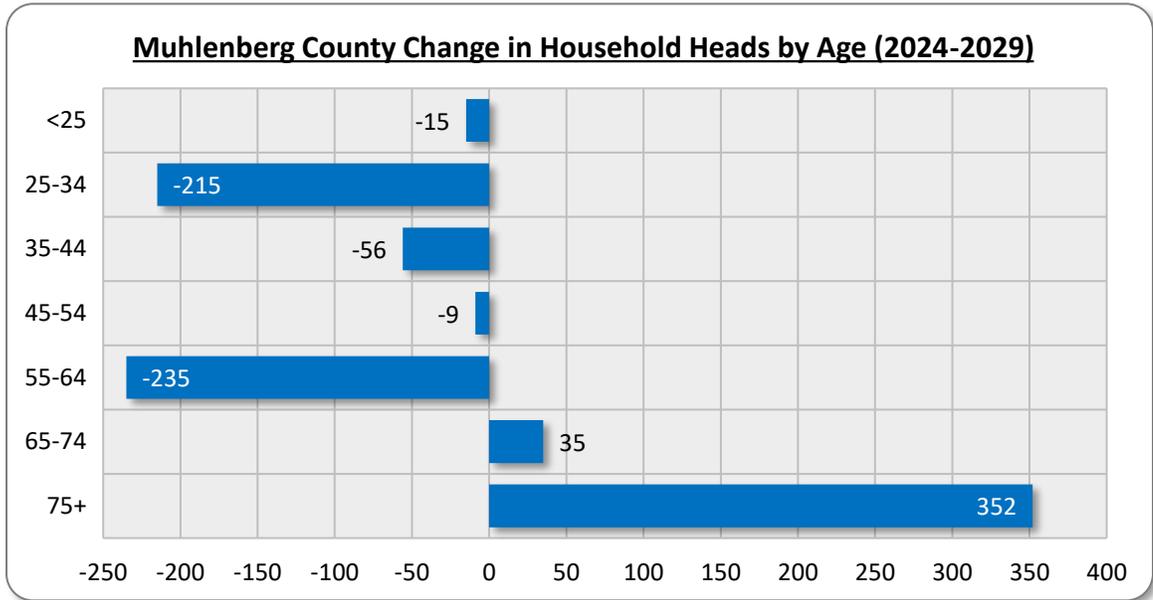
		Household Heads by Age						
		<25	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75+
Greenville	2020	77 (4.2%)	204 (11.0%)	278 (15.0%)	285 (15.4%)	364 (19.6%)	359 (19.4%)	288 (15.5%)
	2024	70 (3.8%)	194 (10.5%)	275 (14.9%)	249 (13.5%)	341 (18.4%)	359 (19.4%)	359 (19.4%)
	2029	70 (3.8%)	172 (9.4%)	253 (13.8%)	282 (15.4%)	293 (16.0%)	361 (19.7%)	402 (21.9%)
	Change 2024-2029	0 (0.0%)	-22 (-11.3%)	-22 (-8.0%)	33 (13.3%)	-48 (-14.1%)	2 (0.6%)	43 (12.0%)
Central City	2020	91 (4.5%)	268 (13.2%)	306 (15.0%)	339 (16.7%)	382 (18.8%)	362 (17.8%)	287 (14.1%)
	2024	70 (3.4%)	271 (13.2%)	288 (14.0%)	317 (15.4%)	401 (19.5%)	384 (18.7%)	325 (15.8%)
	2029	64 (3.1%)	260 (12.6%)	283 (13.7%)	320 (15.5%)	362 (17.5%)	401 (19.3%)	377 (18.2%)
	Change 2024-2029	-6 (-8.6%)	-11 (-4.1%)	-5 (-1.7%)	3 (0.9%)	-39 (-9.7%)	17 (4.4%)	52 (16.0%)
Balance of County	2020	270 (3.3%)	892 (11.1%)	1,186 (14.7%)	1,375 (17.0%)	1,707 (21.2%)	1,496 (18.5%)	1,140 (14.1%)
	2024	179 (2.3%)	894 (11.3%)	1,210 (15.3%)	1,300 (16.4%)	1,583 (20.0%)	1,662 (21.0%)	1,089 (13.8%)
	2029	170 (2.2%)	712 (9.2%)	1,181 (15.2%)	1,255 (16.1%)	1,435 (18.5%)	1,678 (21.6%)	1,346 (17.3%)
	Change 2024-2029	-9 (-5.0%)	-182 (-20.4%)	-29 (-2.4%)	-45 (-3.5%)	-148 (-9.3%)	16 (1.0%)	257 (23.6%)
Muhlenberg County	2020	438 (3.7%)	1,363 (11.4%)	1,770 (14.8%)	2,000 (16.7%)	2,452 (20.5%)	2,218 (18.6%)	1,714 (14.3%)
	2024	319 (2.7%)	1,359 (11.5%)	1,773 (15.0%)	1,866 (15.8%)	2,325 (19.7%)	2,405 (20.4%)	1,773 (15.0%)
	2029	304 (2.6%)	1,144 (9.8%)	1,717 (14.7%)	1,857 (15.9%)	2,090 (17.9%)	2,440 (20.9%)	2,125 (18.2%)
	Change 2024-2029	-15 (-4.7%)	-215 (-15.8%)	-56 (-3.2%)	-9 (-0.5%)	-235 (-10.1%)	35 (1.5%)	352 (19.9%)
Kentucky	2020	80,833 (4.5%)	260,491 (14.5%)	289,656 (16.1%)	312,867 (17.4%)	361,292 (20.1%)	293,975 (16.4%)	198,823 (11.1%)
	2024	74,803 (4.1%)	262,724 (14.4%)	304,687 (16.7%)	297,389 (16.3%)	346,649 (19.0%)	319,282 (17.5%)	218,937 (12.0%)
	2029	75,799 (4.1%)	240,330 (13.0%)	308,442 (16.7%)	301,047 (16.3%)	319,385 (17.3%)	332,026 (18.0%)	271,727 (14.7%)
	Change 2024-2029	996 (1.3%)	-22,394 (-8.5%)	3,755 (1.2%)	3,658 (1.2%)	-27,264 (-7.9%)	12,744 (4.0%)	52,790 (24.1%)

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

In 2024, household heads between the ages of 65 and 74 within the PSA (Muhlenberg County) comprise the largest share (20.4%) of all households in the PSA, closely followed by households between the ages of 55 and 64 (19.7%). Overall, senior households (age 55 and older) constitute over one-half (55.1%) of all households within the PSA. This represents a larger share of senior households when compared to the share within the state (48.5%). Household heads under the age of 35, which are typically more likely to be renters or first-time homebuyers, comprise 14.2% of PSA households, while those between the ages of 35 and 54 account for 30.8% of Muhlenberg County households. The distribution of households by age within the PSA submarkets is generally similar. Senior households (ages 55 and older) comprise 57.2% of households in the Greenville Submarket and 54.0% of households in the Central City Submarket. Conversely, households under the age of 35 comprise notably smaller shares (14.3% and 16.6%, respectively) of the total households in both submarkets.

Between 2024 and 2029, projections indicate significant household growth (19.9%) in the PSA among household heads ages 75 and older. While a modest increase (1.5%) is projected for households between the ages of 65 and 74, all age cohorts less than 65 years of age are projected to decline in Muhlenberg County over the next five years. The largest decrease (15.8%) is projected for households between the ages of 25 and 34 years. Although the notable increase among households ages 65 and older in the PSA is consistent with statewide projections, it is noteworthy that households less than 25 years of age and those between the ages of 35 and 54 are projected to increase statewide over the next five years. This contrasts with the declines projected in the PSA for these age cohorts. Projections for the Greenville and Central City submarkets are largely consistent with the projections for the PSA. However, both submarkets are projected to have increases in households between the ages of 45 and 54, with the Greenville Submarket projected to have a 13.3% increase in households within this age cohort. The aforementioned changes in households by age in the PSA and each submarket will likely have an impact on the area housing market, particularly the demand for senior-oriented housing.

The following graph illustrates the projected change in households by age.



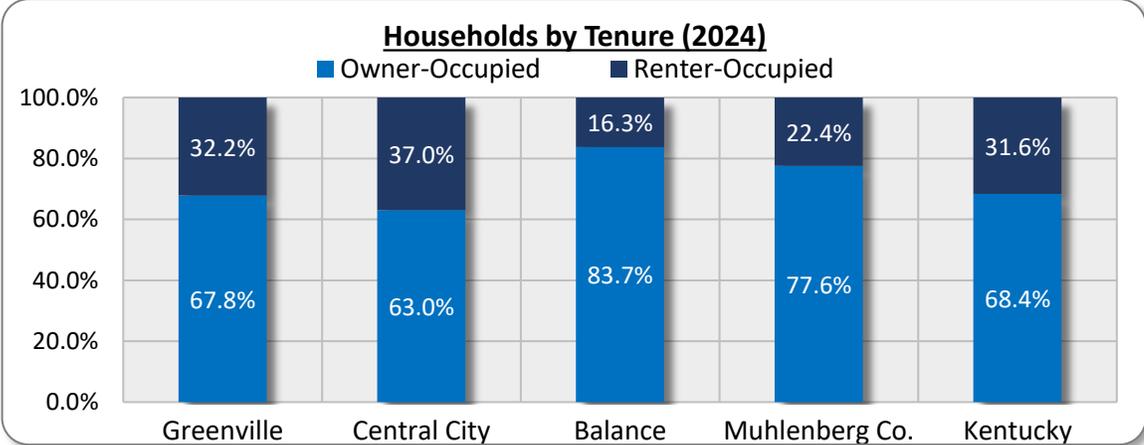
Households by tenure (renters and owners) for selected years are shown in the following table. Note that 2029 numbers which represent a decrease from 2024 are illustrated in red text, while increases are illustrated in green text.

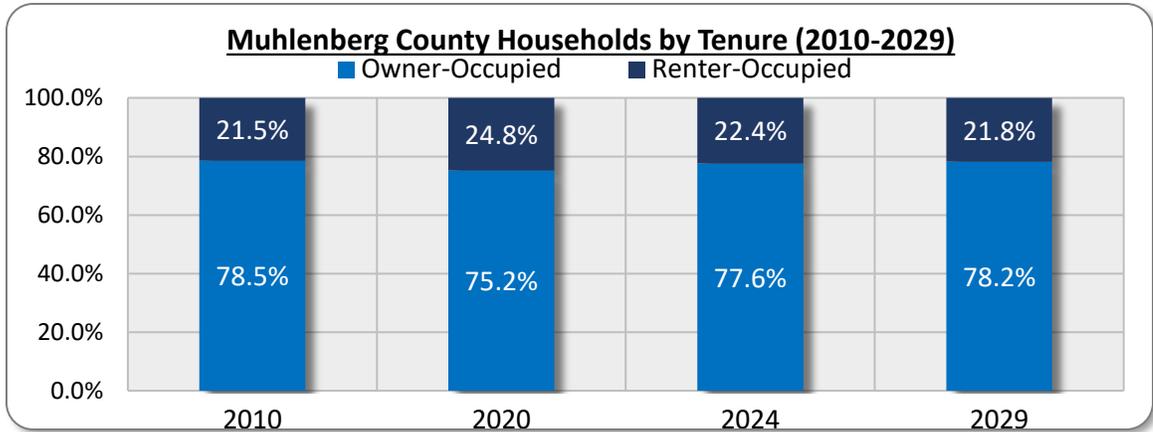
		Households by Tenure							
		2010		2020		2024		2029	
	Household Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Greenville	Owner-Occupied	1,268	68.4%	1,249	67.3%	1,253	67.8%	1,265	69.0%
	Renter-Occupied	586	31.6%	606	32.7%	594	32.2%	568	31.0%
	Total	1,855	100.0%	1,855	100.0%	1,847	100.0%	1,833	100.0%
Central City	Owner-Occupied	1,353	65.4%	1,260	61.9%	1,295	63.0%	1,312	63.5%
	Renter-Occupied	717	34.7%	774	38.1%	761	37.0%	755	36.5%
	Total	2,069	100.0%	2,034	100.0%	2,056	100.0%	2,067	100.0%
Balance of County	Owner-Occupied	6,842	84.2%	6,480	80.3%	6,624	83.7%	6,555	84.3%
	Renter-Occupied	1,286	15.8%	1,586	19.7%	1,293	16.3%	1,222	15.7%
	Total	8,128	100.0%	8,066	100.0%	7,917	100.0%	7,777	100.0%
Muhlenberg County	Owner-Occupied	9,463	78.5%	8,989	75.2%	9,172	77.6%	9,132	78.2%
	Renter-Occupied	2,589	21.5%	2,966	24.8%	2,648	22.4%	2,545	21.8%
	Total	12,052	100.0%	11,955	100.0%	11,820	100.0%	11,677	100.0%
Kentucky	Owner-Occupied	1,181,269	68.7%	1,194,565	66.4%	1,248,032	68.4%	1,284,752	69.5%
	Renter-Occupied	538,693	31.3%	603,372	33.6%	576,439	31.6%	564,004	30.5%
	Total	1,719,962	100.0%	1,797,937	100.0%	1,824,471	100.0%	1,848,756	100.0%

Source: 2010 Census; 2020 Census; ESRI; Urban Decision Group; Bowen National Research

In 2024, there is a 77.6% share of *owner* households and a 22.4% share of *renter* households in the PSA (Muhlenberg County). The current share of owner households in the PSA represents an increase of over two percentage points from the share of owners in 2020. Conversely, the current share of *renter* households represents a *decrease* of over two percentage points from 2020. Notably, renter households declined by nearly 11.0% between 2020 and 2024, which is higher than the rate of decline among renter households within the state (4.5%) during the same timeframe. Virtually all of the decline among renters in the PSA between 2020 and 2024 was concentrated specifically within the Balance of County Submarket, which accounted for approximately 92.0% of this renter household decline within the entire PSA. Owner households in the PSA comprise a notably higher share of the total households as compared to the corresponding share in the state (68.4%). Specifically, the Balance of County Submarket has an owner household share of 83.7%. Although the shares of owner households in the Greenville (67.8%) and Central City (63.0%) submarkets are notably less than the PSA share, both submarkets are somewhat similar to the statewide share. Between 2024 and 2029, the number of owner and renter households in the PSA are projected to decrease (0.4% and 3.9%, respectively). Within the Greenville and Central City submarkets, owner households are projected to increase (1.0% and 1.3%, respectively) over the next five years. Conversely, renter households within both of the aforementioned submarkets are projected to decline (4.4% and 0.8%, respectively), whereas the Balance of County Submarket is the only submarket within the county projected to experience declines among *both* owners and renters (1.0% and 5.5%, respectively) during the same timeframe. Although these tenure projections will likely have an impact on the local housing market, factors such as changes in home mortgage interest rates and home construction costs can also greatly influence tenure projections.

The following graphs illustrate households by tenure for each study area and the state of Kentucky for 2024 and the households by tenure for the entirety of Muhlenberg County from 2010 and projected to 2029:





Renter households by size for 2020 and 2024 are shown in the following table for each of the study areas.

		Persons Per Renter Household					Total	Average H.H. Size
		1-Person	2-Person	3-Person	4-Person	5-Person+		
Greenville	2020	258 (42.6%)	158 (26.1%)	90 (14.8%)	54 (8.9%)	46 (7.6%)	606 (100.0%)	2.13
	2024	223 (39.6%)	142 (28.5%)	97 (13.8%)	73 (9.5%)	59 (8.6%)	594 (100.0%)	2.19
Central City	2020	290 (37.4%)	185 (23.9%)	127 (16.4%)	95 (12.3%)	77 (10.0%)	774 (100.0%)	2.33
	2024	281 (37.0%)	209 (27.5%)	111 (14.6%)	85 (11.2%)	75 (9.8%)	761 (100.0%)	2.29
Balance of County	2020	550 (34.7%)	421 (26.5%)	271 (17.1%)	186 (11.7%)	157 (9.9%)	1,586 (100.0%)	2.36
	2024	460 (35.6%)	372 (28.8%)	193 (14.9%)	141 (10.9%)	127 (9.8%)	1,293 (100.0%)	2.30
Muhlenberg County	2020	1,104 (37.2%)	763 (25.7%)	487 (16.4%)	333 (11.2%)	279 (9.4%)	2,966 (100.0%)	2.30
	2024	976 (36.9%)	752 (28.4%)	387 (14.6%)	281 (10.6%)	252 (9.5%)	2,648 (100.0%)	2.28
Kentucky	2020	235,423 (39.0%)	163,307 (27.1%)	90,028 (14.9%)	61,763 (10.2%)	52,851 (8.8%)	603,372 (100.0%)	2.23
	2024	225,388 (39.1%)	158,521 (27.5%)	85,889 (14.9%)	58,797 (10.2%)	47,844 (8.3%)	576,439 (100.0%)	2.21

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

With an average renter household size of 2.28 in 2024, one- and two-person households comprise nearly two-thirds (65.3%) of all renter households within the PSA (Muhlenberg County). This is a slightly smaller share of such households compared to those within the state overall (66.6%), which has an average renter household size of 2.21 persons. Conversely, 20.1% of renter households in the PSA consist of four- and five-person or larger households, which is a slightly larger share of such households as compared to the state (18.5%). Within the PSA submarkets in 2024, the share of one- and two-person renter households ranges between 64.5% (Central City) and 68.1% (Greenville), while the share of four-person or larger households ranges between 18.1% (Greenville) and 21.0% (Central City).

Owner households by size for 2020 and 2024 for each of the study areas is shown in the following table.

		Persons Per Owner Household					Total	Average H.H. Size
		1-Person	2-Person	3-Person	4-Person	5-Person+		
<b>Greenville</b>	2020	347 (27.8%)	506 (40.6%)	182 (14.5%)	123 (9.9%)	91 (7.3%)	1,249 (100.0%)	2.28
	2024	328 (26.2%)	515 (41.0%)	195 (15.6%)	134 (10.7%)	81 (6.5%)	1,253 (100.0%)	2.30
<b>Central City</b>	2020	338 (26.9%)	465 (36.9%)	208 (16.5%)	151 (12.0%)	97 (7.7%)	1,260 (100.0%)	2.37
	2024	334 (25.8%)	506 (39.1%)	215 (16.6%)	153 (11.8%)	87 (6.7%)	1,295 (100.0%)	2.35
<b>Balance of County</b>	2020	1,508 (23.3%)	2,576 (39.8%)	1,035 (16.0%)	808 (12.5%)	552 (8.5%)	6,480 (100.0%)	2.43
	2024	1,590 (24.0%)	2,689 (40.6%)	1,080 (16.3%)	795 (12.0%)	470 (7.1%)	6,624 (100.0%)	2.38
<b>Muhlenberg County</b>	2020	2,189 (24.4%)	3,548 (39.5%)	1,425 (15.9%)	1,084 (12.1%)	743 (8.3%)	8,989 (100.0%)	2.40
	2024	2,247 (24.5%)	3,715 (40.5%)	1,486 (16.2%)	1,082 (11.8%)	642 (7.0%)	9,172 (100.0%)	2.36
<b>Kentucky</b>	2020	286,798 (24.0%)	451,694 (37.8%)	193,566 (16.2%)	153,085 (12.8%)	109,422 (9.2%)	1,194,565 (100.0%)	2.45
	2024	300,776 (24.1%)	476,748 (38.2%)	202,181 (16.2%)	159,748 (12.8%)	108,579 (8.7%)	1,248,032 (100.0%)	2.44

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

With an average owner household size of 2.36 in 2024, one- and two-person households comprise nearly two-thirds (65.0%) of all owner households within the PSA (Muhlenberg County). This is a larger share of such households compared to those within the state overall (62.3%), which has an average owner household size of 2.44 persons. In both submarkets, a majority of the owner households are one- and two-person households, with such households accounting for 67.2% of owner households in the Greenville Submarket and 64.9% of owner households in the Central City Submarket.

Median household income for selected years is shown in the following table:

	Median Household Income				
	2020 Census	2024 Estimated	% Change 2020-2024	2029 Projected	% Change 2024-2029
<b>Greenville</b>	\$49,876	\$67,328	35.0%	\$82,001	21.8%
<b>Central City</b>	\$46,316	\$51,212	10.6%	\$60,611	18.4%
<b>Balance of County</b>	\$54,462	\$49,552	-9.0%	\$57,797	16.6%
<b>Muhlenberg County</b>	\$52,419	\$52,618	0.4%	\$62,069	18.0%
<b>Kentucky</b>	\$58,731	\$62,002	5.6%	\$72,258	16.5%

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

As the preceding table illustrates, the median household income for the PSA (Muhlenberg County) in 2024 is \$52,618, which represents a slight increase of 0.4% from the median household income in 2020. The estimated median household income in the PSA in 2024 is approximately 15.0% lower than the median income for the state (\$62,002). Within the Greenville Submarket, the median household income of \$67,328 in 2024 is approximately 28.0% higher than the median household income for Muhlenberg County, while the median household income of \$51,212 in the Central City Submarket is 2.7% lower than the PSA median household income. Between 2024 and 2029, it is projected that the median household income in the PSA will increase by 18.0%, at which time the median household income will be \$62,069. The median household income is projected to increase in both submarkets, with the most significant increase (21.8%) occurring in the Greenville Submarket. While the overall median household incomes for the PSA, Balance of County, and Central City Submarket are expected to remain well below that of the state through 2029, the median household income in the Greenville Submarket will be significantly higher than the statewide median household income.

The distribution of *renter* households by income is illustrated in the following table. Note that declines between 2024 and 2029 are in **red**, while increases are in **green**:

		Renter Households by Income							
		<\$10,000	\$10,000 - \$19,999	\$20,000 - \$29,999	\$30,000 - \$39,999	\$40,000 - \$49,999	\$50,000 - \$59,999	\$60,000 - \$99,999	\$100,000+
<b>Greenville</b>	2020	125 (20.7%)	133 (21.9%)	76 (12.5%)	63 (10.5%)	48 (7.8%)	29 (4.8%)	104 (17.2%)	28 (4.6%)
	2024	86 (14.5%)	122 (20.6%)	97 (16.4%)	80 (13.4%)	35 (5.9%)	23 (3.9%)	106 (17.8%)	45 (7.5%)
	2029	60 (10.6%)	107 (18.8%)	77 (13.5%)	84 (14.8%)	39 (6.9%)	19 (3.4%)	130 (22.9%)	52 (9.1%)
	Change 2024-2029	<b>-26</b> <b>(-30.2%)</b>	<b>-15</b> <b>(-12.3%)</b>	<b>-20</b> <b>(-20.6%)</b>	<b>4</b> <b>(5.0%)</b>	<b>4</b> <b>(11.4%)</b>	<b>-4</b> <b>(-17.4%)</b>	<b>24</b> <b>(22.6%)</b>	<b>7</b> <b>(15.6%)</b>
<b>Central City</b>	2020	84 (10.8%)	133 (17.2%)	122 (15.8%)	119 (15.3%)	113 (14.6%)	39 (5.0%)	134 (17.3%)	30 (3.9%)
	2024	62 (8.2%)	132 (17.4%)	123 (16.1%)	126 (16.4%)	116 (15.3%)	34 (4.5%)	133 (17.4%)	35 (4.6%)
	2029	44 (5.8%)	113 (15.0%)	98 (13.0%)	138 (18.2%)	140 (18.5%)	26 (3.5%)	161 (21.2%)	35 (4.6%)
	Change 2024-2029	<b>-18</b> <b>(-29.0%)</b>	<b>-19</b> <b>(-14.4%)</b>	<b>-25</b> <b>(-20.3%)</b>	<b>12</b> <b>(9.5%)</b>	<b>24</b> <b>(20.7%)</b>	<b>-8</b> <b>(-23.5%)</b>	<b>28</b> <b>(21.1%)</b>	<b>0</b> <b>(0.0%)</b>
<b>Balance of County</b>	2020	227 (14.3%)	281 (17.7%)	207 (13.0%)	214 (13.5%)	196 (12.3%)	108 (6.8%)	294 (18.5%)	58 (3.7%)
	2024	197 (15.2%)	292 (22.8%)	162 (12.5%)	166 (12.8%)	187 (14.5%)	61 (4.7%)	172 (13.3%)	56 (4.3%)
	2029	128 (10.5%)	253 (20.6%)	126 (10.3%)	192 (15.7%)	244 (20.0%)	44 (3.6%)	185 (15.1%)	50 (4.1%)
	Change 2024-2029	<b>-69</b> <b>(-35.0%)</b>	<b>-39</b> <b>(-13.4%)</b>	<b>-36</b> <b>(-22.2%)</b>	<b>26</b> <b>(15.7%)</b>	<b>57</b> <b>(30.5%)</b>	<b>-17</b> <b>(-27.9%)</b>	<b>13</b> <b>(7.6%)</b>	<b>-6</b> <b>(-10.7%)</b>
<b>Muhlenberg County</b>	2020	437 (14.7%)	548 (18.5%)	405 (13.6%)	396 (13.3%)	356 (12.0%)	176 (5.9%)	532 (17.9%)	116 (3.9%)
	2024	350 (13.2%)	553 (20.9%)	380 (14.4%)	367 (13.9%)	333 (12.6%)	119 (4.5%)	408 (15.4%)	138 (5.2%)
	2029	237 (9.3%)	476 (18.7%)	300 (11.8%)	410 (16.1%)	417 (16.4%)	89 (3.5%)	476 (18.7%)	140 (5.5%)
	Change 2024-2029	<b>-113</b> <b>(-32.3%)</b>	<b>-77</b> <b>(-13.9%)</b>	<b>-80</b> <b>(-21.1%)</b>	<b>43</b> <b>(11.7%)</b>	<b>84</b> <b>(25.2%)</b>	<b>-30</b> <b>(-25.2%)</b>	<b>68</b> <b>(16.7%)</b>	<b>2</b> <b>(1.4%)</b>
<b>Kentucky</b>	2020	75,396 (12.5%)	95,813 (15.9%)	81,373 (13.5%)	67,552 (11.2%)	58,475 (9.7%)	49,283 (8.2%)	118,904 (19.7%)	56,576 (9.4%)
	2024	69,173 (12.0%)	102,606 (17.8%)	74,361 (12.9%)	63,408 (11.0%)	57,644 (10.0%)	43,809 (7.6%)	110,100 (19.1%)	55,338 (9.6%)
	2029	54,144 (9.6%)	90,441 (16.0%)	64,306 (11.4%)	56,400 (10.0%)	55,277 (9.8%)	43,992 (7.8%)	124,945 (22.1%)	74,499 (13.2%)
	Change 2024-2029	<b>-15,029</b> <b>(-21.7%)</b>	<b>-12,165</b> <b>(-11.9%)</b>	<b>-10,055</b> <b>(-13.5%)</b>	<b>-7,008</b> <b>(-11.1%)</b>	<b>-2367</b> <b>(-4.1%)</b>	<b>183</b> <b>(0.4%)</b>	<b>14,845</b> <b>(13.5%)</b>	<b>19,161</b> <b>(34.6%)</b>

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

In 2024, approximately 48.5% of *renter* households within the PSA (Muhlenberg County) earn less than \$30,000 annually. This is a higher share of such households when compared to the state share (42.7%). A total of 31.0% of renter households in the PSA earn between \$30,000 and \$59,999 annually, while the remaining 20.6% of renter households earn \$60,000 or more annually. This represents a notably smaller share of higher income renter households (earning \$60,000 or more annually) than the share within the state (28.7%). Within the Greenville Submarket, the share (51.5%) of renter households earning less than \$30,000 annually is higher than the share within the PSA. Approximately 23.2% of renter households in the Greenville Submarket earn between \$30,000 and \$59,999, while the remaining 25.3% earn \$60,000 or more. Within the Central City Submarket, 41.7% of renter households earn less than \$30,000 annually, 36.3% earn between \$30,000 and \$59,999, and approximately 22.0% earn \$60,000 or more. Overall, the PSA has a greater concentration of low- and middle-income renter households as compared to the state. Within the two submarkets, Greenville has a disproportionately high concentration of renter households that earn less than \$30,000 annually, while Central City has a notable share of renter households earning between \$30,000 and \$59,999.

Between 2024 and 2029, all renter household income cohorts earning less than \$30,000 in the PSA are projected to decrease, while nearly all of the income cohorts earning more than \$30,000 are projected to increase. The largest increase (25.2%) of renter households by income in the PSA over the next five years is projected among those earning between \$40,000 and \$49,999, although noteworthy increases are also projected for renter households earning between \$30,000 and \$39,999 (11.7%) and those earning between \$60,000 and \$99,999 (16.7%). The projected changes of renter households by income within the two PSA submarkets are generally similar, with substantial declines projected in the lowest income cohorts and notable increases among the moderate- and higher-income cohorts. The projections for the PSA and submarkets differ from statewide projections in that renter household growth at the state level is confined to households earning \$50,000 or more. While the increase among higher earning renter households in the PSA and the Greenville and Central City submarkets over the next five years likely indicates an increase in demand for market-rate rental product, it is critical to understand that nearly 40% of renter households in the PSA will continue to earn less than \$30,000 annually. As such, the need for affordable rental alternatives will persist within Muhlenberg County.

The following table illustrates the distribution of *owner* households by income. Note that declines between 2024 and 2029 are in **red**, while increases are in **green**:

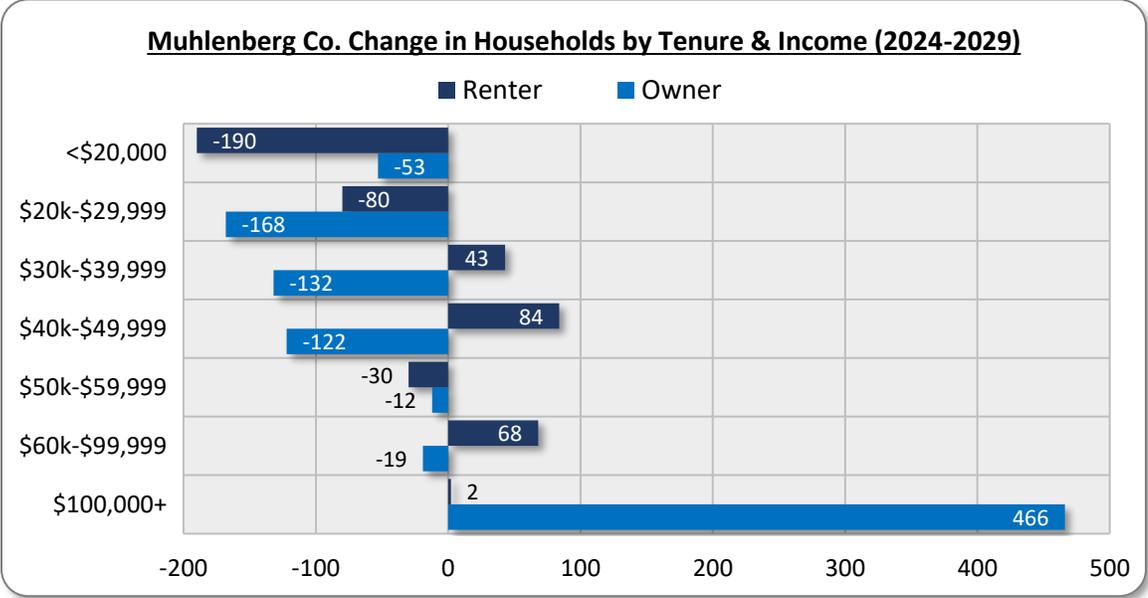
		Owner Households by Income							
		<\$10,000	\$10,000 - \$19,999	\$20,000 - \$29,999	\$30,000 - \$39,999	\$40,000 - \$49,999	\$50,000 - \$59,999	\$60,000- \$99,999	\$100,000+
Greenville	2020	85 (6.8%)	122 (9.8%)	106 (8.5%)	98 (7.8%)	73 (5.9%)	82 (6.5%)	335 (26.8%)	348 (27.9%)
	2024	66 (5.3%)	109 (8.7%)	127 (10.1%)	112 (8.9%)	43 (3.4%)	68 (5.4%)	294 (23.5%)	434 (34.7%)
	2029	59 (4.7%)	104 (8.2%)	95 (7.5%)	83 (6.6%)	30 (2.4%)	68 (5.4%)	283 (22.4%)	543 (42.8%)
	Change 2024-2029	<b>-7</b> <b>(-10.6%)</b>	<b>-5</b> <b>(-4.6%)</b>	<b>-32</b> <b>(-25.2%)</b>	<b>-29</b> <b>(-25.9%)</b>	<b>-13</b> <b>(-30.2%)</b>	0 (0.0%)	<b>-11</b> <b>(-3.7%)</b>	<b>109</b> <b>(25.1%)</b>
Central City	2020	40 (3.2%)	91 (7.2%)	132 (10.4%)	140 (11.1%)	134 (10.6%)	85 (6.8%)	343 (27.2%)	295 (23.4%)
	2024	44 (3.4%)	109 (8.4%)	144 (11.1%)	158 (12.2%)	130 (10.0%)	91 (7.0%)	330 (25.5%)	289 (22.3%)
	2029	45 (3.4%)	110 (8.4%)	121 (9.2%)	136 (10.4%)	110 (8.4%)	92 (7.0%)	347 (26.5%)	351 (26.8%)
	Change 2024-2029	<b>1</b> <b>(2.3%)</b>	<b>1</b> <b>(0.9%)</b>	<b>-23</b> <b>(-16.0%)</b>	<b>-22</b> <b>(-13.9%)</b>	<b>-20</b> <b>(-15.4%)</b>	<b>1</b> <b>(1.1%)</b>	<b>17</b> <b>(5.2%)</b>	<b>62</b> <b>(21.5%)</b>
Balance of County	2020	305 (4.7%)	508 (7.8%)	566 (8.7%)	636 (9.8%)	586 (9.0%)	580 (8.9%)	1,750 (27.0%)	1,550 (23.9%)
	2024	411 (6.2%)	729 (11.0%)	590 (8.9%)	656 (9.9%)	649 (9.8%)	537 (8.1%)	1,446 (21.8%)	1,606 (24.2%)
	2029	380 (5.8%)	721 (11.0%)	479 (7.3%)	570 (8.7%)	557 (8.5%)	531 (8.1%)	1,422 (21.7%)	1,895 (28.9%)
	Change 2024-2029	<b>-31</b> <b>(-7.5%)</b>	<b>-8</b> <b>(-1.1%)</b>	<b>-111</b> <b>(-18.8%)</b>	<b>-86</b> <b>(-13.1%)</b>	<b>-92</b> <b>(-14.2%)</b>	<b>-6</b> <b>(-1.1%)</b>	<b>-24</b> <b>(-1.7%)</b>	<b>289</b> <b>(18.0%)</b>
Muhlenberg County	2020	429 (4.8%)	720 (8.0%)	804 (8.9%)	874 (9.7%)	794 (8.8%)	747 (8.3%)	2,428 (27.0%)	2,193 (24.4%)
	2024	523 (5.7%)	945 (10.3%)	862 (9.4%)	926 (10.1%)	816 (8.9%)	697 (7.6%)	2,079 (22.6%)	2,324 (25.3%)
	2029	484 (5.3%)	931 (10.2%)	694 (7.6%)	794 (8.7%)	694 (7.6%)	685 (7.5%)	2,060 (22.5%)	2,790 (30.5%)
	Change 2024-2029	<b>-39</b> <b>(-7.5%)</b>	<b>-14</b> <b>(-1.5%)</b>	<b>-168</b> <b>(-19.5%)</b>	<b>-132</b> <b>(-14.3%)</b>	<b>-122</b> <b>(-15.0%)</b>	<b>-12</b> <b>(-1.7%)</b>	<b>-19</b> <b>(-0.9%)</b>	<b>466</b> <b>(20.1%)</b>
Kentucky	2020	48,698 (4.1%)	76,565 (6.4%)	88,493 (7.4%)	89,243 (7.5%)	87,910 (7.4%)	98,989 (8.3%)	312,441 (26.2%)	392,226 (32.8%)
	2024	52,417 (4.2%)	91,106 (7.3%)	92,354 (7.4%)	94,850 (7.6%)	93,602 (7.5%)	99,843 (8.0%)	305,768 (24.5%)	418,092 (33.5%)
	2029	44,966 (3.5%)	87,363 (6.8%)	84,789 (6.6%)	86,058 (6.7%)	87,303 (6.8%)	93,587 (7.3%)	301,417 (23.5%)	499,269 (38.9%)
	Change 2024-2029	<b>-7,451</b> <b>(-14.2%)</b>	<b>-3,743</b> <b>(-4.1%)</b>	<b>-7,565</b> <b>(-8.2%)</b>	<b>-8,792</b> <b>(-9.3%)</b>	<b>-6,299</b> <b>(-6.7%)</b>	<b>-6,256</b> <b>(-6.3%)</b>	<b>-4,351</b> <b>(-1.4%)</b>	<b>81,177</b> <b>(19.4%)</b>

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

In 2024, nearly one-half (47.9%) of *owner* households in the PSA (Muhlenberg County) earn \$60,000 or more annually, which represents a significantly smaller share as compared to the state (58.0%). Approximately 25.4% of owner households in the PSA earn less than \$30,000 annually, while 26.6% earn between \$30,000 and \$59,999. As such, the overall distribution of owner households by income in the PSA is much more heavily weighted toward the lower- and moderate-income cohorts compared to that within the state. Within the Greenville Submarket, the distribution of owner households by income is more concentrated among the higher income cohorts as compared to the PSA. Specifically, 24.1% of owner households earn less than \$30,000 annually, 17.7% earn between \$30,000 and \$59,999, and 58.2% earn \$60,000 or more in Greenville. By comparison, the Central City Submarket has a much higher proportion of middle-income owner households. Within this submarket, 22.9% earn less than \$30,000 annually, 29.2% earn between \$30,000 and \$59,999, and nearly 48.0% earn \$60,000 or more.

Between 2024 and 2029, projected growth among owner households in the PSA is isolated to households earning \$100,000 or more annually, increasing by 20.1%. All owner income cohorts earning less than \$100,000 are projected to decline in the PSA during this time, with the most notable decrease (19.5%) projected to occur in the cohort of households earning between \$20,000 and \$29,999 annually. Similar trends are projected within the Greenville Submarket, with owner households earning \$100,000 or more projected to increase by 25.1% over the next five years. While households earning \$100,000 or more are also projected to increase (21.5%) in the Central City Submarket, moderate growth (5.2%) is also projected to occur among owner households earning between \$60,000 and \$99,999. Overall, these projections for the PSA and both submarkets are generally consistent with statewide projections during the time period. While the overall number of owner households in the PSA is projected to decrease by 0.4% between 2024 and 2029, there is a notable shift in the distribution of owner households by income toward the higher earning cohorts. These projected changes should be considered when evaluating the for-sale housing market in Muhlenberg County.

The following graph illustrates household income growth by tenure for Muhlenberg County between 2024 and 2029.

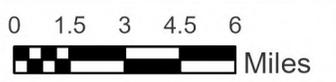
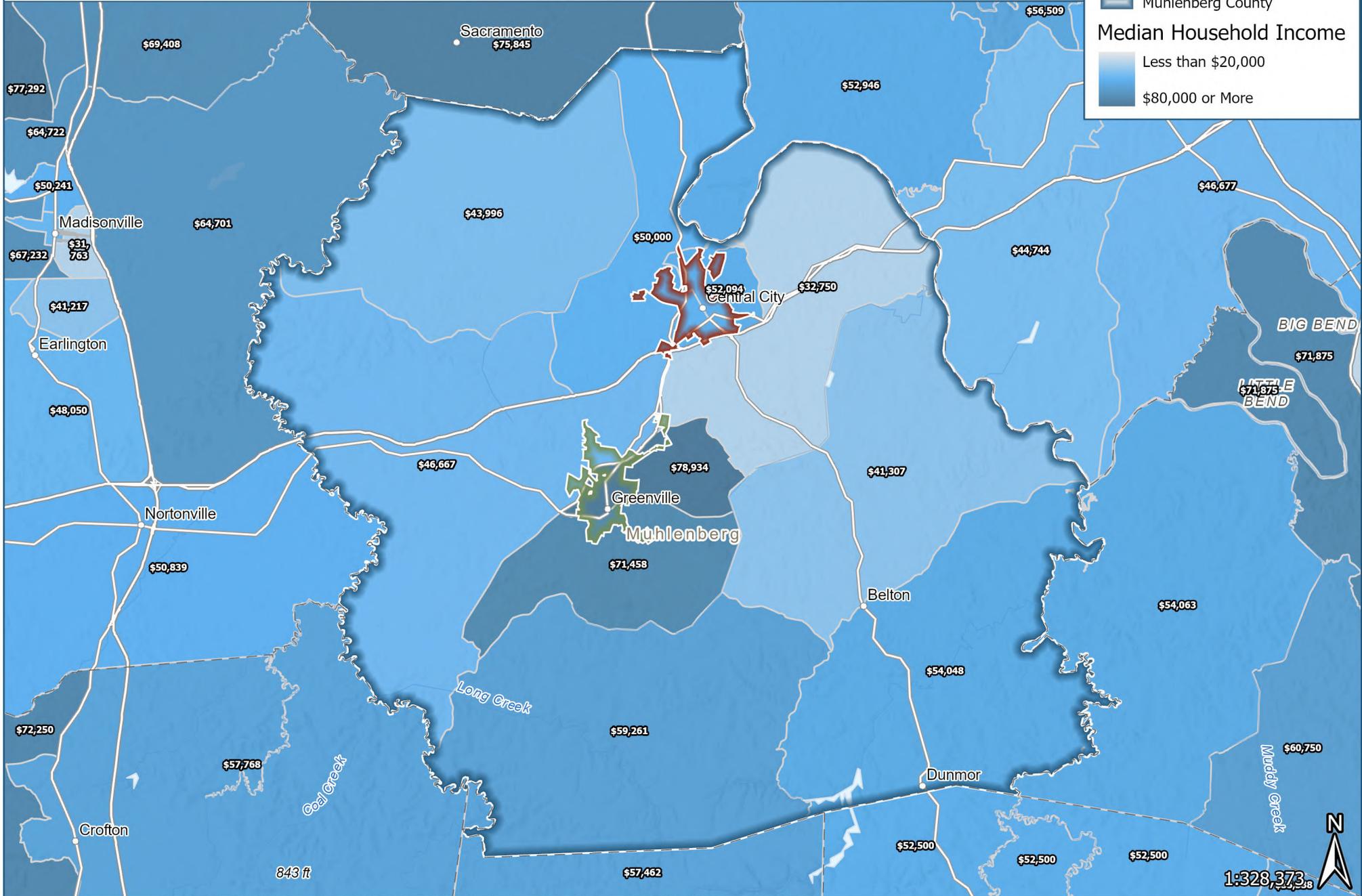
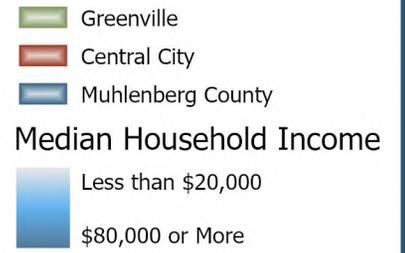


**D. DEMOGRAPHIC THEME MAPS**

The following demographic theme maps for the study area are presented after this page:

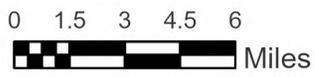
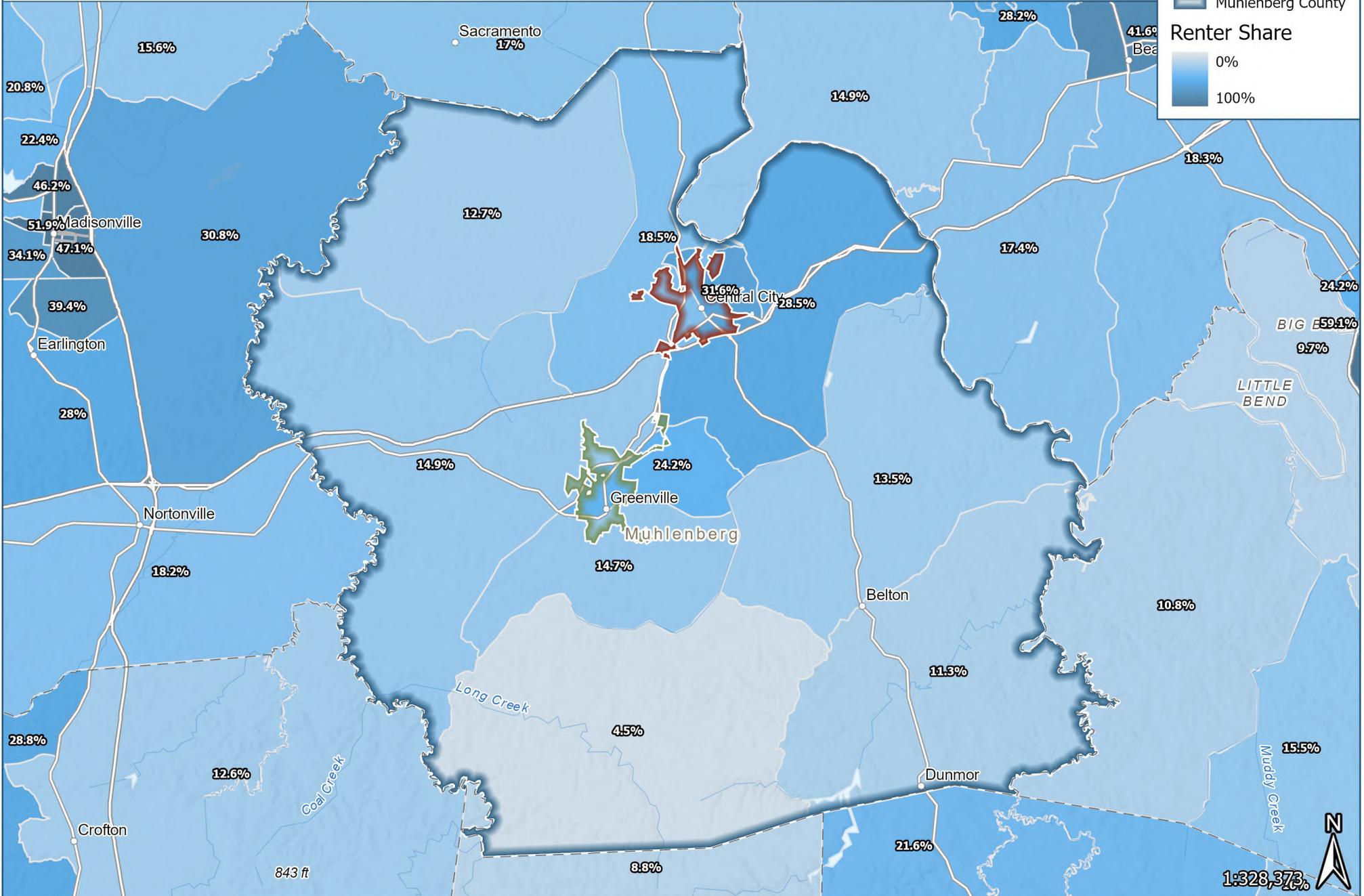
- Median Household Income
- Renter Household Share
- Owner Household Share
- Older Adult Population Share (55 + years)
- Younger Adult Population Share (20 to 34 years)
- Population Density

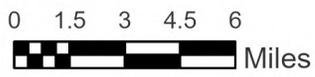
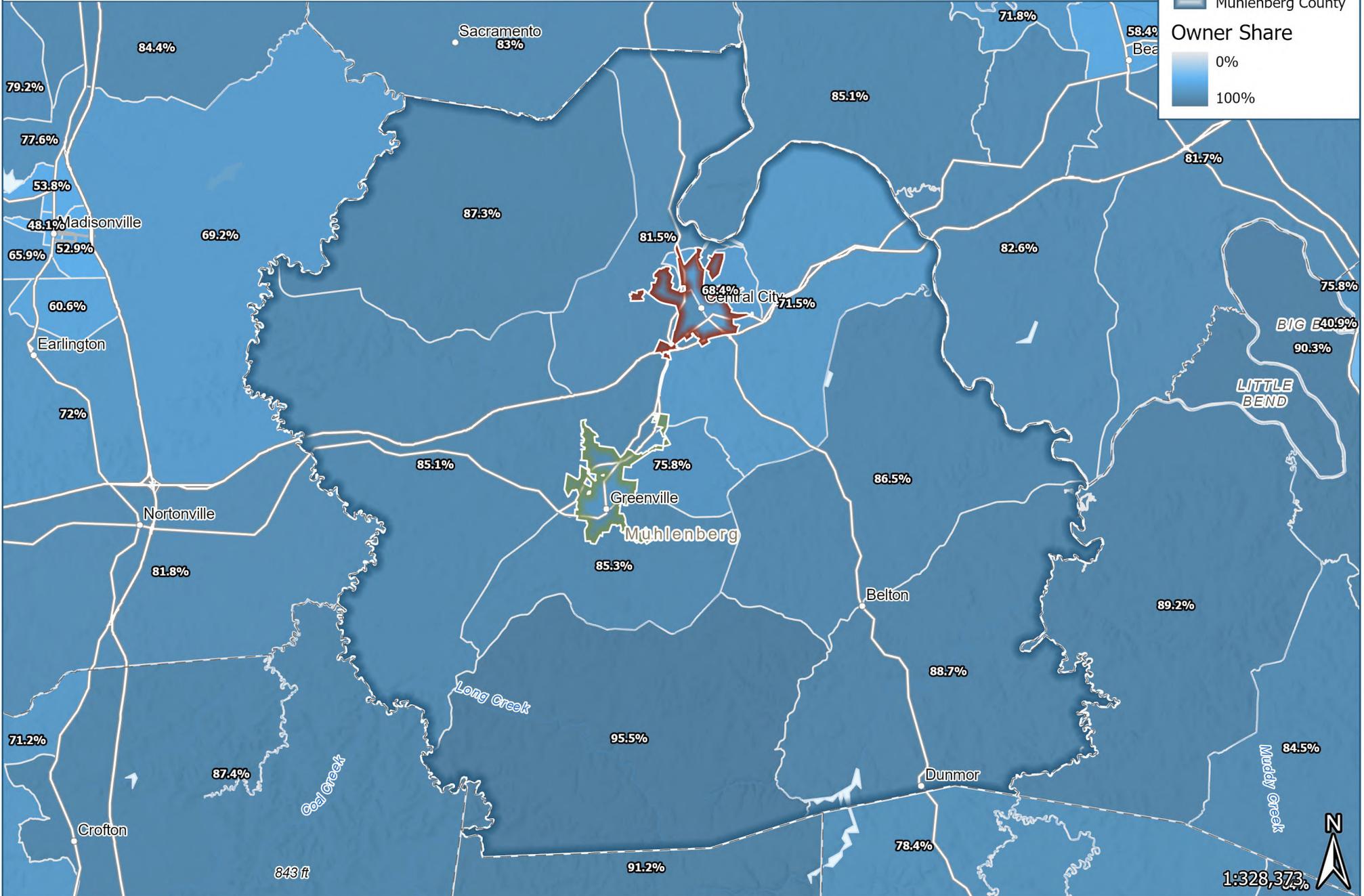
The demographic data used in these maps is based on U.S. Census, American Community Survey (ACS) and ESRI data sets.



Esri, NASA, NGA, USGS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS  
 Additional Source(s): Bowen National Research



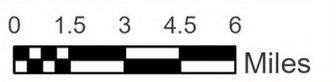
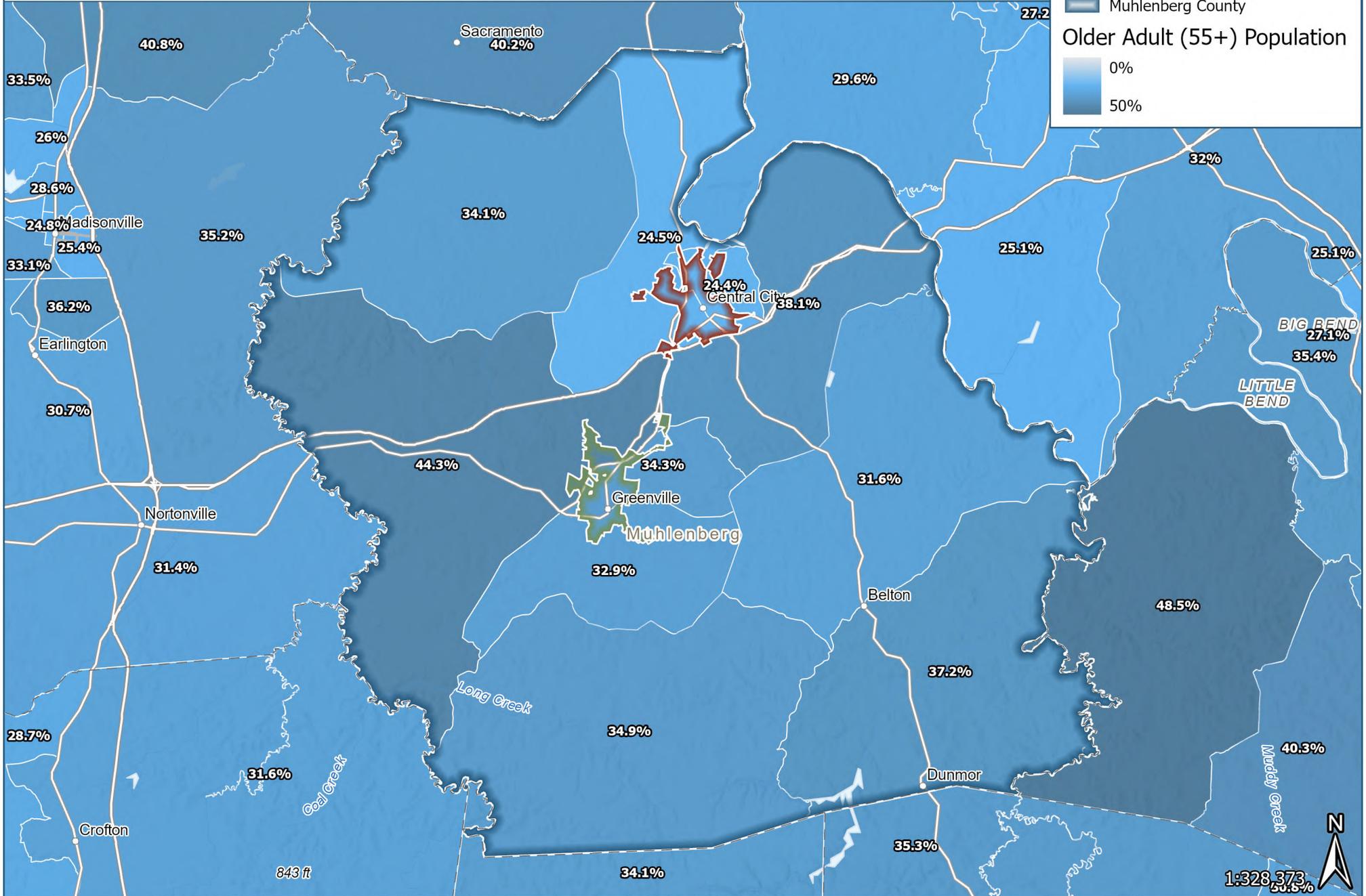




**Older Adult (55+) Population**

- Greenville
- Central City
- Muhlenberg County

0%  
50%



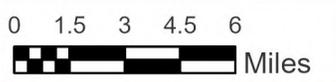
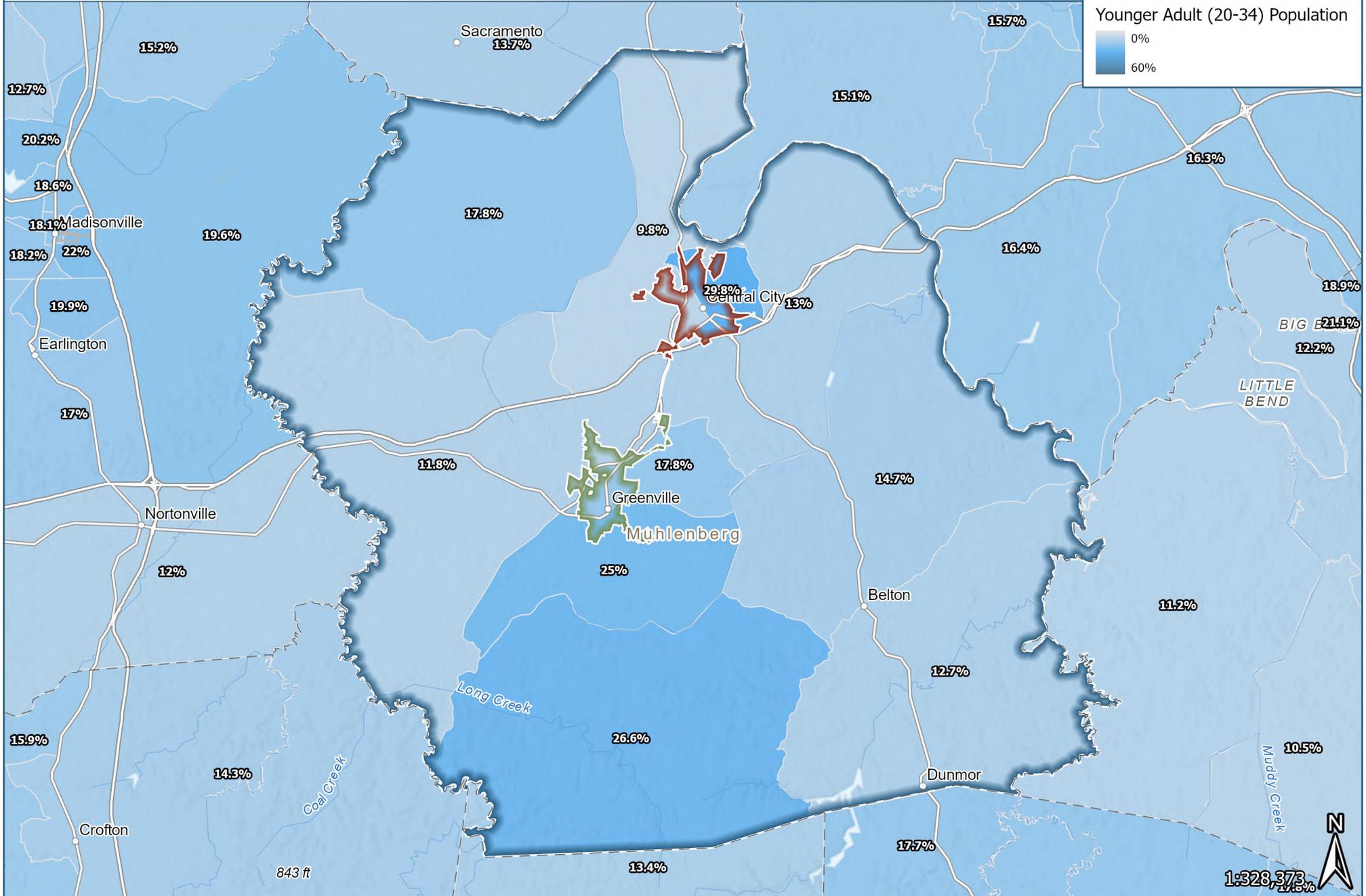
Esri, CGIAR, USGS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS  
 Additional Source(s): Bowen National Research



**Younger Adult (20-34) Population**

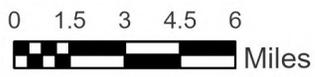
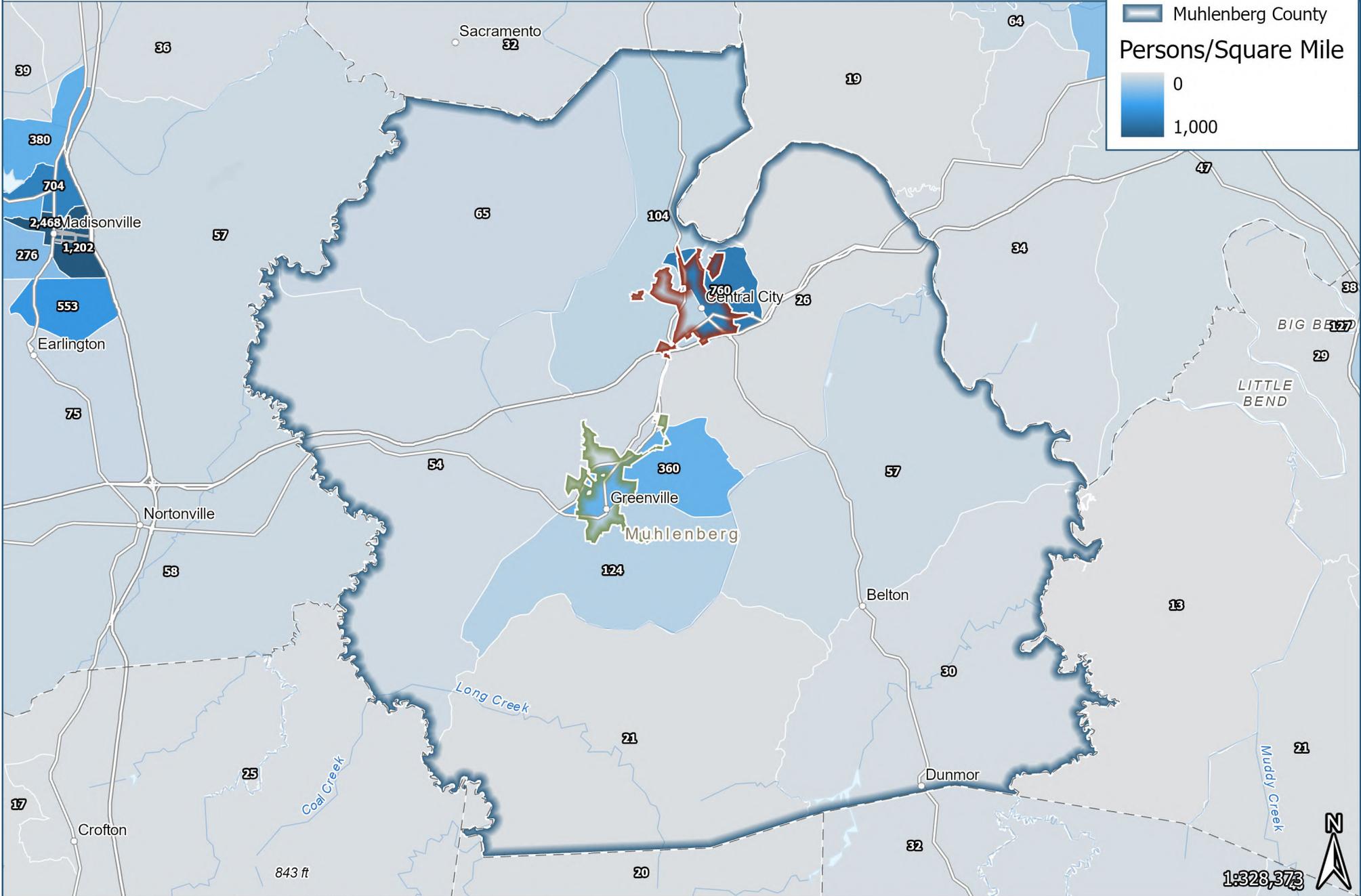
- Greenville
- Central City
- Muhlenberg County

0%  
60%



Esri, NASA, NGA, USGS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS  
 Additional Source(s): Bowen National Research





## V. ECONOMIC ANALYSIS

### A. INTRODUCTION

The need for housing within a given geographic area is influenced by the number of households choosing to live there. Although the number of households in the subject area at any given time is a function of many factors, one of the primary reasons for residency is job availability. In this section, the workforce and employment trends that affect the PSA (Muhlenberg County) and the select submarkets are examined and compared to the state of Kentucky and the United States.

An overview of the Muhlenberg County workforce is provided through several overall metrics: employment by industry, wages by occupation, total employment, unemployment rates and at-place employment trends. We also evaluated the area's largest employers, economic and infrastructure developments, and the potential for significant closures or layoffs in the area (WARN notices). In addition, commuting patterns for the PSA, which include commuting modes, times, and county-to-county commuter flows are analyzed.

### B. WORKFORCE ANALYSIS

The PSA has an employment base comprised of individuals within a broad range of employment sectors. The primary industries of significance within the PSA include retail trade, health care and social assistance, public administration, educational services, and accommodation and food services. Each industry within the PSA requires employees of varying skill and education levels, and there is a broad range of typical wages within the PSA based on occupation. The following evaluates key economic metrics within Muhlenberg County. It should be noted that based on the availability of various economic data metrics, some information is presented only for select geographic areas, which may include the PSA (Muhlenberg County), the two submarkets, the West Kentucky Nonmetropolitan Area, and/or the state of Kentucky.

It is important to note that, while the COVID-19 pandemic in 2020 resulted in widespread economic downturns locally and nationally, Muhlenberg County was also adversely affected by multiple tornados that occurred in December 2021. According to data provided by the American Red Cross, approximately 1.2% (136 homes) of the occupied homes in the county were destroyed, 0.5% (57 homes) incurred major damage, and 0.4% (52 homes) sustained minor damage. In addition, a September 2022 press release provided by the Federal Emergency Management Agency (FEMA) indicated that a total of nearly \$96 million in disaster recovery funds was provided to the western Kentucky counties affected by the disaster. Of this, \$9.2 million was in the form of business loans from the U.S. Small Business Administration, and \$20.6 million was in the form of FEMA Public Assistance, which is designated for community debris removal and infrastructure repairs. As such, the economy within Muhlenberg County has endured notable outside challenges in recent years.

### Employment by Industry

The following table illustrates the distribution of employment by industry sector for the various study areas (note that the top five industry groups by employment for each area are illustrated in **red** text).

NAICS Group	Employment by Industry					
	Greenville		Central City		Balance of County	
	Employees	Percent	Employees	Percent	Employees	Percent
Agriculture, Forestry, Fishing & Hunting	4	0.2%	0	0.0%	18	0.5%
Mining	0	0.0%	7	0.4%	241	6.2%
Utilities	26	1.0%	34	1.7%	44	1.1%
Construction	43	1.7%	39	2.0%	106	2.7%
Manufacturing	115	4.5%	118	5.9%	<b>309</b>	<b>7.9%</b>
Wholesale Trade	65	2.5%	50	2.5%	<b>356</b>	<b>9.2%</b>
Retail Trade	<b>478</b>	<b>18.6%</b>	<b>386</b>	<b>19.4%</b>	<b>552</b>	<b>14.2%</b>
Transportation & Warehousing	12	0.5%	64	3.2%	185	4.8%
Information	43	1.7%	65	3.3%	60	1.5%
Finance & Insurance	102	4.0%	92	4.6%	44	1.1%
Real Estate & Rental & Leasing	35	1.4%	52	2.6%	36	0.9%
Professional, Scientific & Technical Services	78	3.0%	<b>180</b>	<b>9.0%</b>	37	1.0%
Management of Companies & Enterprises	3	0.1%	4	0.2%	9	0.2%
Administrative, Support, Waste Management & Remediation Services	13	0.5%	8	0.4%	88	2.3%
Educational Services	<b>380</b>	<b>14.8%</b>	91	4.6%	306	7.9%
Health Care & Social Assistance	<b>665</b>	<b>25.8%</b>	<b>135</b>	<b>6.8%</b>	<b>448</b>	<b>11.5%</b>
Arts, Entertainment & Recreation	15	0.6%	16	0.8%	27	0.7%
Accommodation & Food Services	<b>158</b>	<b>6.1%</b>	<b>391</b>	<b>19.6%</b>	209	5.4%
Other Services (Except Public Administration)	140	5.4%	119	6.0%	209	5.4%
Public Administration	<b>199</b>	<b>7.7%</b>	<b>140</b>	<b>7.0%</b>	<b>599</b>	<b>15.4%</b>
Non-classifiable	0	0.0%	1	0.1%	5	0.1%
Total	2,574	100.0%	1,992	100.0%	3,888	100.0%

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

Note: Since this survey is conducted of establishments and not of residents, some employees may not live within each market. These employees, however, are included in our labor force calculations because their places of employment are located within each market.

NAICS Group	Employment by Industry			
	Muhlenberg County		Kentucky	
	Employees	Percent	Employees	Percent
Agriculture, Forestry, Fishing & Hunting	23	0.3%	11,536	0.6%
Mining	248	2.9%	8,531	0.4%
Utilities	104	1.2%	10,728	0.5%
Construction	187	2.2%	84,233	4.1%
Manufacturing	543	6.4%	<b>204,962</b>	<b>10.1%</b>
Wholesale Trade	471	5.6%	87,149	4.3%
Retail Trade	<b>1,416</b>	<b>16.7%</b>	<b>245,928</b>	<b>12.1%</b>
Transportation & Warehousing	261	3.1%	47,314	2.3%
Information	168	2.0%	42,695	2.1%
Finance & Insurance	238	2.8%	75,910	3.7%
Real Estate & Rental & Leasing	123	1.5%	44,213	2.2%
Professional, Scientific & Technical Services	296	3.5%	112,781	5.5%
Management of Companies & Enterprises	16	0.2%	12,782	0.6%
Administrative, Support, Waste Management & Remediation Services	109	1.3%	39,195	1.9%
Educational Services	<b>778</b>	<b>9.2%</b>	<b>175,825</b>	<b>8.6%</b>
Health Care & Social Assistance	<b>1,248</b>	<b>14.8%</b>	<b>370,226</b>	<b>18.2%</b>
Arts, Entertainment & Recreation	58	0.7%	31,945	1.6%
Accommodation & Food Services	<b>758</b>	<b>9.0%</b>	<b>187,361</b>	<b>9.2%</b>
Other Services (Except Public Administration)	468	5.5%	110,544	5.4%
Public Administration	<b>938</b>	<b>11.1%</b>	121,160	6.0%
Non-classifiable	6	0.1%	9,519	0.5%
Total	8,457	100.0%	2,034,537	100.0%

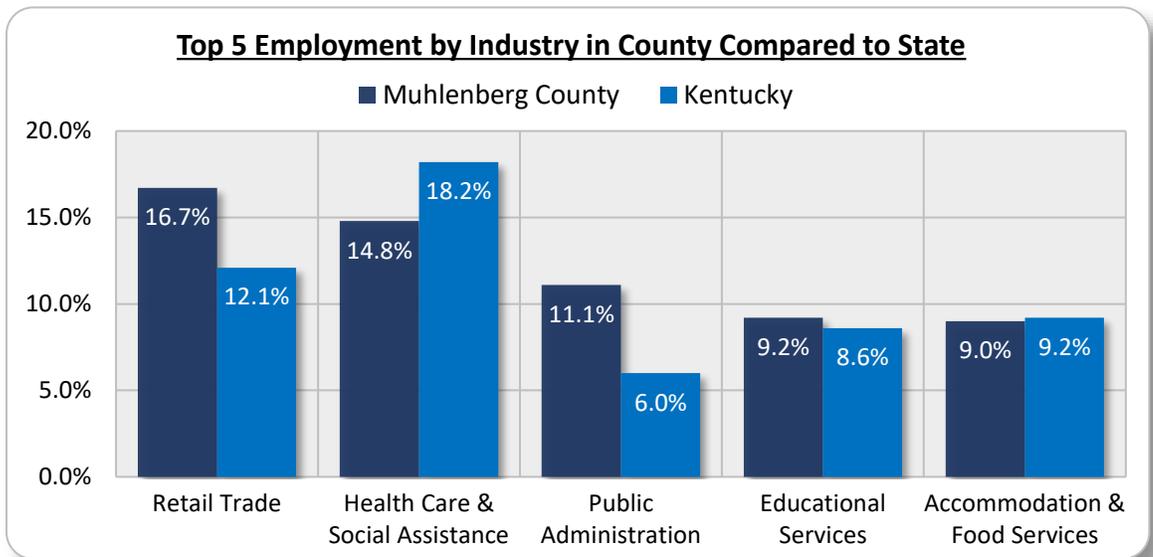
Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

Note: Since this survey is conducted of establishments and not of residents, some employees may not live within each market. These employees, however, are included in our labor force calculations because their places of employment are located within each market.

The labor force within the PSA (Muhlenberg County) is based primarily in five sectors: Retail Trade (16.7%), Health Care & Social Assistance (14.8%), Public Administration (11.1%), Educational Services (9.2%), and Accommodation & Food Services (9.0%). Combined, these five job sectors represent 60.8% of the PSA employment base. This represents a slightly greater concentration of employment within the top five sectors compared to the top five sectors in the state (58.2%). Areas with a heavy concentration of employment within a limited number of industries can be more vulnerable to economic downturns with greater fluctuations in unemployment rates and total employment. Although the PSA has a slightly greater concentration of employment compared to the state, it is noteworthy that three of the top five sectors of employment in the PSA are typically among the most stable employment sectors (healthcare, education, and public administration). This may help to partially insulate the economy in Muhlenberg County from economic downturns. It is also important to note that many occupations within the top industries of the PSA typically have lower average wages which can contribute to demand for affordable housing options.

Within the Greenville Submarket, 73.0% of the total employment is within the top five sectors. It is noteworthy that over one-quarter (25.8%) of the employment in the Greenville Submarket is within Health Care & Social Assistance. Similar to the PSA, the other top sectors of employment include Retail Trade, Educational Services, Accommodation & Food Services, and Public Administration. Each of the top five sectors of employment in the Greenville Submarket are the same sectors as the overall PSA. By comparison, the Central City Submarket has a smaller concentration (61.8%) of employment among the top five sectors. It is also noteworthy that Professional, Scientific & Technical Services (9.0%) is ranked as the third largest sector of employment in Central City. Overall, 46.0% of the total employment in the PSA is within the Balance of County, 30.4% is in the Greenville Submarket, and the remaining 23.6% is within the Central City Submarket.

The following graph illustrates the distribution of employment by job sector for the five largest employment sectors in the PSA (Muhlenberg County) compared to the same employment sectors of the state of Kentucky:



Migrant/Seasonal Workforce

Migrant and seasonal workers play an important role in the economy for many regions within Kentucky, particularly areas with a notable agricultural influence. According to the 2022 Census of Agriculture, Muhlenberg County ranks second in the state in the production of pork, eighth in the state for the production of poultry/eggs, 24<sup>th</sup> in the production of tobacco, and 29<sup>th</sup> in the production of grains. Combined, these four products accounted for approximately \$141 million in county sales in 2022. Although this does not appear to be reflected in the share (0.3%) that agriculture comprises of the area employment (page V-3), the preceding data indicates this is an important component of the local economy.

The U.S. Department of Agriculture defines a migrant worker as an individual whose employment requires travel that prevents the worker from returning to his/her permanent place of residence in the same day. In order to approximate the influence that migrant workers have on this segment of the local economy, data for migrant farm labor, citizenship status and place of birth from the USDA Census of Agriculture and American Community Survey (ACS) was gathered and analyzed. The following tables illustrate data for total farm labor, the migrant workforce, and the foreign-born population by citizenship status for the PSA (Muhlenberg County) and Kentucky:

Farm Labor by Days Worked (2022)					Migrant Farm Workers by Year				
Days Worked	Muhlenberg County		Kentucky		Year	Muhlenberg County		Kentucky	
	Number	Percent	Number	Percent		Number	% Change	Number	% Change
<b>Worked &lt;150 Days</b>	283	52.8%	22,710	56.1%	<b>2012</b>	68	-	10,820	-
<b>Worked 150+ Days</b>	253	47.2%	17,754	43.9%	<b>2017</b>	129	89.7%	10,605	-2.0%
<b>Total Hired Labor</b>	536	100.0%	40,464	100.0%	<b>2022</b>	93	-27.9%	5,090	-52.0%

Source: U.S. Department of Agriculture, Census of Agriculture

	Foreign Born Population by Citizenship Status					
	Naturalized Citizen		Not U.S. Citizen		Total	
	Number	Percent	Number	Percent	Number	Percent*
<b>Muhlenberg County</b>	367	55.9%	290	44.1%	657	2.1%
<b>Kentucky</b>	77,238	42.0%	106,871	58.0%	184,109	4.1%

Source: U.S. Census Bureau, 2022 5-Year ACS Estimates (B05002); Bowen National Research

\*Share of Total Population

As the preceding illustrates, there were approximately 536 individuals who worked as hired farm labor in Muhlenberg County in 2022. Of these, over one-half (52.8%) worked less than 150 days during the year. During the same year, there were approximately 93 farm workers that were classified as migrant workers, and these migrant workers comprised roughly 17.4% of the total hired farm workforce in the PSA. The county's share of migrant farmworkers relative to its total hired farm workforce is higher than that of the state of 12.6%. Although the 93 farmworkers within the PSA represent an increase of 36.8% from 2012, it is noteworthy that the number of migrant workers decreased by 27.9% between 2017 and 2022. According to the 2022 5-Year ACS estimates, 2.1% of the population in the PSA is foreign born, and 44.1%, or 290 individuals, are not U.S. citizens. Despite representing a small portion of the total population and total employment within the PSA, these individuals comprise a notable portion of the farm labor force in the county. Given the economic impact associated with pork, poultry/eggs, grains, and tobacco production in Muhlenberg County, *temporary/seasonal* workforce housing for migrant workers should be a consideration in the overall housing solutions of the PSA.

## Employment Characteristics and Trends

Muhlenberg County is in the West Kentucky Nonmetropolitan Area. Typical wages by job category for the West Kentucky Nonmetropolitan Area are compared with those of Kentucky in the following table:

Typical Wage by Occupation Type		
Occupation Type	West Kentucky Nonmetropolitan Area	Kentucky
Management Occupations	\$91,310	\$105,980
Business and Financial Occupations	\$66,420	\$73,360
Computer and Mathematical Occupations	\$71,720	\$84,790
Architecture and Engineering Occupations	\$80,700	\$81,240
Community and Social Service Occupations	\$46,860	\$50,230
Art, Design, Entertainment and Sports Medicine Occupations	\$47,640	\$53,680
Healthcare Practitioners and Technical Occupations	\$81,510	\$88,540
Healthcare Support Occupations	\$33,370	\$36,610
Protective Service Occupations	\$41,910	\$43,120
Food Preparation and Serving Related Occupations	\$26,480	\$28,790
Building and Grounds Cleaning and Maintenance Occupations	\$30,680	\$33,160
Personal Care and Service Occupations	\$29,330	\$32,550
Sales and Related Occupations	\$37,270	\$44,470
Office and Administrative Support Occupations	\$39,140	\$42,450
Construction and Extraction Occupations	\$53,080	\$53,650
Installation, Maintenance and Repair Occupations	\$53,820	\$55,400
Production Occupations	\$45,680	\$46,650
Transportation and Moving Occupations	\$46,090	\$48,470

Source: U.S. Department of Labor, Bureau of Statistics

Most annual blue-collar salaries range from \$26,480 to \$53,820 within the West Kentucky Nonmetropolitan Area. White-collar jobs, such as those related to professional positions, management and medicine, have an average salary of \$78,332. Average wages within the area are typically 8.0% lower than the overall average state wages. White-collar professions in the study area typically earn 9.7% less than those within Kentucky, while blue-collar wages are typically 6.7% less than the average state wages. Within the West Kentucky Nonmetropolitan Area, wages by occupation vary widely and are reflective of a diverse job base that covers a wide range of industry sectors and job skills, as well as diverse levels of education and experience. Because employment is distributed among a variety of professions with diverse income levels, there are likely a variety of housing needs by affordability level. As a significant share of the labor force within Muhlenberg County is contained within retail trade, healthcare, and public administration, education, and accommodation and food services, many workers in the area have typical wages ranging between approximately \$25,000 and \$40,000 annually, likely contributing to the need for lower priced housing product in the county. It is important to point out that the wages cited above are by single wage-earning households, and multiple wage-earning households often have a greater capacity to spend earnings toward housing than single wage earners. Households by income data is included starting on page IV-20.

In an effort to better understand how area wages by occupation affect housing affordability, wages for the top 35 occupations by share of total employment within the West Kentucky Nonmetropolitan Area were analyzed. While this data does not include every possible occupation and wage within each sector and is not specific to just Muhlenberg County (encompasses 20 counties in total, including the adjacent counties of Hopkins, Ohio, and Todd), the occupations included in this table represent nearly one-half (48.2%) of the total employment in the nonmetropolitan area in 2023 and provide a general overview of housing affordability for some of the most common occupations in the region. Based on the annual wages at the lower quartile (bottom 25%) and median levels, the maximum affordable monthly rent and home price (at 30% of income) for each occupation was calculated. It is important to note that calculations based on the median annual wage mean that half of the individuals employed in this occupation earn less than the stated amount. It is equally important to understand that the supplied data is based on *individual* income. As such, affordability levels will proportionally increase for households with multiple income sources at a rate dependent on the additional income. Affordable rents and home prices for each occupation presented in this analysis that are **below** the two-bedroom Fair Market Rent (\$850) or the overall median list price (\$199,000) of the available for-sale inventory in the PSA (Muhlenberg County) as of May 8, 2024, are shown in **red** text, indicating that certain lower-wage earning occupations cannot reasonably afford a typical housing unit in the market.

The following table illustrates the wages (lower quartile and median) and housing affordability levels for the top 35 occupations in the West Kentucky Nonmetropolitan Area.

Wages and Housing Affordability for Top 35 Occupations by Share of Labor Force West Kentucky Nonmetropolitan Area								
Occupation Sector, Title & Wages*					Housing Affordability**			
Sector Group (Code)	Labor Force Share	Occupation Title	Annual Wages		Max. Monthly Rent		Max. Purchase Price	
			Lower Quartile	Median	Lower Quartile	Median	Lower Quartile	Median
Sales & Related Occupations (41)	2.9%	Cashiers	\$20,550	\$23,260	<b>\$514</b>	<b>\$582</b>	<b>\$68,500</b>	<b>\$77,533</b>
	2.6%	Retail Salespersons	\$22,130	\$28,230	<b>\$553</b>	<b>\$706</b>	<b>\$73,767</b>	<b>\$94,100</b>
	1.1%	First-Line Supervisors, Retail	\$27,550	\$35,130	<b>\$689</b>	\$878	<b>\$91,833</b>	<b>\$117,100</b>
Food Preparation/ Serving (35)	2.2%	Fast Food and Counter Workers	\$20,800	\$21,970	<b>\$520</b>	<b>\$549</b>	<b>\$69,333</b>	<b>\$73,233</b>
	1.4%	Waiters/Waitresses	\$17,340	\$20,910	<b>\$434</b>	<b>\$523</b>	<b>\$57,800</b>	<b>\$69,700</b>
	1.4%	Cooks, Fast Food	\$21,310	\$22,290	<b>\$533</b>	<b>\$557</b>	<b>\$71,033</b>	<b>\$74,300</b>
	1.1%	First-Line Supervisors, Food Prep	\$28,280	\$32,270	<b>\$707</b>	<b>\$807</b>	<b>\$94,267</b>	<b>\$107,567</b>
	0.9%	Cooks, Restaurant	\$22,960	\$27,830	<b>\$574</b>	<b>\$696</b>	<b>\$76,533</b>	<b>\$92,767</b>
	0.8%	Cooks, Institution/Cafeteria	\$24,260	\$27,470	<b>\$607</b>	<b>\$687</b>	<b>\$80,867</b>	<b>\$91,567</b>
	0.8%	Food Preparation Workers	\$20,070	\$21,490	<b>\$502</b>	<b>\$537</b>	<b>\$66,900</b>	<b>\$71,633</b>
Office and Administrative Support (43)	1.8%	Customer Services Reps.	\$27,780	\$31,640	<b>\$695</b>	<b>\$791</b>	<b>\$92,600</b>	<b>\$105,467</b>
	1.4%	Office Clerks, General	\$27,400	\$32,890	<b>\$685</b>	<b>\$822</b>	<b>\$91,333</b>	<b>\$109,633</b>
	1.3%	Bookkeeping/Accounting Clerks	\$34,580	\$41,240	\$865	\$1,031	<b>\$115,267</b>	<b>\$137,467</b>
	1.2%	Secretaries/Administrative Assts.	\$29,730	\$35,360	<b>\$743</b>	\$884	<b>\$99,100</b>	<b>\$117,867</b>
	1.0%	First-Line Supervisors, Office	\$42,680	\$52,830	\$1,067	\$1,321	<b>\$142,267</b>	<b>\$176,100</b>
	0.9%	Medical Secretaries/Assistants	\$29,400	\$35,100	<b>\$735</b>	\$878	<b>\$98,000</b>	<b>\$117,000</b>
Transportation Material Moving (53)	2.5%	Stockers/Order Fillers	\$29,230	\$31,670	<b>\$731</b>	<b>\$792</b>	<b>\$97,433</b>	<b>\$105,567</b>
	2.3%	Laborers/Stock/Material Movers	\$29,120	\$34,700	<b>\$728</b>	\$868	<b>\$97,067</b>	<b>\$115,667</b>
	1.9%	Heavy/Tractor-Trailer Drivers	\$41,420	\$47,060	\$1,036	\$1,177	<b>\$138,067</b>	<b>\$156,867</b>
	0.8%	Sailors/Marine Oilers	\$37,120	\$46,690	\$928	\$1,167	<b>\$123,733</b>	<b>\$155,633</b>
	0.7%	Light Truck Drivers	\$30,450	\$37,460	<b>\$761</b>	\$937	<b>\$101,500</b>	<b>\$124,867</b>
	0.7%	Captains/Mates, Water Vessels	\$59,780	\$109,360	\$1,495	\$2,734	\$199,267	\$364,533
Production Occupations (51)	1.6%	Misc. Assemblers/Fabricators	\$30,700	\$35,110	<b>\$768</b>	\$878	<b>\$102,333</b>	<b>\$117,033</b>
	0.9%	First-Line Supervisors, Production	\$54,270	\$63,020	\$1,357	\$1,576	<b>\$180,900</b>	\$210,067
Education/ Library (25)	1.1%	Elementary School Teachers	\$49,910	\$55,130	\$1,248	\$1,378	<b>\$166,367</b>	<b>\$183,767</b>
	1.0%	Teaching Assistants	\$24,840	\$28,200	<b>\$621</b>	<b>\$705</b>	<b>\$82,800</b>	<b>\$94,000</b>
Healthcare (29, 31)	2.3%	Registered Nurses	\$63,880	\$74,540	\$1,597	\$1,864	\$212,933	\$248,467
	1.2%	Nursing Assistants	\$29,100	\$35,590	<b>\$728</b>	\$890	<b>\$97,000</b>	<b>\$118,633</b>
	1.0%	Home Health/Personal Aides	\$21,470	\$26,060	<b>\$537</b>	<b>\$652</b>	<b>\$71,567</b>	<b>\$86,867</b>
Management/ Business (11)	2.5%	General/Operations Managers	\$48,210	\$71,530	\$1,205	\$1,788	<b>\$160,700</b>	\$238,433
Maintenance/ Repair (49)	1.1%	Maintenance/Repair Workers	\$31,400	\$41,550	<b>\$785</b>	\$1,039	<b>\$104,667</b>	<b>\$138,500</b>
	0.8%	Industrial Machine Mechanics	\$50,900	\$60,610	\$1,273	\$1,515	<b>\$169,667</b>	\$202,033
Construction/ Extraction (47)	1.1%	Construction Laborers	\$34,670	\$39,110	\$867	\$978	<b>\$115,567</b>	<b>\$130,367</b>
	0.7%	Oper. Engineers/Equip. Operators	\$45,960	\$50,640	\$1,149	\$1,266	<b>\$153,200</b>	<b>\$168,800</b>
Maintenance (37)	1.2%	Janitors/Cleaners	\$26,070	\$29,380	<b>\$652</b>	<b>\$735</b>	<b>\$86,900</b>	<b>\$97,933</b>

Source: U.S. Bureau of Labor Statistics, May 2023 Occupational Employment and Wage Statistics (OEWS)

\*Annual wages listed are at the lower 25<sup>th</sup> percentile (quartile) and median level for each occupation

\*\*Housing Affordability is the maximum monthly rent or total for-sale home price a household can reasonably afford based on stated wages.

In order to reasonably afford a two-bedroom rental at the Fair Market Rent of \$850, an individual would need to earn at least \$34,000 per year. As such, the *lower quartile* of wage earners within 23 of the 35 occupations listed in the previous table do not have sufficient wages to afford a typical rental. Many of these occupations, particularly those within the food services and retail industries, earn significantly less than the amount required to afford a typical rental in the market. When wages for each occupation are increased to their respective *median* levels, 15 occupations still do not have the income necessary to afford a typical rental. While a share of these individuals likely lives in multiple-income households, this illustrates the reasonable conclusion that a significant portion of households with a single income earned in a variety of occupations in the PSA are likely housing cost burdened.

Housing affordability issues among the listed occupations are more prevalent when home ownership is considered. In order to afford the purchase of a typical home in the PSA at the median list price of \$199,000, an individual would have to earn at least \$59,700 per year. As such, only five occupations with wages up to the median wage among the top 35 occupations have sufficient income to afford the purchase of a typical home in the PSA. As previously stated, it is likely that many of these individuals are part of multiple-income households. However, even if a household or person had double the single wage earner incomes of the median wages shown in the preceding table, 11 occupations (approximately 16.2% of the labor force) would not be able to afford a home at the current median list price of \$199,000. This illustrates that home ownership is not affordable for a notable share of workers in the most common occupations in the PSA.

A full analysis of the area housing supply, which includes multifamily apartments, current and historical for-sale product, and non-conventional rentals (typically four units or less within a structure), is included in Section VI of this report. A lack of affordable workforce housing in a market can limit the ability of employers to retain and attract new employees, which can affect the performance of specific industries, the local economy, and household growth within an area.

## Employment Base and Unemployment Rates

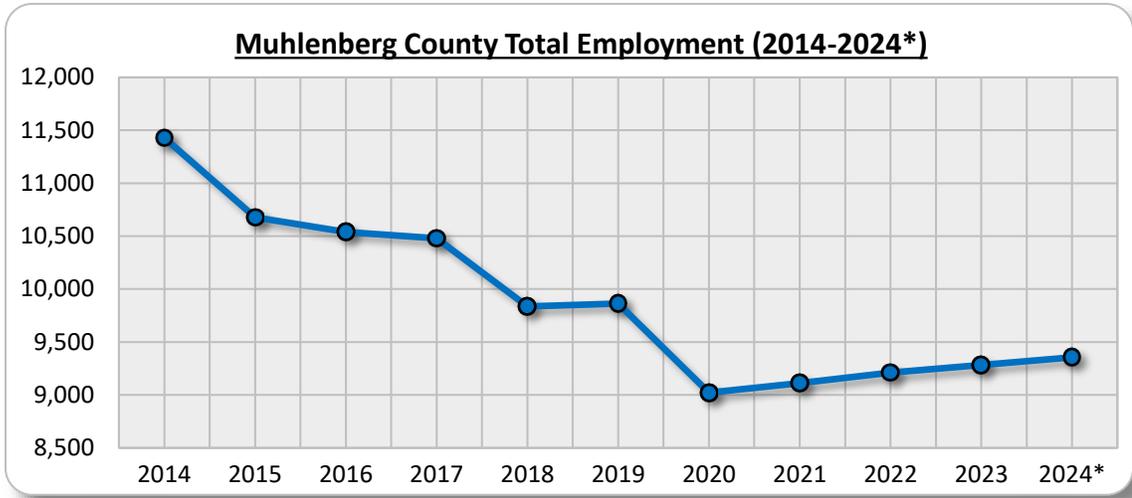
Total employment reflects the number of employed persons who live within an area regardless of where they work. The following illustrates the total employment base for Muhlenberg County, the state of Kentucky, and the United States.

Year	Total Employment					
	Muhlenberg County		Kentucky		United States	
	Total Number	Percent Change	Total Number	Percent Change	Total Number	Percent Change
2014	11,429	-	1,877,551	-	147,293,817	-
2015	10,677	-6.6%	1,876,009	-0.1%	149,540,791	1.5%
2016	10,540	-1.3%	1,914,479	2.1%	151,934,228	1.6%
2017	10,480	-0.6%	1,955,234	2.1%	154,721,780	1.8%
2018	9,836	-6.1%	1,966,186	0.6%	156,709,676	1.3%
2019	9,862	0.3%	1,979,803	0.7%	158,806,264	1.3%
2020	9,022	-8.5%	1,874,863	-5.3%	149,143,265	-6.1%
2021	9,112	1.0%	1,921,355	2.5%	154,201,818	3.4%
2022	9,211	1.1%	1,948,312	1.4%	159,458,223	3.4%
2023	9,283	0.8%	1,941,994	-0.3%	161,750,804	1.4%
2024*	9,355	0.8%	1,935,066	-0.4%	161,870,534	0.1%

Source: Department of Labor; Bureau of Labor Statistics

\*Through April

From 2014 to 2019, total employment in the PSA (Muhlenberg County) decreased by 13.7%, or 1,567 employees. This contrasts with the increases in total employment for the state (5.4%) and nation (7.8%) during this time period. The most significant decreases that occurred during this time period occurred in 2015 and 2018. In 2015, the reduction in total employment can likely be attributed to the closures of the Armstrong Coal facilities (Muhlenberg and Ohio counties, Gourmet Express (Muhlenberg County), and DynCorp International (Christian County). In total, seven WARN Notices totaling approximately 600 jobs in the region are associated with these aforementioned closures/layoffs. Similarly, the closures of Hopkins County Coal and Thoroughfare Mining, both which are located in neighboring Hopkins County, resulted in a loss of 526 jobs in the region during 2018. In 2020, total employment in the PSA further decreased by 8.5%, which reflects a rate of *reduction* above those for the state (5.3%) and nation (6.1%) during that year. This reduction in total employment during 2020 is primarily attributed to the economic impacts related to the COVID-19 pandemic. Following the end of many of the restrictions associated with the pandemic, total employment in the PSA has increased each year since 2021. Despite these increases, total employment in the PSA remains at 94.9% of the 2019 level, representing a recovery rate well below that of the state (97.7%) and nation (101.9%) through April 2024. Overall, total employment in the PSA is at 81.9% of the 2014 level, indicating a significant contraction in the local economy in the last 10 years.



\*Through April

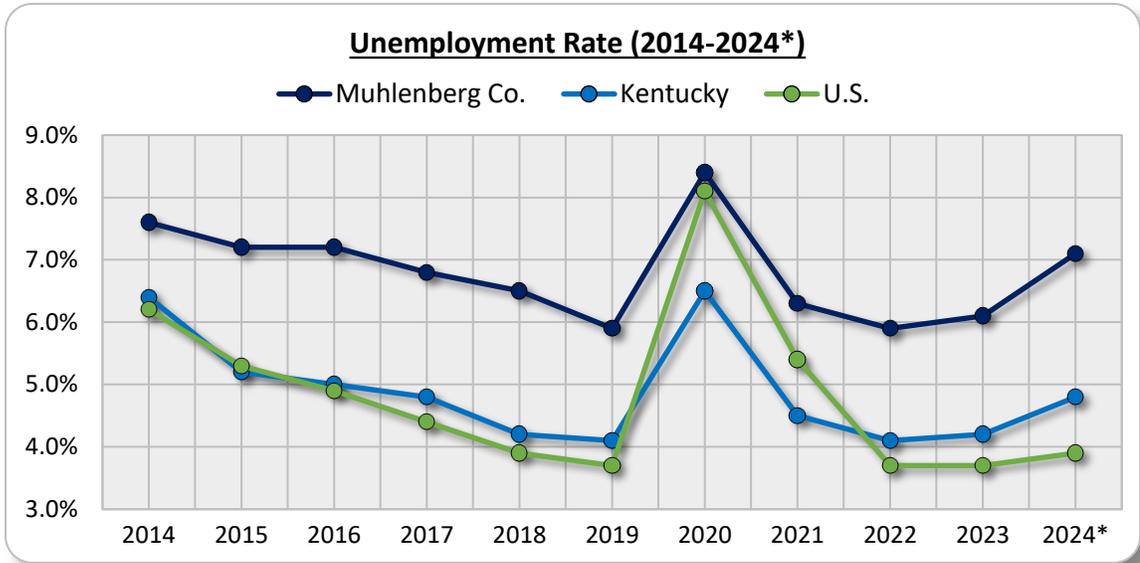
Unemployment rates for Muhlenberg County, the state of Kentucky and the United States are illustrated as follows:

Year	Unemployment Rate		
	Muhlenberg County	Kentucky	United States
2014	7.6%	6.4%	6.2%
2015	7.2%	5.2%	5.3%
2016	7.2%	5.0%	4.9%
2017	6.8%	4.8%	4.4%
2018	6.5%	4.2%	3.9%
2019	5.9%	4.1%	3.7%
2020	8.4%	6.5%	8.1%
2021	6.3%	4.5%	5.4%
2022	5.9%	4.1%	3.7%
2023	6.1%	4.2%	3.7%
2024*	7.1%	4.8%	3.9%

Source: Department of Labor, Bureau of Labor Statistics

\*Through April

Between 2014 and 2019, unemployment rates in the county steadily decreased year over year, from a high of 7.6% in 2014 to a low of 5.9% in 2019. Despite this, it is noteworthy that the unemployment rates in the PSA were higher than both the statewide and national unemployment rates each year from 2014 to 2019. Interestingly, this contrasts with the county’s declining employment base during this time, which is likely attributed to people relocating outside of the county for residency, as opposed to those becoming unemployed. In 2020, unemployment increased to 8.4% in the PSA, largely due to the impacts of the pandemic. Although the unemployment rate within the county declined in both 2021 and 2022, the unemployment rate has notably increased through April 2024 (7.1%). This 2024 unemployment rate is significantly higher than both the state (4.8%) and national (3.9%) unemployment rates and indicates some weakness in the local labor market.



\*Through April

The following table illustrates the monthly unemployment rates from November 2022 to April 2024 for the PSA (Muhlenberg County):

Monthly Unemployment Rate	
Month	Muhlenberg County
November 2022	5.5%
December 2022	5.6%
January 2023	6.5%
February 2023	6.8%
March 2023	6.0%
April 2023	5.3%
May 2023	6.2%
June 2023	6.8%
July 2023	6.5%
August 2023	6.0%
September 2023	5.9%
October 2023	5.8%
November 2023	5.5%
December 2023	5.7%
January 2024	7.0%
February 2024	7.5%
March 2024	7.4%
April 2024	6.5%

Source: Department of Labor, Bureau of Labor Statistics

The preceding illustrates that the monthly unemployment rate in the PSA has fluctuated a number of times between November 2022 and April 2024. The lowest unemployment rate during the time period was in April 2023 (5.3%), while the highest monthly unemployment rate was in February 2024 (7.5%). In fact, three of the four highest monthly unemployment rates have occurred since

January 2024. While some of the high unemployment within the county may be attributed to the shift from mining to manufacturing in the area, which is covered later in this section, high unemployment rates adversely impact housing affordability and can result in population loss in an area.

At-place employment reflects the total number of jobs within the county regardless of the employee's county of residence. The following illustrates the total at-place employment base for Muhlenberg County:

At-Place Employment Muhlenberg County			
Year	Employment	Change	Percent Change
2013	9,430	-	-
2014	9,361	-69	-0.7%
2015	9,014	-347	-3.7%
2016	8,929	-85	-0.9%
2017	8,871	-58	-0.6%
2018	8,069	-802	-9.0%
2019	8,157	88	1.1%
2020	7,473	-684	-8.4%
2021	7,554	81	1.1%
2022	7,772	218	2.9%
2023	8,089	317	4.1%

Source: Department of Labor, Bureau of Labor Statistics

The preceding table illustrates at-place employment (people working within Muhlenberg County) decreased by 13.5%, or 1,273 jobs, from 2013 to 2019. In 2020, which was heavily influenced by the COVID-19 pandemic, at-place employment decreased by 8.4%, or 684 jobs. Since 2020, at-place employment has increased each year through 2023 and is currently at 99.2% of the 2019 level. While this indicates that the local economy has mostly recovered from the pandemic, the data illustrates that at-place employment has declined notably since 2013.

Data for 2023, the most recent year that year-end figures are available, indicates at-place employment in Muhlenberg County to be 87.1% of the total Muhlenberg County employment. This indicates that there are more employed residents of the county than there are jobs located within the county. A significant number of residents seeking employment outside a subject area, particularly those with lengthy commutes, can increase the likelihood of residents relocating outside the county. Detailed commuting data, which includes modes, times, and an inflow/outflow analysis, is included later in this section.

Based on the preceding analysis, the economy in the PSA appears to have experienced a moderate contraction since 2014. Total employment decreased 18.1% between 2014 and 2024, at-place employment decreased 14.2% since 2013, and the annual unemployment rate is 7.1% through April 2024. Like many areas within Kentucky, there has been a recent shift from the mining sector to other various sectors of employment. However, it should be noted that there have been steady improvements in both total employment and at-place employment

since 2020, and the unemployment rate has improved since February 2024. In addition, notable economic and infrastructure investments, which are discussed later in this section, will create additional jobs and improve the overall appeal of Muhlenberg County.

**C. EMPLOYMENT OUTLOOK**

WARN (layoff notices):

The Worker Adjustment and Retraining Notification (WARN) Act requires advance notice of qualified plant closings and mass layoffs. WARN notices were reviewed on April 3, 2024. According to the Kentucky Career Center, there has been one WARN notice reported for Muhlenberg County over the past 12 months.

WARN Notices				
Company	Location	Jobs	Notice Date	Effective Date
Pride Mine	Central City	230	03/01/2024	04/29/2024

It is important to note that, in March 2024, the Muhlenberg Alliance for Progress announced that Pride Mine would reopen as Alliance Coal. This reopening would restore approximately 100 of the jobs lost during the closure of Pride Mine.

The 10 largest employers within Muhlenberg County are summarized in the following table:

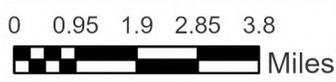
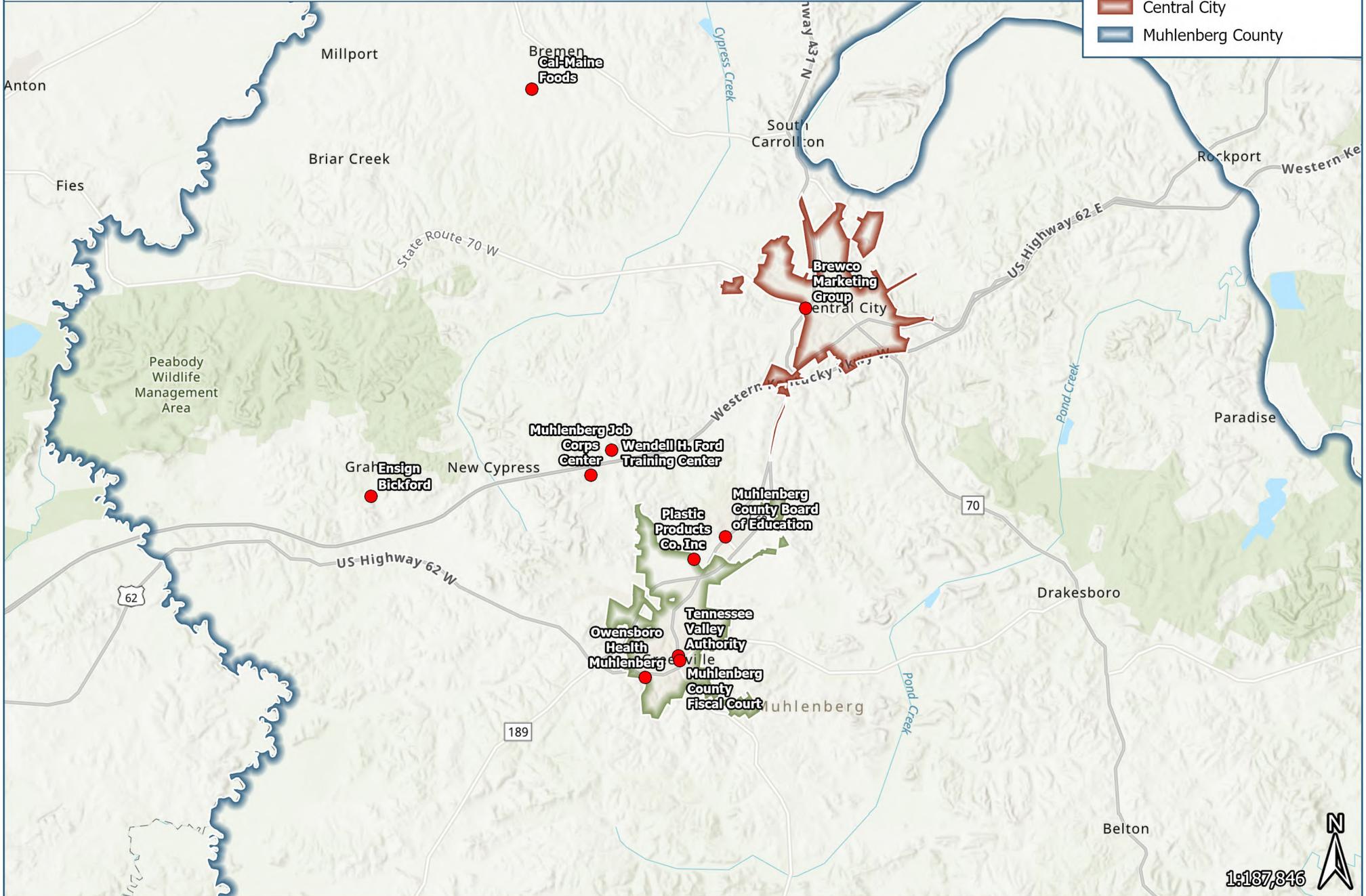
10 Largest Employers – Muhlenberg County		
Employer Name	Business Type	Employees
Muhlenberg County Board of Education	Education	890
Owensboro Health Muhlenberg	Healthcare	500
Wendell H. Ford Training Center	Education	180
Muhlenberg Job Corps Center	Education	139
Muhlenberg County Fiscal Court	Government	165
Tennessee Valley Authority	Energy	125
Cal-Maine Foods	Food Production	147
Brewco Marketing Group	Marketing	85
Ensign Bickford	Manufacturing	86
Plastic Products Co. Inc.	Production	72

Source: Muhlenberg Alliance for Progress

Major employers in the area are primarily engaged in education, healthcare, government, utilities, food production/manufacturing, and business services (marketing). It is noteworthy that several of the largest employers in the area are engaged in business activities that are considered essential services (i.e., education, healthcare, utilities, etc.), which helps to partially insulate the local economy from economic downturns. Additionally, a number of the business types associated with these top employers have occupations that typically offer competitive compensation, which contributes positively to housing affordability.

A map delineating the location of the area’s largest employers is included on the following page.

- Largest Employers Locations
- Greenville
- Central City
- Muhlenberg County



Esri, NASA, NGA, USGS, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS  
Additional Source(s): Bowen National Research



## Economic Development

Economic development can improve the economic well-being and quality of life for a region or community by building local wealth, diversifying the economy, and creating and retaining jobs. Local perspective on the economy as well as notable developments in the area are summarized in this section.

According to a representative from the Muhlenberg Alliance for Progress, the Muhlenberg County economy is growing as it transitions from a mining-centric economy to a manufacturing-centric economy.

The following tables summarize notable recent and/or ongoing economic development and infrastructure projects within the Muhlenberg County area at the time of this analysis:

<b>Economic Development Activity – Muhlenberg County</b>			
<b>Project Name (Location)</b>	<b>Investment</b>	<b>Job Creation</b>	<b>Scope of Work/Details</b>
Double D Group (Greenville)	\$41.5 Million	200+	Company will relocate to an existing 300,000 square-foot building in Greenville, which will be renovated to include two production lines for food/protein manufacturing and allow space for future growth
Central Screen Printing (Central City)	N/A	50+	Expansion of existing facility with \$850,000 in incentives to help offset the costs
Alliance Coal (Waverly)	N/A	~100	Muhlenberg Alliance for Progress announced in March 2024 the reopening of Pride Mine as Alliance Coal
Paradise Regional Industrial Park (Greenville)	N/A	N/A	Plans to acquire two properties as well as improve the overall condition of the business park

N/A – Not Available

<b>Infrastructure Projects – Muhlenberg County</b>	
<b>Project Name (Location)</b>	<b>Scope of Work, Status, Investment</b>
Central City Municipal Water and Sewer System (Central City)	A \$313,119 grant will be used to assist in the rehabilitation of one of the city’s water tanks
Water tank and fire hydrants (Drakesboro)	City given \$313,119 grant to replace fire hydrants and make improvements to water tank
Rainwater Sewer system renovation (Powderly)	City was given \$313,119 grant to help improve sewer system to aid in dealing with rainwater from heavy storms
Pennyrile Rural Electric Cooperation Corp Muhlenberg County (Drakesboro)	Will use a \$2.7 million investment to increase access to high-speed internet in Muhlenberg County
Broadlinc (Muhlenberg County)	Will use \$1 million investment to improve access to high-speed internet for entire county
Muhlenberg County Airport Hangar Expansion Project (Greenville)	Awarded more than \$759,000 for a multiphase airport expansion project which will support Madisonville Community College Fixed Wing Aviation Program (a certification program for commercial pilots and flight instructors)

As the preceding illustrates, four economic development projects with a known valuation of approximately \$42 million have been announced in the county. The four projects are expected to create roughly 350 or more new jobs in the county, representing an increase of 4.3% in at-place employment, and also improve the appeal of the existing Paradise Regional Business Park. In addition, six infrastructure improvement projects were identified within the PSA (Muhlenberg County). Projects include improvements to existing water, sewer, fire suppression, and rainwater management systems, the expansion and improvement of high-speed internet connectivity in the county, and the expansion of the Muhlenberg County Airport. These economic investments and infrastructure improvements will create new jobs within the county, improve the quality of life for local residents, and improve the likelihood of additional businesses choosing to locate within the county.

#### **D. PERSONAL MOBILITY**

The ability of a person or household to travel easily, quickly, safely, and affordably throughout a market influences the desirability of a housing market. If traffic congestion creates long commuting times or public transit service is not available for carless people, their quality of life is diminished. Factors that lower resident satisfaction weaken housing markets. Typically, people travel frequently outside of their residences for three reasons: 1) to commute to work, 2) to run errands or 3) to recreate.

##### Commuting Mode and Time

The following tables show commuting pattern attributes for each study area:

		Commuting Mode						
		Drove Alone	Carpooled	Public Transit	Walked	Other Means	Worked at Home	Total
<b>Greenville</b>	Number	1,946	129	0	0	20	3	2,098
	Percent	92.8%	6.1%	0.0%	0.0%	1.0%	0.1%	100.0%
<b>Central City</b>	Number	1,884	195	0	52	61	14	2,206
	Percent	85.4%	8.8%	0.0%	2.4%	2.8%	0.6%	100.0%
<b>Balance of County</b>	Number	6,631	673	2	64	152	267	7,789
	Percent	85.1%	8.6%	0.0%	0.8%	2.0%	3.4%	100.0%
<b>Muhlenberg County</b>	Number	10,461	997	2	117	234	283	12,094
	Percent	86.5%	8.2%	0.0%	1.0%	1.9%	2.3%	100.0%
<b>Kentucky</b>	Number	1,574,496	181,776	14,607	39,648	24,776	158,544	1,993,847
	Percent	79.0%	9.1%	0.7%	2.0%	1.2%	8.0%	100.0%

Source: U.S. Census Bureau, 2018-2022 ACS

		Commuting Time						
		Less Than 15 Minutes	15 to 29 Minutes	30 to 44 Minutes	45 to 59 Minutes	60 or More Minutes	Worked at Home	Total
<b>Greenville</b>	Number	859	431	549	130	127	3	2,099
	Percent	40.9%	20.5%	26.2%	6.2%	6.1%	0.1%	100.0%
<b>Central City</b>	Number	846	862	117	236	132	14	2,207
	Percent	38.3%	39.1%	5.3%	10.7%	6.0%	0.6%	100.0%
<b>Balance of County</b>	Number	2,152	2,621	1,333	541	876	267	7,790
	Percent	27.6%	33.6%	17.1%	6.9%	11.2%	3.4%	100.0%
<b>Muhlenberg County</b>	Number	3,857	3,913	1,999	907	1,135	283	12,094
	Percent	31.9%	32.4%	16.5%	7.5%	9.4%	2.3%	100.0%
<b>Kentucky</b>	Number	556,205	719,983	330,386	115,606	113,123	158,544	1,993,847
	Percent	27.9%	36.1%	16.6%	5.8%	5.7%	8.0%	100.0%

Source: U.S. Census Bureau, 2018-2022 ACS

Noteworthy observations from the preceding tables follow:

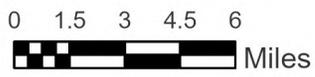
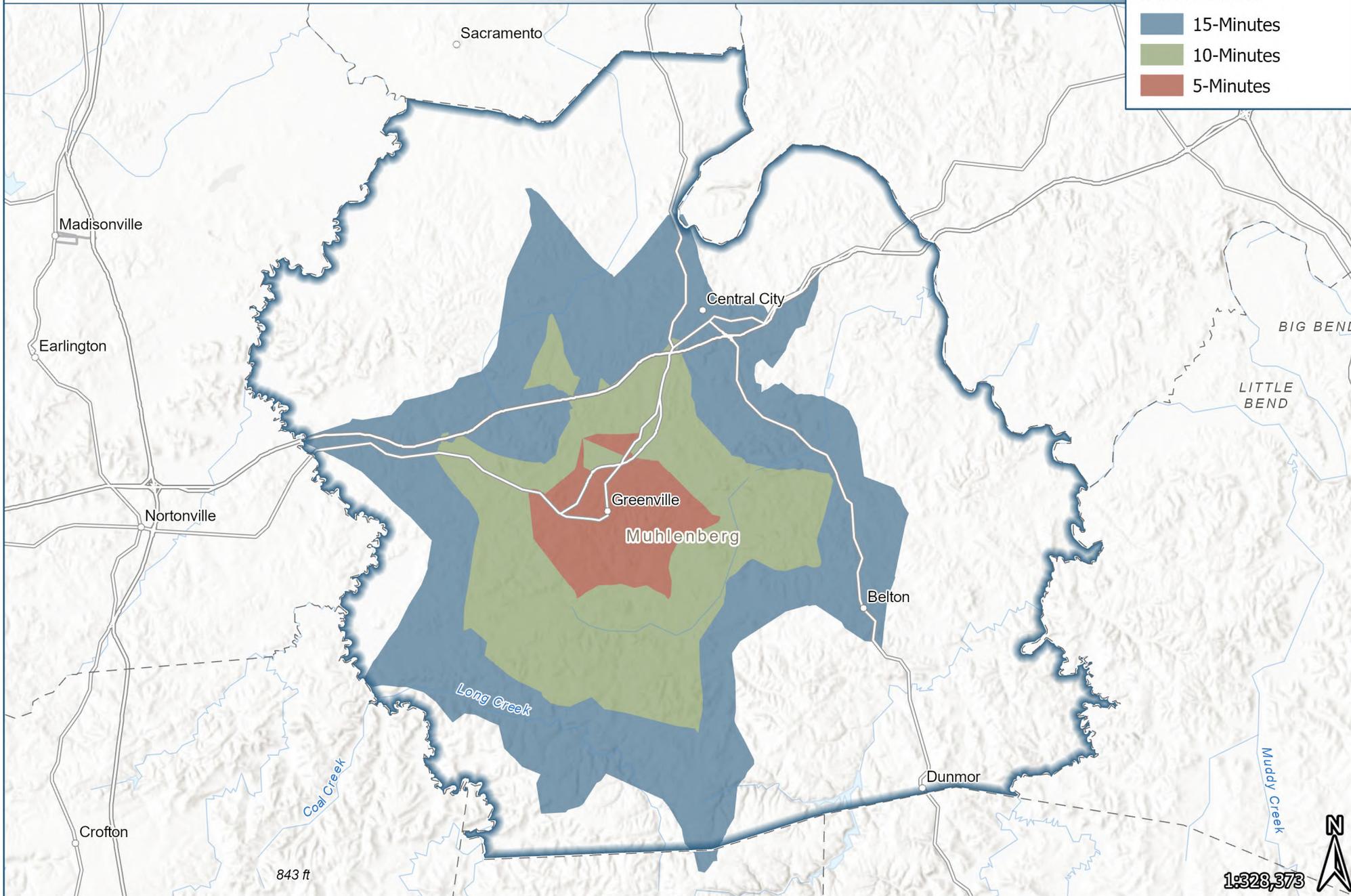
- Within the PSA (Muhlenberg County), 94.7% of commuters either drive alone or carpool to work. This represents a higher share of such commuting modes when compared to the state of Kentucky (88.1%). As such, the shares of PSA commuters that utilize public transit (0.0%), walk to work (1.0%), or work from home (2.3%) are notably less than the corresponding shares for the state. Similarly, the share of commuters that drive alone or carpool to work in the Greenville (98.9%) and Central City (94.2%) submarkets are exceptionally high.
- Nearly one-third (31.9%) of commuters in Muhlenberg County have commute times of less than 15 minutes, representing a larger share of very short commute times compared to the state (27.9%). Overall, 64.3% of PSA workers have commute times less than 30 minutes to work, which is similar to the share statewide (64.0%). Greenville has a smaller share (61.4%) of commuters with commute times less than 30 minutes, while the share (77.4%) in Central City is notably higher. Approximately 6% of commuters in both submarkets have commute times of 60 minutes or more, while the share within the overall PSA (9.4%) is notably higher.

Based on the preceding analysis, a vast majority of PSA and submarket commuters utilize their own vehicles or carpool to work, and a relatively small share of individuals in the PSA work from home. Although a notable share of workers in the PSA have very short commute times (less than 15 minutes), the share of workers with long commute times (60 minutes or more) is slightly higher than the state.

A drive-time map illustrating travel times from the center of Greenville, which is the county seat within Muhlenberg County, is included on the following page.

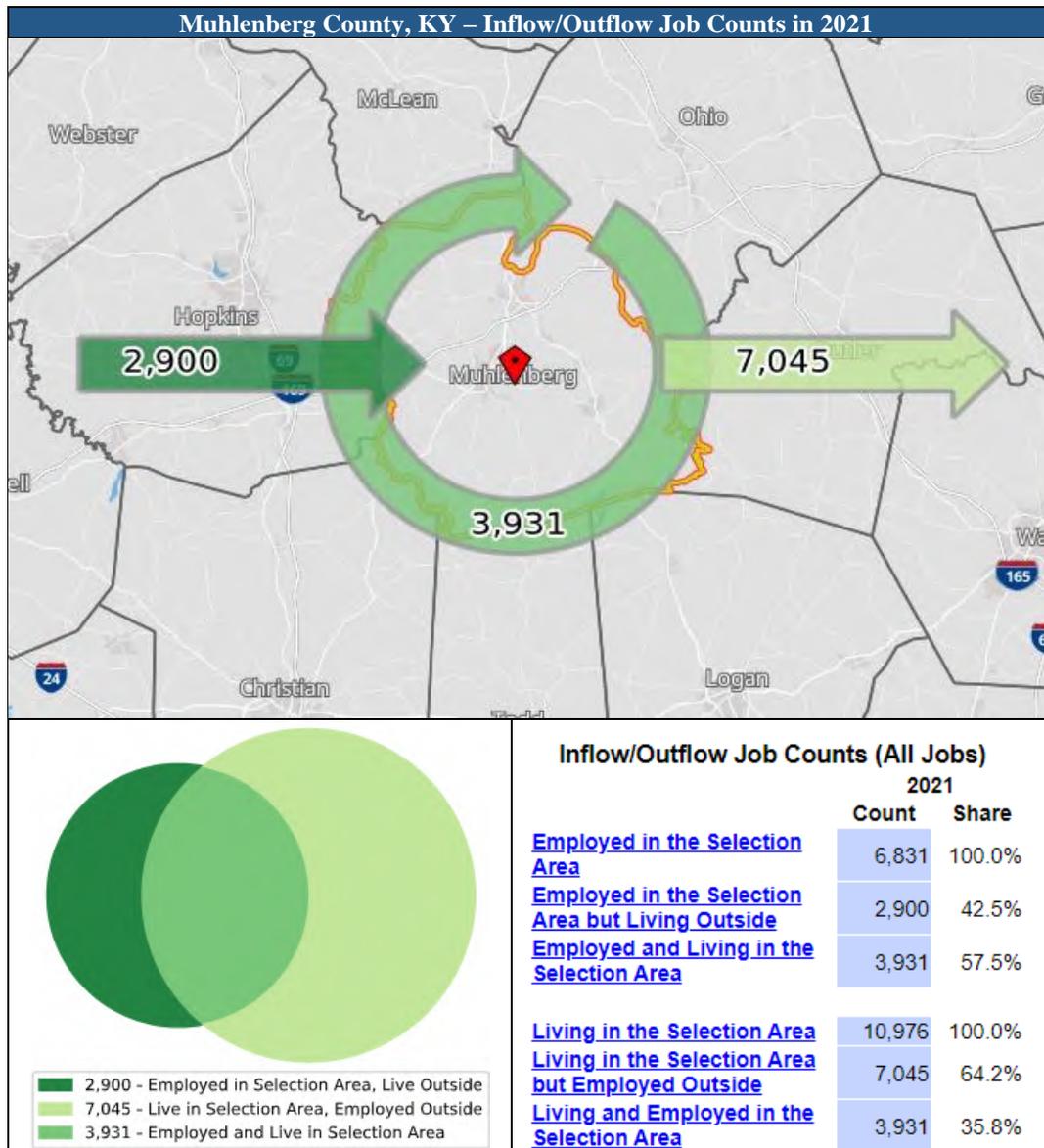
**Drive-Time**

- 15-Minutes
- 10-Minutes
- 5-Minutes



Commuting Inflow/Outflow

According to 2021 U.S. Census Longitudinal Origin-Destination Employment Statistics (LODES), of the 10,976 employed residents of Muhlenberg County, 7,045 (64.2%) are employed outside the county, while the remaining 3,931 (35.8%) are employed within Muhlenberg County. In addition, 2,900 people commute into Muhlenberg County from surrounding areas for employment. These 2,900 non-residents account for 42.5% of the people employed in the county and represent a notable base of potential support for future residential development as some commuters would likely consider relocating to Muhlenberg County to be closer to their place of employment if housing that met their needs was available. The following illustrates the number of jobs filled by in-commuters and residents, as well as the number of resident out-commuters.



Source: U.S. Census, Longitudinal Origin-Destination Employment Statistics (LODES)

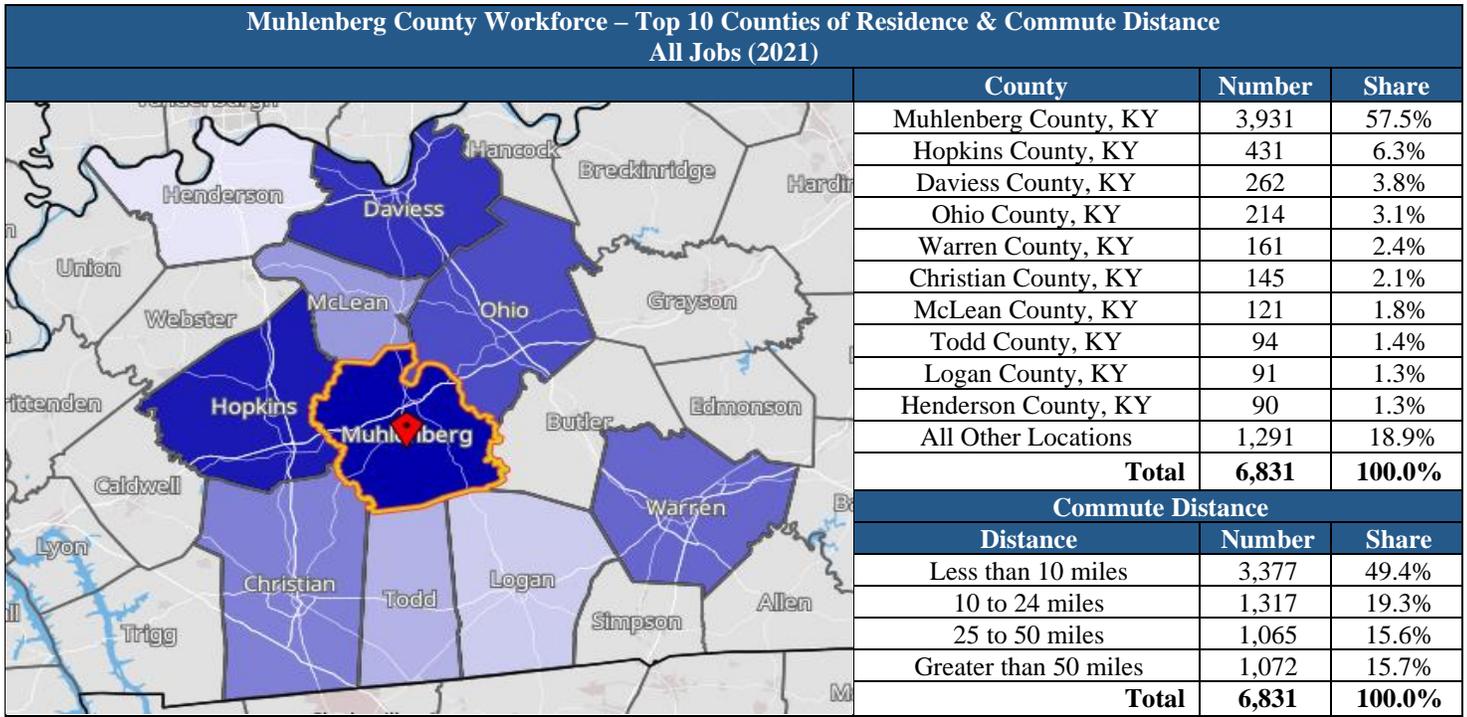
Characteristics of the Muhlenberg County commuting flow in 2021 are illustrated in the following table:

Muhlenberg County, KY: Commuting Flow Analysis by Earnings, Age and Industry Group (2021, All Jobs)						
Worker Characteristics	Resident Outflow		Workers Inflow		Resident Workers	
	Number	Share	Number	Share	Number	Share
Ages 29 or younger	1,914	27.2%	731	25.2%	868	22.1%
Ages 30 to 54	3,764	53.4%	1,475	50.9%	2,099	53.4%
Ages 55 or older	1,367	19.4%	694	23.9%	964	24.5%
<i>Earning &lt;\$1,250 per month</i>	1,386	19.7%	670	23.1%	991	25.2%
<i>Earning \$1,251 to \$3,333</i>	2,426	34.4%	1,030	35.5%	1,629	41.4%
<i>Earning \$3,333+ per month</i>	3,233	45.9%	1,200	41.4%	1,311	33.4%
Goods Producing Industries	1,813	25.7%	657	22.7%	873	22.2%
Trade, Transportation, Utilities	1,796	25.5%	863	29.8%	599	15.2%
All Other Services Industries	3,436	48.8%	1,380	47.6%	2,459	62.6%
<b>Total Worker Flow</b>	<b>7,045</b>	<b>100.0%</b>	<b>2,900</b>	<b>100.0%</b>	<b>3,931</b>	<b>100.0%</b>

Source: U.S. Census, Longitudinal Origin-Destination Employment Statistics (LODES)  
 Note: Figures do not include contract employees and self-employed workers

Specifically, of the county’s 2,900 in-commuters (Workers Inflow), over one-half (50.9%) are between the ages of 30 and 54 years, 25.2% are less than 30 years of age, and 23.9% are age 55 or older. Approximately 41.4% earn \$3,333 or more monthly (\$40,000 or more annually), 35.5% earn between \$1,251 and \$3,333 (between \$15,000 and \$40,000 annually), and 23.1% earn less than \$1,250 monthly (less than \$15,000 annually). Resident outflow workers, by comparison, tend to be slightly younger and earn higher wages than inflow workers. Regardless, given the diversity of incomes, ages, and occupation types of the approximately 2,900 people commuting into the area for work each day, a variety of housing product types could be developed to potentially attract these commuters to live in Muhlenberg County. A detailed analysis of the area housing market, which includes availability, costs, and product mixture is included in Section VI of this report. It is important to understand that the overall health of the local housing market can influence the probability of in-commuters relocating to the area.

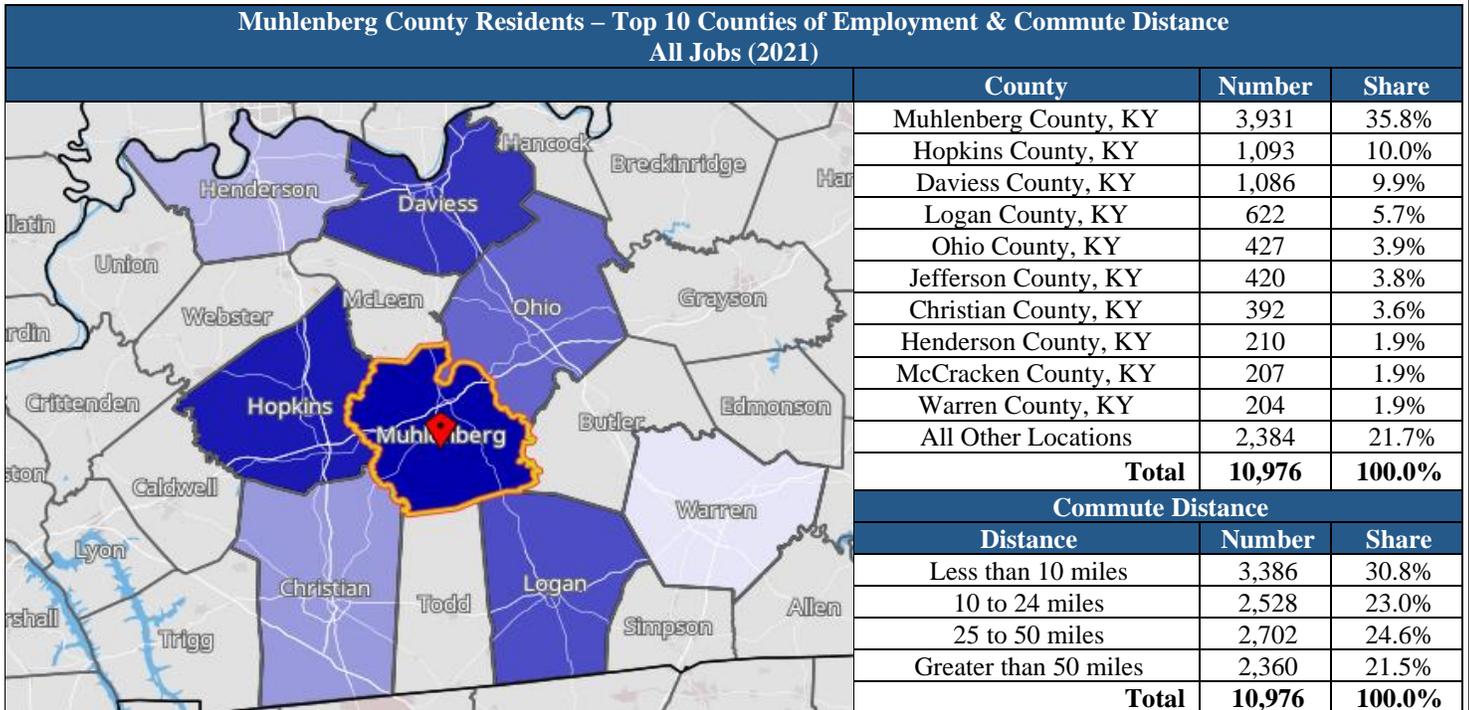
The following map and corresponding tables illustrate the physical *home* location (county) of people *working in* Muhlenberg County, as well as the distribution of commute distances for the Muhlenberg County workforce.



Source: U.S. Census, Longitudinal Origin-Destination Employment Statistics (LODES)

Statistics provided by LODES indicate that 57.5% of the Muhlenberg County workforce are residents of the county. The counties of Hopkins (6.3%), Daviess (3.8%), and Ohio (3.1%) contribute the next largest shares of people that work in Muhlenberg County. In total, approximately 74.4% of the Muhlenberg County workforce originates from either within the county or from an adjacent county (includes 0.9% for Butler County), and 18.9% of the labor force originates from outside of the top 10 counties listed. As such, the Muhlenberg County workforce is mostly regional based with 68.7% of individuals commuting less than 25 miles. Inflow workers with commute distances of more than 50 miles comprise 15.7% of the total Muhlenberg County workforce. These 1,072 inflow workers with lengthy commutes, as well as those with shorter commutes from outside the county, represent a base of potential support for future residential development in Muhlenberg County.

The following map and corresponding tables illustrate the physical *work* location (county) of Muhlenberg County residents, as well as the commute distances for these individuals.



Source: U.S. Census, Longitudinal Origin-Destination Employment Statistics (LODES)

Of the 10,976 employed residents of Muhlenberg County, 35.8% are employed within Muhlenberg County. The counties of Hopkins (10.0%), Daviess (9.9%), and Logan (5.7%) employ the next largest shares of Muhlenberg County residents. While 62.3% of Muhlenberg County residents are either employed within the county or in an adjacent county (includes combined shares of 3.3% for McLean, Butler, and Todd counties), it is noteworthy that 21.5% of PSA residents have commutes of 50 miles or more. Although a number of factors contribute to where an individual chooses to reside, lengthy commute times can increase the likelihood of relocation if improved housing options are present closer to an individual’s place of employment.

## **E. CONCLUSIONS**

The economy in the PSA (Muhlenberg County) has experienced a number of challenges in recent years, including the COVID-19 pandemic in 2020, multiple tornados that occurred in December 2021, and the ongoing transition from a historically mining-based economy. While each of these factors have impeded recent growth in the local economy to some degree, they have also created an opportunity to diversify employment within the county. Because the diversification of employment among various sectors can help insulate an economy from largescale downturns, this represents a significant opportunity to improve the long-term position of the economy within Muhlenberg County. Although the economy is currently heavily influenced by the retail trade, healthcare, and the public administration sectors, which collectively account for 42.6% of the total employment, a local representative from the Muhlenberg Alliance for Progress indicated that there is increased interest in the manufacturing sector within the county. Additionally, Muhlenberg County ranks in the top 10 counties in Kentucky for poultry and hog/pig production. As a result, the county has a relatively high share of migrant farmworkers (17.4%) among its total hired farm workforce compared to that of the state (12.6%). Overall, wages within the PSA are lower than wages at the state level, and housing affordability, particularly home ownership, is an issue for a significant share of individuals working within the most common occupations in the area. Total employment in the PSA as of April 2024 has recovered to only 94.9% of the 2019 level, likely indicating the area was disproportionately affected by the COVID-19 pandemic, and this was compounded by multiple tornados that occurred in late 2021. While the yearly unemployment rate through April 2024 was 7.1%, it is noteworthy that at-place employment (total jobs in the county regardless of the employee's county of residence) through the end of 2023 is at 99.2% of the 2019 level. As such, job creation within Muhlenberg County has been positive since 2020, and approximately 350 new jobs are expected to be created based on recent economic development announcements alone. These economic investments, along with the announced infrastructure improvements, will advance the competitive position of the PSA and increase the likelihood that some of the 2,900 non-residents commuting into the county daily for employment might relocate to Muhlenberg County. However, it is critical that an adequate supply of income-appropriate housing is available to potentially capture new residents and retain existing residents.

## VI. HOUSING SUPPLY ANALYSIS

This housing supply analysis considers both rental and for-sale housing. Understanding the historical trends, market performance, characteristics, composition, and current housing choices provide critical information as to current market conditions and future housing potential. The housing data presented and analyzed in this section includes primary data collected directly by Bowen National Research and secondary data sources including American Community Survey (ACS), U.S. Census housing information, and data provided by various government entities and real estate professionals.

While there are a variety of housing options offered in the PSA (Muhlenberg County) and each submarket, we focused our analysis on the most common housing alternatives. The housing structures included in this analysis are:

- **Rental Housing** – Rental properties consisting of multifamily apartments (generally with five or more units within a structure) were identified and surveyed. An analysis of non-conventional rentals (typically with four or less units within a structure) was also conducted.
- **For-Sale Housing** – For-sale housing alternatives, both recent sales activity and currently available supply, were inventoried. This data includes single-family homes, condominiums, mobile homes, and other traditional housing alternatives. It includes stand-alone product as well as homes within planned developments or projects.

For the purposes of this analysis, the housing supply information is presented for the two select submarkets (Greenville and Central City), the Balance of County, the PSA (Muhlenberg County), and the state of Kentucky, when available.

Maps illustrating the location of various housing types are included throughout this section.

**A. OVERALL HOUSING SUPPLY (SECONDARY DATA)**

This section of analysis on the area housing supply is based on secondary data sources such as the U.S. Census, American Community Survey, and ESRI and is provided for each submarket, the Balance of County, the PSA (Muhlenberg County), and the state of Kentucky, when applicable. Note that some small variation of total numbers and percentages within tables may exist due to rounding.

Housing Characteristics

The estimated distribution of the area housing stock by tenure (renter and owner) within the study areas for 2024 is summarized in the following table:

		Occupied and Vacant Housing Units by Tenure 2024 Estimates				
		Total Occupied	Owner Occupied	Renter Occupied	Vacant	Total
<b>Greenville</b>	Number	1,847	1,253	594	242	2,089
	Percent	88.4%	67.8%	32.2%	11.6%	100.0%
<b>Central City</b>	Number	2,056	1,295	761	229	2,285
	Percent	90.0%	63.0%	37.0%	10.0%	100.0%
<b>Balance of County</b>	Number	7,917	6,624	1,293	1,140	9,057
	Percent	87.4%	83.7%	16.3%	12.6%	100.0%
<b>Muhlenberg County</b>	Number	11,820	9,172	2,648	1,611	13,431
	Percent	88.0%	77.6%	22.4%	12.0%	100.0%
<b>Kentucky</b>	Number	1,824,471	1,248,032	576,439	209,558	2,034,029
	Percent	89.7%	68.4%	31.6%	10.3%	100.0%

Source: 2020 Census; ESRI; Urban Decision Group; Bowen National Research

In total, there are an estimated 13,431 housing units within the PSA (Muhlenberg County) in 2024. Based on estimates, of the 11,820 total occupied housing units in the PSA, 77.6% are owner occupied and 22.4% are renter occupied. This distribution of product by tenure within the PSA is more heavily weighted toward owner-occupied housing than the state of Kentucky, which has a 68.4% share of owner-occupied housing units. Overall, 12.0% of the total housing units within the PSA are classified as vacant, which is a larger share as compared to the statewide share (10.3%). Vacant units are comprised of a variety of units including abandoned properties, rentals, for-sale, and seasonal housing units.

The Greenville Submarket comprises 15.6% of the total occupied housing units in the PSA, while the Central City Submarket accounts for 17.4% of all occupied units in the PSA. Both submarkets have lower shares (67.8% and 63.0%) of owner-occupied units than the PSA share, while the Balance of County has an exceptionally high share (83.7%) of owner-occupied units. The shares of vacant units in Greenville (11.6%) and Central City (10.0%) are lower than the overall PSA share, and Central City is the only study area with a slightly lower share of vacant units than the estimated share for the state of Kentucky (10.3%).

The following table compares key housing age and conditions for each of the study areas and the state based on 2018-2022 American Community Survey (ACS) data. Housing units built over 50 years ago (pre-1970), overcrowded housing (1.01+ persons per room), or housing that lacks complete kitchens or bathroom plumbing are illustrated for each area by tenure (renter or owner). It is important to note that some occupied housing units may have more than one housing issue.

	Housing Age and Conditions											
	Pre-1970 Product				Overcrowded				Incomplete Plumbing or Kitchen			
	Renter		Owner		Renter		Owner		Renter		Owner	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Greenville</b>	148	33.2%	916	58.7%	0	0.0%	1	0.1%	1	0.2%	N/A	N/A
<b>Central City</b>	174	33.6%	491	34.2%	7	1.4%	0	0.0%	0	0.0%	0	0.0%
<b>Balance of County</b>	346	30.9%	2,030	30.0%	5	0.4%	66	1.0%	28	2.5%	81	1.2%
<b>Muhlenberg County</b>	667	32.0%	3,436	35.2%	12	0.6%	67	0.7%	29	1.4%	357	3.7%
<b>Kentucky</b>	186,372	33.0%	377,864	31.4%	21,511	3.8%	13,091	1.1%	11,901	2.1%	9,330	0.8%

Source: American Community Survey (2018-2022); ESRI; Urban Decision Group; Bowen National Research

N/A – Due to inconsistencies for incomplete plumbing or kitchen data in Greenville, this metric has been excluded

Within the PSA (Muhlenberg County), 32.0% of renter-occupied housing units and 35.2% of owner-occupied housing units were built prior to 1970. While the share of renter-occupied units built during this time period in the PSA is less than the state share (33.0%), although not illustrated within the preceding table, the share of renter-occupied units in the PSA built prior to 1980 (60.3%) is notably higher than the corresponding share of the state (50.8%). Additionally, the share of owner-occupied units in the PSA built prior to 1970 is notably higher than the corresponding state share (31.4%). The shares of overcrowded renter households (0.6%) and overcrowded owner households (0.7%) in the PSA are notably less than the respective shares for the state (3.8% and 1.1%). Although the share of renter households with incomplete plumbing or kitchens (1.4%) is less than the state share (2.1%), there is a significantly higher share of owner households (3.7%) with this condition issue in the PSA. Noteworthy findings related to age and conditions within the submarkets and Balance of County include:

- Greenville has a comparably high share (58.7%) of owner-occupied housing units built prior to 1970.
- The share of renter-occupied housing units with incomplete plumbing or kitchens in the Balance of County (2.5%) is slightly elevated.

Overall, the most significant age issue in Muhlenberg County appears to be among owner-occupied units in Greenville, whereas the most significant condition issues appear to generally exist within the Balance of County. In total, there are approximately 465 households within the PSA that live in substandard housing conditions (overcrowded or lacking complete kitchens or indoor plumbing), of which 424 are owner households and the remaining 41 are renter households.

The following table compares key household income, housing cost, and housing affordability metrics of the PSA (Muhlenberg County) and the state. Cost burdened households are defined as those paying over 30% of their income toward housing costs, while severe cost burdened households pay over 50% of their income toward housing.

	Household Income, Housing Costs and Affordability							
	2024 Households	Median Household Income	Estimated Median Home Value	Average Gross Rent	Share of Cost Burdened Households*		Share of Severe Cost Burdened Households**	
					Renter	Owner	Renter	Owner
<b>Greenville</b>	1,847	\$67,328	\$145,652	\$641	54.3%	6.4%	22.9%	3.0%
<b>Central City</b>	2,056	\$51,212	\$122,922	\$658	25.4%	27.4%	3.9%	14.7%
<b>Balance of County</b>	7,917	\$49,552	\$121,622	\$705	35.9%	16.5%	21.6%	6.9%
<b>Muhlenberg County</b>	11,820	\$52,618	\$125,247	\$676	37.3%	16.5%	17.5%	7.4%
<b>Kentucky</b>	1,824,471	\$62,002	\$191,091	\$958	39.4%	17.3%	19.6%	7.0%

Source: American Community Survey (2018-2022); ESRI; Urban Decision Group; Bowen National Research

\*Paying more than 30% of income toward housing costs

\*\*Paying more than 50% of income toward housing costs

The PSA’s (Muhlenberg County) median home value of \$125,247 is 34.5% lower than the state’s estimated median home value of \$191,091. The average gross rent of \$676 in the PSA is approximately 29.4% lower than the state’s average gross rent of \$958. The median household income for the PSA (\$52,618) is approximately 15.0% lower than that for the state. Overall, these factors result in lower shares of cost burdened renter households (37.3%) and owner households (16.5%) in the PSA compared to the shares within the state (39.4% and 17.3%, respectively), although the share of *severe* cost burdened owner households in the PSA (7.4%) is slightly higher than the state share (7.0%). While the estimated median household income in the Central City Submarket (\$51,212) is slightly lower than the overall PSA, the median household income in the Greenville Submarket (\$67,328) is significantly higher. Similarly, the estimated median home value in Greenville (\$145,652) is significantly higher than that within Central City (\$122,922), the Balance of County (\$121,622) and the PSA (\$125,247). Interestingly, the average gross rent in Greenville (\$641) is the lowest of the study areas, while the average gross rent in the Balance of County (\$705) is the highest. Regardless, rents within the entirety of Muhlenberg County are significantly lower than rents in the state overall. Over one-half (54.3%) of *renter* households in Greenville are cost burdened, while over one-quarter (27.4%) of *owner* households in Central City are cost burdened, both representing the highest shares among any study area for each tenure category. Given these high shares, it is not surprising that both areas have comparably high shares of severe cost burdened households within the same tenure groups.

The following table provides the estimated *number* of cost burdened and severe cost burdened households for each study area.

	Housing Cost Burden by Tenure					
	2024 Total Households		Number of Cost Burdened Households*		Number of Severe Cost Burdened Households**	
	Renter	Owner	Renter	Owner	Renter	Owner
<b>Greenville</b>	594	1,253	323	80	136	38
<b>Central City</b>	761	1,295	193	355	30	190
<b>Balance of County</b>	1,293	6,624	464	1,093	279	457
<b>Muhlenberg County</b>	2,648	9,172	988	1,513	463	679
<b>Kentucky</b>	576,439	1,248,032	227,117	215,910	112,982	87,362

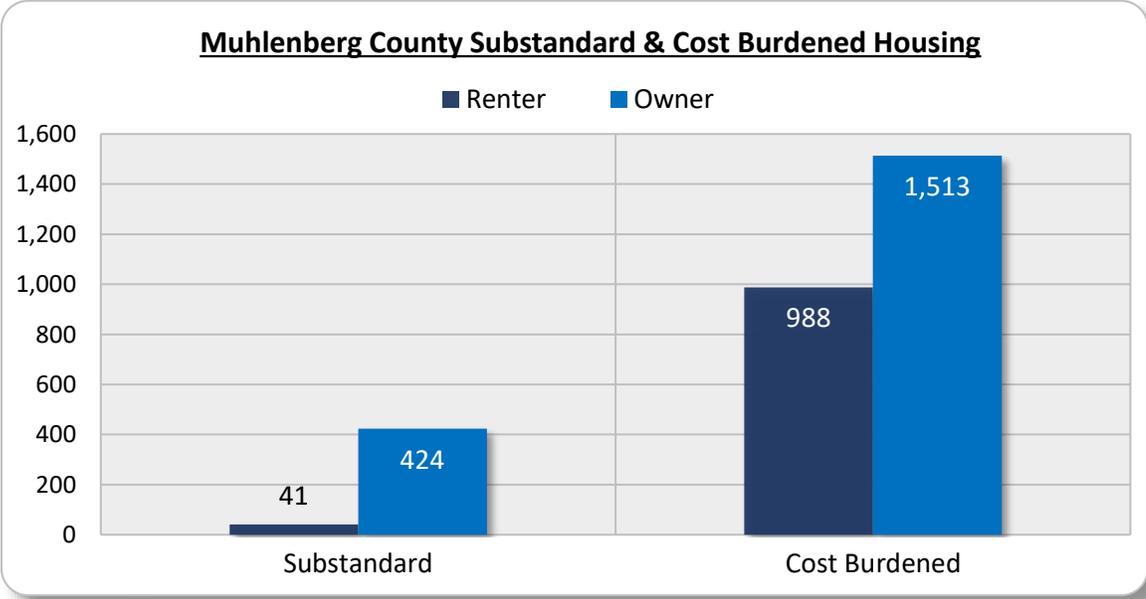
Source: American Community Survey (2018-2022); ESRI; Urban Decision Group; Bowen National Research

\*Paying more than 30% of income toward housing costs

\*\*Paying more than 50% of income toward housing costs

Overall, there are approximately 988 renter households and 1,513 owner households in the PSA that are housing cost burdened, of which 463 renter households and 679 owner households are *severe* cost burdened.

The following graph illustrates substandard housing and cost burdened households:



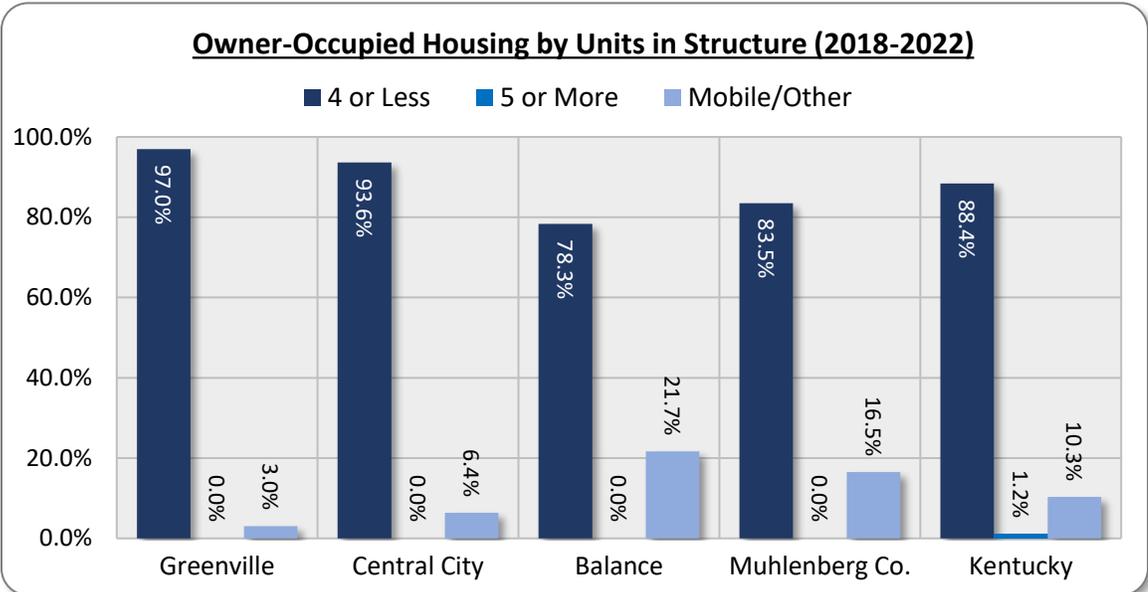
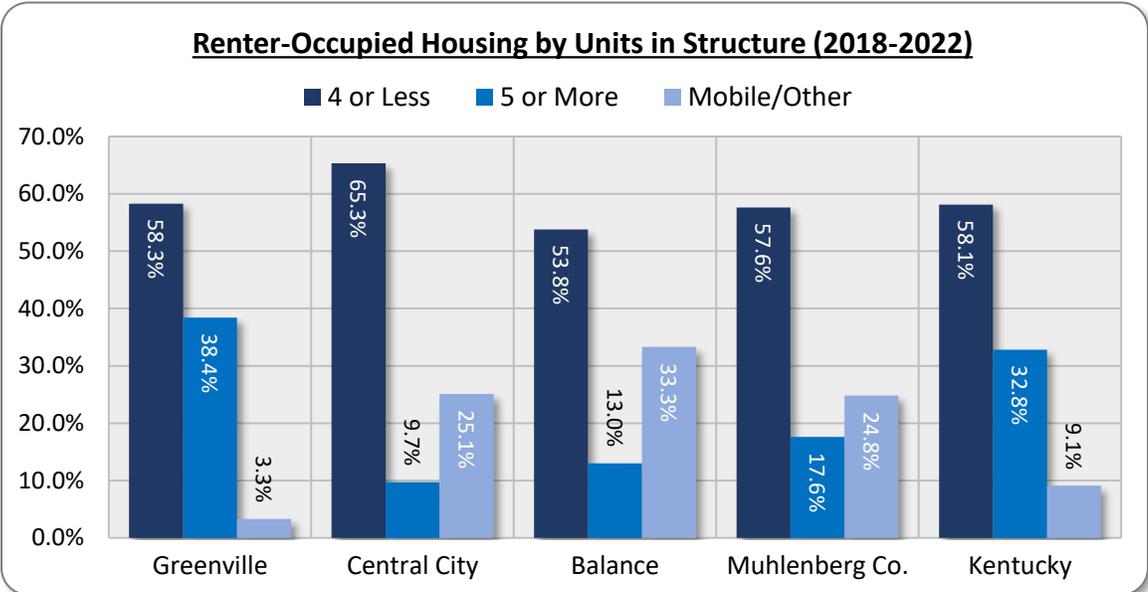
Based on the 2018-2022 American Community Survey (ACS) data, the following is a distribution of all occupied housing by units in structure by tenure (renter or owner) for the various study areas.

		Renter-Occupied Housing by Units in Structure				Owner-Occupied Housing by Units in Structure			
		4 Units or Less	5 Units or More	Mobile Home/ Other	Total	4 Units or Less	5 Units or More	Mobile Home/ Other	Total
<b>Greenville</b>	Number	261	172	15	448	1,512	0	46	1,558
	Percent	58.3%	38.4%	3.3%	100.0%	97.0%	0.0%	3.0%	100.0%
<b>Central City</b>	Number	338	50	130	518	1,342	0	91	1,433
	Percent	65.3%	9.7%	25.1%	100.0%	93.6%	0.0%	6.4%	100.0%
<b>Balance of County</b>	Number	601	145	372	1,118	5,300	0	1,471	6,771
	Percent	53.8%	13.0%	33.3%	100.0%	78.3%	0.0%	21.7%	100.0%
<b>Muhlenberg County</b>	Number	1,200	367	517	2,084	8,154	0	1,609	9,763
	Percent	57.6%	17.6%	24.8%	100.0%	83.5%	0.0%	16.5%	100.0%
<b>Kentucky</b>	Number	327,671	185,265	51,099	564,035	1,065,821	14,873	124,373	1,205,067
	Percent	58.1%	32.8%	9.1%	100.0%	88.4%	1.2%	10.3%	100.0%

Source: American Community Survey (2018-2022); ESRI; Urban Decision Group; Bowen National Research

Over one-half (57.6%) of the *rental* units in the PSA (Muhlenberg County) are within structures of four units or less, with mobile homes comprising an additional 24.8% of the PSA rental units. The combined share of these two structure types (82.4%) is a notably larger share compared to that of the state (67.2%). Only 17.6% of rental units in the PSA are within structures containing five or more units, which are considered to be conventional multifamily apartment properties. Despite this low share of multifamily apartments in the PSA, it is noteworthy that the Greenville Submarket accounts for nearly one-half (46.9%) of all multifamily units in the PSA, and the share (38.4%) of such units within Greenville exceeds the statewide share (32.8%). The shares of renter-occupied mobile homes in the Central City Submarket (25.1%) and Balance of County (33.3%) are substantially higher than the statewide share (9.1%). Among *owner* units in the PSA, a vast majority (83.5%) of the housing units are within structures of four units or less, with mobile homes comprising 16.5% of owner-occupied housing units in the PSA. This high share of mobile homes in the PSA is primarily driven by the significant share (21.7%) of such units within the Balance of County.

The following graphs illustrate the number of housing units in structure by tenure (renter/owner):



## **B. RENTAL HOUSING SUPPLY ANALYSIS (BOWEN NATIONAL SURVEY)**

### **1. Introduction**

Bowen National Research conducted research and analysis of various rental housing alternatives within the PSA (Muhlenberg County). This analysis includes multifamily rental housing and non-conventional rentals.

### **2. Multifamily Rental Housing**

During March and April of 2024, Bowen National Research surveyed (both by telephone and in-person) a total of six multifamily rental housing projects within the PSA (Muhlenberg County). While this survey does not include all properties in the market, it does include a majority of the larger properties. The overall survey is considered representative of the performance, conditions and trends of multifamily rental housing in the market. Projects identified, inventoried, and surveyed operate under a number of affordable housing programs including the Low-Income Housing Tax Credit (LIHTC) program and various HUD programs. Definitions of each housing program are included in *Addendum E: Glossary*.

Property managers and leasing agents for each project were surveyed to collect a variety of property information including vacancies, rental rates, unit mixes, year built and other features. Most properties were personally visited by staff of Bowen National Research and were also rated based on general exterior quality and upkeep, and each property was mapped as part of this survey.

The distribution of the surveyed multifamily rental housing supply by program type is illustrated in the following table.

<b>Surveyed Multifamily Rental Housing PSA (Muhlenberg County)</b>				
<b>Project Type</b>	<b>Projects Surveyed</b>	<b>Total Units</b>	<b>Vacant Units</b>	<b>Occupancy Rate</b>
Tax Credit	2	63	0	100.0%
Government-Subsidized	4	188	0	100.0%
Total	6	251	0	100.0%

Source: Bowen National Research

Typically, in healthy and well-balanced markets, multifamily rentals operate at an overall 94% to 96% occupancy rate. As the preceding table illustrates, all rental properties surveyed in the PSA (Muhlenberg County) are affordable housing communities that are 100.0% occupied. Notably, every property surveyed maintains a waiting list for the next available unit.

The following table shows relevant details for each surveyed property by submarket (Central City and Greenville).

Map I.D.	Project Name	Year Built/ Renovated	Total Units	Occ. Rate	Waiting List	Target Market
<b>Central City Submarket</b>						
1	Greenville Park & Arms Apts.	1980	72	100.0%	Yes**	Seniors 62+; Section 8
2	Hillwood Village	1981 / 2024	44 + 4*	100.0%	2 HH	Families; RD 515
<b>Greenville Submarket</b>						
3	Muhlenberg Manor	1987 / 2024	23 + 1*	100.0%	Yes**	Families; RD 515
4	Public Housing of Greenville	1967 / 2023	49	100.0%	Yes**	Families; Public Housing
5	Sandy Hill Apts.	2004	29	100.0%	20 HH	Seniors 55+; 50% & 60% AMHI
6	Tammy Terrace	2006	34	100.0%	37 HH	Families; 50% & 60% AMHI

Source: Bowen National Research  
 OCC. – Occupancy; HH – Households  
 \*Unit(s) under renovation  
 \*\*Time length unknown

As the preceding illustrates, of the six projects surveyed in the PSA, two are within the Central City Submarket, and four are within the Greenville Submarket. The two Tax Credit properties, which are located in the Greenville Submarket, were built in 2004 and 2006. While the year built for the government-subsidized projects ranges from 1967 to 1987, three of the four projects have been renovated since 2023. As noted, no vacancies were identified among the surveyed rental properties, resulting in 100.0% occupancy rates in both the Central City and Greenville submarkets. Among the six total projects, two projects are age-restricted, and both properties are fully occupied with wait lists totaling at least 20 households. Overall, this data is indicative of a market with strong demand for affordable multifamily rentals.

The collected rents for the surveyed Tax Credit projects, as well as their unit mixes and vacancies by bedroom are listed in the following table:

<b>Tax Credit Rental Housing</b>			
Map I.D.	Project Name	Collected Rent/Percent of AMHI (Number of Units/Vacancies)	
		Two-Br.	Three-Br.
5	Sandy Hill Apts.	\$653/50% (18/0) \$675/60% (11/0)	-
6	Tammy Terrace	\$629/50% (12/0) \$705/60% (12/0)	\$694/50% (5/0) \$730/60% (5/0)

Source: Bowen National Research

Of the 63 total Tax Credit units surveyed in the PSA (Muhlenberg County), all are located in the Greenville Submarket. Among these, 35 units are restricted to households with incomes up to 50% of Area Median Household Income (AMHI), and 28 units are restricted to incomes of up to 60% AMHI. Two-bedroom units comprise 84.1% of the Tax Credit supply. Among this unit configuration, collected rents range from \$629 to \$705. While notably less in number, three-bedroom units account for the remaining 15.9% of the total Tax Credit supply. These units have collected rents that range from \$694 to \$730.

The unit sizes (square footage) and number of bathrooms included for the Tax Credit units surveyed in the PSA (Muhlenberg County) are shown in the following table:

Map I.D.	Project Name	Square Footage		Number of Baths	
		Two-Br.	Three-Br.	Two-Br.	Three-Br.
5	Sandy Hill Apts.	948	-	1.0	-
6	Tammy Terrace	949	1,166	1.0	2.0

Source: Bowen National Research

The surveyed two-bedroom Tax Credit units in the PSA offer approximately 950 square feet in size and are all a one-bathroom configuration. Three-bedroom Tax Credit units in the market are 1,166 square feet in size and offer two full bathrooms.

We also evaluated the potential number of existing subsidized affordable housing units that are at risk of losing their affordable status. A total of two properties in the county operate as subsidized projects under a current HUD contract. Because these contracts have a designated renewal date, it is important to understand if these projects are at risk of an expiring contract in the near future that could result in the reduction of affordable rental housing stock.

Expiring HUD Contracts Muhlenberg County, Kentucky					
Property Name	Total Units	Assisted Units	Expiration Date	Program Type	Target Population
Glenbrook Park Apartments*	97	97	6/25/2031	Sec. 8	Family
Greenville Park	73	73	1/23/2032	Sec. 8	Senior

Source: HUDUser.gov Assistance & Section 8 Contracts Database (Updated 4.2.24); Bowen National Research

\*Unable to survey property at the time this report was issued

All HUD supported projects are subject to annual appropriations by the federal government and it appears that none of the projects in Muhlenberg County have an overall renewal date within the next five years. However, it is important that these properties continue to renew their HUD contracts as expiration dates approach to prevent the *potential* risk of losing their government assistance in the future. Given the high occupancy rates and wait lists among the market's surveyed subsidized properties, it will be important for the area's low-income residents that the projects with pending expiring HUD contracts be preserved in order to continue to house some of the market's most economically vulnerable residents.

The Kentucky Housing Corporation oversees the Housing Choice Vouchers in Muhlenberg County. At the time of this analysis, we were unable to obtain data on vouchers issued in Muhlenberg County.

In addition to the Tax Credit program, affordable rental projects can be developed under federal programs that use Fair Market Rents or the HOME Program rents. The following table illustrates the 2024 Fair Market Rents and Low HOME and High HOME rents for Muhlenberg County, Kentucky.

Studio	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
<b>Fair Market Rents (2024)</b>				
\$616	\$647	\$850	\$1,068	\$1,188
<b>Low/High HOME Rent (2024)</b>				
\$616/\$616	\$647/\$647	\$810/\$850	\$936/\$1,068	\$1,045/\$1,188

Source: HUD Office of Policy Development and Research ([huduser.gov](http://huduser.gov))

The preceding rents, which are updated annually, can be used by developers as a guide for the possible rent structures incorporated at their projects within Muhlenberg County. It is also of note that properties with rents set near or below area Fair Market Rent levels often attract voucher holders. Thus, a property with rents similar to Fair Market Rents and/or HOME rent limits could help alleviate some of the pent-up demand for affordable product capable of accommodating voucher holders in the Muhlenberg County area.

A map illustrating the location of all multifamily apartments surveyed within the market is included on the following page. Note the number designations for each property illustrated on the map correspond with the Map ID numbers assigned to each property surveyed as illustrated by the Field Survey of Conventional Rentals (Addendum A).

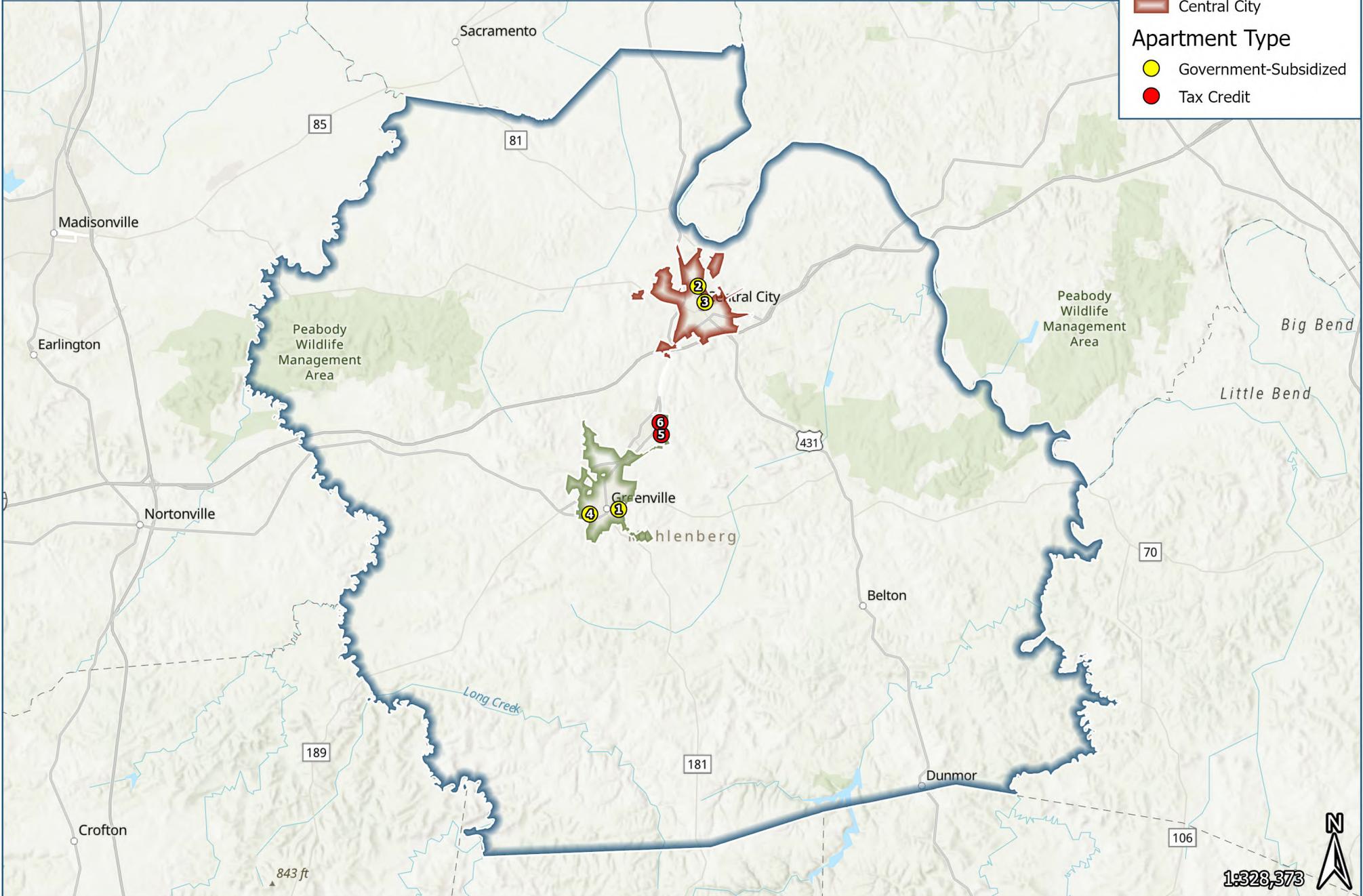
Muhlenberg County

Greenville

Central City

## Apartment Type

- Government-Subsidized
- Tax Credit



### 3. Non-Conventional Rental Housing

Non-conventional rentals are generally considered rental units consisting of single-family homes, duplexes, units over store fronts, mobile homes, etc. Typically, these rentals are older, offer few amenities, and lack on-site management and maintenance. For the purposes of this analysis, we have assumed that rental properties consisting of four or less units within a structure and mobile homes are non-conventional rentals. Based on data from the American Community Survey (2018-2022), the number and share of units within renter-occupied structures is summarized in the following table:

		Renter-Occupied Housing by Units in Structure			
		1 to 4 Units	5 Units or More	Mobile Home/ Other	Total
<b>Greenville</b>	Number	261	172	15	448
	Percent	58.3%	38.4%	3.3%	100.0%
<b>Central City</b>	Number	338	50	130	518
	Percent	65.3%	9.7%	25.1%	100.0%
<b>Balance of County</b>	Number	601	145	372	1,118
	Percent	53.8%	13.0%	33.3%	100.0%
<b>Muhlenberg County</b>	Number	1,200	367	517	2,084
	Percent	57.6%	17.6%	24.8%	100.0%
<b>Kentucky</b>	Number	327,671	185,265	51,099	564,035
	Percent	58.1%	32.8%	9.1%	100.0%

Source: American Community Survey (2018-2022); ESRI; Urban Decision Group; Bowen National Research

As the preceding table illustrates, non-conventional rentals with four or fewer units per structure and mobile homes comprise a vast majority of the local rental housing market, as they represent 82.4% of rental units in the PSA (Muhlenberg County). This is a significantly larger share of non-conventional rentals as compared to the share for the state (67.2%). Although non-conventional rentals comprise 61.6% of all rentals in the Greenville Submarket, this is a notably smaller share of non-conventional rentals as compared to the entirety of Muhlenberg County. By comparison, the Central City Submarket and Balance of County have much higher shares of non-conventional rentals (90.4% and 87.1%, respectively). The share (24.8%) of mobile homes in the PSA is noteworthy, specifically within the Central City Submarket (25.1%) and the Balance of County (33.3%). Regardless, the data illustrates the importance of non-conventional rentals within Muhlenberg County.

The following table summarizes monthly gross rents (per unit) for area rental alternatives within the PSA (Muhlenberg County), each submarket, the Balance of County, and the state of Kentucky, based on American Community Survey data. While this data encompasses all rental units, which includes multifamily apartments, a vast majority (82.4%) of the PSA’s rental supply consists of non-conventional rentals. Therefore, it is reasonable to conclude that the following provides insight into the overall distribution of rents among the non-conventional rental housing units. It should be noted, gross rents include tenant-paid rents and tenant-paid utilities.

		Estimated Monthly Gross Rents by Market								Total
		<\$300	\$300 - \$500	\$500 - \$750	\$750 - \$1,000	\$1,000 - \$1,500	\$1,500 - \$2,000	\$2,000+	No Cash Rent	
<b>Greenville</b>	Number	108	52	164	89	8	15	4	8	448
	Percent	24.1%	11.6%	36.6%	19.9%	1.8%	3.3%	0.9%	1.8%	100.0%
<b>Central City</b>	Number	25	97	189	120	33	0	0	54	518
	Percent	4.8%	18.7%	36.5%	23.2%	6.4%	0.0%	0.0%	10.4%	100.0%
<b>Balance of County</b>	Number	51	101	363	250	69	1	11	274	1,120
	Percent	4.6%	9.0%	32.4%	22.3%	6.2%	0.1%	1.0%	24.5%	100.0%
<b>Muhlenberg County</b>	Number	184	249	715	459	110	16	15	336	2,084
	Percent	8.8%	11.9%	34.3%	22.0%	5.3%	0.8%	0.7%	16.1%	100.0%
<b>Kentucky</b>	Number	25,843	37,141	106,567	146,520	151,765	35,139	11,603	49,457	564,035
	Percent	4.6%	6.6%	18.9%	26.0%	26.9%	6.2%	2.1%	8.8%	100.0%

Source: American Community Survey (2018-2022); ESRI; Urban Decision Group; Bowen National Research

As the preceding table illustrates, the largest share (34.3%) of PSA (Muhlenberg County) rental units have gross rents between \$500 and \$750, followed by units with rents between \$750 and \$1,000 (22.0%). Collectively, units with gross rents below \$1,000 account for 77.0% of all PSA rentals, which is a much larger share of such units when compared to the state (56.1%). Overall, this demonstrates the dominance of the lower and moderately priced product among the non-conventional rental units in the county. While limited, 6.8% of rental units in the PSA have gross rents over \$1,000, which illustrates some opportunities exist to achieve premium rents in the market. In addition, these units provide some alternatives to homeownership for higher income residents in the PSA. It is also notable to point out that 16.1% of rental units, which represents the third highest share of rental units within the PSA, consisted of “No Cash Rent,” which can include units that are owned by family members/friends of residents which pay no rent and/or rent-free units to compensate farmworkers, caretakers, property managers, etc. This share is nearly twice as high as the state’s share of 8.8%.

Within the Greenville Submarket, 92.2% of rental units have rents below \$1,000, and nearly one-quarter (24.1%) of rentals have rents below \$300. While a majority of these rentals are likely government-subsidized multifamily apartments, it should be noted that over one-third (36.6%) of rentals in Greenville have rents between \$500 and \$750. The shares of units with rents between \$500 and \$750 are similar in both the Central City Submarket (36.5%) and Balance of County (32.4%). As is the case with the overall PSA, the rental market in both submarkets and the Balance of County appear to be predominantly comprised of lower and moderately priced rental product. Similarly, the Central City and Balance of County submarkets have higher shares of “No Cash Rent” rental units (10.4% and 24.5%, respectively) than that of the state. The Balance of County submarket comprises the vast majority of such rental units (81.5%) within the entire PSA.

During May and June 2024, Bowen National Research identified only two non-conventional rentals that were listed as *available* for rent in the PSA (Muhlenberg County). A variety of online resources were utilized to identify available non-conventional rentals during the research period. Although limited in number, we believe that we have identified most vacant non-conventional rentals in the PSA that were actively marketed. While these rentals do not represent all non-conventional rentals, they are representative of common characteristics of the various non-conventional rental alternatives available in the area. As a result, these available rentals provide a good baseline to compare the rental rates, number of bedrooms, number of bathrooms, and other features of non-conventional rentals. When compared to the overall non-conventional inventory of the PSA (1,717 units), these two units represent an overall vacancy rate of 0.1%, which is considered extremely low and demonstrates the lack of available non-conventional rentals within Muhlenberg County.

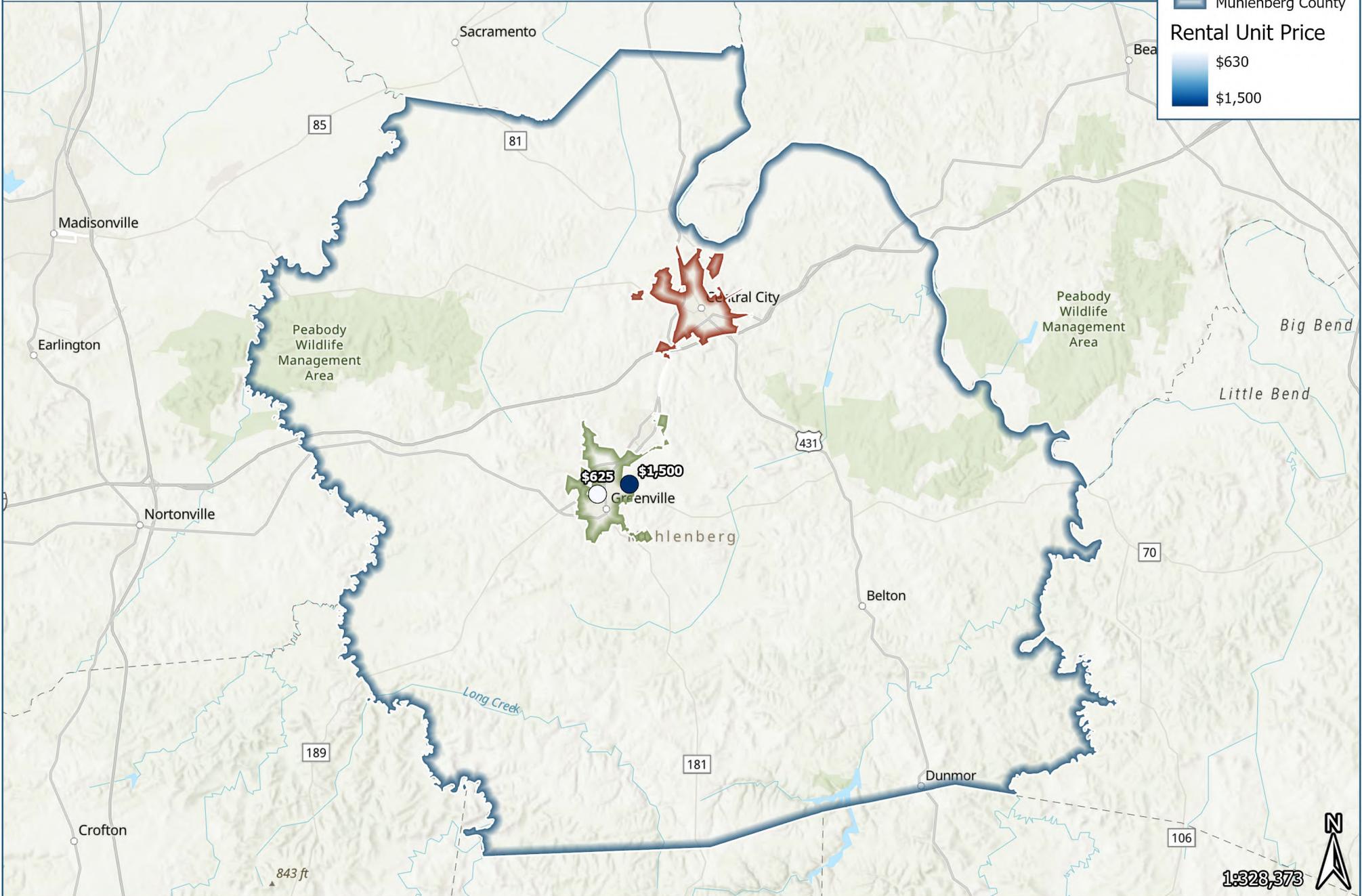
The available non-conventional rentals identified in the PSA (Muhlenberg County) are summarized in the following table.

Available Non-Conventional Rentals						
Bedroom Type	Units	Number of Baths	Year Built	Square Feet	Rent	Rent Per Square Foot
One-Bedroom	1	1.0	1946	610	\$625	\$1.02
Two-Bedroom	1	2.0	2006	1,400	\$1,500	\$1.07

Sources: Realtor.com; Zillow.com

The two available non-conventional rentals identified have rents of \$625 (one-bedroom) and \$1,500 (two-bedroom). While the rent per square foot (\$1.02 and \$1.07 per square foot) for both units is similar, the year built (1946 and 2006) and square feet (610 square feet and 1,400 square feet) vary substantially. Although the rent of \$625 for the one-bedroom unit is affordable to many households, this bedroom configuration is not adequate for most households. In addition, the rent of \$1,500 for the available two-bedroom unit is more than double the rent for a comparable two-bedroom Tax Credit unit (between \$629 and \$705) in the PSA. As such, the available inventory of non-conventional rentals is extremely scarce, and it is unlikely that most low-income households in the area could afford two-bedroom or larger non-conventional rentals, even if they were available. It should be noted that, while the monthly gross rents data from the table on page VI-14 indicates a majority of rents in the area are typically less than \$1,000, this data is derived from surveys conducted between 2018 and 2022 and reflects annual averages during this time period. It should be noted, a severe imbalance between supply and demand in a market can result in rapid price increases. As a result, it will be important to monitor area rents for the foreseeable future.

A map delineating the location of identified non-conventional rentals currently available to rent in the PSA (Muhlenberg County) is included on the following page.



## C. FOR-SALE HOUSING SUPPLY

### 1. Introduction

Bowen National Research obtained for-sale housing data from the local Multiple Listing Service (MLS) providers for Muhlenberg County. This included historical for-sale residential data and currently available for-sale housing stock. While this sales data does not include all for-sale residential transactions or available supply in the county, it does consist of the majority of such product and therefore, it is representative of market norms for for-sale housing product. The available supply does not include foreclosures, auctions, or for-sale by owner housing.

The following table summarizes the available and recently sold homes for the PSA (Muhlenberg County) and each of the submarkets.

Sold/Currently Available For-Sale Housing Supply								
Status	Homes	Median Price	Homes	Median Price	Homes	Median Price	Homes	Median Price
	Central City		Greenville		Balance of County		Muhlenberg County (PSA)	
Sold*	96	\$101,250	137	\$128,000	344	\$149,900	577	\$133,750
Available**	11	\$74,000	8	\$223,250	22	\$287,400	41	\$199,000

Source: Multiple Listing Service (MLS)

\*As of May 8, 2024

\*\*Historical sales between January 1, 2020 and May 8, 2024

Within the PSA (Muhlenberg County), 577 homes were sold between January 1, 2020, and May 8, 2024, at a median sales price of \$133,750. This equates to an average of approximately 11.1 homes sold per month, or an annualized average of around 133 homes sold during this time. The for-sale housing stock *available* as of May 8, 2024 within the PSA consists of 41 units with a median list price of \$199,000. A majority (59.6%) of the homes sold in the PSA between January 2020 and May 2024 were within the Balance of County, while the Greenville Submarket accounted for 23.7% of home sales and the Central City Submarket accounted for 16.6% of all sales. Median sales prices ranged between \$101,250 (Central City) and \$149,900 (Balance of County). Among the available supply of for-sale homes in the PSA, slightly over one-half (53.7%) are within the Balance of County, 26.8% are in the Central City Submarket, and 19.5% are in the Greenville Submarket. Median list prices of the available inventory range between \$74,000 (Central City) and \$287,400 (Balance of County). Aside from the Central City Submarket, median *list* prices of the currently available inventory have increased substantially from median *sales* prices of recent historical sales.

## 2. Historical For-Sale Analysis

The following table illustrates the annual sales activity from January 1, 2020 to May 8, 2024 for each study area, with full year sales volume projections for 2024 shown in parenthesis.

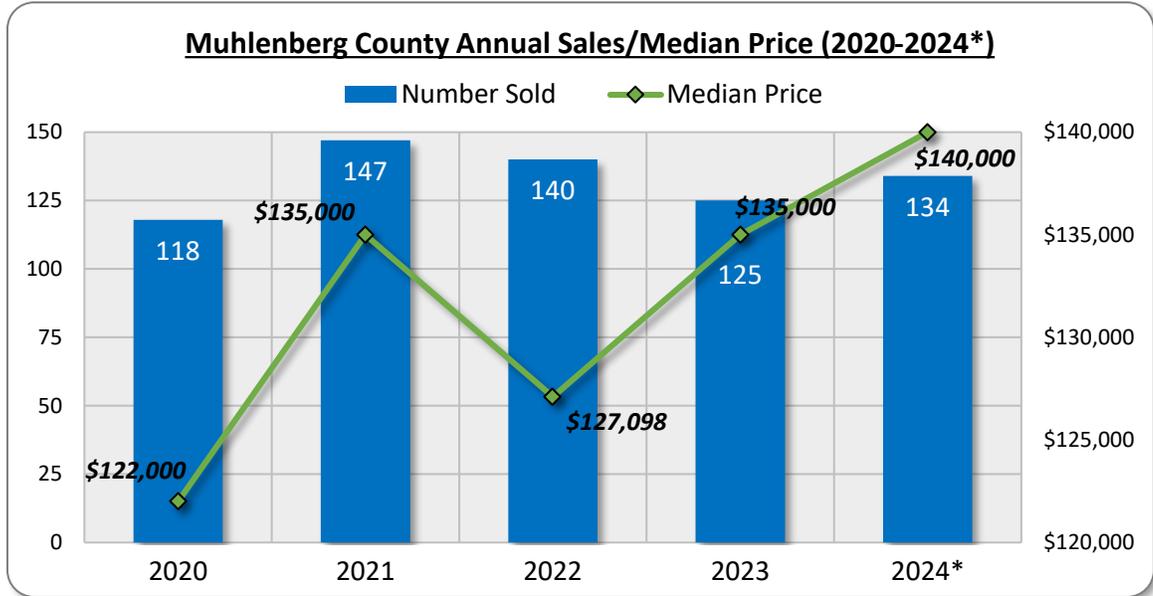
Sales History by Year (January 1, 2020 to May 8, 2024*)								
Year	Central City				Balance of County			
	Number Sold	Percent Change	Median Sales Price	Percent Change	Number Sold	Percent Change	Median Sales Price	Percent Change
2020	17	-	\$117,000	-	72	-	\$131,500	-
2021	24	41.2%	\$105,000	-10.3%	87	20.8%	\$154,000	17.1%
2022	31	29.2%	\$75,000	-28.6%	75	-13.8%	\$150,000	-2.6%
2023	16	-48.4%	\$122,500	63.3%	84	12.0%	\$150,000	0.0%
2024*	8 (23)	-50.0% (43.8%)	\$107,500	-12.2%	26 (74)	-69.0% (-11.9%)	\$143,000	-4.7%
Year	Greenville				Muhlenberg County (PSA)			
	Number Sold	Percent Change	Median Sales Price	Percent Change	Number Sold	Percent Change	Median Sales Price	Percent Change
2020	29	-	\$105,000	-	118	-	\$122,000	-
2021	36	24.1%	\$131,500	25.2%	147	24.6%	\$135,000	10.7%
2022	34	-5.6%	\$127,098	-3.3%	140	-4.8%	\$127,098	-5.9%
2023	25	-26.5%	\$130,000	2.3%	125	-10.7%	\$135,000	6.2%
2024*	13 (37)	-48.0% (48.0%)	\$140,000	7.7%	47 (134)	-62.4% (7.2%)	\$140,000	3.7%

Source: Multiple Listing Service (MLS)

\*As of May 8, 2024 (Full year projection shown in parenthesis)

The median sales price of homes sold within the PSA (Muhlenberg County) increased by 10.7% between 2020 and 2023, with the largest annual increase (10.7%) occurring in 2021. It is noteworthy that the median sales price *decreased* by 5.9% in 2022. While the number of homes sold annually in the PSA increased by 24.6% between 2020 and 2021, the number of homes sold annually in 2022 and 2023 decreased each year. Within the individual submarkets, the annual median sales price of homes sold between 2020 and 2023 increased by 4.7% in Central City and 23.8% in Greenville, while the median price of home sales in the Balance of County increased by 14.1%. While annual sales volume increased in 2021 for each study area, there was significant variability in volume for each study area in 2022 and 2023. As of May 8, 2024, a total of 47 homes have been sold in the PSA at a median sales price of \$140,000. This equates to approximately 134 homes sold in the PSA in 2024, which would represent an increase of 7.2% in annual sales volume at the current pace. The county's median sales price of \$140,000 in 2024 represents the highest price over the past four and one-half years.

Recent home sales volume and median price by year for the PSA (Muhlenberg County) are illustrated in the following graph:



\*2024 full year projection

The distribution of homes sold between January 1, 2020 and May 8, 2024 by price point for the study areas is summarized in the following table.

Sales History by Price (January 1, 2020 to May 8, 2024)								
Sales Price	Central City		Greenville		Balance of County		Muhlenberg County (PSA)	
	Number Sold	Percent of Supply	Number Sold	Percent of Supply	Number Sold	Percent of Supply	Number Sold	Percent of Supply
Up to \$99,999	46	47.9%	49	35.8%	94	27.3%	189	32.8%
\$100,000 to \$199,999	40	41.7%	64	46.7%	147	42.7%	251	43.5%
\$200,000 to \$299,999	7	7.3%	19	13.9%	53	15.4%	79	13.7%
\$300,000 to \$399,999	1	1.0%	4	2.9%	33	9.6%	38	6.6%
\$400,000+	2	2.1%	1	0.7%	17	4.9%	20	3.5%
<b>Total</b>	<b>96</b>	<b>100.0%</b>	<b>137</b>	<b>100.0%</b>	<b>344</b>	<b>100.0%</b>	<b>577</b>	<b>100.0%</b>

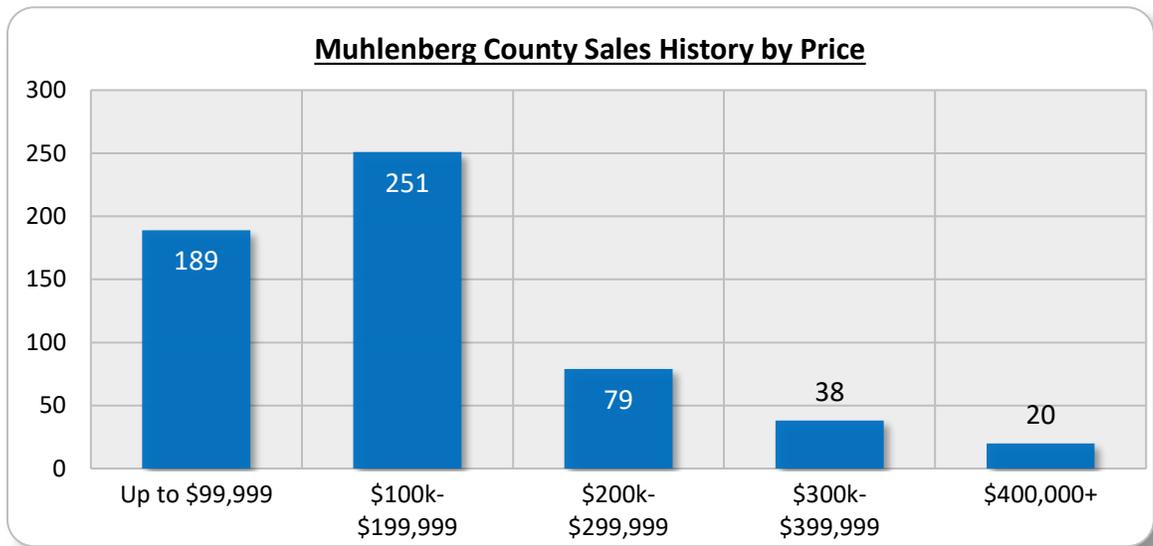
Source: Multiple Listing Service (MLS)

As the preceding table illustrates, over three-quarters (76.3%) of home sales by price point within the PSA between January 2020 and May 2024 were among product priced below \$200,000. While homes priced between \$100,000 and \$199,999 comprised the single largest share (43.5%), it is noteworthy that nearly one-third (32.8%) of home sales were for product priced below \$100,000. Approximately 13.7% of sales were homes priced between \$200,000 and \$299,999, while only 10.1% were priced at \$300,000 or higher.

Noteworthy findings for each submarket and the Balance of County include:

- Nearly one-half (47.9%) of home sales in the Central City Submarket and over one-third (35.8%) of home sales in the Greenville Submarket were for homes priced below \$100,000.
- The Balance of County had the highest share (14.5%) of homes priced at \$300,000 or above, while a very small share of homes in the Central City (3.1%) and Greenville (3.6%) submarkets were in this price cohort.
- Between 41.7% (Central City) and 46.7% (Greenville) of home sales in each study area were for homes priced between \$100,000 and \$199,999.

Recent home sales by *price point* in the PSA are shown in the following graph:



To gain a better understanding of the for-sale housing market within Muhlenberg County, we obtained residential sales records from the county assessor and compared it to the sales data provided through the local MLS. While there is a notable difference in the volume of residential sales that occurred within a given year, with the assessor generally having a higher number of recorded sales, the identified *trends* are generally similar between these two data sources. Notable similarities include the following:

- Volume of residential sales peaked in 2021/2022, with declines in residential sales volume reported in 2023.
- Based on relevant sales data, the median sales prices are generally similar, with the lowest median pricing reported in 2020 and the highest median pricing reported in 2024.
- Volume of sales by pricing are the highest among homes priced below \$200,000 and are the lowest among homes priced at or above \$300,000.

Based on this analysis, we believe the MLS data is an accurate reflection of relevant home sales characteristics and trends of Muhlenberg County.

The following table illustrates recent home sales for the study areas by *bedroom type*.

Sales History by Bedroom Type (January 1, 2020 to May 8, 2024)							
Bedrooms	Number Sold	Average Baths	Average Square Feet*	Average Year Built**	Price Range	Median Sales Price	Median Price per Sq. Ft.*
<b>Central City</b>							
Two-Br.	26	1.0	1,158	1995	\$11,000-\$115,000	\$63,750	\$57.14
Three-Br.	50	1.5	1,741	1974	\$5,000-\$489,900	\$121,500	\$70.14
Four-Br.	14	2.5	2,188	1953	\$45,000-\$423,000	\$122,000	\$68.00
Five+-Br.	6	2.5	2,372	1955	\$74,000-\$282,500	\$135,000	\$60.09
Total	96	2.0	1,688	1963	\$5,000-\$489,900	\$101,250	\$65.39
<b>Greenville</b>							
Studio/One-Br.	1	1	600	N/A	\$47,500	\$47,500	\$79.17
Two-Br.	26	1.0	1,200	1949	\$22,500-\$182,000	\$96,450	\$79.16
Three-Br.	75	1.5	1,686	1974	\$22,000-\$320,000	\$126,000	\$83.33
Four-Br.	33	2.0	2,598	1966	\$60,000-\$435,000	\$155,000	\$72.41
Five+-Br.	2	3.5	2,673	1946	\$110,000-\$238,000	\$174,000	\$66.14
Total	137	1.5	1,820	1965	\$22,000-\$435,000	\$128,000	\$76.53
<b>Balance of County</b>							
Studio/One-Br.	9	1.0	942	1986	\$22,000-\$270,000	\$120,000	\$112.46
Two-Br.	57	1.0	1,295	1973	\$30,000-\$400,000	\$94,000	\$83.49
Three-Br.	207	1.5	1,751	1984	\$25,000-\$640,000	\$140,000	\$89.33
Four-Br.	52	2.0	2,458	1990	\$79,500-\$515,000	\$219,500	\$94.10
Five+-Br.	19	3.0	3,166	1996	\$82,500-\$750,000	\$320,000	\$97.42
Total	344	1.5	1,837	1984	\$22,000-\$750,000	\$149,900	\$90.00
<b>Muhlenberg County (PSA)</b>							
Studio/One-Br.	10	1.0	908	1986	\$22,000-\$270,000	\$107,500	\$112.27
Two-Br.	109	1.0	1,239	1963	\$11,000-\$400,000	\$84,800	\$74.22
Three-Br.	332	1.5	1,735	1979	\$5,000-\$640,000	\$135,000	\$84.70
Four-Br.	99	2.0	2,466	1977	\$45,000-\$515,000	\$185,000	\$77.90
Five+-Br.	27	3.0	2,945	1983	\$74,000-\$750,000	\$199,000	\$89.15
Total	577	1.5	1,808	1976	\$5,000-\$750,000	\$133,750	\$82.99

Source: Multiple Listing Service (MLS)

N/A – Not Available

\*Excludes 2 from Balance of County and 2 from PSA with no square feet information

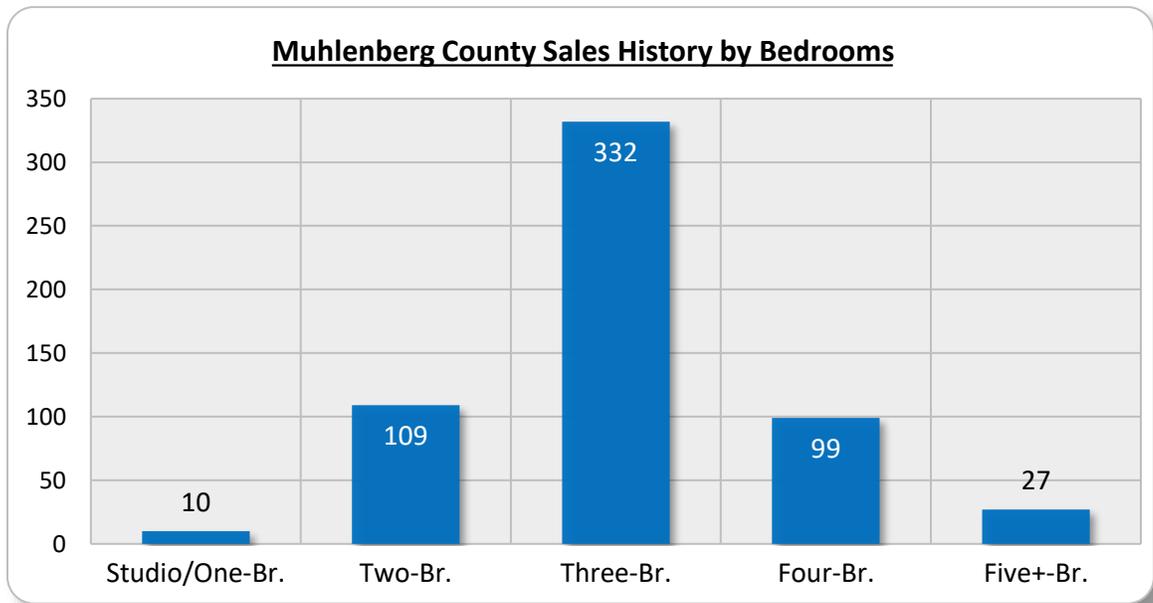
\*\*Excludes 10 listings from Central City, 7 from Greenville, 28 from Balance of County and 45 from PSA with no year-built information

Three-bedroom units comprise the largest share (57.5%) of recent home sales by bedroom type in the PSA (Muhlenberg County), followed by two-bedroom (18.9%) and four-bedroom (17.2%) homes. Three-bedroom homes have a median sales price of \$135,000, an average year built of 1979, and average slightly over 1,700 square feet. Recent two-bedroom homes sales, by comparison, have a much lower median sales price (\$84,800), are typically older (average year built of 1963), and are, as expected, notably smaller (average of 1,239 square feet).

Noteworthy findings for each submarket and Balance of County include:

- The median sales prices of the three-bedroom homes sold in Central City (\$121,500) and those sold in Greenville (\$126,000) are relatively comparable, while the median sales price of the three-bedroom homes sold in the Balance of County (\$140,000) is notably higher.
- The average year built for three-bedroom homes in Central City and Greenville (1974 for each) is considerably older than those within the Balance of County (1984).

Recent home sales by bedroom type in the PSA (Muhlenberg County) are shown in the following graph:



Recent home sales by *year built* for the study areas are illustrated in the following table.

Sales History by Year Built (January 1, 2020 to May 8, 2024)						
Year Built**	Number Sold	Average Beds/Baths	Average Square Feet*	Price Range	Median Sales Price	Median Price per Sq. Ft.*
<b>Central City</b>						
Before 1970	56	3/1.5	1,634	\$5,000-\$249,000	\$100,000	\$64.96
1970 to 1979	8	3/1.5	1,752	\$45,000-\$190,900	\$112,500	\$58.10
1980 to 1989	7	3/2.0	1,485	\$65,000-\$279,000	\$135,000	\$98.09
1990 to 1999	6	3/2.5	1,895	\$56,000-\$339,725	\$118,750	\$63.84
2000 to 2009	6	3/2.5	2,120	\$58,000-\$423,000	\$97,450	\$57.08
2010 to present	3	3/2.0	2,856	\$79,900-\$489,900	\$260,000	\$87.48
Total	86	3/2.0	1,725	\$5,000-\$489,900	\$105,000	\$66.06
<b>Greenville</b>						
Before 1970	77	3/1.5	1,801	\$22,000-\$344,900	\$122,000	\$73.69
1970 to 1979	23	3/1.5	1,621	\$32,000-\$290,000	\$123,000	\$77.78
1980 to 1989	12	3/1.5	1,926	\$40,000-\$350,000	\$134,500	\$86.84
1990 to 1999	7	3/2.5	2,898	\$50,000-\$435,000	\$245,000	\$78.63
2000 to 2009	5	3/2.0	1,642	\$86,900-\$220,000	\$135,000	\$100.00
2010 to present	6	3/2.0	1,553	\$104,000-\$169,900	\$148,000	\$100.84
Total	130	3/2.0	1,822	\$22,000-\$435,000	\$129,098	\$77.72
<b>Balance of County</b>						
Before 1970	79	3/1.5	1,607	\$26,250-\$385,000	\$125,000	\$87.69
1970 to 1979	68	3/1.5	1,624	\$22,000-\$405,000	\$140,000	\$85.67
1980 to 1989	32	3/1.5	1,713	\$39,000-\$380,000	\$137,501	\$79.75
1990 to 1999	37	3/2.0	1,828	\$30,000-\$558,540	\$160,000	\$101.05
2000 to 2009	64	3/2.5	2,627	\$36,000-\$750,000	\$268,750	\$106.95
2010 to present	36	3/2.0	1,789	\$50,000-\$489,900	\$234,500	\$109.58
Total	316	3/2.0	1,870	\$22,000-\$750,000	\$152,000	\$92.78
<b>Muhlenberg County (PSA)</b>						
Before 1970	212	3/1.5	1,685	\$5,000-\$385,000	\$117,500	\$74.84
1970 to 1979	99	3/1.5	1,633	\$22,000-\$405,000	\$136,000	\$80.00
1980 to 1989	51	3/2.0	1,732	\$39,000-\$380,000	\$135,000	\$83.07
1990 to 1999	50	3/2.0	1,986	\$30,000-\$558,540	\$177,500	\$92.00
2000 to 2009	75	3/2.5	2,518	\$36,000-\$750,000	\$255,000	\$102.14
2010 to present	45	3/2.0	1,829	\$50,000-\$489,900	\$195,000	\$106.67
Total	532	3/1.5	1,835	\$5,000-\$750,000	\$135,250	\$84.65

Source: Multiple Listing Service (MLS)

\*Excludes 2 from Balance of County and 2 from PSA with no square feet information

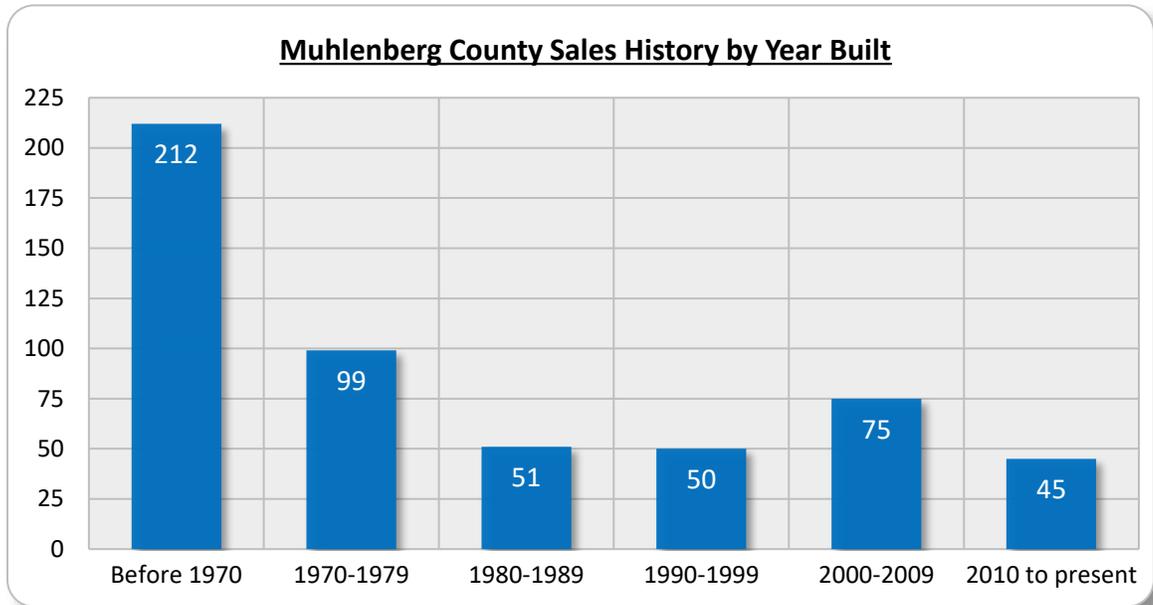
\*\*Excludes 10 listings from Central City, 7 from Greenville, 28 from Balance of County and 45 from PSA with no year-built information

Approximately 39.8% of recent home sales in the PSA were homes built prior to 1970. Homes built during this development period have a median sales price of \$117,500, which is the lowest median sales price among the various development periods. In addition, these homes have among the smallest average size (1,685 square feet) for any development period. While these homes may be affordable to many lower income households and first-time homebuyers in the area, these older homes are more likely to require repairs or modernization compared to homes built in later development periods. Homes built in the newest development period (2010 to present) in

the PSA, which account for 8.5% of recent sales, have the second highest median sales price (\$195,000) and highest median price per square foot (\$106.67) of any development period. Noteworthy findings for each submarket and the Balance of County include:

- Central City has the highest share (65.1%) of recent home sales for homes built prior to 1970, followed by Greenville (59.2%) and the Balance of County (39.8%).
- While homes built since 2000 comprise 31.6% of recent home sales in the Balance of County, these homes only account for 10.5% of sales in Central City and 8.5% of sales in Greenville.
- Central City has the lowest median sales price and median price per square foot among homes built prior to 1970 (\$100,000, or \$64.96 per square foot), while the Balance of County has the highest (\$125,000, or \$87.69 per square foot).
- Among the most recent development period (2010 to present), it is interesting to note that the Central City Submarket has the highest median sales price (\$260,000), although only three homes were sold within the submarket that were built during this period.

Recent home sales by *year built* in the PSA are shown in the following graph:

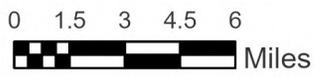
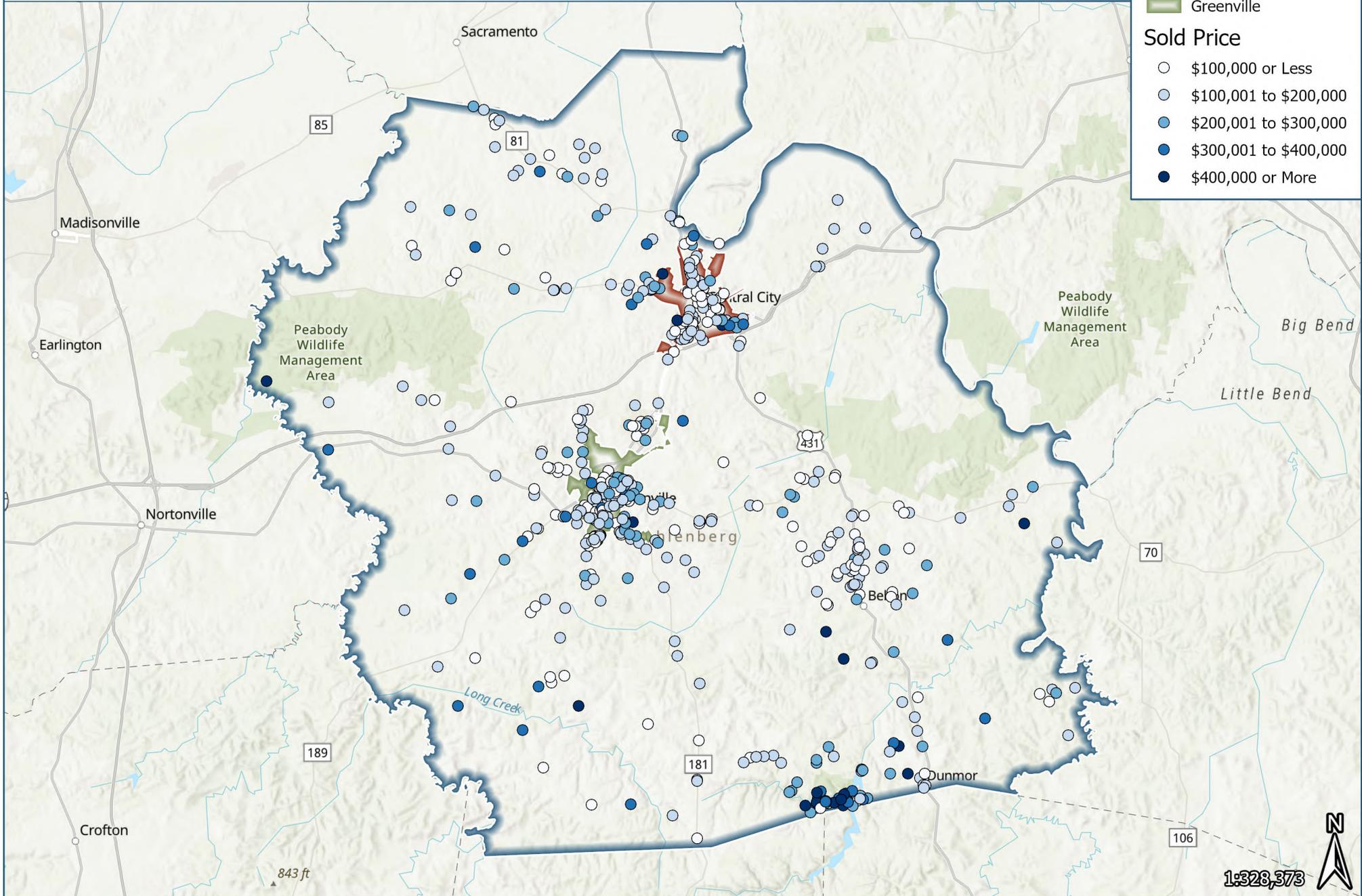


A map illustrating the location of all homes sold from January 1, 2020 to May 8, 2024 within the PSA (Muhlenberg County) is included on the following page.

- Muhlenberg County
- Central City
- Greenville

### Sold Price

- \$100,000 or Less
- \$100,001 to \$200,000
- \$200,001 to \$300,000
- \$300,001 to \$400,000
- \$400,000 or More



Esri, NASA, NGA, USGS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS  
Additional Source(s): Bowen National Research

1:328,373

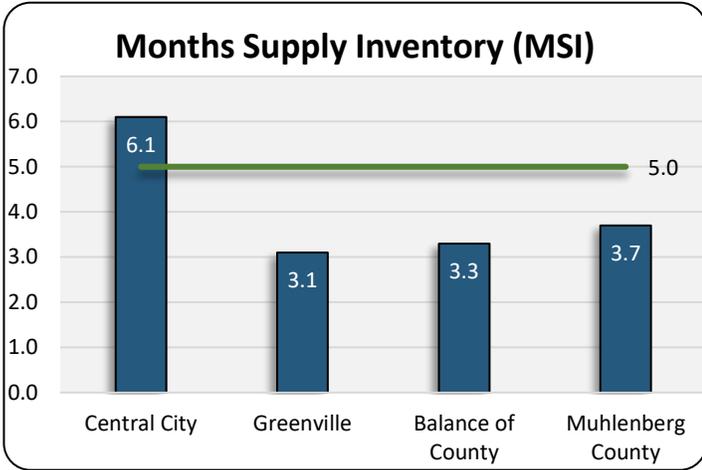
### 3. Available For-Sale Housing Supply

Based on information provided by the local Multiple Listing Service providers for the PSA (Muhlenberg County), we identified 41 housing units within the PSA that were listed as *available* for purchase as of May 8, 2024. Of the 41 available housing units, 11 (26.8%) are located in the Central City Submarket, eight (19.5%) are in the Greenville Submarket, and 22 (53.7%) are in the Balance of County. While there are likely additional for-sale residential units available for purchase, such homes were not identified during our research due to the method of advertisement or simply because the product was not actively marketed. Regardless, the available inventory of for-sale product identified in this analysis provides a good baseline for evaluating the for-sale housing alternatives offered in Muhlenberg County.

There are two inventory metrics most often used to evaluate the health of a for-sale housing market. These metrics include *Months Supply of Inventory* (MSI) and availability rate. The MSI for Muhlenberg County was calculated based on sales history occurring between January 1, 2020 and May 8, 2024, which equates to an overall absorption rate of approximately 11.1 homes per month. Overall, based on the monthly absorption rate of 11.1 homes, the 41 homes listed as available for purchase in the PSA represent approximately 3.7 months of supply. Within the Central City Submarket, the available homes represent approximately 6.1 months of supply, while the MSI in the Greenville Submarket (3.1 months) and Balance of County (3.3 months) are notably less. Typically, healthy and well-balanced markets have an available supply that should take about four to six months to absorb (if no other units are added to the market). Therefore, the overall PSA inventory is considered nearly optimal and is only marginally lower than the low end of the four-to-six-month range. When comparing the 41 available units with the overall inventory of 9,172 owner-occupied units, the PSA has a vacancy/availability rate of 0.4%, which is well below the normal range of 2.0% to 3.0% for a well-balanced for-sale/owner-occupied market. While the availability rates in the Central City (0.8%) and Greenville (0.6%) submarkets are slightly higher, the availability rate in the Balance of County (0.3%) is marginally lower. Regardless, the availability rates throughout the PSA are considered low rates and indicate very limited availability.

While for-sale availability is considered very low based on the total owner-occupied housing units in the area (availability rate), it should be noted that this availability is only considered slightly low based on recent sales volume (Months Supply of Inventory). To get a better understanding of housing availability in the PSA, we have conducted a more refined analysis of available supply by price point, bedroom type, and year built.

The following graphs illustrate Months Supply of Inventory (MSI) and availability rate metrics for each study area. Note that healthy MSI and availability rate levels (5.0 and 2.5%, respectively) are illustrated by the solid green line.



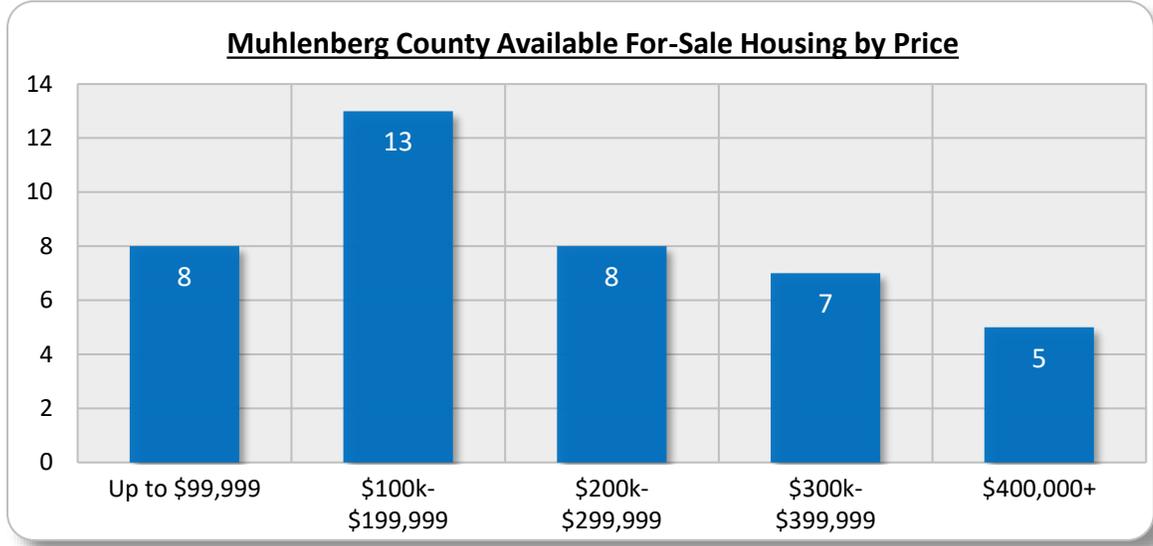
The following table summarizes the distribution of available for-sale residential units by price point for the study areas.

Available For-Sale Housing by Price (As of May 8, 2024)								
List Price	Central City		Greenville		Balance of County		Muhlenberg County (PSA)	
	Number Available	Percent of Supply	Number Available	Percent of Supply	Number Available	Percent of Supply	Number Available	Percent of Supply
Up to \$99,999	6	54.5%	0	-	2	9.0%	8	19.5%
\$100,000 to \$199,999	3	27.3%	4	50.0%	6	27.3%	13	31.7%
\$200,000 to \$299,999	2	18.2%	2	25.0%	4	18.2%	8	19.5%
\$300,000 to \$399,999	0	-	1	12.5%	6	27.3%	7	17.1%
\$400,000+	0	-	1	12.5%	4	18.2%	5	12.2%
Total	11	100.0%	8	100.0%	22	100.0%	41	100.0%

Source: Multiple Listing Service (MLS) and Bowen National Research

The largest share (31.7%) of available homes in the PSA as of May 8, 2024 are priced between \$100,000 and \$199,999. The balance of homes is relatively well-distributed among the remaining price cohorts, with individual shares ranging between 12.2% and 19.5%. Overall, homes priced below \$200,000 represent over one-half (51.2%) of the available supply, with homes priced between \$200,000 and \$299,999 comprising 19.5%, and those priced at \$300,000 accounting for the remaining 29.3%. While this indicates the available homes in the PSA can accommodate a wide range of affordability levels, which includes lower-income households and first-time homebuyers, the overall limited availability and varying concentrations of supply by price point in specific areas of the PSA may limit options for many homebuyers. For example, 81.8% of the available supply in the Central City Submarket is priced below \$200,000; whereas, nearly one-half (45.5%) of the supply in the Balance of County is priced at \$300,000 or higher.

The number of available homes in the PSA by *price point* is illustrated in the following graph:



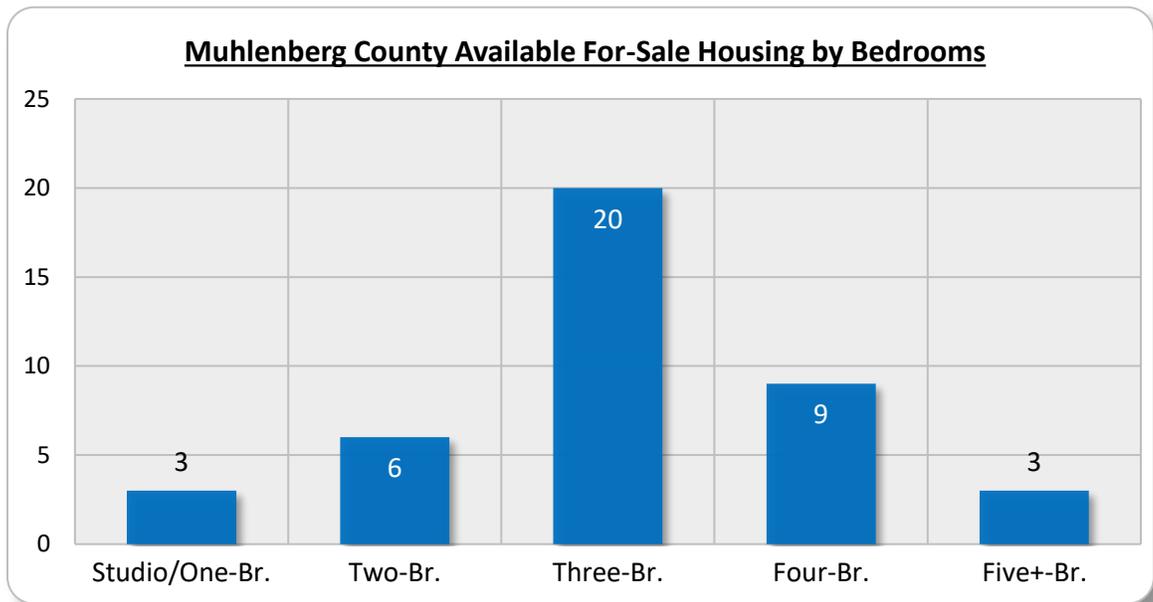
The available for-sale housing by bedroom type in the study areas is summarized in the following table.

Available For-Sale Housing by Bedroom Type (As of May 8, 2024)							
Bedrooms	Number Available	Average Baths	Average Square Feet	Average Year Built	Price Range	Median List Price	Median Price Per Sq. Ft.
<b>Central City</b>							
One-Br.*	1	1.0	700	N/A	\$15,000	\$15,000	\$21.43
Two-Br.	3	1.0	851	1923	\$45,000-\$70,000	\$66,900	\$77.78
Three-Br.	5	2.0	1,649	1972	\$39,500-\$269,900	\$155,000	\$81.58
Four-Br.	2	2.0	2,253	1954	\$195,000-\$249,000	\$222,000	\$109.56
Total	11	2.0	1,455	1954	\$15,000-\$269,900	\$74,000	\$79.27
<b>Greenville</b>							
One-Br.	1	1.0	1,456	1948	\$199,000	\$199,000	\$136.68
Two-Br.	1	1.0	850	2004	\$118,000	\$118,000	\$138.82
Three-Br.	4	2.5	2,345	1974	\$109,000-\$1,375,000	\$218,700	\$135.72
Four-Br.	1	3.0	3,320	1965	\$329,900	\$329,900	\$99.37
Five+-Br.	1	1.5	2,850	1925	\$284,900	\$284,900	\$99.96
Total	8	2.0	2,232	1967	\$109,000-\$1,375,000	\$223,250	\$133.46
<b>Balance of County</b>							
One-Br.	1	1.0	972	2021	\$150,000	\$150,000	\$154.32
Two-Br.	2	2.0	1,925	1980	\$29,900-\$304,900	\$167,400	\$69.99
Three-Br.	11	2	2,171	1991	\$69,000-\$550,000	\$289,900	\$116.19
Four-Br.	6	2.5	2,905	2001	\$125,000-\$2,500,000	\$342,450	\$168.39
Five+-Br.	2	2.0	1,874	1974	\$159,000-\$330,000	\$244,500	\$129.70
Total	22	2.0	2,267	1992	\$29,900-\$2,500,000	\$287,400	\$129.70
<b>Muhlenberg County (PSA)</b>							
One-Br.	3	1	1,043	1985	\$15,000-\$199,000	\$150,000	\$137.00
Two-Br.	6	1	1,209	1956	\$29,900-\$304,900	\$68,450	\$78.50
Three-Br.	20	2	2,075	1983	\$39,500-\$1,375,000	\$202,400	\$113.00
Four-Br.	9	2.5	2,806	1986	\$125,000-\$2,500,000	\$284,900	\$139.00
Five+-Br.	3	2.0	2,199	1957	\$159,000-\$330,000	\$284,900	\$127.00
Total	41	2.0	2,042	1978	\$15,000-\$2,500,000	\$199,000	\$115.00

Source: Multiple Listing Service (MLS); \*Studio Unit

Overall, the median list price of available product in the PSA (Muhlenberg County) is \$199,000. The available for-sale supply in the PSA primarily consists of three-bedroom (41.0%) and four-bedroom (22.0%) units. The three-bedroom homes have a median list price of \$202,400 (\$113.00 per square foot), while four-bedroom homes have a median list price of \$284,900 (\$139.00 per square foot). Within the Central City Submarket, the available three-bedroom homes have a median list price of \$155,000. By comparison, the three-bedroom homes in the Greenville Submarket and Balance of County have much higher median sales prices (\$218,700 and \$289,900, respectively). A similar median price disparity among each study area also exists for the four-bedroom homes, with the Central City Submarket having a notably lower median sales price for this bedroom type.

The number of available homes by *bedroom type* in the PSA is shown in the following graph:



The distribution of available homes by *year built* for each of the study areas is summarized in the following table.

Available For-Sale Housing by Year Built (As of May 8, 2024)						
Year Built	Number Available	Average Beds/Baths	Average Square Feet	Price Range	Median List Price	Median Price per Sq. Ft.
<b>Central City</b>						
Before 1970	7	3/1.0	1,476	\$45,000-\$249,000	\$74,000	\$79.27
1970 to 1979	-	-	-	-	-	-
1980 to 1989	1	3/1.0	1,100	\$39,500	\$39,500	\$35.91
1990 to 1999	1	3/3.0	1,411	\$175,000	\$175,000	\$124.03
2000 to 2009	1	3/3.0	2,460	\$269,900	\$269,900	\$109.72
2010 to present	-	-	-	-	-	-
Total	10*	3/1.5	1,530	\$45,000-\$269,900	\$114,500	\$79.79
<b>Greenville</b>						
Before 1970	5	3/2.0	2,054	\$109,000-\$329,900	\$199,000	\$99.96
1970 to 1979	1	3/2.0	1,753	\$247,500	\$247,500	\$141.19
1980 to 1989	-	-	-	-	-	-
1990 to 1999	-	-	-	-	-	-
2000 to 2009	1	2/1.0	850	\$118,000	\$188,000	\$138.82
2010 to present	1	3/3.5	4,984	\$1,375,000	\$1,375,000	\$275.88
Total	8	3/2.0	2,232	\$109,000-\$1,375,000	\$223,250	\$133.46
<b>Balance of County</b>						
Before 1970	3	3/1.5	1,647	\$29,900-\$179,900	\$159,000	\$72.13
1970 to 1979	5	3/1.5	1,962	\$125,000-\$330,000	\$179,000	\$87.82
1980 to 1989	3	3/2.5	3,167	\$284,900-\$550,000	\$435,000	\$116.19
1990 to 1999	1	3/2.0	2,520	\$374,000	\$374,000	\$148.41
2000 to 2009	3	4/3.0	3,545	\$265,000-\$2,500,000	\$599,000	\$197.30
2010 to present	7	3/2.0	1,782	\$69,000-\$399,999	\$304,900	\$161.06
Total	22	3/2.0	2,267	\$29,900-\$2,500,000	\$287,400	\$129.70
<b>Muhlenberg County (PSA)</b>						
Before 1970	15	3/1.5	1,703	\$29,900-\$329,900	\$159,000	\$82.00
1970 to 1979	6	3/2.0	1,927	\$125,000-\$330,000	\$196,950	\$94.50
1980 to 1989	4	3/2.0	2,650	\$39,500-\$550,000	\$359,950	\$103.00
1990 to 1999	2	3/2.5	1,966	\$175,000-\$374,000	\$274,500	\$136.00
2000 to 2009	5	3/2.5	2,789	\$118,000-\$2,500,000	\$269,900	\$139.00
2010 to present	8	3/2.0	2,182	\$69,000-\$1,375,000	\$314,950	\$169.00
Total	40*	3/2.0	2,076	\$29,900-\$2,500,000	\$206,950	\$115.50

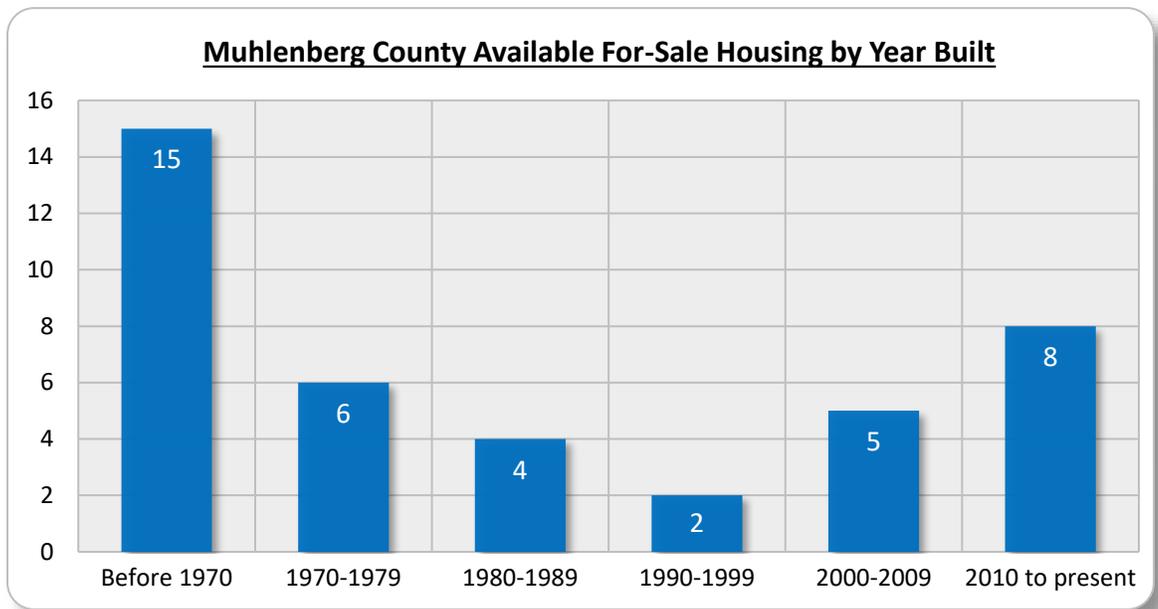
Source: Multiple Listing Service (MLS)

\*Excludes 1 listing with no year built information

As shown in the preceding table, 37.5% of the available for-sale housing product in the PSA was built before 1970, while product built since 2010 represents 20.0% of the available inventory. The median price per square foot in the PSA increases for each subsequent development period, with homes built before 1970 having the lowest median price per square foot (\$82.00) and homes built since 2010 having the highest median price per square foot (\$169.00). Because the average square footage of homes varies significantly between development periods, there is no direct correlation between development period and median list price. However, it is noteworthy that homes built prior to 1970 in the PSA have the lowest median sales price (\$159,000) of any development period. While homes

built prior to 1970 comprise the largest shares of available homes in both the Central City (70.0%) and Greenville (62.5%) submarkets, homes built since 2010 comprise nearly one-third (31.8%) of available homes in the Balance of County, comprising the largest share of homes by development period in the area. Overall, there is limited availability in the PSA (Muhlenberg County), and a notable majority of the homes available within the Central City and Greenville submarkets are relatively dated compared to the supply in the Balance of County. These factors limit the options available to prospective homebuyers in the area and likely have an impact on population and household growth potential for Muhlenberg County.

The distribution of available homes in the PSA by year built is shown in the following graph:

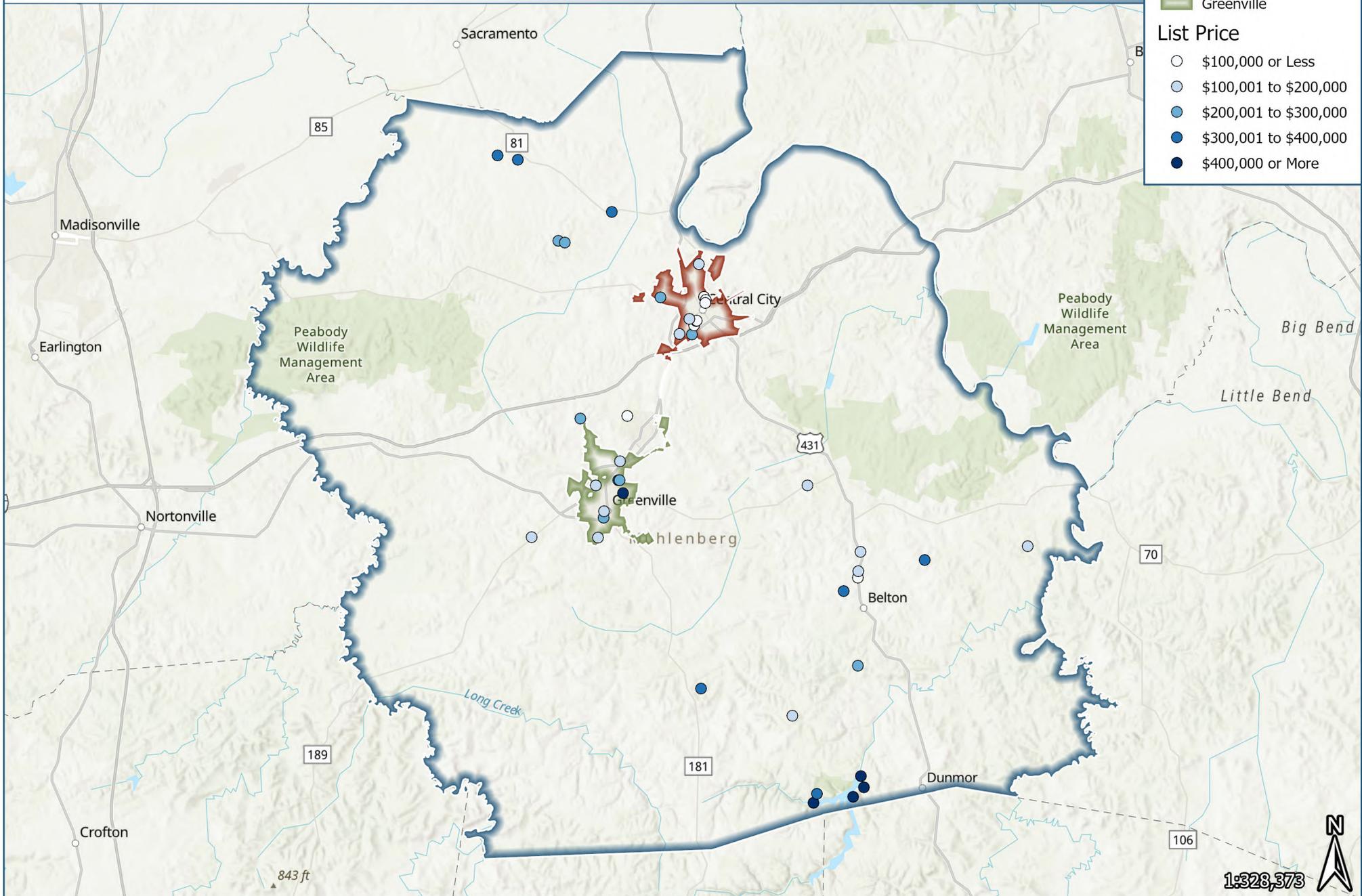


A map illustrating the location of available for-sale homes in the PSA (Muhlenberg County) as of May 2024 is included on the following page.

-  Muhlenberg County
-  Central City
-  Greenville

## List Price

-  \$100,000 or Less
-  \$100,001 to \$200,000
-  \$200,001 to \$300,000
-  \$300,001 to \$400,000
-  \$400,000 or More



#### **D. PLANNED & PROPOSED**

In order to assess housing development potential, we evaluated recent residential building permit activity and identified residential projects in the development pipeline within the PSA (Muhlenberg County). Understanding the number of residential units and the type of housing being considered for development in the market can assist in determining how these projects are expected to meet the housing needs of the market.

The following table illustrates single-family and multifamily building permits issued within Muhlenberg County for the most recent 10-year period available.

<b>Housing Unit Building Permits for Muhlenberg County:</b>										
<b>Permits</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Multifamily Permits	0	0	0	0	0	0	0	0	0	0
Single-Family Permits	2	2	3	4	5	5	5	6	7	5
Total Units	2	2	3	4	5	5	5	6	7	5

Source: SOCDS Building Permits Database at <http://socds.huduser.org/permits/index.html>

As the preceding illustrates, there has been very limited residential development activity within Muhlenberg County between 2014 and 2023. On average, only 4.4 residential building permits were issued annually within the PSA, and none were multifamily building permits. This is not surprising, given the rural nature of the county. However, as stated previously, a number of factors contribute to household growth in an area. With the recent improvements in total employment and at-place employment within the PSA over the last few years and the recent economic and infrastructure developments, it is likely that the overall appeal of the PSA will continue to improve and interest in housing development will increase.

We contacted representatives of area building and permitting departments to identify residential projects within the development pipeline (proposed, planned or under construction) within Muhlenberg County. At the time of research, no new projects were identified by local representatives as part of the residential development pipeline.

## VII. OTHER HOUSING MARKET FACTORS

### INTRODUCTION

Factors other than demography, employment, and supply (all analyzed earlier in this study) can affect the strength or weakness of a given housing market. The following additional factors influence a housing market's performance and needs, and are discussed relative to the PSA (Muhlenberg County):

- Developer/Investor Identification
- Housing Program Identification

### A. DEVELOPER/INVESTOR IDENTIFICATION

Given the scope and variety of housing challenges that exist within Muhlenberg County, the community would benefit from encouraging the involvement of both public and non-public entities to develop and invest in the numerous housing development opportunities that exist in the county and its municipalities. To that end, we have compiled a list of various residential developers, philanthropic organizations, investors/lenders, and federal and state housing finance organizations that are active in Kentucky and nearby states and jurisdictions, with an emphasis on western Kentucky. In some cases, we provided links to membership directories given the extensive list of organization members that could be included. Each organization's name, website (or phone number) and type of entity are provided in the following table and hyperlinks are provided when available.

Entity Name	Website
<b>Housing Developer</b>	
Al. Neyer	<a href="https://www.neyer.com/">https://www.neyer.com/</a>
AU Associates	<a href="https://www.auassociates.com/">https://www.auassociates.com/</a>
Barrow Development	<a href="https://www.barrowdevelopment.com/">https://www.barrowdevelopment.com/</a>
Habitat for Humanity Pennyriple Region	<a href="https://www.pennyriplehabitat.org/">https://www.pennyriplehabitat.org/</a>
Haymaker Development Company	None Found, Phone: 270-754-2521
Housing Authority of Greenville	<a href="https://www.officialhousingauthority.com/kentucky/greenville-housing-authority-7/">https://www.officialhousingauthority.com/kentucky/greenville-housing-authority-7/</a>
LDG Development	<a href="https://www.ldgdevelopment.com">https://www.ldgdevelopment.com</a>
McBrayer PLLC	<a href="https://www.mcbrayerfirm.com/">https://www.mcbrayerfirm.com/</a>
Orleans Development	<a href="https://orleansdev.com/">https://orleansdev.com/</a>
Volunteers Of America Mid-States	<a href="https://www.voamid.org/">https://www.voamid.org/</a>
Wallick Asset Management LLC	<a href="http://www.wallick.com">www.wallick.com</a>
Winterwood Development	<a href="https://winterwooddevelopment.com/">https://winterwooddevelopment.com/</a>
<b>Housing Investor/Lender</b>	
29 <sup>TH</sup> Street Capital	<a href="https://www.29sc.com/">https://www.29sc.com/</a>
Atlantic Bay Mortgage Group	<a href="http://www.atlanticbay.com">www.atlanticbay.com</a>
Arbor	<a href="https://www.arbor.com">https://www.arbor.com</a>
Bluegrass Multifamily	<a href="https://bluegrassmultifamily.com/">https://bluegrassmultifamily.com/</a>
Covenant Capital Group	<a href="https://covenantcapgroup.com/">https://covenantcapgroup.com/</a>
Connor Group	<a href="https://connorgroup.com/">https://connorgroup.com/</a>
Greystone Affordable Housing Initiatives	<a href="http://www.greystone.com">www.greystone.com</a>

Entity Name	Website
<b>Housing Investor/Lender (Continued)</b>	
Homestar Financial Corporation	<a href="http://www.homestarfc.com">www.homestarfc.com</a>
HUD Lenders (list of all)	<a href="http://www.hud.gov/program_offices/housing/sfh/lender/lenderlist">www.hud.gov/program_offices/housing/sfh/lender/lenderlist</a>
Greystone	<a href="http://www.greystone.com">www.greystone.com</a>
Kentucky Housing Corporation	<a href="http://www.kyhousing.org">www.kyhousing.org</a>
Movement Mortgage	<a href="https://movement.com">https://movement.com</a>
Passco	<a href="https://passco.com/">https://passco.com/</a>
PNC Bank	<a href="http://www.pnc.com">www.pnc.com</a>
Roers Companies	<a href="https://roerscompanies.com/">https://roerscompanies.com/</a>
RedStone Equity Partners	<a href="https://rsequity.com">https://rsequity.com</a>
Stoneweg US	<a href="https://www.stoneweg.us/">https://www.stoneweg.us/</a>
Expree Credit Union	<a href="https://expree.org/">https://expree.org/</a>
United States Department of Agriculture (USDA)	<a href="http://www.rd.usda.gov/wv">www.rd.usda.gov/wv</a>
Wells Fargo	<a href="http://www.wellsfargo.com">www.wellsfargo.com</a>
<b>Qualified Opportunity Zone Investors</b>	
Caliber	<a href="https://www.caliberco.com/">https://www.caliberco.com/</a>
Capital Square	None Found; Phone: 404-229-5645
Economic Innovation Group	<a href="https://eig.org/opportunityzones/resources">https://eig.org/opportunityzones/resources</a>
Enterprise Community	<a href="http://www.enterprisecommunity.org/opportunity360">www.enterprisecommunity.org/opportunity360</a>
Fifth Third Bancorp	<a href="https://www.53.com/content/fifth-third/en.html">https://www.53.com/content/fifth-third/en.html</a>
National Minority Technology Council	None Found; Phone: 202-600-7828
Nest Opportunity Fund	<a href="https://nestopportunityfund.com/">https://nestopportunityfund.com/</a>
Origin Investments	<a href="https://origininvestments.com">https://origininvestments.com</a>
Pinnacle Partners	<a href="http://www.pinnacleoz.com">www.pinnacleoz.com</a>
Pintar Investment Company	None Found; Phone: 407-450-1889
PrimeCore Management, LLC	None Found; Phone: 803-605-7503
Reonomy	<a href="http://www.reonomy.com">www.reonomy.com</a>
Smart Growth America	<a href="https://Smartgrowthamerica.org">https://Smartgrowthamerica.org</a>
Strategic Rivermont Fund Manager, LLC	<a href="http://www.thestrategicgroup.com">www.thestrategicgroup.com</a>
West End Opportunity Partnership	<a href="https://westendpartners.org/">https://westendpartners.org/</a>
Winebrenner Opportunity Zone Fund	<a href="https://wcmria.com/">https://wcmria.com/</a>
Woodforest Cei-Boulos Opportunity Fund	<a href="https://www.woodforest.com/WoodforestCares/Community-Development/Economic-Development-and-Revitalization">https://www.woodforest.com/WoodforestCares/Community-Development/Economic-Development-and-Revitalization</a>
<b>Foundations/Nonprofits</b>	
Community Foundation of West Kentucky	<a href="https://cfwestky.org/">https://cfwestky.org/</a>
Felix E. Martin Jr. Foundation	<a href="https://www.felixmartinfoundation.org/">https://www.felixmartinfoundation.org/</a>
Kentucky Housing Corporation	<a href="https://www.kyhousing.org/">https://www.kyhousing.org/</a>
Housing Development Alliance	<a href="https://www.hdahome.org/">https://www.hdahome.org/</a>
Housing Partnership Inc.	<a href="https://wearehpi.org/">https://wearehpi.org/</a>

The preceding list of over 50 organizations representing potential residential development partners in the area is not exhaustive, as there are certainly other organizations that could be participants in supporting residential development projects in Muhlenberg County. The community may want to research other resources to identify developers and investors, such as contacting real estate brokers, Kentucky Association for Economic Development, Kentucky Affordable Housing Coalition, Kentucky Bankers Association, and Affordable Housing Investors Council.

## B. HOUSING PROGRAM OVERVIEW

This section summarizes the various federal and state programs that could be used to potentially support the development and preservation of housing in the Muhlenberg County market. Note that hyperlinks for each organization/program are provided when available.

### Programs, Initiatives, and Incentives (Federal)

Federal Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">US Grants.Org</a>	Listing of grant programs that come through the Rural Development Department under the US Department of Agriculture	Each program has various eligibility requirements
<a href="#">Veterans United Home Loans</a>	Get quotes on home loans	Eligibility requires one or more of the following: <ul style="list-style-type: none"> <li>• Must have served 90 consecutive days of active service during wartime;</li> <li>• 181 days of active service during peacetime;</li> <li>• Served under Title 32 orders or six years in National Guard or Reserves;</li> <li>• Spouse of a service member that died while serving or received a service-related disability</li> </ul>
<a href="#">USA Cares Veteran &amp; Family Support System</a>	Links to various funding and grants	Each program has various eligibility requirements
<a href="#">Rural Development U.S. Department of Agriculture</a>	Offers programs and funding for nonprofits and tribes for clean reliable water and septic systems, program for eligible communities for reliable drinking water, loans to purchase and develop low- to moderate-income housing (Section 523 and Section 524), loans for households to obtain decent and safe housing in eligible rural areas, loans for home repairs and grants for elderly homeowners,	Income based; Each program has various eligibility requirements
<a href="#">U.S. Department of Housing and Urban Development</a>	Offers several links for housing programs, resources, and grants such as HUD Community Development Block Grants, Homeownership Programs, Mainstream Vouchers, Kentucky Association for Community Action Partnerships, Federal Appalachian Housing Enterprise, Habitat for Humanity	Income based; Each program has various eligibility requirements
<a href="#">U.S. Department of Labor</a>	National Farmworker Jobs Program Grants for Housing Services	Various requirements
<a href="#">U.S. Department of Energy's Weatherization Assistance Program</a>	A residential energy efficiency program that enables low-income households to lower energy costs and make homes more energy efficient	Income based
<a href="#">Rural Development U.S. Department of Agriculture</a>	Section 504 Home Repair Program offers loans to homeowners to repair, improve or modernize their homes; Grants for elderly (aged 62+) to remove health and safety hazards in their homes	Very low-income households and elderly (aged 62+); Must be homeowner; Unable to obtain affordable credit elsewhere

**Programs, Initiatives, and Incentives (Federal continued)**

Federal Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">Military Housing Assistance Fund</a>	Provide closing cost funds to assist in purchasing a home	Active military or veteran
<a href="#">Army Emergency Relief</a>	Financial help with rent, deposit on rent, home repair, mortgage, temporary lodging, and utilities; Program has helped approximately 40,000 soldiers and family members and has provided \$70 million in financial assistance	Soldiers on active duty and their eligible dependents; Army Reserve and National Guard soldiers activated on Title 10 orders; Retired soldiers; Surviving spouses who have not remarried and children of soldiers who have died on active duty or died after reaching retirement eligibility
<a href="#">Housing Opportunities for Persons with AIDS</a>	Programs that are funded through the U.S. Department of Housing and Urban Development (HUD); Assistance to low-income individuals diagnosed with HIV/AIDS and their family members living with them; Short-term rent, mortgage, and utility payments to prevent homelessness	Income based; Must be diagnosed with HIV/AIDS

**Programs, Initiatives, and Incentives (State)**

State Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">KCEOC Community Action Partnership</a>	Various programs from home energy, weatherization, Low-Income Home Energy Assistance Program (LIHEAP) which offers bill payment assistance and energy crisis assistance	Income based; Each program has various eligibility requirements
<a href="#">Team Kentucky Cabinet for Health and Family Services</a>	Federally funded energy assistance program that assists residents of Kentucky	Income based
<a href="#">Department of Local Government</a>	Program for cities, counties, and housing nonprofit organizations to acquire and redevelop foreclosed properties	Each program has various eligibility requirements
<a href="#">PACS</a>	Community Services Block Grant helps with rent and utilities. Also offers a weatherization program	Income based
<a href="#">Kentucky River Foothills Development Council, Inc.</a>	Program helps make homes more efficient by lowering heating and cooling expenses; Programs for veterans and their families	Income based; Priority given to elderly, disabled, households with young children, and those who have a high energy burden
<a href="#">PHADA</a>	Manage various housing authorities throughout the United States	Each program has various eligibility requirements
<a href="#">Kentucky Department of Veterans Affairs</a>	Wide variety of programs	Each program has various eligibility requirements
<a href="#">Commonwealth of Kentucky</a>	List of programs and funding offered to households such as housing, assistance with closing costs, down payments, etc.	Each program has various eligibility requirements
<a href="#">Military By Owner</a>	Find housing by military base and list resources for military families needing VA loans, renting, or buying a home	Each program has various eligibility requirements
<a href="#">Jared Allen's Home for Wounded Warriors</a>	Money raised to build and remodel injury-specific, accessible, and mortgage-free homes	Critically injured United States military veterans returning from Iraq and Afghanistan

**Programs, Initiatives, and Incentives (State continued)**

State Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">National Resource Directory</a>	Website that connects wounded warriors, service members, veterans, families, and caregivers to programs	Each program has various eligibility requirements
<a href="#">Tennessee Valley Authority</a>	Offers a list of all electric companies in Kentucky; Some may offer programs	Various eligibility requirements
<a href="#">Miami Valley Community Action Partnership</a>	Utility assistance, weatherization, and home repair	Income based
<a href="#">Community Action of Southern Kentucky</a>	Spring Subsidy Cooling Component helps offset electric cost	Income based
<a href="#">Columbia Gas of Kentucky</a>	Offers WinterCare (heating assistance) and Energy Assistance Program (EAP)	Income based
<a href="#">Delta</a>	Offers budget payment plan	Must be a Delta customer
<a href="#">Pennyrile Electric</a>	Offers low interest loans to install new heating and cooling systems; Up to \$15,000	Own property, inspection, use one of their preferred contactors, credit check
<a href="#">Energy Right</a>	Offers \$0 down, fixed interest rate loans for certain home energy upgrades; Income-eligible program for up to \$10,000 in free home energy upgrades (Home Uplift Program)	Each program has various eligibility requirements
<a href="#">Columbia Gas of Kentucky</a>	Offers budget plans and Customer Choice program which gives customers the option to purchase the natural gas they use from an alternate certified supplier	Must be a Columbia Gas of Kentucky customer
<a href="#">Peoples'</a>	If you meet the qualifications for LIHEAP program, you can apply for the CRISIS component of the LIHEAP program	Must be in a crisis of having heating turned off, have four or fewer days' supply of fuel, or eviction notice due to unpaid rent
<a href="#">Kentucky Power</a>	Payment extensions, assistance, and arrangements	Each program has various eligibility requirements
<a href="#">LG&amp;U</a>	Heating and cooling assistance	Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	Housing programs for those with special needs, low-income and other populations	Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	Affordable Housing Trust Fund (AHTF) Home Repair Program helps residents stabilize and repair their homes; Maximum assistance \$15,000 per home	Income based; Single-family or manufactured homes; Not all home repairs are eligible
<a href="#">Kentucky Housing Corporation</a>	Down Payment Assistance (DAP), loan programs for first time homebuyers, and tax credit programs that make it possible, for those that qualify, to buy a home	Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	This program helps to pay past-due and future rent; Emergency relocation vouchers for tenants that have been evicted	Income based; Must have a court-ordered eviction
<a href="#">Kentucky Housing Corporation</a>	Offers programs such as Mortgage Revenue Bonds, Federal Housing Administration, Veterans Administration, Rural Housing Services; Housing counseling and education also offered	Income based; Each program has various eligibility requirements

Programs, Initiatives, and Incentives (State continued)

State Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">Kentucky Housing Corporation</a>	HOME Tenant-Based Rental Assistance (TBRA) is a grant program that funds community-based nonprofit organizations, housing nonprofit organizations, and local governments (cities and counties); HOME Investment Partnerships Program can create programs for individual households such as rental and utility assistance	Income based; Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	Funding is also available for acquisition, rehabilitation, or new construction of affordable rental housing	Income based; Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	The Kentucky Housing Corporation is the state's participating jurisdiction (PJ) and can allocate funding from the Community Housing Development Organization (a nonprofit community-based organization) to housing agencies that use the funding to develop affordable housing	Housing agencies must be legally organized under state and local law; Have a good standing with the Kentucky Secretary of State's office; Have its 501(c) tax-exempt determination from the Internal Revenue Service and various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	The Affordable Housing Trust Fund (AHTF) was established to acknowledge the housing needs of the very low-income population including the mentally and physically disabled and those on the brink of homelessness	Income based; At or below 60% of the area median income (AMI) or 60% of Kentucky's State Median Family Income; Preference is for those that are at or below 30% AMI; Single-family and multifamily; Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	The Kentucky Housing Corporation provides the Housing Choice Voucher Program for most of Kentucky but select cities such as Louisville (Louisville Metro Housing) and Lexington (Lexington Housing Authority) have their own public housing agencies; Family Self-Sufficiency Program offered to help clients plan for homeownership	Income based; Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	Imminent placement of the family's child or children in out-of-home care	Youths from 18 to 24 who have left foster care, leaving foster care within 90 days, or homeless or at risk to become homeless at age 16 or older
<a href="#">Kentucky Housing Corporation</a>	Program was created to meet the housing needs for the population with a severe mental illness	Various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	Project-Based Contract Administration (PBCA) Program provides rental assistance for extremely low- to moderate-income residents	Income based
<a href="#">Kentucky Housing Corporation</a>	Programs listed by county including emergency shelter, permanent housing, mortgage, and credit counseling	Each program has various eligibility requirements
<a href="#">Kentucky Housing Corporation</a>	The Military Housing Assistance program was created to aid military personnel during active duty	Income based (based on county); Kentucky must be listed as home state; Various other eligibility requirements
<a href="#">Housing Development Alliance, Inc.</a>	Offers home repair programs in East Kentucky; Over 1,000 homes repaired	Income based
<a href="#">Kentucky American Water</a>	Helps assistance through the H2O Help program	Income based; Must have paid at least \$25 toward previous water bill within the last 180 days; Must have a balance of at least \$50

**Programs, Initiatives, and Incentives (State continued)**

State Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">Community Action Kentucky</a>	Array of programs are offered such as home energy and housing programs	Income based
<a href="#">United Way of Kentucky</a>	Programs offered for financial assistance for housing and utilities	Income based; Each program has various eligibility requirements
<a href="#">Benefits.gov</a>	Kentucky Weatherization Assistance Program improves energy efficiency, household safety and educates the public on maintaining energy efficiency	Income based; Low-income household with children, elderly aged 60+, and persons with a disability
<a href="#">Salvation Army</a>	Rent, mortgage, and utility assistance	Income based
<a href="#">Helping Hands for Freedom</a>	Program provides emergency financial assistance to active military, veterans, Wounded Veteran and Gold Star families; Also assists Gold Star families who have lost a loved one to war or post-war suicide resulting from complications from PTSD and/or other injuries	At least one child 18 or under currently in the home; Service members DD214 with honorable discharge; Gold Star family
<a href="#">Children of Restaurant Employees</a>	Program has helped 1,500 families in all 50 states and Puerto Rico; Funds can go toward rent, mortgage, utilities and more	Medical diagnosis or injury of parent, legal guardian, or child; Death of an immediate family member; Loss of life or home due to fire or other natural disaster
<a href="#">Operation First Response</a>	Financial services for rent, utilities, and daily necessities	Military or first responder
<a href="#">Operation Homefront</a>	Offers financial assistance for critical home repairs, rent/mortgage, and utilities; Helps with other needs such as childcare, dental, moving, auto repair and more; Also offers housing programs	Actively served in the United States military post 9/11 and suffered a wound, illness, or injury in the line of duty; Honorable or general discharge; Deployed service members may also apply for funding
<a href="#">R.I.S.E.</a>	Construct specially adapted smart homes that are 100% mortgage free for the nation's most severely wounded in combat or training; Offers the same for first responders such as firefighters, police officers and paramedics; Offers modifications to homeowners and customizes the home to meet specific needs due to injuries	Predominantly supports post 9/11 defenders, those injured in combat or during training
<a href="#">Operation Finally Home</a>	Provides mortgage free homes, home modifications and transitional housing; 247 homes in planning; 108 homes modified or in planning; 389 projects completed or in planning in 32 states	Injured military, fire, paramedic, and law enforcement
<a href="#">Building Homes for Heroes</a>	A total of 300 mortgage free homes gifted in 2023; Also modifies homes based on owner's needs; Intend to reach 400 homes in 2024	Injured veterans, first responders
<a href="#">Homes for Our Troops</a>	Build and donate specially adapted mortgage free homes nationwide for severely injured post 9/11 veterans; To date 370 homes completed; 79 currently under construction	Injured veterans due to 9/11
<a href="#">PRE/3</a>	Help find an affordable rental housing unit for applicants	Income Based

Programs, Initiatives, and Incentives (City)

City Organization/Program (Hyperlinked)	Description	Eligibility
<a href="#">Housing Authority of Greenville</a>	Housing program for those with special needs, low-income and other populations	Income based
<a href="#">Central City Housing Authority</a>	Housing program for those with special needs, low-income and other populations	Income based

Overall, a total of 65 programs (or organizations) were identified that could potentially be accessed to support housing preservation and development efforts in Muhlenberg County. This includes 11 federal programs, 52 state programs, and two local municipality programs. These programs cover a variety of purposes, are available on a community or individual household level, and have various eligibility requirements. Muhlenberg County should explore, utilize and promote programs that best fit the county’s goals. It is important to note that this listing of various housing programs likely does not include all such programs that are available. Therefore, the county and area housing advocates may want to conduct additional research to determine if other programs are available.

## VIII. HOUSING GAP ESTIMATES

### INTRODUCTION

This section of our report provides five-year housing gap estimates for both rental and for-sale housing within the PSA (Muhlenberg County). The assessment includes demand from a variety of sources and focuses on the housing demand potential of Muhlenberg County, though consideration is given to potential support that may originate from outside the county.

Housing to meet the needs of both current and future households in the market will most likely involve multifamily, duplex, and single-family housing alternatives. There are a variety of financing mechanisms that can support the development of housing alternatives such as federal and state government programs, as well as conventional financing through private lending institutions. These different financing alternatives often have specific income and rent/price restrictions, which affect the market they target.

We evaluated the market’s ability to support rental and for-sale housing based on four levels of income/affordability. While there may be overlap among these levels due to program targeting and rent/price levels charged, we have established specific income stratifications that are exclusive of each other in order to eliminate double counting demand. We used HUD’s published income limits for Muhlenberg County.

The following table summarizes the income and housing affordability segments used in this analysis to estimate potential housing demand.

Household Income/Wage & Affordability Levels				
Percent AMHI	Income Range*	Hourly Wage**	Affordable Rents***	Affordable Prices^
≤ 50%	≤ \$36,700	≤ \$17.64	≤ \$917	≤ \$122,333
51%-80%	\$36,701-\$58,720	\$17.65-\$28.23	\$918-\$1,468	\$122,334-\$195,733
81%-120%	\$58,721-\$88,080	\$28.24-\$42.34	\$1,469-\$2,202	\$195,734-\$293,600
121%+	\$88,081+	\$42.35+	\$2,203+	\$293,601+

AMHI – Area Median Household Income

\*Based on the 2024 HUD limits for Muhlenberg County, KY (4-person limit)

\*\*Assumes full-time employment 2,080 hours/year (Assumes one wage earner household)

\*\*\*Based on assumption tenants pay up to 30% of income toward rent

^Based on assumption homebuyer can afford to purchase home priced three times annual income after 10% down payment

While different state and federal housing programs establish income and rent restrictions for their respective programs, in reality, there is potential overlap between windows of affordability between the programs. Further, those who respond to a certain product or program type vary. This is because housing markets are highly dynamic, with households entering and exiting by tenure and economic profile. Further, qualifying policies of property owners and management impact the households that may respond to specific project types. As such, while a household may prefer a certain product, ownership/management qualifying procedures (i.e., review of credit history, current income verification, criminal background checks, etc.) may affect housing choices that are available to households.

Regardless, we have used the preceding income segmentations as the ranges that a typical project or lending institution would use to qualify residents, based on their household income. Ultimately, any new product added to the market will be influenced by many decisions made by the developer and management. This includes eligibility requirements, design type, location, rents/prices, amenities, and other features. As such, our estimates assume that the rents/prices, quality, location, design, and features of new housing product are marketable and will appeal to most renters and homebuyers.

#### **A. HOUSING GAP DEMAND COMPONENTS**

The primary sources of demand for new housing (rental and for-sale) include the following:

- Household Growth
- Units Required for a Balanced Market
- Replacement of Substandard Housing
- External (Outside Muhlenberg County) Commuter Support
- Severe Cost Burdened Households
- Step-Down Support

Since the focus of this report is on the specific housing needs of the PSA (Muhlenberg County), we have focused the housing demand estimates on the metrics that only impact this area.

##### New Household Growth

In this report, household growth projections from 2024 to 2029 are based on ESRI estimates. This projected growth was evaluated for each of the targeted income segments. It should be noted that changes in the number of households within a specific income segment do not necessarily mean that households are coming to or leaving the market, but instead, many of these households are likely to experience income growth or loss that would move them into a higher or lower income segment. Furthermore, should additional housing become available, either through new construction or conversion of existing units, demand for new housing could increase.

##### Units Required for a Balanced Market

The second demand component considers the number of units a market requires to offer balanced market conditions, including some level of vacancies. A healthy *rental* market requires approximately 4% to 6% of the rental market to be available while a healthy *for-sale* housing market should have approximately 2% to 3% of its inventory vacant. Such vacancies allow for inner-market mobility, such as households upsizing or downsizing due to changes in family composition or income, and for people to move into the

market. When markets have too few vacancies, rental rates and housing prices often escalate at an abnormal rate, homes can get neglected, and potential renters and homebuyers can leave the market. Conversely, an excess of rental units and for-sale homes can lead to stagnant or declining rental rates and home prices, property neglect, or existing properties being converted to rentals or for-sale housing. Generally, markets with low vacancy rates often require additional units, while markets with high vacancy rates often indicate a surplus of housing. For the purposes of this analysis, we have utilized a vacancy rate of **5% for rental** product and **3% for for-sale** product to establish balanced market conditions.

### Replacement of Substandard Housing

Demand for new units as replacement housing takes into consideration that while some properties are adequately maintained and periodically updated, a portion of the existing stock reaches a point of functional obsolescence over time and needs to be replaced. This comes in the form of either units that are substandard (lacking complete plumbing or are overcrowded) or units expected to be removed from the housing stock through demolitions. Based on demographic data included in this report, approximately 1.7% of **renter** households and 4.3% of **owner** households in the PSA (Muhlenberg County) are living in substandard housing (e.g., lacking complete plumbing or are overcrowded). Lower income households live in substandard housing conditions more often than higher income households, which we have accounted for in our gap estimates.

### External Commuter Support

Market support can originate from households not currently living in the market. This is particularly true for people who work in Muhlenberg County but commute from outside of the county and would consider moving to Muhlenberg County, if adequate and affordable housing that met residents' specific needs was offered. Currently, there are few *available* housing options in the market. As such, external market support will likely be created if new housing product is developed in Muhlenberg County.

Based on our experience in evaluating housing markets throughout the country, it is not uncommon for new product to attract as much as 50% of its support from outside of county limits. As a result, we have assumed that a portion of the demand for new housing will originate from the 2,900 commuters traveling into the PSA (Muhlenberg County) from areas outside of county limits. For the purposes of this analysis, we have used a conservative demand ratio of up to 25% for the PSA to estimate the demand that could originate from outside of Muhlenberg County.

### Severe Cost Burdened Households

HUD defines severe cost burdened households as those paying 50% or more of their household income toward housing costs. While such households are housed, the disproportionately high share of their income being utilized for housing costs is considered excessive and often leaves little money for impacted households to pay for other essentials such as healthy foods, transportation, healthcare, and education. Therefore, households meeting these criteria were included in our estimates.

### Step-down Support

It is not uncommon for households of a certain income level (typically higher income households) to rent or purchase a unit at a lower price point despite the fact they can afford a higher priced unit/home. Using housing cost and income data reported by American Community Survey (ACS), we have applied a portion of this step-down support to lower income demand estimates. In some instances, step-down support constitutes a large portion of potential/total demand, as upwards of 80% or 90% of households with moderate and higher incomes within the county pay less than 30% of their income toward housing costs.

Residential housing within the development pipeline is another important factor to consider in determining the housing needs of Muhlenberg County. Based on our interviews with planning/zoning representatives of each jurisdiction within the county, it was determined that there are no housing projects planned for the region.

It is also important to understand that the housing gap estimates contained within this report are representative of the needs to cure all housing deficiencies within the county. Specifically, these estimates demonstrate the total number of new housing units required over the five-year projection period (2024 to 2029) to meet the demands of the market based on the demand components detailed on the preceding pages. These estimates also assume that a wide variety of product (both rental and for-sale) is developed within each income segment, in terms of unit designs, bedroom type, amenities offered, etc. throughout all portions of the county. We recognize it is unlikely the number of units needed as calculated by our demand estimates will be developed during the projection period due to infrastructure limitations, governmental policies, funding availability, etc. As such, the following housing gap estimates should be utilized as a guide for future development to determine the greatest need by affordability level within the rental and for-sale segments within the county's housing market.

## B. RENTAL HOUSING GAP ESTIMATES

The following table summarizes the rental housing gaps for Muhlenberg County by affordability level.

Muhlenberg County, Kentucky				
Rental Housing Gap Estimates (2024-2029)				
Percent of Median Income	≤ 50%	51%-80%	81%-120%	121%+
Household Income Range	≤ \$36,700	\$36,701-\$58,720	\$58,721-\$88,080	\$88,081+
Monthly Rent Range	≤ \$917	\$918-\$1,468	\$1,469-\$2,202	\$2,203+
Household Growth	-241	72	44	22
Balanced Market*	75	28	14	12
Replacement Housing**	52	9	3	1
External Market Support^	38	34	19	13
Severe Cost Burdened^^	83	42	14	0
Step-Down Support	56	-28	-4	-24
Less Pipeline Units	0	0	0	0
<b>Overall Units Needed</b>	<b>63</b>	<b>157</b>	<b>90</b>	<b>24</b>
<b>Total Rental Housing Gap</b>				<b>334</b>

\*Based on Bowen National Research's survey of area rentals and ACS estimates

\*\*Based on ESRI/ACS estimates of units lacking complete indoor plumbing or are overcrowded

^Based on Bowen National Research proprietary research and ACS migration patterns for Muhlenberg County

^^Based on ESRI/ACS estimates of households paying 50% or more of income toward housing

Based on the preceding demand estimates, it is clear that there is some level of rental housing demand among all household income levels within Muhlenberg County over the five-year projection period. Overall, there is a housing need for 334 additional rental units in the county over the next five years. The housing gaps range from a low of 24 units needed that have rents at \$2,203 or higher to a high of 157 units needed with rents between \$918 and \$1,468. Without the addition of new rental product similar to the numbers cited in the preceding table, the area will not meet the growing and changing housing needs of the market.

Considering the demographics of the market, including projected household growth estimates and projected changes in household compositions (e.g., household size, ages, etc.), it appears that over one-third of the demand for new rental housing could be specifically targeted to meet the needs of area seniors, though a project could be built to meet the housing needs of both seniors and families concurrently. For general-occupancy projects, a unit mix of around 25% to 35% one-bedroom units, 40% to 50% two-bedroom units, and 15% to 25% three-bedroom units should be the general goal for future rental housing. Senior-oriented projects should consider unit mixes closer to 50% for both one- and two-bedroom units each. Additional details of the area's rental housing supply are included in Section VI and may serve as a guide for future rental housing development design decisions.

**C. FOR-SALE HOUSING GAP ESTIMATES**

The following table summarizes the *for-sale* housing gaps for Muhlenberg County by affordability level.

Muhlenberg County, Kentucky				
For-Sale Housing Gap Estimates (2024-2029)				
Percent of Median Income	≤ 50%	51%-80%	81%-120%	121%+
Household Income Range	≤ \$36,700	\$36,701-\$58,720	\$58,721-\$88,080	\$88,081+
Price Point	≤ \$122,333	\$122,334-\$195,733	\$195,734-\$293,600	\$293,601+
Household Growth	-309	-176	-15	460
Balanced Market*	79	42	37	76
Replacement Housing**	148	74	0	0
External Market Support^	72	42	38	72
Severe Cost Burdened^^	82	41	13	0
Step-Down Support	5	39	321	-365
Less Pipeline Units	0	0	0	0
<b>Overall Units Needed</b>	<b>77</b>	<b>62</b>	<b>394</b>	<b>243</b>
<b>Total For-Sale Housing Gap</b>				<b>776</b>

\*Based on MLS inventory of available homes

\*\*Based on ESRI/ACS estimates of units lacking complete indoor plumbing or are overcrowded

^Based on Bowen National Research proprietary research and ACS migration patterns for Muhlenberg County

^^Based on ESRI/ACS estimates of households paying 50% or more of income toward housing

The overall for-sale housing gap in the county is approximately 776 units over the five-year projection period. While all home price segments and affordability levels have some level of need, the greatest gap appears to be for housing priced between \$195,734 and \$293,600 (394 units) with the next greatest gap for housing priced at or above \$293,601 (243 units). Thus, for-sale product is most in need among moderate- to higher-income households, which is typical of most markets. The relatively limited supply of product at all price levels will increase demand for lower priced units, as many buyers may “step down” to a lower price point. This will place greater pressure on the market’s lower priced product and create greater challenges for lower income households and first-time homebuyers who already have limited housing alternatives that are affordable to them.

In terms of product design, we believe that a variety of for-sale product could be successful in Muhlenberg County. Based on current and projected demographics, as well as the available inventory of for-sale housing, a combination of two- and three-bedroom single-family/attached townhome units could be successful, particularly if they are located in areas within proximity of essential community services (i.e., grocery stores, shopping, education, healthcare, etc.). An opportunity may also exist to develop four-bedroom single-family homes catering to larger family households, as this product type represents the third most common bedroom type among the homes that have recently sold within the county. Additionally, detached or attached single-story cottage-style product, primarily consisting of two-bedroom units, could be successful in serving area seniors, particularly those seeking to downsize from their single-family homes. Smaller detached units

or duplexes may be a product to develop in some of the smaller infill lots within the PSA. For-sale housing product that targets moderate- and high-income households could be successful, though affordable for-sale housing product for lower income and first-time homebuyer households would also do well in this market. The for-sale housing supply of Muhlenberg County is summarized in Section VI and can provide additional details of project concept considerations for future for-sale product in the city.

Overall, there is potential support for a variety of residential development alternatives in the PSA (Muhlenberg County). It is important to note that the housing demand estimates shown in this report assume no major changes occur in the local economy and that the demographic trends and projections provided in this report materialize. As such, our demand estimates should be considered conservative and serve as a baseline for development potential. Should new product be developed, it is reasonable to believe that people will consider moving to Muhlenberg County, assuming the housing is aggressively marketed throughout the region.

It is critical to understand that the estimates provided in this report (both rental and for-sale) represent potential units of demand by targeted income level. The actual number of units that can be supported will ultimately be contingent upon a variety of factors including the location of a project, proposed features (i.e., pricing, amenities/features, bedroom type, unit mix, square footage, etc.), product quality, design (i.e., townhouse, single-family homes, or traditional rental units), management and marketing efforts. As such, each targeted segment outlined in the tables included in this section may be able to support more or less than the number of units shown. The potential number of supportable units should be considered a general guideline to residential development planning.

## IX. COMMUNITY INPUT RESULTS AND ANALYSIS

### A. INTRODUCTION

To gain information, perspective and insight about Muhlenberg County housing issues and the factors influencing housing decisions by its residents, developers and others, Bowen National Research conducted targeted surveys of two specific groups: Stakeholders and Employers. These surveys were conducted during April and May of 2024 and questions were customized to solicit specific information relative to each segment of the market that was surveyed.

The surveys were conducted through the SurveyMonkey.com website. In total, 23 survey responses were received from a broad cross section of the community. The following is a summary of the two surveys conducted by our firm.

*Stakeholder Survey* – A total of 14 respondents representing community leaders (stakeholders) from a broad field of expertise participated in a survey that inquired about common housing issues, housing needs, barriers to development, and possible solutions or initiatives that could be considered to address housing on a local level.

*Employer Survey* – A total of nine respondents representing some of the area’s employers participated in a survey that inquired about general employee composition, housing situations and housing needs. The survey also identified housing issues and the degree housing impacts local employers.

It should be noted that the overall total number of respondents summarized for each survey indicates the number of individuals that responded to at least one survey question. In some instances, the number of actual respondents to a *specific* survey question may be less than these stated numbers.

Key findings from the surveys are included on the following pages.

## B. STAKEHOLDER SURVEY RESULTS

A total of 14 area stakeholders from a broad range of organization types participated in the housing survey with the following results. Note that percentages may not add up to 100.0% due to rounding or because respondents were able to select more than one answer.

Stakeholder respondents were asked to provide the type of organization they represent. Note that respondents were able to select more than one type of organization. All 14 respondents provided input to this question with the following distribution:

Stakeholder Respondents by Organization Type		
Type	Number of Respondents	Share of Respondents
Economic Development Organizations	7	50.0%
Business/Employer/Private Sector	6	42.9%
Elected Official/Municipal Contact/Government	3	21.4%
Landlord/Property Management	3	21.4%
Nonprofit Organization	2	14.3%
Education/Higher Education/University	1	7.1%
Faith-Based Organization	1	7.1%
Housing Authority	1	7.1%
Realtor (Association/Board of Realtors/etc.)	1	7.1%
Social/Supportive Service Provider	1	7.1%

Stakeholder respondents were asked to provide the degree that certain housing types are needed within Muhlenberg County. All 14 respondents provided feedback to this question with the following results:

Housing Needs by Type	
Housing Type	Weighted Score*
Rental Housing (Less than \$1,250/month)	96.2
For-Sale Housing (Less than \$200,000)	89.3
For-Sale Housing (\$200,000-\$299,999)	69.6
Rental Housing (\$1,250-\$1,875/month)	44.2
For-Sale Housing (\$300,000 or more)	37.5
Rental Housing (\$1,876 or more/month)	32.7

\*High Need = 100.0, Moderate Need = 50.0, Low Need = 25.0

Stakeholder respondents were asked to rank the need for specific housing styles in Muhlenberg County. All 14 respondents provided feedback to this question with the following results:

Housing Needs by Style			
Housing Style	Weighted Score*	Housing Style	Weighted Score*
Multifamily Apartments	92.9	Manufactured/Mobile Homes	57.1
Ranch Homes/Single Floor Plan Units	91.1	Accessory Dwelling Units/Tiny Houses	53.6
Duplex/Triplex/Townhomes	76.8	Mixed-Use/Units Above Retail (Downtown Housing)	50.0
Traditional Two-Story Single-Family Homes	71.4	Condominiums	48.2
Low-Cost Fixer-Uppers (Single-Family Homes)	66.1	Single-Room Occupancy (SRO)	46.4

\*High Need = 100.0, Moderate Need = 50.0, Low Need = 25.0

Stakeholder respondents were asked to provide what they believe are the three most common housing issues experienced by residents in Muhlenberg County from a list of choices. All 14 respondents provided feedback to this question with the following results:

Common Housing Issues Experienced by Muhlenberg County Residents			
Housing Issue	Share of Respondents	Housing Issue	Share of Respondents
Limited Availability	85.7%	Outdated Housing (Need to Modernize)	21.4%
Home Purchase Affordability	71.4%	Lack of Rental Deposit (or First/Last Month Rent)	21.4%
Rent Affordability	64.3%	Absentee Landlords	21.4%
Substandard Housing (Quality/Condition)	42.9%	High Cost of Maintenance/Upkeep	14.3%
Lack of Down Payment for Purchase	35.7%	Investors Buying Properties & Increasing Rents/Prices	14.3%
High Cost of Renovation	35.7%	Foreclosure	7.1%
Lack of Access to Public Transportation	28.6%	Failed Background Checks	7.1%

Stakeholder respondents were asked to rank the priority that should be given to specific housing construction types. All 14 respondents provided insight to this question with the following results:

Priority of Housing Construction Types	
Construction Type	Weighted Score*
New Construction	96.4
Repair/Renovation/Revitalization of Existing Housing	92.9
Clear Blighted/Unused Structures to Create Land for New Development	78.6
Mixed-Use (Residential with Commercial)	48.2
Adaptive Reuse (i.e., Warehouse Conversion to Residential)	42.9

\*High Priority = 100.0, Moderate Priority = 50.0, Low Priority = 25.0

Stakeholder respondents were asked to identify common barriers or obstacles (all that apply) that limit residential development in Muhlenberg County. All 14 respondents provided feedback to this question with the following results:

Common Barriers/Obstacles to Residential Development in Muhlenberg County		
Barrier/Obstacle	Number of Respondents	Share of Respondents
Cost of Labor/Materials	12	85.7%
Development Costs	9	64.3%
Cost of Land	8	57.1%
Neighborhood Blight	8	57.1%
Lack of Investors/Developers/Expertise	7	50.0%
Cost of Infrastructure	6	42.9%
Financing	5	35.7%
Lack of Buildable Sites	5	35.7%
Availability of Land	4	28.6%
Lack of Infrastructure	3	21.4%
Lack of Public Transportation	3	21.4%
Crime/Perception of Crime	1	7.1%
Lack of Community Services	1	7.1%

In addition to the answers in the previous table, one respondent noted that *the lack of jobs within the county* limits residential development.

Stakeholder respondents were asked to identify the common infrastructure issues (all that apply) believed to limit residential development in Muhlenberg County. A total of 13 respondents provided feedback to this question with the following results:

Infrastructure Issues Limiting Residential Development in Muhlenberg County		
Infrastructure Issue	Number of Respondents	Share of Respondents
Lack of Access to Public Sewer Utilities	6	46.2%
Developer Fees to Access Sewer Services	6	46.2%
No Impact/No Opinion	5	38.5%
Developer Fees to Access Water Services	4	30.8%
No/Limited Sewer Service Capacity	3	23.1%
Developer Fees to Access Electric Services	3	23.1%
Developer Fees to Access Gas Services	3	23.1%
Lack of Access to Public Water Utilities	2	15.4%
Lack of Access to Electric Utilities	2	15.4%
Lack of Access to Gas Utilities	2	15.4%

Stakeholder respondents were asked to provide the best options to reduce or eliminate Muhlenberg County’s greatest obstacles (barriers to residential development). Respondents were asked to select up to five of the provided options. All 14 respondents provided feedback to this question with the following results:

Best Options to Reduce or Eliminate the Greatest Obstacles to Residential Development in Muhlenberg County			
Option	Share of Respondents	Option	Share of Respondents
Collaboration between Public and Private Sectors	64.3%	Pooling of Public, Philanthropic, and Private Resources	28.6%
Housing Gap/Bridge Financing	50.0%	Tax Abatements/Credits	28.6%
Government Assistance with Infrastructure	50.0%	Establish Rental Registry	21.4%
Building Consensus among Communities/Advocates	35.7%	Revisiting/Modifying Zoning (e.g., Density, Setbacks, etc.)	21.4%
Establishment of a Housing Trust Fund (Focuses on Preservation/Development of Affordable Housing)	35.7%	Establish Rental Inspection Program	14.3%
Inform/Educate Development Community on Local Opportunities	35.7%	Government Sale of Public Land/Buildings at Discount or Donated	14.3%
Educating the Public on Importance of Housing	28.6%	Support/Expand Code Enforcement	14.3%
Educate the Public on the Importance of Different Types of Housing	28.6%	Waiving/Lowering Development Fees	14.3%
Establish Centralized Developer/Builder Resource Center	28.6%	Encouraging Accessory Dwelling Unit Opportunities	7.1%
Expanding Grant Seeking Efforts	28.6%	Removal of City Fines/Fees/Liens on Existing Homes to Encourage Transactions	7.1%

Stakeholder respondents were asked what factors are believed to be the most critical to the geographical location of new residential development. Respondents were asked to select up to three of the provided options. All 14 respondents provided feedback to this question with the following results:

Factors Most Critical to the Geographical Location of New Residential Development			
Factor	Share of Respondents	Factor	Share of Respondents
Access to Infrastructure (Water/Sewer/High-Speed Internet)	71.4%	Access To Public Transit	21.4%
Quality of Life	57.1%	Surrounding Land Uses/Neighborhoods	21.4%
Proximity to Community Services (Shopping, Entertainment, Recreation, etc.)	50.0%	Access To Highways/Thoroughfares	14.3%
Safety/Crime	42.9%	Local Taxes	7.1%
Proximity to Work	35.7%	Walkability	7.1%
Quality of Schools	28.6%		

In addition to the answers in the previous table, one respondent noted that *zoning laws and enforcement* as a critical factor to the geographical location of new residential development.

Stakeholder respondents were asked to select from a list of choices (all that apply) that should be areas of focus in Muhlenberg County. All 14 respondents provided feedback to this question with the following results:

Areas of Focus in Muhlenberg County			
Area of Focus	Share of Respondents	Area of Focus	Share of Respondents
Developing New Housing	100.0%	Adding Community Services (Shopping, Entertainment, Recreation, etc.)	28.6%
Removal/Mitigation of Residential Blight	92.9%	Addressing Crime	21.4%
Accessibility to Key Community Services (e.g., Healthcare, Childcare, etc.)	57.1%	Accessibility to Recreational Amenities	14.3%
Critical Home Repair	57.1%	Improving Public Transportation	14.3%
Renovating/Repurposing Buildings for Housing	57.1%	Unit Modifications to Allow Aging in Place	7.1%

Stakeholder respondents were asked to rank the demand for housing in Muhlenberg County for each listed special needs group. All 14 respondents provided feedback to this question with the following results:

Demand for Special Needs Housing			
Special Needs Group	Weighted Score*	Special Needs Group	Weighted Score*
Persons with Substance Abuse Disorder	76.8	Veterans	50.0
Victims of Domestic Violence	57.1	Youth Aging Out of Foster Care	50.0
Homeless	55.4	Persons with Psychiatric Disabilities (mental illness)	46.4
Released Convicts/Re-Entry	55.4	Developmentally Disabled (cognitive)	46.4
Disabled (Vision/Hearing/Mobility)	53.6		

\*High Need = 100.0, Moderate Need = 50.0, Low Need = 25.0

Stakeholder respondents were asked to rank the types of housing for special needs that are most needed in Muhlenberg County. All 14 respondents provided feedback to this question with the following results:

Type of Special Needs Housing	
Type	Weighted Score*
Permanent Supportive Housing	67.9
Emergency Shelter	66.1
Transitional Housing	57.7
Group Homes	48.1

\*High Need = 100.0, Moderate Need = 50.0, Low Need = 25.0

Stakeholder respondents were asked to provide the obstacles that exist that limit the development of housing for special needs populations in Muhlenberg County. Eleven respondents provided feedback through an open-ended response, which are summarized as follows:

- Availability of funding
- Lack of community services that cater to special needs populations
- Lack of awareness of the need for special needs housing
- Minimal development options
- High development costs
- Lack of interested developers
- The prevalence of blight
- Lack of accessibility
- Lack of investment return
- Lack of transportation to essential community services (e.g., grocery stores, healthcare, etc.)

Stakeholder respondents were asked to provide recommendations on ways to address the needs of the special needs populations in Muhlenberg County. A total of eight respondents provided feedback to this question, which are summarized as follows:

- Establish public and private partnerships
- Institute a group to monitor and help with the special needs population
- Create public awareness
- Develop multiunit properties
- Create funding sources and sponsorship
- Establish public transportation

## Stakeholder Survey Conclusions

Based on the feedback provided by area stakeholders, it appears that Muhlenberg County is most in need of housing that is affordable to lower income households (i.e., rentals priced below \$1,250/month and for-sale housing priced below \$200,000), while for-sale housing priced between \$200,000 and \$299,999 also appears to be a significant need. Multifamily apartments and ranch homes/single floor plan units were rated as the top housing styles needed within the county, with duplex/triplex/townhomes and traditional two-story single-family homes also ranking as some of the top housing styles needed. Limited availability is one of the most common housing issues experienced in Muhlenberg County. Home purchase affordability and rent affordability were also cited as some of the most common housing issues within the area. Stakeholder respondents indicated that new construction, the repair/renovation/revitalization of existing housing and the clearing of blighted/unused structures to create land for new development should be priorities in the county. Overall, the cost of labor and materials, development costs, cost of land and neighborhood blight were cited as the most common barriers to residential development within Muhlenberg County. In terms of infrastructure issues within the county, lack of access to public sewer utilities and developer fees to access sewer services were cited as the most common issues that limit residential development. Stakeholder respondents noted that the collaboration between public and private sectors, housing gap/bridge financing and government assistance with infrastructure are the best options to reduce or eliminate barriers to residential development within the county. Access to infrastructure (water/sewer/high-speed internet), quality of life and proximity to community services (shopping, entertainment, recreation, etc.) are cited as the most critical factors to the geographical location of new residential development. Notably, all stakeholder respondents cited the development of new housing as the top area of focus within Muhlenberg County, with the removal/mitigation of residential blight also cited as a top area of focus.

In terms of housing demand for the special needs population within Muhlenberg County, it appears that demand is relatively even among the different special needs subgroups (e.g., homeless, victims of domestic violence, disabled, veterans, etc.); however, stakeholder respondents cited that housing for persons with a substance abuse disorder should be the main focus. In terms of the housing types needed for the special needs population, permanent supportive housing and emergency shelters are believed to be the most needed within the county, while the need for transitional housing was ranked relatively high among stakeholder respondents. Obstacles and solutions regarding housing development for the special needs groups within the area, as cited by stakeholders, are summarized on page IX-7.

The following table summarizes the top stakeholder responses for Muhlenberg County:

<b>Muhlenberg County, Kentucky Summary of Stakeholder Survey Results</b>		
<b>Category</b>	<b>Top Responses</b>	<b>Consensus</b>
Housing Needs by Type	<ul style="list-style-type: none"> <li>Rental Housing (Less than \$1,250/month)</li> <li>For-Sale Housing (Less than \$200,000)</li> <li>For-Sale Housing (\$200,000-\$299,999)</li> </ul>	<b>96.2*</b> <b>89.3*</b> <b>69.6*</b>
Housing Needs by Style	<ul style="list-style-type: none"> <li>Multifamily Apartments</li> <li>Ranch Homes/Single Floor Plan Units</li> <li>Duplex/Triplex/Townhomes</li> <li>Traditional Two-Story Single-Family Homes</li> </ul>	<b>92.9*</b> <b>91.1*</b> <b>76.8*</b> <b>71.4*</b>
Housing Issues Experienced	<ul style="list-style-type: none"> <li>Limited Availability</li> <li>Home Purchase Affordability</li> <li>Rent Affordability</li> </ul>	<b>85.7%</b> <b>71.4%</b> <b>64.3%</b>
Priority by Construction Type	<ul style="list-style-type: none"> <li>New Construction</li> <li>Repair/Renovation/Revitalization of Existing Housing</li> <li>Clear Blighted/Unused Structures to Create Land for New Development</li> </ul>	<b>96.4*</b> <b>92.9*</b> <b>78.6*</b>
Common Residential Barriers/Obstacles	<ul style="list-style-type: none"> <li>Cost of Labor/Materials</li> <li>Development Costs</li> <li>Cost of Land</li> <li>Neighborhood Blight</li> </ul>	<b>85.7%</b> <b>64.3%</b> <b>57.1%</b> <b>57.1%</b>
Infrastructure Issues Limiting Residential Development	<ul style="list-style-type: none"> <li>Lack of Access to Public Sewer Utilities</li> <li>Developer Fees to Access Sewer Services</li> </ul>	<b>46.2%</b> <b>46.2%</b>
Best Options to Reduce/Eliminate Obstacles to Residential Development	<ul style="list-style-type: none"> <li>Collaboration between Public and Private Sectors</li> <li>Housing Gap/Bridge Financing</li> <li>Government Assistance with Infrastructure</li> </ul>	<b>64.3%</b> <b>50.0%</b> <b>50.0%</b>
Critical Factors to the Geographical Location of Residential Development	<ul style="list-style-type: none"> <li>Access to Infrastructure</li> <li>Quality of Life</li> <li>Proximity to Community Services</li> </ul>	<b>71.4%</b> <b>57.1%</b> <b>50.0%</b>
Areas of Focus	<ul style="list-style-type: none"> <li>Developing New Housing</li> <li>Removal/Mitigation of Residential Blight</li> </ul>	<b>100.0%</b> <b>92.9%</b>
Demand for Special Needs Housing	<ul style="list-style-type: none"> <li>Persons with Substance Abuse</li> <li>Victims of Domestic Violence</li> <li>Homeless</li> <li>Released Convicts/Re-Entry</li> <li>Disabled (Vision/Hearing/Mobility)</li> </ul>	<b>76.8*</b> <b>57.1*</b> <b>55.4*</b> <b>55.4*</b> <b>53.6*</b>
Type of Special Needs Housing	<ul style="list-style-type: none"> <li>Permanent Supportive Housing</li> <li>Emergency Shelter</li> <li>Transitional Housing</li> </ul>	<b>67.9*</b> <b>66.1*</b> <b>57.7*</b>

\*Denotes weighted score

### C. EMPLOYER SURVEY RESULTS

A total of nine representatives from area employers responded to the housing survey. Note that percentages may not add up to 100.0% due to rounding or because respondents were able to select more than one answer.

Employer respondents were asked to describe the primary business activity of their company. A total of eight respondents provided feedback to this question with the following distribution:

Employer Respondents by Business Type		
Type	Number	Share
Education	3	37.5%
Manufacturing/Industrial	2	25.0%
Construction	1	12.5%
Healthcare	1	12.5%
Finance	1	12.5%

Employer respondents were asked to estimate the share of their employees that are commuting more than 45 minutes to work. All nine employers provided feedback to this question with the following results:

Estimated Share of Workers that Commute More than 45 Minutes		
Share of Workers	Number of Employers	Share of Employers
Less than 25%	7	77.8%
25% to 50%	1	11.1%
51% to 75%	0	0.0%
More than 75%	1	11.1%

Employer respondents were asked to estimate the shares of their employees that are renters versus homeowners. All nine employers provided feedback to this question with the following results.

Tenancy	Estimated Shares of Workers				
	< 25%	25%-50%	51%-75%	> 75%	Unknown
	<b>Share of Employers</b>				
Renters	33.3%	11.1%	33.3%	11.1%	11.1%
Homeowners	33.3%	22.2%	11.1%	22.2%	11.1%

Employer respondents were asked what aspect of housing is impacting their employees. Employers could select from a list of impact options that was provided. All nine employers provided insight to this question with the following distribution.

<b>Housing Aspects Adversely Impacting Employees</b>		
<b>Housing Aspect</b>	<b>Number of Employers</b>	<b>Share of Employers</b>
Affordability of Housing	7	77.8%
Availability of Housing	6	66.7%
Quality of Housing	4	44.4%
Housing Matching Household Needs (e.g., Families, Young Professionals, etc.)	2	22.2%
No Impact	2	22.2%
Location of Housing	1	11.1%

Employer respondents were then asked how the housing issues that their employees or prospective employees experience are impacting the company. Employers could select from a list of impact options that was provided. All nine respondents provided feedback to this question with the following distribution.

<b>Impacts for Employers Resulting from Housing Issues</b>		
<b>Impact</b>	<b>Number</b>	<b>Share</b>
Attracting Employees	4	44.4%
Retaining Employees	4	44.4%
No Impact	4	44.4%
Limits Expansion/Growth Plans	2	22.2%
Adds to Company Costs/Expenses	2	22.2%
Places Company at Competitive Disadvantage	1	11.1%

Employer respondents were asked if their company is involved with housing (e.g., provides funding, offers relocation packages, provides placement services, etc.). All nine employers provided feedback to this question with the following distribution.

<b>Company Involvement with Housing</b>		
<b>Response</b>	<b>Number</b>	<b>Share</b>
No	6	66.7%
Yes	2	22.2%
Not Directly	1	11.1%

Employer respondents were then asked if their company is not directly involved with housing, would this be an area they would consider being involved with in the future. A total of seven employers provided feedback to this question with the following distribution.

<b>Potential Involvement in Housing for Employers not Directly Involved</b>		
<b>Response</b>	<b>Number</b>	<b>Share</b>
Maybe	4	57.1%
No	3	42.9%
Yes	0	0.0%

Employer respondents were asked what options they would consider in addressing the housing issues for their current and future employees. Employers who already provide housing assistance were asked what options they would consider adding. Employers could select from a list of options that was provided. A total of six respondents provided feedback to this question with the following distribution.

<b>Options for Employers to Consider Addressing Housing Issues for Current/Future Employees</b>		
<b>Option</b>	<b>Number</b>	<b>Share</b>
Not Interested in Adding Any Additional Housing Assistance	3	50.0%
Participating in a Housing Resource Center/Website	2	33.3%
Developing Employee Housing	1	16.7%
Offering Employee Relocation Services/Reimbursements	1	16.7%
Purchasing Housing to Rent/Sell to Employees	1	16.7%

Employer respondents were asked what type of housing assistance their company currently provides for its employees. Employers could select from a list of options that was provided. A total of seven respondents provided feedback to this question with the following distribution.

<b>Type of Housing Assistance Employers Provide to their Employees</b>		
<b>Type of Housing Assistance</b>	<b>Number</b>	<b>Share</b>
None	5	71.4%
Purchases Housing to Rent/Sell to Employees	2	28.6%
Develops Employee Housing	1	14.3%

Employer respondents were asked in what ways would an employer housing tax credit impact their involvement in employee housing solutions. Employers could select from a list of options that was provided. A total of seven respondents provided feedback to this question with the following distribution.

<b>Employer Housing Tax Credit Impact on Involvement in Employee Housing</b>		
<b>Response</b>	<b>Number</b>	<b>Share</b>
Not Interested in an Employer Housing Tax Credit	4	57.1%
More Likely to Offer Housing Assistance to Employees	2	28.6%
More Likely to be Involved in Developing Employee Housing	1	14.3%
Unknown	1	14.3%

Employer respondents were then asked if additional housing was available in the county that adequately served the needs of their employees, would they consider expanding or hiring additional staff. A total of seven respondents supplied answers to this question with the following distribution.

<b>Consider Increasing Number of Employees if Adequate Housing Available</b>		
<b>Response</b>	<b>Number</b>	<b>Share</b>
No	4	57.1%
Yes	2	28.6%
Unknown	1	14.3%

Employer respondents were asked to provide any additional comments regarding housing issues and needs that impact employees within Muhlenberg County. A total of five respondents provided feedback in the form of an open-ended response, which are summarized as follows:

- Lack of affordable housing realistic to employee wages of the county.
- Housing shortages for employees in the agricultural industry (which are underpaid).
- Housing issues affect students/families more than employees. Livable housing options for low-income families are severely limited within the county. Due to the general lack of subsidized housing, families are forced to live in vehicles or with relatives/neighbors, which makes student learning very difficult by not having basic needs met.
- The need for lower rents and deposits or offer to spread out monthly deposits. Also need more communities that allow pets.
- Need for more three-bedroom homes.

#### Employer Survey Conclusions

Based on the feedback provided by employers of Muhlenberg County, the majority of respondents cited the affordability and availability of housing within the county as being the main housing issues impacting their employees. This, in turn, has presented difficulties for area employers to attract and retain employees. The majority of employer respondents indicated that their company has no direct involvement with housing (e.g., funding, relocation packages, placement services, etc.). Over half of respondents indicated that they *may* consider being involved with housing assistance in the future. Some of the housing assistance initiatives that respondents indicated they would consider being involved in include participating in a housing resource center/website, developing employee housing, offering employee relocation services or reimbursements or purchasing housing to rent or sell to employees. Lastly, over a quarter of the employer respondents indicated that they *would* consider hiring more staff if additional housing that adequately served the needs of their employees was made available in the county.

The following table summarizes the top employer responses to critical questions contained within this survey:

<b>Muhlenberg County, Kentucky Summary of Employer Survey Results</b>		
<b>Category</b>	<b>Findings / Needs / Issues</b>	<b>Consensus/ Share</b>
Housing Aspects Adversely Impacting Employees	<ul style="list-style-type: none"> <li>Affordability of Housing</li> <li>Availability of Housing</li> </ul>	<b>77.8%</b> <b>66.7%</b>
Impacts for Employers from Housing Issues	<ul style="list-style-type: none"> <li>Difficulty Attracting Employees</li> <li>Difficulty Retaining Employees</li> <li>No Impact</li> </ul>	<b>44.4%</b> <b>44.4%</b> <b>44.4%</b>
Current Housing Assistance Provided by Employer	<ul style="list-style-type: none"> <li>Do Not Currently Provide Housing Assistance to Employees</li> <li>Provides Some Type of Housing Assistance to Employees</li> <li>Not Directly Involved with Housing</li> </ul>	<b>66.7%</b> <b>22.2%</b> <b>11.1%</b>
Potential Housing Assistance Provided by Employer	<ul style="list-style-type: none"> <li>Maybe</li> <li>Would Not Consider</li> </ul>	<b>57.1%</b> <b>42.9%</b>
Housing Assistance Program Consideration	<ul style="list-style-type: none"> <li>No Interest</li> <li>Participating in a Housing Resource Center/Website</li> </ul>	<b>50.0%</b> <b>33.3%</b>
Type of Housing Assistance Provided by Employer	<ul style="list-style-type: none"> <li>None</li> <li>Purchases Housing to Rent/Sell to Employees</li> <li>Develops Employee Housing</li> </ul>	<b>71.4%</b> <b>28.6%</b> <b>14.3%</b>
Impact of Employer Housing Tax Credit on Involvement in Employee Housing	<ul style="list-style-type: none"> <li>Not Interested in an Employer Housing Tax Credit</li> <li>More Likely to Offer Housing Assistance to Employees</li> <li>More Likely to be Involved in Developing Employee Housing</li> </ul>	<b>57.1%</b> <b>28.6%</b> <b>14.3%</b>
Consider Increasing Number of Employees if Adequate Housing Available	<ul style="list-style-type: none"> <li>Would Not Consider Expanding/Hiring Additional Staff</li> <li>Would Consider Expanding/Hiring Additional Staff</li> <li>Unknown</li> </ul>	<b>57.1%</b> <b>28.6%</b> <b>14.3%</b>

ADDENDUM A:  
FIELD SURVEY OF  
CONVENTIONAL RENTALS

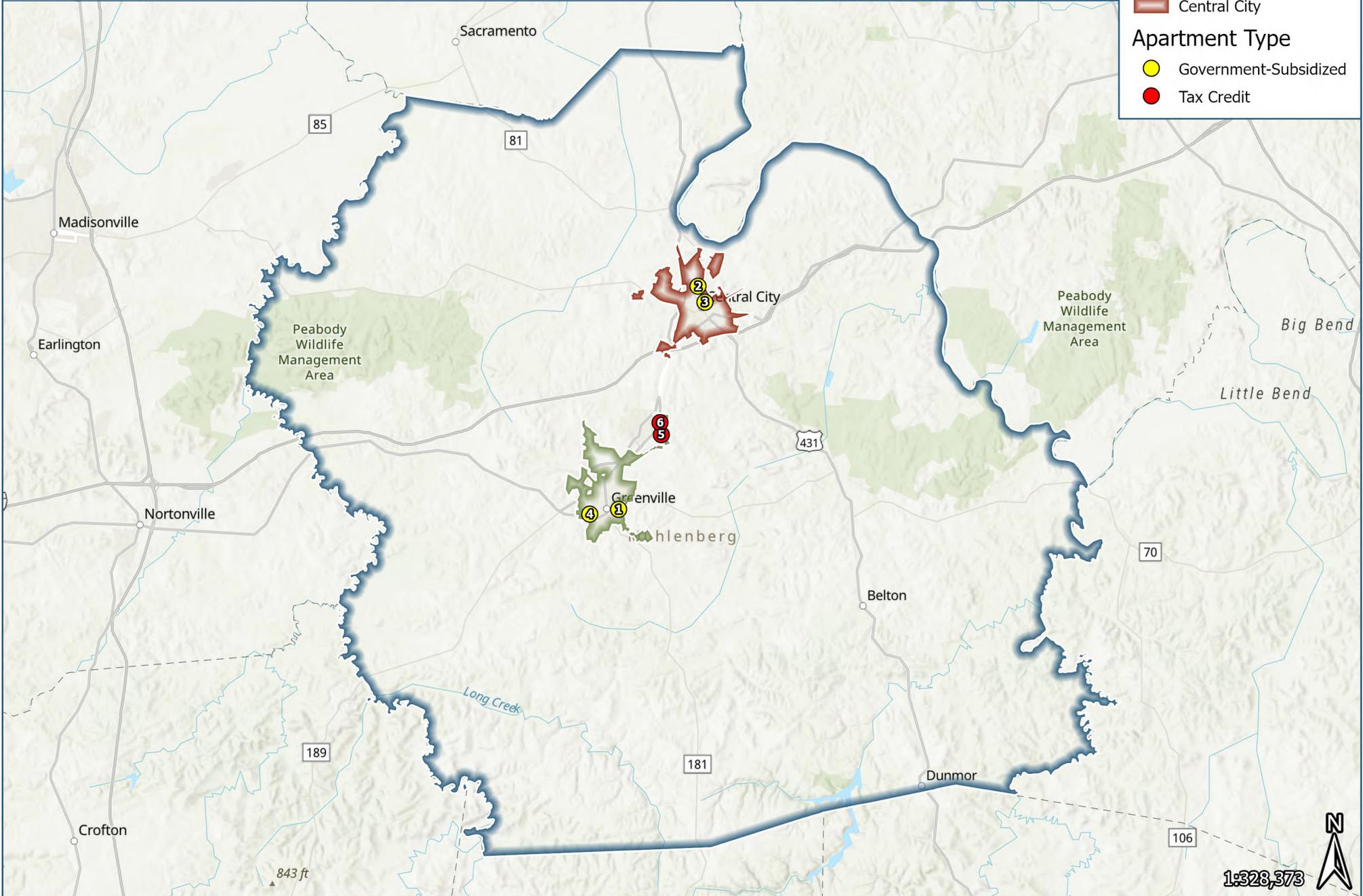
Muhlenberg County

Greenville

Central City

**Apartment Type**

- Government-Subsidized
- Tax Credit



Esri, CGIAR, USGS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS  
Additional Source(s): Bowen National Research

1:328,373



Map ID	Property	Prop Type	Quality Rating	Year Built	Total Units	Vacant	Occ. Rate
1	Greenville Park & Arms Apts.	GSS	B-	1980	72	0	100.0%
2	Hillwood Village	GSS	B	1981	44	0	100.0%
3	Muhlenberg Manor	GSS	B-	1987	23	0	100.0%
4	Public Housing of Greenville	GSS	C+	1967	49	0	100.0%
5	Sandy Hill Apts.	TAX	B	2004	29	0	100.0%
6	Tammy Terrace	TAX	B	2006	34	0	100.0%

 Comparable Property	 (MIG) Market-Rate, Income-Restricted (not LIHTC) & Govt-Subsidized	 (TIG) Tax Credit, Income-Restricted (not LIHTC) & Govt-Subsidized
 Senior Restricted	 (TAX) Tax Credit	 (INR) Income-Restricted (not LIHTC)
 (MRR) Market-Rate	 (TGS) Tax Credit & Government-Subsidized	 (ING) Income-Restricted (not LIHTC) & Government-Subsidized
 (MRT) Market-Rate & Tax Credit	 (TMI) Tax Credit, Market-Rate, Income-Restricted (not LIHTC)	 (GSS) Government-Subsidized
 (MRG) Market-Rate & Government-Subsidized	 (TIN) Tax Credit & Income-Restricted (not LIHTC)	 (ALL) Tax Credit, Market-Rate, Govt-Subsidized & Income-Restricted
 (MIN) Market-Rate & Income-Restricted (not LIHTC)	 (TMG) Tax Credit, Market-Rate & Government-Subsidized	

<b>1</b>	<b>Greenville Park &amp; Arms Apts.</b> 100 Pritchett Dr, Greenville, KY 42345	Contact: Laquita Phone: (270) 338-9988
	Total Units: 72 UC: 0 Occupancy: 100.0% Stories: 2 Year Built: 1980 BR: 1 Vacant Units: 0 Waitlist: Yes AR Year: Target Population: Senior 62+ Yr Renovated: Rent Special: None Notes: HUD Section 8	
<b>2</b>	<b>Hillwood Village</b> 701 N 5th St, Central City, KY 42330	Contact: Linda Phone: (270) 754-2282
	Total Units: 44 UC: 4 Occupancy: 100.0% Stories: 2 Year Built: 1981 BR: 1, 2 Vacant Units: 0 Waitlist: 2 HH AR Year: Target Population: Family Yr Renovated: 2024 Rent Special: None Notes: RD 515, has RA (30 units)	
<b>3</b>	<b>Muhlenberg Manor</b> 401 Morehead St, Central City, KY 42330	Contact: Phone: (270) 931-5056
	Total Units: 23 UC: 1 Occupancy: 100.0% Stories: 2 Year Built: 1987 BR: 1, 2 Vacant Units: 0 Waitlist: Yes AR Year: Target Population: Family Yr Renovated: 2024 Rent Special: None Notes: RD 515, has RA (20 units)	
<b>4</b>	<b>Public Housing of Greenville</b> 613 Reynolds Dr, Greenville, KY 42345	Contact: Jackie Phone: (270) 338-5900
	Total Units: 49 UC: 0 Occupancy: 100.0% Stories: 1 Year Built: 1967 BR: 0, 1, 2, 3, 4, 5 Vacant Units: 0 Waitlist: Yes AR Year: Target Population: Family Yr Renovated: 2023 Rent Special: None Notes: Public Housing	
<b>5</b>	<b>Sandy Hill Apts.</b> 801 Cleaton Rd., Central City, KY 42330	Contact: Karen Phone: (270) 338-0460
	Total Units: 29 UC: 0 Occupancy: 100.0% Stories: 1 Year Built: 2004 BR: 2 Vacant Units: 0 Waitlist: 20 HH AR Year: Target Population: Senior 55+ Yr Renovated: Rent Special: None Notes: Tax Credit	

 Comparable Property	 (MIG) Market-Rate, Income-Restricted (not LIHTC) & Govt-Subsidized	 (TIG) Tax Credit, Income-Restricted (not LIHTC) & Govt-Subsidized
 Senior Restricted	 (TAX) Tax Credit	 (INR) Income-Restricted (not LIHTC)
 (MRR) Market-Rate	 (TGS) Tax Credit & Government-Subsidized	 (ING) Income-Restricted (not LIHTC) & Government-Subsidized
 (MRT) Market-Rate & Tax Credit	 (TMI) Tax Credit, Market-Rate, Income-Restricted (not LIHTC)	 (GSS) Government-Subsidized
 (MRG) Market-Rate & Government-Subsidized	 (TIN) Tax Credit & Income-Restricted (not LIHTC)	 (ALL) Tax Credit, Market-Rate, Govt-Subsidized & Income-Restricted
 (MIN) Market-Rate & Income-Restricted (not LIHTC)	 (TMG) Tax Credit, Market-Rate & Government-Subsidized	

<b>6</b>	<b>Tammy Terrace</b> 801 Cleaton Rd., Central City, KY 42330		Contact: Karen Phone: (270) 338-0460		
		Total Units: <b>34</b> UC: <b>0</b> BR: <b>2, 3</b> Target Population: <b>Family</b> Rent Special: <b>None</b> Notes: <b>Tax Credit</b>	Occupancy: <b>100.0%</b> Vacant Units: <b>0</b>	Stories: <b>2</b> Waitlist: <b>37 HH</b>	Year Built: <b>2006</b> AR Year: Yr Renovated:

Comparable Property	(MIG) Market-Rate, Income-Restricted (not LIHTC) & Govt-Subsidized	(TIG) Tax Credit, Income-Restricted (not LIHTC) & Govt-Subsidized
Senior Restricted	(TAX) Tax Credit	(INR) Income-Restricted (not LIHTC)
(MRR) Market-Rate	(TGS) Tax Credit & Government-Subsidized	(ING) Income-Restricted (not LIHTC) & Government-Subsidized
(MRT) Market-Rate & Tax Credit	(TMI) Tax Credit, Market-Rate, Income-Restricted (not LIHTC)	(GSS) Government-Subsidized
(MRG) Market-Rate & Government-Subsidized	(TIN) Tax Credit & Income-Restricted (not LIHTC)	(ALL) Tax Credit, Market-Rate, Govt-Subsidized & Income-Restricted
(MIN) Market-Rate & Income-Restricted (not LIHTC)	(TMG) Tax Credit, Market-Rate & Government-Subsidized	

**ADDENDUM B:**  
**NON-CONVENTIONAL RENTAL SURVEY**

Address	City	County	Type	Price	Square Feet	Price Per Square Foot	Bed	Bath	Year Built	Source
211 Fairview St	Greenville	Muhlenberg	House	\$625	610	\$1.02	1	1.0	1946	realtor.com
105 Silver Laurel Ct	Greenville	Muhlenberg	House	\$1,500	1,400	\$1.07	2	2.0	2006	zillow.com

## ADDENDUM C: METHODOLOGY AND LIMITATIONS

### A. METHODOLOGIES AND SOURCES

The following methods were used by Bowen National Research.

#### Study Area Delineation

The primary geographic scope of this study is Muhlenberg County, Kentucky. Additionally, supplemental data and analysis is provided for the cities of Greenville and Central City. A full description of the market areas and corresponding maps are included in Section III.

#### Demographic Information

Demographic data for population, households, and housing was secured from ESRI, the 2010 and 2020 U.S. Census, the U.S. Department of Commerce, and the American Community Survey. This data has been used in its primary form and by Bowen National Research for secondary calculations. All sources are referenced throughout the report. Estimates and projections of key demographic data for 2024 and 2029 were also provided.

#### Employment Information

Employment information was obtained and evaluated for various geographic areas that were part of this overall study. This information included data related to wages by occupation, employment by job sector, total employment, unemployment rates, identification of top employers, and identification of large-scale job expansions or contractions. Most information was obtained through the U.S. Department of Labor, Bureau of Labor Statistics. Bowen National Research also conducted numerous interviews with local stakeholders familiar with the area's employment characteristics and trends.

#### Housing Component Definitions

This study focuses on rental and for-sale housing components. Rentals include multifamily apartments (generally five+ units per building and non-conventional rentals (single-family homes, duplexes, units over storefronts, etc.). For-sale housing includes individual homes, mobile homes, and projects within subdivisions.

### Housing Supply Documentation

Between March and April of 2024, Bowen National Research conducted telephone research, as well as online research, of the area's housing supply. Additionally, market analysts from Bowen National Research traveled to the area between March and May of 2024, conducting research on the housing properties identified in this study, as well as obtaining other on-site information relative to this analysis.

The following data was collected on each multifamily rental property:

1. Property Information: Name, address, total units, and number of floors
2. Owner/Developer and/or Property Manager: Name and telephone number
3. Population Served (i.e., seniors vs. family, low-income vs. market-rate, etc.)
4. Available Amenities/Features: Both in-unit and within the overall project
5. Years Built and Renovated (if applicable)
6. Vacancy Rates
7. Distribution of Units by Bedroom Type
8. Square Feet and Number of Bathrooms by Bedroom Type
9. Gross Rents or Price Points by Bedroom Type
10. Property Type
11. Quality Ratings
12. GPS Locations

Non-Conventional rental information includes such things as collected and gross rent, bedroom types, square footage, price per square foot, and total available inventory.

For-sale housing data includes details on home price, year built, location, number of bedrooms/bathrooms, price per-square-foot, and other property attributes. Data was analyzed for both historical transactions and currently available residential units.

### Other Housing Factors

We evaluated other factors or resources that could impact housing development and preservation, including identification of potential development/investment partners and identification of housing programs.

### Housing Demand

Based on the demographic data for both 2024 and 2029 and taking into consideration the housing data from our field survey of area housing alternatives, we are able to project the potential number of new housing units that are needed (housing gap) in Muhlenberg County. The following summarizes the metrics used in our demand estimates.

- Rental Housing – We included renter household growth, the number of units required for a balanced market, the need for replacement housing, commuter/external market support, severe housing cost burdened households, and step-down support as the demand components in our estimates for new rental housing units. As part of this analysis, we accounted for vacancies reported among all rental alternatives. We conclude this analysis by providing the number of units that are needed (housing gap) by different income segments and rent levels.
- For-Sale Housing – We considered potential demand from owner household growth, the number of units required for a balanced market, the need for replacement housing, commuter/external market support, severe housing cost burdened households, and step-down support in our estimates for new for-sale housing. As part of this analysis, we accounted for vacancies reported among all surveyed for-sale alternatives. We conclude this analysis by providing the number of units that are needed (housing gap) by different income segments and price points.

#### Community Engagement

Bowen National Research conducted two separate online surveys to solicit input from area stakeholders and employers in the county. Overall, 23 individuals participated in the surveys, providing valuable local insight on the housing challenges, issues and opportunities in Muhlenberg County. The aggregate results from these surveys are presented and evaluated in Section IX.

#### **B. REPORT LIMITATIONS**

The intent of this report is to collect and analyze significant levels of data for Muhlenberg County, Kentucky. Bowen National Research relied on a variety of data sources to generate this report. These data sources are not always verifiable; however, Bowen National Research makes a concerted effort to assure accuracy. While this is not always possible, we believe that our efforts provide an acceptable standard margin of error. Bowen National Research is not responsible for errors or omissions in the data provided by other sources.

We have no present or prospective interest in any of the properties included in this report, and we have no personal interest or bias with respect to the parties involved. Our compensation is not contingent on an action or event resulting from the analyses, opinions, or use of this study. Any reproduction or duplication of this study without the expressed approval of Muhlenberg Economic Growth Alliance or Bowen National Research is strictly prohibited.

## ADDENDUM D: QUALIFICATIONS

### The Company

Bowen National Research employs an expert staff to ensure that each market study includes the highest standards. Each staff member has hands-on experience evaluating sites and comparable properties, analyzing market characteristics and trends, and providing realistic recommendations and conclusions. The Bowen National Research staff has national experience and knowledge to assist in evaluating a variety of product types and markets.



### Primary Contact and Report Author

**Patrick Bowen**, President of Bowen National Research, has conducted numerous housing needs assessments and provided consulting services to city, county and state development entities as it relates to residential development, including affordable and market-rate housing, for both rental and for-sale housing, and retail development opportunities. He has also prepared and supervised thousands of market feasibility studies for all types of real estate products, including housing, retail, office, industrial and mixed-use developments, since 1996. Mr. Bowen has worked closely with many state and federal housing agencies to assist

them with their market study guidelines. Mr. Bowen has his bachelor's degree in legal administration (with emphasis on business and law) from the University of West Florida and currently serves as Chairman of the National Council of Housing Market Analysts (NCHMA).

#### Housing Needs Assessment Experience

Location	Client	Completion Year
Asheville, NC	City of Asheville Community and Economic Development Department	2020
Evansville, IN	City of Evansville, IN - Department of Metropolitan Development	2020
Youngstown, OH	Youngstown Neighborhood Development Corporation (YNDC)	2020
Richlands, VA	Town of Richlands, Virginia	2020
Elkin, NC	Elkin Economic Development Department	2020
Grand Rapids, MI	Grand Rapids Area Chamber of Commerce	2020
Morgantown, WV	City of Morgantown	2020
Erwin, TN	Unicoi County Economic Development Board	2020
Ferrum, VA	County of Franklin (Virginia)	2020
Charleston, WV	Charleston Area Alliance	2020
Wilkes County, NC	Wilkes Economic Development Corporation	2020
Oxford, OH	City of Oxford - Community Development Department	2020
New Hanover County, NC	New Hanover County Finance Department	2020
Ann Arbor, MI	Smith Group, Inc.	2020
Austin, IN	Austin Redevelopment Commission	2020

(continued)

Housing Needs Assessment Experience		
Location	Client	Completion Year
Evansville, IN	City of Evansville, IN - Department of Metropolitan Development	2021
Giddings, TX	Giddings Economic Development Corporation	2021
Georgetown County, SC	Georgetown County	2021
Western North Carolina (18 Counties)	Dogwood Health Trust	2021
Carteret County, NC	Carteret County Economic Development Foundation	2021
Ottawa County, MI	HOUSING NEXT	2021
Dayton, OH	Miami Valley Nonprofit Housing Collaborative	2021
High Country, NC (4 Counties)	NC REALTORS	2022
Evansville, IN	City of Evansville, IN - Department of Metropolitan Development	2022
Barren County, KY	The Barren County Economic Authority	2022
Kirksville, MO	City of Kirksville	2022
Rutherfordton, NC	Town of Rutherfordton	2022
Spindale, NC	Town of Spindale	2022
Wood County, WV	Wood County Development Authority & Parkersburg-Wood County Area Development Corporation	2022
Yancey County, NC	Yancey County	2022
Cherokee County, NC	Economic and Workforce Development, Tri-County Community College	2022
Rowan County, KY	Morehead-Rowan County Economic Development Council	2022
Avery County, NC	Avery County	2022
Muskegon, MI	City of Muskegon	2023
Firelands Region, OH	Firelands Forward	2023
Marshall County, WV	Marshall County Commission	2023
Lebanon County, PA	Lebanon County Coalition to End Homelessness	2023
Northern, MI	Housing North	2023
Muskegon County, MI	Community Foundation for Muskegon County	2023
Mason County, MI	Mason County Chamber Alliance	2023
Oceana County, MI	Dogwood Community Development	2023
Allegan County, MI	Allegan County Community Foundation	2023
Bowling Green, KY	City of Bowling Green	2023
Fayette County, PA	Fay-Penn Economic Development Council	2023
Tarboro, NC	Town of Tarboro	2023
Southwest Region, WV (10 Counties)	Advantage Valley	2023
Lake County, MI	FiveCap, Inc.	2023
Owensboro, KY	City of Owensboro	2023
Burke County, NC	Burke County	2023
Charleston, WV	Charleston Land Reuse Agency	2024
Huntington, WV	Huntington Municipal Development Authority	2024
Cabarrus, Iredell, Rowan Counties, NC	Cabarrus, Iredell and Rowan County Housing Consortium	2024
Carolina Core Region, NC (21 Counties)	NC Realtors	2024

**The following individuals provided research and analysis assistance:**

**Jack Wiseman**, Market Analyst, has conducted extensive market research in over 200 markets throughout the United States since 2007. He provides thorough evaluation of site attributes, area competitors, market trends, economic characteristics and a wide range of issues impacting the viability of real estate development. He has evaluated market conditions for a variety of real estate alternatives, including affordable and market-rate

apartments, retail and office establishments, student housing, and senior residential alternatives. Mr. Wiseman has a Bachelor of Arts degree in Economics from Miami University.

**Christopher Bunch**, Market Analyst, has more than two decades of experience in conducting both site-specific market feasibility studies and broader housing needs assessments. He has conducted on-site market research of a variety of housing product, conducted stakeholder interviews and completed specialized research on housing market attributes including the impact of military personnel, heirs and estates and other unique factors that impact housing needs. He holds a bachelor's degree in geography from Ohio University.

**Desireé Johnson** is the Director of Operations for Bowen National Research. Ms. Johnson is responsible for all client relations, the procurement of work contracts, and the overall supervision and day-to-day operations of the company. Ms. Johnson also coordinates and oversees research staff and activities. She has been involved in the real estate market research industry since 2006. Ms. Johnson has an Associate of Applied Science in Office Administration from Columbus State Community College.

**Pat McDavid**, Market Analyst, has conducted housing research for housing needs assessments completed throughout the country. Additionally, he is experienced in analyzing demographic and economic data in rural, suburban and metropolitan communities. Mr. McDavid has been a part of the development of market strategies, operational and fiscal performance analysis, and commercial, industrial and government (local, state, and federal) client consultation within the construction and manufacturing industries. He holds a bachelor's degree in educational studies from Western Governors University.

**Jody LaCava**, Research Specialist, has more than a decade of real estate research experience. She has extensive experience in surveying a variety of housing alternatives, including rental, for-sale, and senior housing. She has experience in conducting on-site research of real estate, evaluating existing housing properties, conducting interviews, and evaluating community services. She has been involved in industry leading case studies, door-to-door resident surveys and special needs housing research.

**In-House Researchers** – Bowen National Research employs a staff of in-house researchers who are experienced in the surveying and evaluation of all rental and for-sale housing types, as well as in conducting interviews and surveys with city officials, economic development offices and chambers of commerce, housing authorities and residents.

*No subconsultants were used as part of this assessment.*

## ADDENDUM E: GLOSSARY

Various key terms associated with issues and topics evaluated in this report are used throughout this document. The following provides a summary of the definitions for these key terms. It is important to note that the definitions cited below include the source of the definition, when applicable. Those definitions that were not cited originated from the National Council of Housing Market Analysts (NCHMA).

**Area Median Household Income (AMHI)** is the median income for families in metropolitan and non-metropolitan areas, used to calculate income limits for eligibility in a variety of housing programs. HUD estimates the median family income for an area in the current year and adjusts that amount for different family sizes so that family incomes may be expressed as a percentage of the area median income. For example, a family's income may equal 80% of the area median income, a common maximum income level for participation in HUD programs. (Bowen National Research, Various Sources)

**Available rental housing** is any rental product that is currently available for rent. This includes any units identified through Bowen National Research survey of affordable rental properties identified in the study areas, published listings of available rentals, and rentals disclosed by local realtors or management companies.

**Basic Rent** is the minimum monthly rent that tenants who do not have rental assistance pay to lease units developed through the USDA-RD Section 515 Program, the HUD Section 236 Program and the HUD Section 223 (d) (3) Below Market Interest Rate Program. The Basic Rent is calculated as the amount of rent required to operate the property, maintain debt service on a subsidized mortgage with a below-market interest rate, and provide a return on equity to the developer in accordance with the regulatory documents governing the property.

**Contract Rent** is (1) the actual monthly rent payable by the tenant, including any rent subsidy paid on behalf of the tenant, to the owner, inclusive of all terms of the lease (HUD & RD) or (2) the monthly rent agreed to between a tenant and a landlord (Census).

**Cost overburdened households** are households that pay more than 30% or 35% (depending upon source) of their annual household income toward housing costs. Typically, such households will choose a comparable property (including new affordable housing product) if it is less of a cost burden.

**Elderly Person** is a person who is at least 62 years of age as defined by HUD.

**Elderly or Senior Housing** is housing where (1) all the units in the property are restricted for occupancy by persons 62 years of age or older or (2) at least 80% of the units in each building are restricted for occupancy by households where at least one household member is 55 years of age or older and the housing is designed with amenities and facilities designed to meet the needs of senior citizens.

***Extremely low-income*** is a person or household with income below 30% of Area Median Income adjusted for household size.

***Fair Market Rent (FMR)*** are the estimates established by HUD of the gross rents (contract rent plus tenant paid utilities) needed to obtain modest rental units in acceptable condition in a specific county or metropolitan statistical area. HUD generally sets FMR so that 40% of the rental units have rents below the FMR. In rental markets with a shortage of lower priced rental units HUD may approve the use of Fair Market Rents that are as high as the 50<sup>th</sup> percentile of rents.

***Frail Elderly*** is a person who is at least 62 years of age and is unable to perform at least three “activities of daily living” comprising of eating, bathing, grooming, dressing or home management activities as defined by HUD.

***Garden apartments*** are apartments in low-rise buildings (typically two to four stories) that feature low density, ample open space around buildings, and on-site parking.

***Gross Rent*** is the monthly housing cost to a tenant which equals the Contract Rent provided for in the lease plus the estimated cost of all tenant paid utilities.

***Household*** is one or more people who occupy a housing unit as their usual place of residence.

***Housing Choice Voucher (Section 8 Program)*** is a federal rent subsidy program under Section 8 of the U.S. Housing Act, which issues rent vouchers to eligible households to use in the housing of their choice. The voucher payment subsidizes the difference between the Gross Rent and the tenant’s contribution of 30% of adjusted gross income, (or 10% of gross income, whichever is greater). In cases where 30% of the tenant’s income is less than the utility allowance, the tenant will receive an assistance payment. In other cases, the tenant is responsible for paying his share of the rent each month.

***Housing unit*** is a house, apartment, mobile home, or group of rooms used as a separate living quarters by a single household.

***HUD Section 8 Program*** is a federal program that provides project based rental assistance. Under the program HUD contracts directly with the owner for the payment of the difference between the Contract Rent and a specified percentage of tenants’ adjusted income.

***HUD Section 202 Program*** is a federal program, which provides direct capital assistance (i.e., grant) and operating or rental assistance to finance housing designed for occupancy by elderly households who have income not exceeding 50% of the Area Median Income. The program is limited to housing owned by 501(c)(3) nonprofit organizations or by limited partnerships where the sole general partner is a 501(c)(3) nonprofit organization. Units receive HUD project based rental assistance that enables tenants to occupy units at rents based on 30% of tenant income.

***HUD Section 236 Program*** is a federal program which provides interest reduction payments for loans which finance housing targeted to households with income not exceeding 80% of Area Median Income who pay rent equal to the greater of Basic Rent or 30% of their adjusted income. All rents are capped at a HUD approved market rent.

***HUD Section 811 Program*** is a federal program, which provides direct capital assistance and operating or rental assistance to finance housing designed for occupancy by persons with disabilities who have income not exceeding 50% of Area Median Income. The program is limited to housing owned by 501(c)(3) nonprofit organizations or by limited partnerships where the sole general partner is a 501(c)(3) nonprofit organization.

***Income Limits*** are the Maximum Household Income by county or Metropolitan Statistical Area, adjusted for household size and expressed as a percentage of the Area Median Income (AMI) for the purpose of establishing an upper limit for eligibility for a specific housing program. Income Limits for federal, state and local rental housing programs typically are established at 30%, 50%, 60% or 80% of AMI.

***Low-Income Household*** is a person or household with gross household income between 50% and 80% of Area Median Income adjusted for household size.

***Low-Income Housing Tax Credit*** is a program to generate equity for investment in affordable rental housing authorized pursuant to Section 42 of the Internal Revenue Code, as amended. The program requires that a certain percentage of units built be restricted for occupancy to households earning 80% or less of Area Median Income, and that the rents on these units be restricted accordingly.

***Market vacancy rate (physical)*** is the average number of apartment units in any market which are unoccupied divided by the total number of apartment units in the same market, excluding units in properties which are in the lease-up stage. Bowen National Research considers only these vacant units in its rental housing survey.

***Mixed income property*** is an apartment property containing (1) both income restricted and unrestricted units or (2) units restricted at two or more income limits (i.e., low-income Tax Credit property with income limits of 30%, 50% and 60%).

***Moderate Income*** is a person or household with gross household income between 40% and 60% of Area Median Income adjusted for household size.

***Multifamily*** are structures that contain more than two housing units.

***New owner-occupied household growth*** within a market is a primary demand component for new for-sale housing. For the purposes of this analysis, we have evaluated growth between 2024 and 2029. The 2024 households by income level are based on ESRI estimates that account for 2020 Census counts of total households for each study area. The 2024 and 2029 estimates are also based on growth projections by income level by ESRI. The difference between the two household estimates represents the new owner-occupied households that are projected to be added to a study area between 2024 and 2029. These estimates of growth are provided by each income level and corresponding price point that can be afforded.

***Non-Conventional Rentals*** are structures with four or fewer rental units.

***Overcrowded housing*** is often considered housing units with 1.01 or more persons per room. These units are often occupied by multi-generational families or large families that are in need of more appropriately sized and affordable housing units. For the purposes of this analysis, we have used the share of overcrowded housing from the American Community Survey.

***Pipeline housing*** is housing that is currently under construction or is planned or proposed for development. We identified pipeline housing during our telephone interviews with local and county planning departments and through a review of published listings from housing finance entities such as NCHFA, HUD and USDA.

***Population trends*** are changes in population levels for a particular area over a specific period of time which is a function of the level of births, deaths, and net migration.

***Potential support*** is the equivalent to the *housing gap* referenced in this report. The *housing gap* is the total demand from eligible households that live in certain housing conditions (described in Section VIII of this report) less the available or planned housing stock that was inventoried within each study area.

***Project-based rent assistance*** is rental assistance from any source that is allocated to the property or a specific number of units in the property and is available to each income eligible tenant of the property or an assisted unit.

***Public Housing or Low-Income Conventional Public Housing*** is a HUD program administered by local (or regional) Housing Authorities which serves Low- and Very Low-Income households with rent based on the same formula used for HUD Section 8 assistance.

***Rent burden*** is gross rent divided by adjusted monthly household income.

***Rent burdened households*** are households with rent burden above the level determined by the lender, investor, or public program to be an acceptable rent-to-income ratio.

***Replacement of functionally obsolete housing*** is a demand consideration in most established markets. Given the limited development of new housing units in the study area, homebuyers are often limited to choosing from the established housing stock, much of which is considered old and/or often in disrepair and/or functionally obsolete. There are a variety of ways to measure functionally obsolete housing and to determine the number of units that should be replaced. For the purposes of this analysis, we have applied the highest share of any of the following three metrics: cost burdened households, units lacking complete plumbing facilities, and overcrowded units. This resulting housing replacement ratio is then applied to the existing (2024) owner-occupied housing stock to estimate the number of for-sale units that should be replaced in the study areas.

**Restricted rent** is the rent charged under the restrictions of a specific housing program or subsidy.

**Single-Family Housing** is a dwelling unit, either attached or detached, designed for use by one household and with direct access to a street. It does not share heating facilities or other essential building facilities with any other dwelling.

**Standard Condition:** A housing unit that meets HUD's Section 8 Housing Quality Standards.

**Subsidized Housing** is housing that operates with a government subsidy often requiring tenants to pay up to 30% of their adjusted gross income toward rent and often limiting eligibility to households with incomes of up to 50% or 80% of the Area Median Household Income. (Bowen National Research)

**Subsidy** is monthly income received by a tenant or by an owner on behalf of a tenant to pay the difference between the apartment's contract rent and the amount paid by the tenant toward rent.

**Substandard** housing is typically considered product that lacks complete indoor plumbing facilities. Such housing is often considered to be of such poor quality and in disrepair that it should be replaced. For the purposes of this analysis, we have used the share of households living in substandard housing from the American Community Survey.

**Substandard conditions** are housing conditions that are conventionally considered unacceptable which may be defined in terms of lacking plumbing facilities, one or more major systems not functioning properly, or overcrowded conditions.

**Tenant** is one who rents real property from another.

**Tenant paid utilities** are the cost of utilities (not including cable, telephone, or internet) necessary for the habitation of a dwelling unit, which are paid by the tenant.

**Tenure** is the distinction between owner-occupied and renter-occupied housing units.

**Townhouse (or Row House)** is a single-family attached residence separated from another by party walls, usually on a narrow lot offering small front and back-yards; also called a row house.

**Vacancy Rate – Economic Vacancy Rate (physical)** is the maximum potential revenue less actual rent revenue divided by maximum potential rent revenue. The number of total habitable units that are vacant divided by the total number of units in the property.

**Very Low-Income Household** is a person or household with gross household income between 30% and 50% of Area Median Income adjusted for household size.

**Windshield Survey** references an on-site observation of a physical property or area that considers only the perspective viewed from the "windshield" of a vehicle. Such a survey does not include interior inspections or evaluations of physical structures.