



Multifamily Challenges and Opportunities in Middle Appalachia

Multifamily Economics and Market Research

Appalachia has long been known as coal country, but recently the region has diversified a bit -- these days, you are likely to see tourists visiting the Great Smoky Mountains, attending a bluegrass music festival, kayaking, or even hang-gliding. But the same remote, difficult mountain terrain that attracts tourists today has historically hindered the area's economic growth. Consequently, rural areas of Middle Appalachia struggle with low incomes and inadequate rental housing. However, the region is not simply defined by its challenges. There are also areas where the population is growing and the economy is improving.

Defining Rural Middle Appalachia

In its broadest sense, Appalachia consists of rural areas near the Appalachian Mountains. The Federal Housing Finance Agency (FHFA) defines rural Middle Appalachia to include certain census tracts in West Virginia, Ohio, Kentucky, Tennessee, North Carolina, and Virginia.

Most Residents Live in Rural Areas

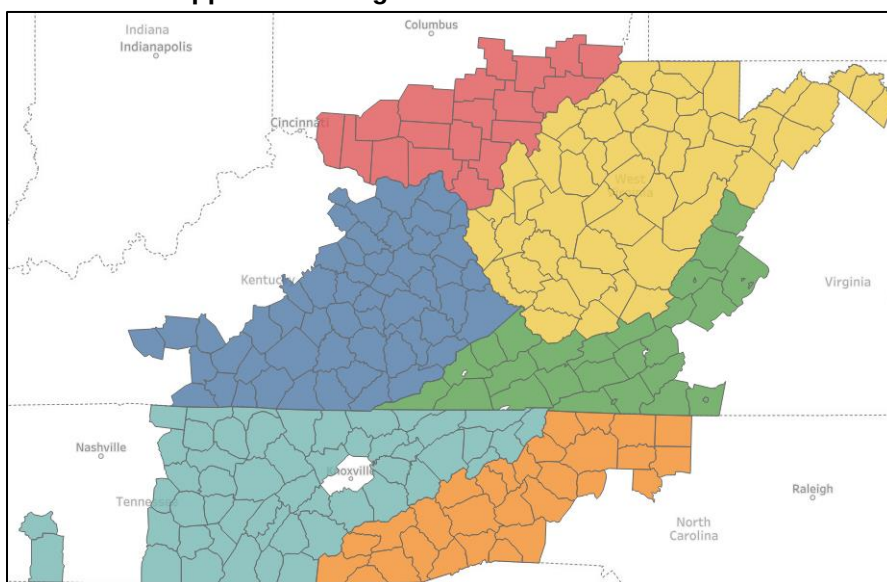
Middle Appalachia has an estimated population of 8.8 million, or about 2.8 percent of the nation's population. Fifty-nine percent of residents -- about 5.2 million -- live in rural areas, compared to 23 percent for the nation as a whole. The average age of residents in the rural census tracts of Middle Appalachia tends to be older -- 42.5 years old, which is about 5 years older than for the average for the U.S. as a whole.

Middle Appalachia Suffers from Inadequate Housing

As shown in the adjacent table, residents tend to own their own homes in Middle Appalachia, with 73 percent of households owning homes compared to 64 percent for the U.S.

However, many of these homes are inadequate. In fact, almost 56,000 units lack adequate plumbing or a complete kitchen. The majority of these inadequate units, just over 36,000, are in rural areas, representing about 1.4% of total housing stock.

Middle Appalachian Region – Counties with Rural Census Tracts



Source: Federal Housing Finance Agency (FHFA)

Note: Knox County which contains Knoxville does not appear to have any rural designated census tracts currently.

Middle Appalachia Quick Facts

	Rural MA	MA	U.S.
Population	5.2 M	8.8 M	314.0 M
Population Growth	-0.2%	1.5%	4.8%
Population in Rural	100%	59%	23%
Poverty Rate	21%	19%	15%
Average Age	42.5	41.6	37.7
Homeownership Share	73%	70%	64%
Renter Share	27%	30%	36%
Seasonal/Recreational (%)	7.3%	5.2%	4.0%

Source: Fannie Mae tabulations of 2016 American Community Survey (ACS) 5 year estimates

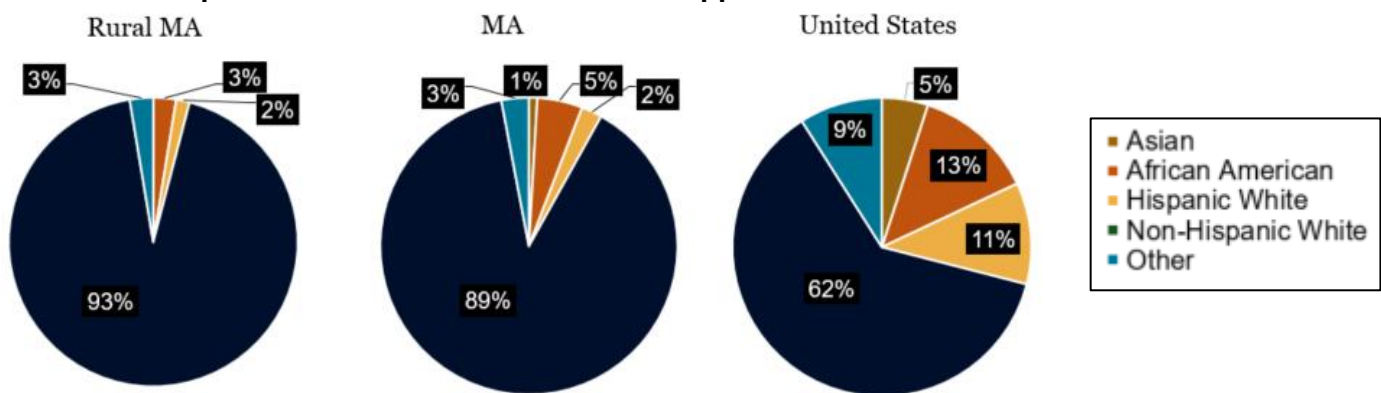


A Homogeneous, Slow-Growing Population

As seen in the pie charts below, the overwhelming majority of residents in the rural areas of Middle Appalachia are identified as being non-Hispanic White. Non-Hispanic White households represent 93 percent of all households in Middle Appalachia, compared to 62 percent for the U.S. as a whole. By contrast, African-American and Hispanic White households represent just 3 percent and 2 percent of the population in rural areas of Middle Appalachia, respectively.

Population growth in Middle Appalachia trails that of the U.S. overall. Since 2010, the population in the region has only grown by 1.5 percent, compared to 4.8 percent for the nation. Rural tracts in Middle Appalachia face even more severe demographic challenges as the population has declined by 0.2 percent since 2010, most likely due to households seeking better economic opportunities elsewhere.

Population Characteristics of Middle Appalachia

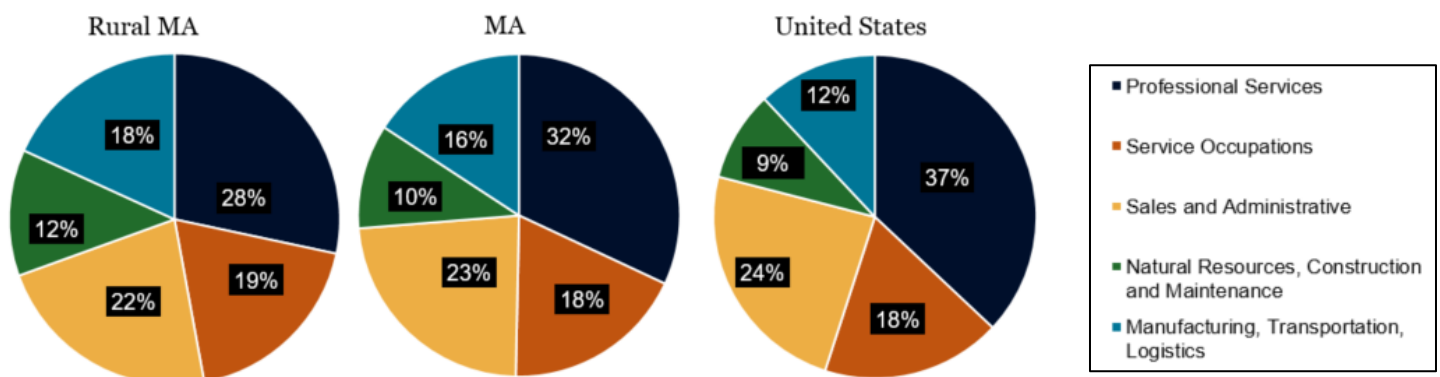


Source: Fannie Mae tabulations of 2016 American Community Survey (ACS) 5 year estimates

Occupational Challenges Persist

The unemployment rate in Middle Appalachia overall is over one-half percent higher – and in rural areas, over one percent higher – than the national average. In addition, the share of households in jobs outside of the better-paying professional services category is higher than the national average, as illustrated in the pie charts below. For example, the share of households in rural areas of Middle Appalachia working in manufacturing, transportation, and logistics is estimated to be 18 percent, about 6 percent higher than the U.S. as a whole. The share working in the natural resources, construction, and maintenance category is about 12 percent, which is about 3 percent higher than the national average. This category includes farmers and those working in forestry services – not necessarily high-paying occupations.

Occupational Characteristics of Middle Appalachia and the U.S.



Source: Fannie Mae tabulations of 2016 American Community Survey (ACS) 5 year estimates



Poverty Rate Elevated

Since a larger share of households in Middle Appalachia tend to work in lower-paying occupations such as logistics and manufacturing, the region suffers from lower household incomes. The median household income of \$42,800 is about \$12,500 lower than the \$55,300 recorded for the U.S. As a result, the poverty rate overall in Middle Appalachia is 19 percent compared to 15 percent for the nation.

The poverty rate rises even higher, to 21 percent, in the rural census tracts of Middle Appalachia. This means over one-fifth of the region's households are living in poverty.

While a large portion of Middle Appalachia's households face economic challenges, renters fare slightly worse than homeowners. Overall, renters in Middle Appalachia earn \$31,500 in median household income annually compared to \$35,200 for the U.S. as a whole. But renters in the region's rural census tracts earn even less, with a median household income of about \$24,400 annually. This is just under \$11,000 less annually than income for renters nationwide and less than half of the national median household income for all households.

Renters Are Cost-Burdened

Although one might expect housing to be affordable in rural areas, low incomes lead to higher cost burdens for renters. Almost 49 percent of renter households in rural areas of Middle Appalachia spend over 30 percent of their income on rent and utilities, compared to about 29 percent of owner households. Just over one quarter of renter households in rural Middle Appalachia, about 25.2 percent, are severely cost-burdened, spending over half of their income on rent and utilities. Even though this is slightly better than the 26.0 percent rate for the U.S. as a whole, it is slightly worse than the 24.9 percent rate for the overall region.

Manufactured Housing Is an Important Housing Source

Single-family rentals are the predominant rental housing source in rural Middle Appalachia. About 60 percent of renter households occupy single-family homes compared to 53 percent in the U.S. as a whole. However, what is interesting is the relatively high share of households living in manufactured homes. Twenty-three percent of renter households, almost a quarter, occupy manufactured homes. This is almost six times the 4 percent rate of households occupying this type of housing across the U.S. By comparison, only 17 percent of renters occupy apartments. As a result, renters in the rural census tracts of Middle Appalachia are more likely to rent manufactured housing than to rent typical multifamily units.

Vacation Homes Abound

Rural Middle Appalachia has a high percentage of seasonal/recreational units thanks to the lure of the mountains as a tourist destination. Slightly more than 7 percent of housing units are vacation homes and rentals. This is 2.1 percent higher than in Middle Appalachia as a whole and 3.3 percent higher than the national average. These homes overstate the amount of housing stock since even though they exist, they are not available for rent to year-round residents.

Middle Appalachia Incomes

	Rural MA	MA	U.S.
Poverty Rate	21%	19%	15%
Median Household Income	\$38.8	\$42.8	\$55.3
Median Renter Household Income	\$24.4	\$27.0	\$35.2

Source: Fannie Mae Tabulations of 2016 ACS 5 year estimates

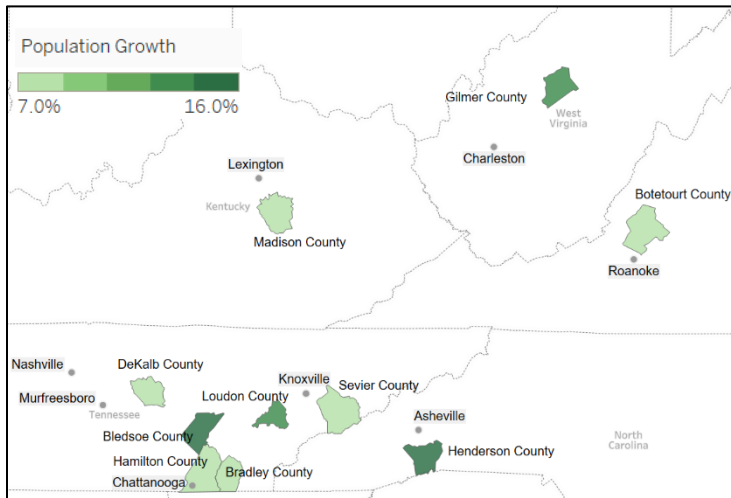
Middle Appalachia Renter Households

	Rural MA	MA	U.S.
Single Family	60%	58%	53%
Manufactured Housing	23%	17%	4%
Multifamily	17%	25%	42%
Cost Burden	48.8%	49.0%	51.1%
Severe Cost Burden	25.2%	24.9%	26.0%

Source: Fannie Mae Tabulations of 2016 ACS 5 year estimates



Faster Growing Counties by Population in Middle Appalachia Rural Census Tracts



Source: 2010 and 2016 ACS 5 year estimates

Retirees Spur Growth

While rural tracts in Middle Appalachia face many challenges, there is variation among counties. In fact, there are some rural counties that are actually adding to their total population.

For instance, the fastest-growing county by population since 2010 for rural census tracts in Middle Appalachia is Henderson County, NC, which has grown by 16 percent over the past six years. Henderson County is about 30 minutes outside of Asheville but is not a bedroom community for Asheville. Agriculture is a key economic driver with apples as the primary crop. With two hospitals, Henderson has also been attracting retirees. Retirees take advantage of low housing costs, access to healthcare, and a short drive to the cultural amenities of Asheville.

Some Rural Areas in Larger Growing Metros

Some of the fastest-growing counties by population in rural areas are close to faster growing large metro areas, and rural counties in Middle Appalachia are no different.

Bledsoe, Hamilton, and Bradley Counties have experienced cumulative population growth of 8 to 15 percent over the past six years and all are located in or near Chattanooga. Chattanooga has experienced steady economic growth over the past few years due to its location in a tri-state area and its pro-business policies. As a result, logistics are a key economic driver here, as Chattanooga is a distribution point for several large Southern markets, including Atlanta and Charlotte. It also has robust manufacturing, including a sizable auto industry with Volkswagen recently expanding its facilities.

Going forward, Moody's Analytics projects that Chattanooga should continue steady, if not average, growth. An increase in housing starts will spur a pickup in new orders at regional factories specializing in housing-related machinery and appliances. For instance, Roper Corporation specialized in stoves and ovens. In addition, Volkswagen's expansion is expected to drive up demand and hiring at auto suppliers.

Smoky Mountains Tourism Helps

Several of the fastest growing counties are located in or near the Smoky Mountains. Here, as in some other rural areas, tourism spurs economic growth and attracts new residents. For instance, Sevier County in Tennessee is located in the Great Smoky Mountains National Park, and tourism supports the county's growing economy. In fact, one of the fastest growing counties by job growth is Sequatchie County in Tennessee, which grew over 20 percent in just six years and is a major center for hang-gliding.

A Boost from Broadband...

Rural areas with solid internet access also grow economically. For instance, Gilmer County in West Virginia, which grew by about 14 percent over the past six years, has been working to expand broadband to support small business initiatives, including tourism.

... but not from Mining

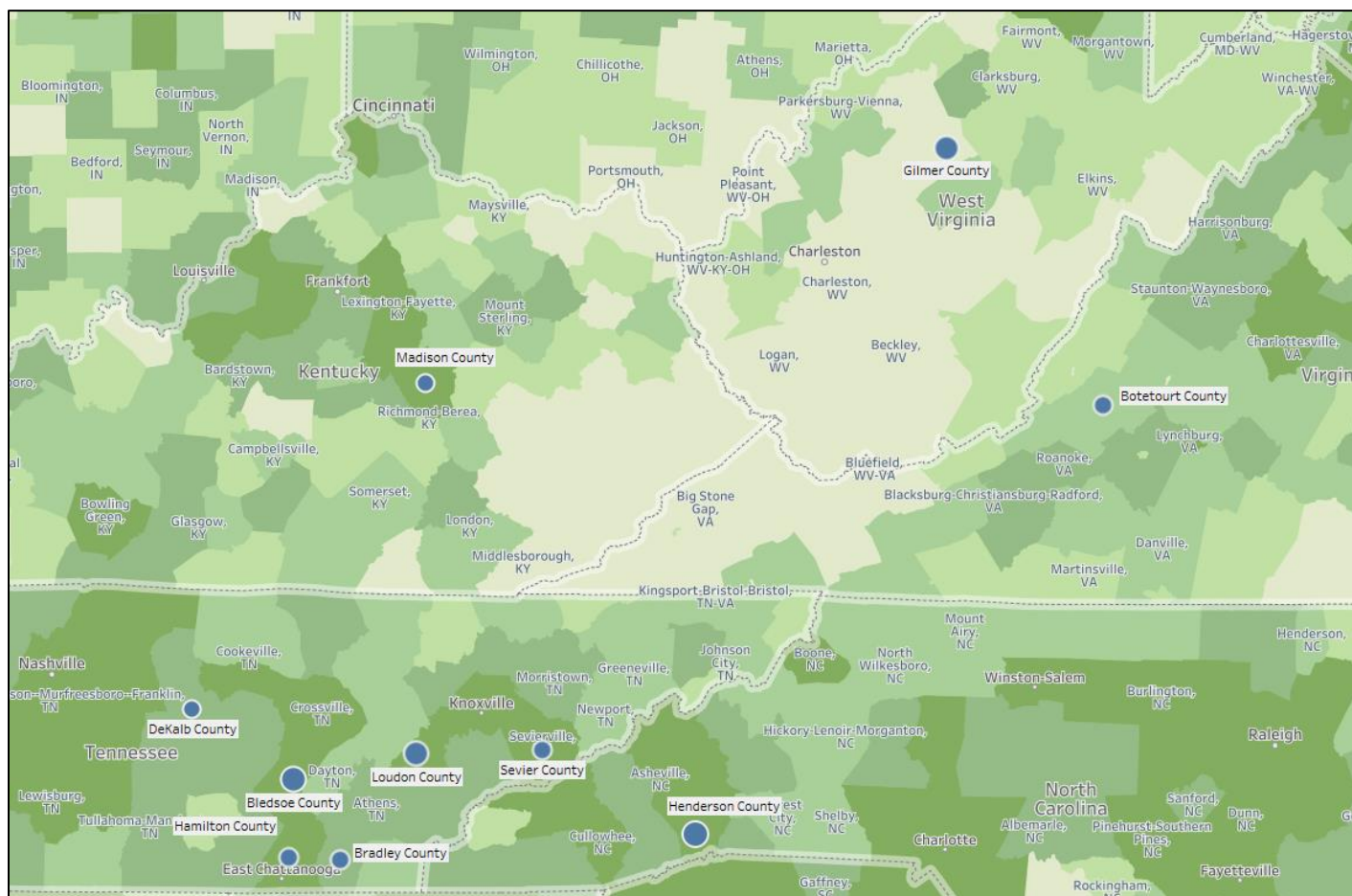
The Appalachian Mountains have traditionally been home to coal mining. However, despite recent regulatory roll-backs, this industry has been declining for decades. Going forward, local economies that diversify away from this economic driver will likely show stronger growth.

Continuing Household Formation

As shown on the map on the next page, most of the Middle Appalachia counties with high population growth over the past few years are expected to continue having solid household formations over the next five years. All of these households will need a place to call home, including living in multifamily rentals.



Projected Household Growth by Middle Appalachia County 2018-2023



Household Growth % 2018-2023

-10.280 to -0.870
-0.870 to 0.560
0.560 to 2.090
2.090 to 4.200
4.200 to 13.680

Source: U.S. Census Bureau
Household Projections per Tableau



Middle Appalachia Has Some Apartments

According to CoStar, there are just under 1,500 properties consisting of 5-50 units in the rural areas of Middle Appalachia. These properties contain nearly 31,000 units for an average of about 21 multifamily units per property, as shown in the table below.

Most counties have just a handful of multifamily properties in rural census tracts. In fact, 124 counties have fewer than five properties each in rural areas. Only a handful of counties have a significant number of multifamily properties, with only 16 counties having twenty or more properties in rural areas.

These properties appear to have higher vacancy rates than properties with 5-50 units nationally. As of June 2018 the vacancy rate for these properties was 6.2 percent compared to a national vacancy rate of about 4.4 percent for properties with 5-50 units. At just \$560 per month, rents for apartments in rural Middle Appalachia are less expensive than the \$630 rent for apartments in Middle Appalachia overall, and about half of the national average rent of nearly \$1,100 per month for properties with 5-50 units.

Select Statistics for Small Multifamily Properties (5-50 Units)

Region	Properties	Units	Average Vacancy	Average Rent	Rent Growth (Annual)	Cap Rate
Middle Appalachia	4,200	78,000	6.1%	\$630	1.6%	8.8%
Rural Middle Appalachia	1,500	31,000	6.2%	\$560	1.6%	8.0%
National (5-50 units)	325,000	4.9million	4.4%	\$1,100	2.6%	5.4%

Source: CoStar, as of June 2018

Cap Rates Elevated

As shown in the table above, cap rates for small multifamily properties are significantly higher in rural Middle Appalachia than nationwide. Cap rates in rural Middle Appalachia are estimated at 8.0 percent compared to just 5.4 percent nationwide. This most likely reflects buyers' concerns that properties in rural areas are riskier due to factors such as a small renter pool and the less diversified job base in many rural regions.

County with Most Properties in Tennessee

According to data from CoStar, Sevier County in Tennessee has the greatest number of multifamily properties, with about 100 properties in rural areas and 1,800 units, as shown in the table below. Watauga County in Tennessee follows a distant second with about 60 properties containing about 1,250 units. Madison County in Kentucky follows at an even more distant third with an estimated 50 properties and about 625 units. Sevier and Watauga counties were also top counties for lending activity in 2017 and/or 2016.

Performance Steady

As shown in the table below, performance has generally been steady in the counties with more than 20 multifamily properties, with vacancy rates in most counties below 6.0 percent. In fact, vacancy rates of 5.5 percent in Sevier County, 4.3 percent in Watauga County, and 4.6 percent in Madison County are below the 6.2 percent rate for rural Middle Appalachia.

Rent growth has shown more variation, however. Annual rent growth as of second quarter 2018 was 2.8 percent in Madison County, which exceeded both the 1.6 percent average for rural Middle Appalachia and the 2.6 percent national average. However, rent growth in Watauga County was just 0.8 percent. Rent growth was generally positive in counties with over 20 multifamily properties. With the exception of Washington County in Ohio, where rents declined by 1.1 percent, most counties with at least 20 properties have had positive annual rent growth.

Select Middle Appalachia Counties with a High Number of Small Multifamily Properties

County	Properties	Units	Average Units	Average Vacancy	Average Rent	Rent Growth (Annual)
Sevier County, TN	100	1,800	17	5.5%	\$660	2.0%
Watauga County, NC	60	1,250	21	4.3%	\$670	0.8%
Madison County, KY	50	625	12	4.6%	\$540	2.8%

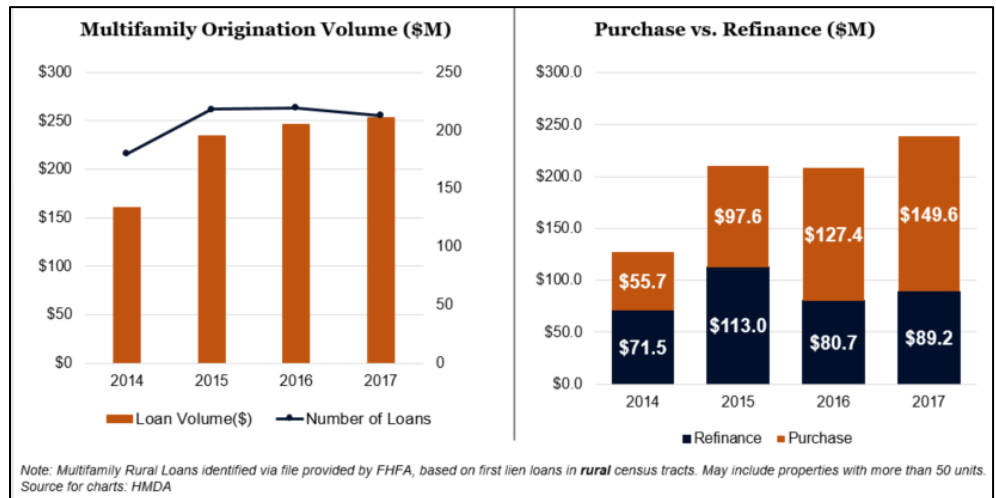
Source: CoStar, as of June 2018



Rural Middle Appalachia Lending Characteristics

The availability of multifamily lending data is limited in the rural areas of Middle Appalachia, since many small lenders and community banks are not required to report data under the Home Mortgage Disclosure Act (HMDA). Even so, based on HMDA data, lending in rural tracts of Middle Appalachia appears to be growing. As shown in the adjacent chart, 2017 multifamily lending volume totaled \$253 million on 213 loans, with an average loan size of about \$1.2 million. This represents an increase of 18 percent in the number of loans and a nearly 58 percent increase in multifamily lending volume since 2014. As a result, it is probable that property values are growing in faster growing areas of Middle Appalachia.

Origination Volume in Middle Appalachia



Correspondingly, it appears that there has been an increase in sales transactions with the volume of multifamily originations nearly tripling since 2014 to almost \$150 million in 2017. While refinances of multifamily properties continue to play an important role in originations, they grew more modestly to just over \$89 million. In addition, refinances fell to just 37 percent as a share of origination volume in 2017 from over half in 2014.

A Limited Number of Multifamily Lenders in Rural Tracts

As shown on the adjacent left table, Kentucky Bank was a top lender in both 2017 and 2016, originating an estimated \$17 million in volume on 13 multifamily loans. In addition, a couple of larger regional lenders, U.S. Bank and Branch Banking and Trust, were active multifamily lenders in the rural areas of Middle Appalachia over the past couple of years. While the Bank of Tennessee originated six loans in 2017 with a larger average balance of about \$4 million, for the most part the lenders appear to be smaller banks originating loans under \$2 million.

Middle Appalachia Multifamily Lending in Rural Areas

Select Top Lenders :				Select Top Counties for Lending:			
Lender	Loans (#)	Volume (\$M)	Average Loan (\$M)	County	Loans (#)	Volume (\$M)	Average Loan (\$M)
2017				2017			
COMMUNITY TRUST BANK, INC.	8	\$5.4	\$0.7	MADISON COUNTY, KY	18	\$15.6	\$0.9
U.S. BANK N.A.	7	8.8	1.3	WATAUGA COUNTY, NC	13	89.0	6.8
NATIONAL BANK OF BLACKSBURG, TN	7	3.2	0.5	SEVIER COUNTY, TN	12	12.3	1.0
KENTUCKY BANK	6	3.2	0.5	MARION COUNTY, WV	9	6.9	0.8
BANK OF TENNESSEE	6	24.6	4.1	HARRISON COUNTY, WV	5	13.7	2.7
2016				2016			
FIRST CMNTY BK	17	\$9.9	\$0.6	MADISON COUNTY, KY	18	28.7	1.6
BRANCH BKG&TC	14	4.8	0.3	MARION COUNTY, WV	10	23.3	2.3
WESBANCO BK	7	13.3	1.9	HARRISON COUNTY, WV	9	17.9	2.0
AMERICAN NB&TC	7	5.5	0.8	SEVIER COUNTY, TN	8	5.4	0.7
KENTUCKY BK	7	14.2	2.0	TAZEWELL COUNTY, VA	7	6.2	0.9

Note: Multifamily Rural Loans identified via file provided by FHFA, based on all first lien loans. Source for tables: HMDA

Top Counties for Multifamily Lending in Rural Tracts

Four of the top five counties in which multifamily lending took place in rural census tracts were surprisingly consistent over the past couple of years, as shown on the right table above. Madison County in Kentucky saw the highest amount of multifamily activity with an estimated \$44 million of origination volume on 36 loans. Two counties in West Virginia, Marion and Harrison Counties, also saw a lot of multifamily lending with an estimated \$30 million in volume.



The remaining county with a high number of multifamily originations was Sevier County in Tennessee, which saw originations total almost 18 million on 20 loans. However, the average loan size in Sevier was quite small in averaging \$1 million in 2017 and just \$700,000 in 2016.

Many Reasons to Finance Small Multifamily

Small multifamily buildings can be an important source of affordable housing. For that reason, in its Duty to Serve regulations, FHFA provides credit to Fannie Mae and Freddie Mac for financing small multifamily housing in the affordable housing preservation market, as well as the rural housing market, if the housing serves families of moderate-, low-, or very-low incomes. In addition, FHFA's housing goals regulation also recognizes the importance of the GSEs financing small multifamily housing serving low-income families.

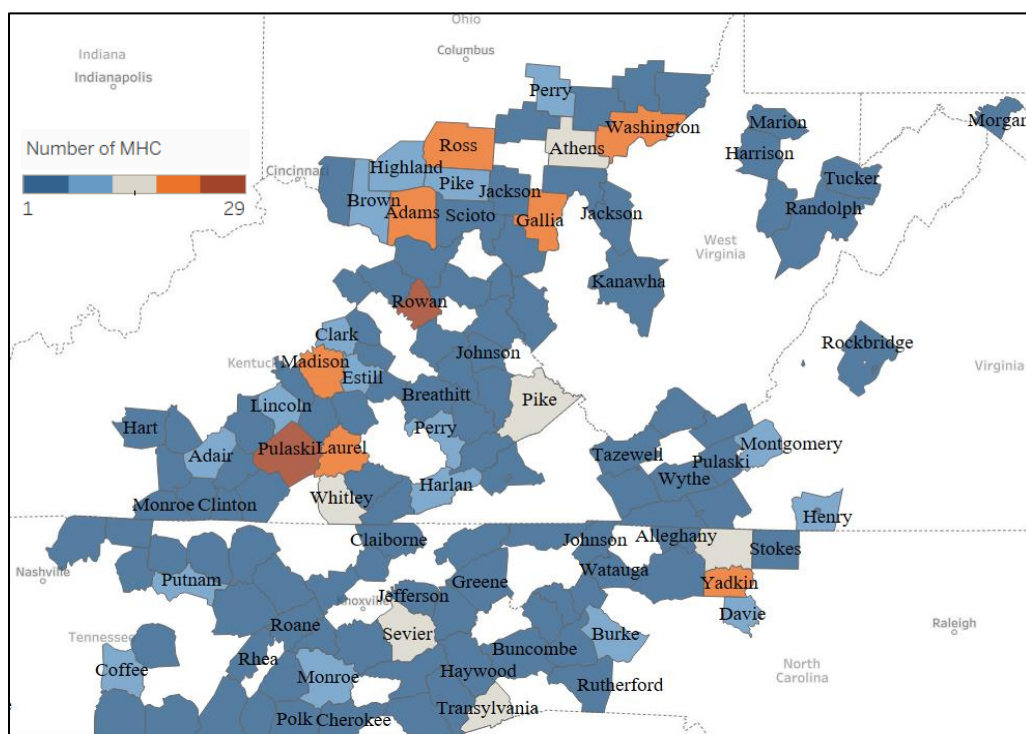
Manufactured Housing Communities

Due to the steep mountain terrain, there is generally limited suitable land to build homes. In addition, low incomes put homeownership out of reach for many residents. These factors have greatly contributed to the growth of manufactured housing communities (MHCs), which tend to have smaller housing units that are more affordable. As shown on the map below, there are several counties with a high concentration of MHCs in the rural areas of Middle Appalachia. For instance, Pulaski, and Rowan Counties in Kentucky each have over 20 MHC properties. Ohio has four counties with just under 20 MHC properties each in rural areas: Washington, Ross, Adams, and Gallia counties. Only West Virginia and Virginia lack any counties with high concentrations of MHCs in rural areas.

Many Reasons to Finance MHC

Manufactured housing is an important source of affordable housing in rural areas. This includes rental homes located in MHCs, including government, non-profit, and resident-owned MHCs. For that reason, in its Duty to Serve regulation, FHFA provides credit to Fannie Mae and Freddie Mac for financing certain types of manufactured housing units, as well as MHC properties. Also, MHC loan acquisitions are exempt from FHFA's imposed lending cap on the GSEs.

Number of MHC by County in Rural Middle Appalachia Tracts



Source: Datacomp/JLT

There Are Multifamily Lending Opportunities in Middle Appalachia

Although there are a limited number of multifamily properties located throughout Middle Appalachia, opportunities for lending and providing liquidity do exist. These opportunities are primarily closer to larger population centers that have an adequate population to support apartment rentals. Additionally, MHCs are also prevalent in the region. These provide another important financing opportunity to support affordable multifamily housing in rural areas of the Middle Appalachian region.



Tatyana Zahalak
Senior Multifamily Economist
Multifamily Economics and Market Research

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