



Kentucky Housing Corporation
Housing Needs Assessment

Kentucky Demographics and Housing Statistics

Contents

State Level Statistics Overview.....	1
Population Demographics.....	3
Population Change.....	5
Migration.....	7
Number of Households.....	13
Racial Demographics.....	26
Aging population.....	41
Education Levels.....	45
Housing Characteristics.....	49
Age of Housing.....	53
House Heating Fuel.....	55
Occupied Housing Units by Occupant Type.....	65
Renters.....	65
Owners.....	83
Economic Factors.....	97
Public Transportation.....	97
Commuting.....	99
Income.....	102
Employment.....	105
Elementary and Secondary School Education Outcomes.....	115
Factors Influencing Health.....	118
Access to food.....	118
Access to Health Care.....	120
Appendix A: List of Counties by Congressional District and District Population.....	123

State Level Statistics Overview

Population Demographics

- The U.S. Census Bureau estimates that in 2016 Kentucky's population reached 4.4 million individuals residing in the state that make up approximately 1,718,217 households.
- Population has increased the most in Scott (19.76%), Oldham (15.86%), and Warren (13.67%) counties since 2009; conversely, population has decreased at the greatest rate in Breathitt (-13.8%), Clay (-11.06%), Harlan (-9.57%), Floyd (-9.11%), and Powell (-8.84%) counties.
- Between 2010 and 2016, 26,135 individuals migrated into Kentucky and became residents of this state. Fayette County had the highest net increase of residents with a total of 11,081 individuals migrating into the county between 2010 and 2016. Christian County had the highest net decrease of residents with a total of 7,754 leaving the county between 2010 and 2016.
- Individuals 65 years of age and over make up approximately 15% of the total population in the Commonwealth of Kentucky. The concentration of this population ranges between 26% and 11% at the county level. Robertson County (26%), Hickman County (23%), Lyon County (23%), Trigg County (21%) and Marshall County (21%) have the highest proportion of citizens 65 years of age and older.
- On average, 80.3% of Kentucky Adults 25 Years and Older have graduated from High School.
- On average, 15.5% of Kentucky Adults 25 Years and Older have a Bachelor's Degree or higher.

Housing Characteristics

- In Kentucky, there are, approximately, 1,942,944 housing units across the state (+/- 10,000 units). Of these units, 88%, or 1,711,631 units, are occupied by either renters or owners.
- Between 2010 and 2016, we see a 0.82% increase in total units in the Commonwealth. Scott County (4.67%), Warren County (2.69%), and Jessamine County (2.07%) had the greatest increase in the total number of housing units during this time.
- Only 2.44% of Kentucky's total housing stock was built after 2010, with 45% of housing being constructed between 1980 and 2009 and 52% being constructed before 1979.
- The majority of Kentucky residents utilize Electricity (52%) and Utility gas (38%) for house heating fuel.

Occupied Housing Units by Occupant Type

- Renters
 - In Kentucky, 33% of occupied housing units are occupied by renters (570,314 households), ranging between 52% (Christian County) and 15.3% (Oldham County).
 - The Median Vacancy Rate among Renter-Occupied dwellings in the Kentucky is 5.4%, ranging between 16.7% (Muhlenberg and Elliot Counties) and 1.4% (Wolfe County).
 - Median gross rent across the state ranges between \$362 per month (Owsley County) and \$922 per month (Boone County).
- Owners
 - 58.8% of occupied housing units are occupied by home-owners (1,147,903 households), ranging between 80.20% in Oldham County and 40.35% in Christian County.
 - The Median Household size of Owner-Occupied Units in Kentucky is 2.52 people, ranging between 3.02 individuals (Oldham County) and 2.13 individuals (Lyon County).
 - The median home value for home owners in Kentucky is \$96,750, with the highest median home value at \$250,500 (Oldham County) and the lowest median value at \$44,200 (Leslie County).
 - The median vacancy rate among Owner-Occupied dwellings in the Kentucky is 1.7%, ranging between 7.6% (Gallatin County) and 0.2% (Russell County).
 - Median monthly home owner costs for the entire state are \$578, ranging between \$1,313 in Oldham County and \$297 in Leslie County.

Economic Factors

- Public Transportation: 67% of Kentucky's citizens have access to public transportation.
- Commuting: Average commute time by county in Kentucky ranges between 16.5 minutes to 38.5 minutes.
- Income: Median Household Income in Kentucky is \$39,753 (2016), ranging between \$86,324 (Oldham County) and \$18,972 (McCreary County). The largest concentration of low income households is in Eastern Kentucky.
- Employment: In 2016, the unemployment rate for Kentucky was approximately 5.3% (seasonally adjusted). This value ranged between 18.6% (Martin County) and 4.1% (Oldham County).
 - The "Management, business, science, and arts occupations" industry employs 18% of the workforce.

Population Demographics

Total Population in Kentucky: 4,411,989

The U.S. Census Bureau estimates that in 2016 Kentucky's population reached 4.4 million individuals residing in the state. Jefferson County had 759,724 residents in 2016, ranking the highest in the state; Robertson County has the lowest population in Kentucky with 2,191 residents in 2016.¹ Figure One (next page) outlines total population by county, with counties shaded in blue indicating the counties with the highest concentration of residents and counties shaded in red containing the lowest concentration of residents. The counties with the highest concentration of residents are centered on the Metropolitan Statistical Areas (MSAs)² or urban areas in the state. Table One (below) displays the ten counties with the highest concentration of residents and the ten counties with the lowest concentration of residents.

Table One: Counties with the Highest and Lowest Population³

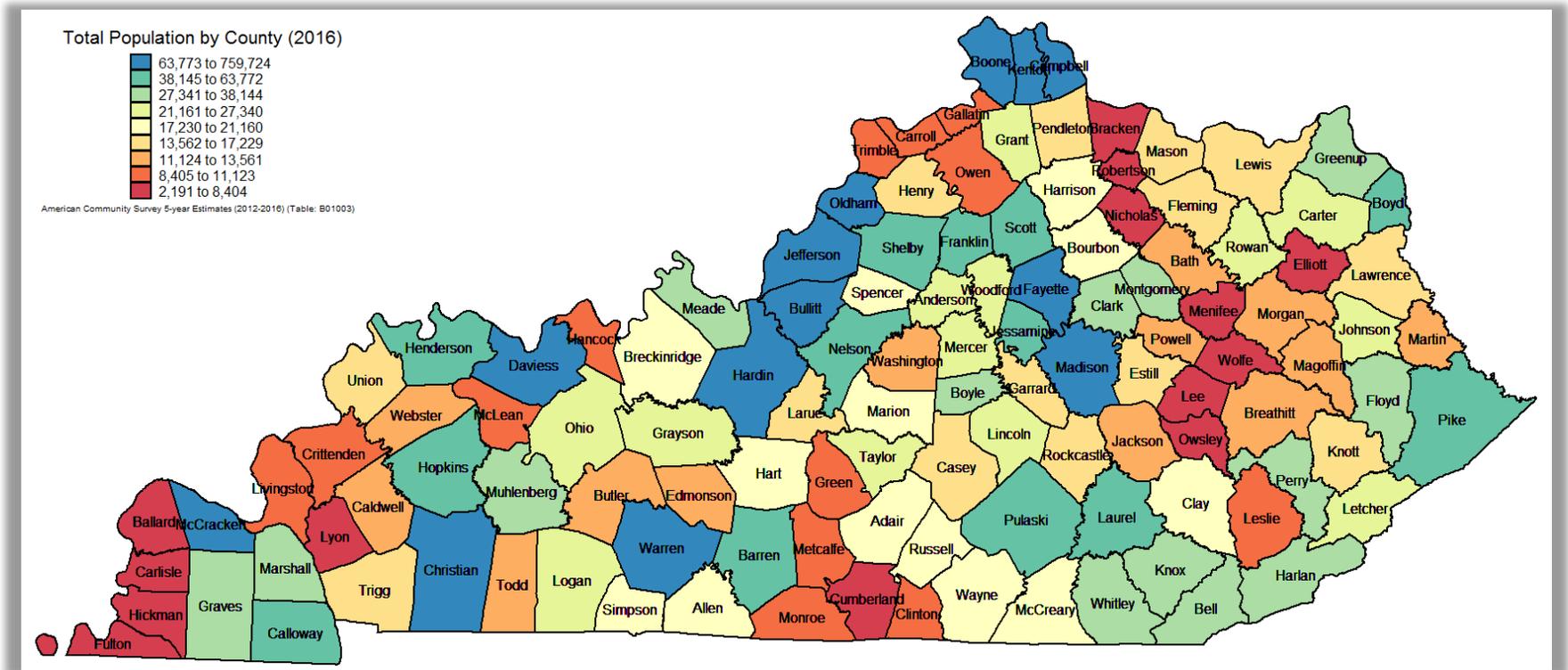
Highest		Lowest	
County	Number of Residents	County	Number of Residents
Jefferson County	759,724	Robertson County	2,191
Fayette County	311,529	Owsley County	4,552
Kenton County	163,393	Hickman County	4,691
Boone County	125,656	Carlisle County	4,954
Warren County	121,066	Fulton County	6,323
Hardin County	107,573	Menifee County	6,345
Daviess County	98,724	Cumberland County	6,780
Campbell County	91,456	Lee County	6,896
Madison County	87,324	Nicholas County	7,062

¹ American Community Survey 5-year Estimates (2012-2016). "Total Population." (Table: B01003)

² The Metropolitan Statistical Areas for the state of Kentucky are: Bowling Green, Cincinnati-Middletown, Clarksville-Hopkinsville, Elizabethtown, Evansville, Huntington-Ashland, Lexington-Fayette, Louisville-Jefferson County, and Owensboro.

³ American Community Survey 5-year Estimates (2012-2016). "Total Population." (Table: B01003)

Figure One: Total Population by County (2016)⁴



⁴ American Community Survey 5-year Estimates (2012-2016). "Total Population." (Table: B01003)

Population Change

Population change accounts for movement of individuals from one county to another (or even perhaps leaving the state), but also takes into account population increases due to migration into the state and the estimate of births and deaths within each county. The counties in blue saw positive growth between these years, while the counties in red saw a decrease in population. Eastern Kentucky had overall negative growth, with the exception of Wolfe County, which had a 1.9% increase in population between 2009 and 2016. Figure Two (next page) shows the percentage change in population between 2009 and 2016.

Counties with the greatest decrease in population were not all concentrated to Eastern Kentucky. Fulton County saw an 8.6% decrease in population and Christian County had a 7.14% decrease in population. The top ten counties with the greatest decrease in population between 2009 and 2016 were Breathitt (-13.8%), Clay (-11.06%), Harlan (-9.57%), Floyd (-9.11%), Powell (-8.84%), Fulton (-8.6%), Monroe (-8.22%), Knott (-7.63%), Elliott (-7.59%), and Lee (-7.14%).

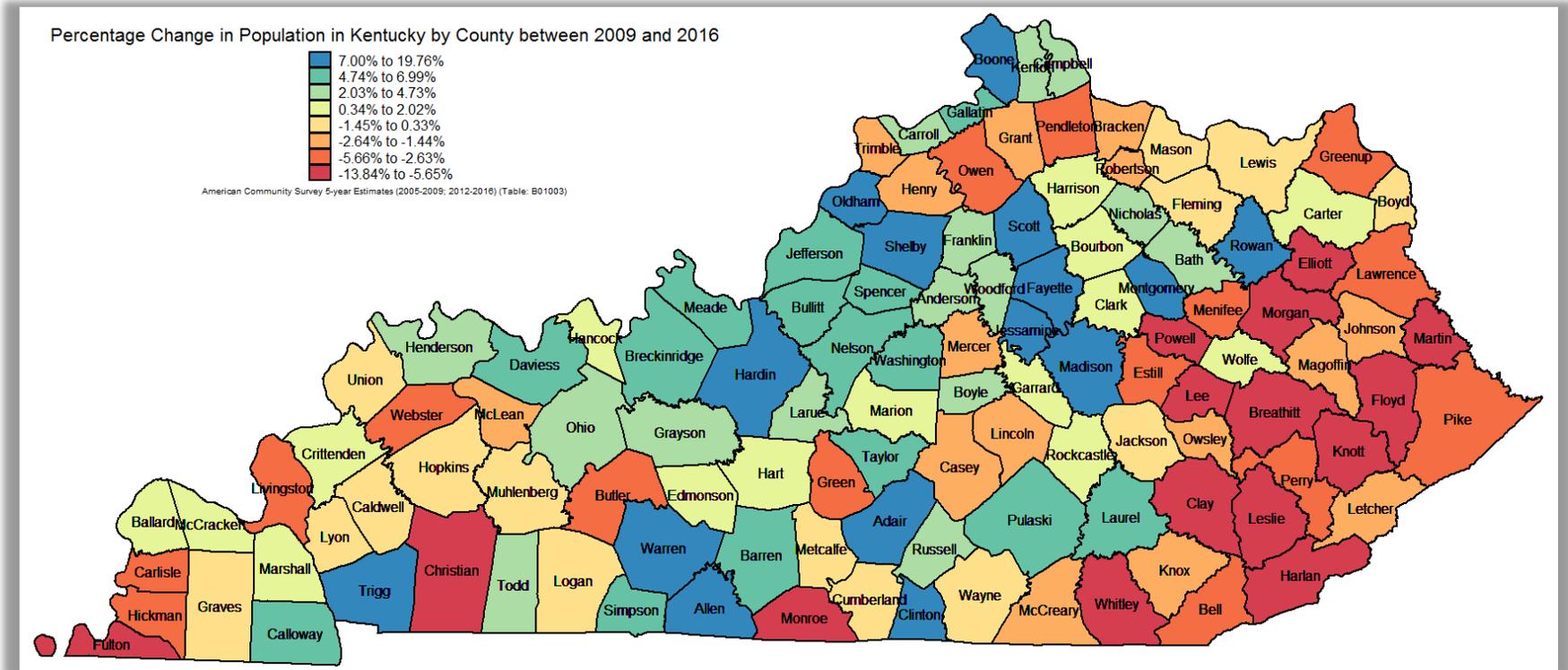
Kentucky also saw significant increases in population in some areas across the state. The counties with the highest level of growth are shown in Table Two (below). Scott County had the greatest population change between 2009 and 2016, increasing by 19.76%, followed by Warren, Oldham, Jessamine and Boone counties.

Table Two: Counties with the Highest Level of Growth (2009-2016)⁵

County	Percentage Change in Population
Scott County	19.76%
Warren County	15.86%
Oldham County	13.67%
Jessamine County	12.00%
Boone County	11.68%
Shelby County	11.52%
Hardin County	9.64%
Montgomery County	9.16%
Allen County	8.63%
Fayette County	8.34%

⁵ American Community Survey, 5-Year Estimates (2005-2009; 2012-2016). "Total Population." Table: B01003.

Figure Two: Percentage Change in Population in Kentucky by County between 2009 and 2016⁶



⁶ American Community Survey. 5-Year Estimates (2005-2009; 2012-2016). "Total Population." Table: B01003.

Migration

Net Migration: 26,135⁷

Net Increase: 72,003 (50 total counties)

Net Decrease: -45,868 (70 total counties)

Between 2010 and 2016, 26,135 individuals migrated into Kentucky and became residents of this state. Fayette County had the highest net increase of residents with a total of 11,081 individuals migrating here between 2010 and 2016. Christian County had the highest net decrease of residents with a total of 7,754 leaving the county between 2010 and 2016. Figure Three (next page) displays the net migration by county for the state of Kentucky between 2010 and 2016. Counties with the highest net increase are shaded in blue; counties with the highest net decrease are shaded in red. Table Three displays the counties with the highest net increase and the highest net decrease in migration across the state between 2010 and 2016.

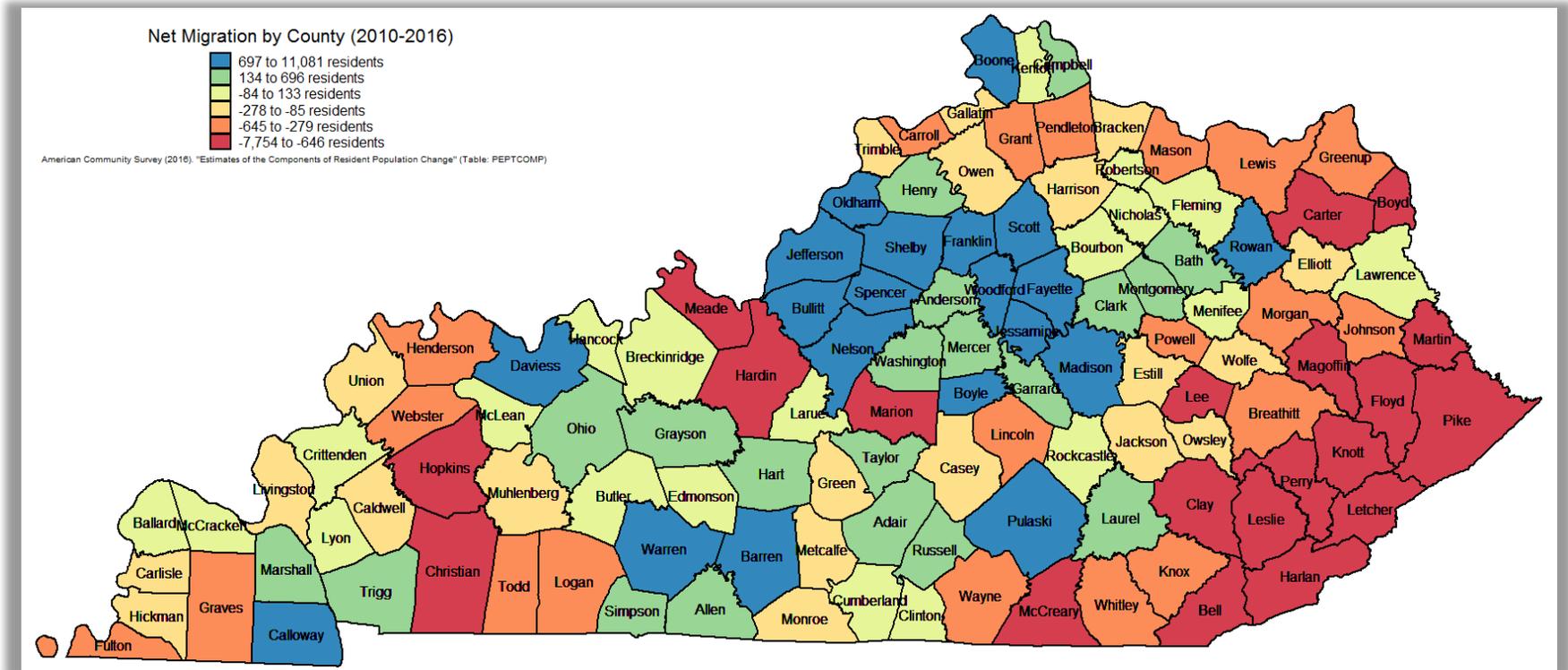
Table Three: Highest Net Increase and Decrease in Population by County (2010-2016)⁸

Highest Net Increase		Highest Net Decrease	
County	Population	County	Population
Fayette County	11,081	Christian County	-7,754
Jefferson County	9,209	Pike County	-3,712
Warren County	7,700	Hardin County	-2,878
Scott County	4,689	Floyd County	-2,260
Madison County	4,583	Harlan County	-1,925
Boone County	4,334	Letcher County	-1,552
Oldham County	4,238	Bell County	-1,368
Bullitt County	3,184	Boyd County	-1,343
Shelby County	2,561	Perry County	-1,272
Jessamine County	1,937	Lee County	-1,148

⁷ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

⁸ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

Figure Three: Net Migration by County (2010-2016)⁹



⁹ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

Net Migration – Domestic

Net Migration: -13,916¹⁰

Net Increase: 44,497 (46 total counties)

Net Decrease: -58,863 (74 total counties)

Between 2010 and 2016, net migration of domestic individuals was a net loss for the state at 13,916 residents, with the net decrease of 58,863 outweighing the net increase of 44,497 residents. Warren County had the highest net increase of domestic residents with a total of 4,637 individuals migrating here between 2010 and 2016. Christian County had the highest net decrease of domestic residents with a total of 10,324 leaving the county between 2010 and 2016. Figure Four (next page) displays the net migration by county of domestic residents for the state of Kentucky between 2010 and 2016. Counties with the highest net increase are shaded in blue; counties with the highest net decrease are shaded in red. Table Four (below) displays the counties with the highest net increase and the highest net decrease in the state between 2010 and 2016.

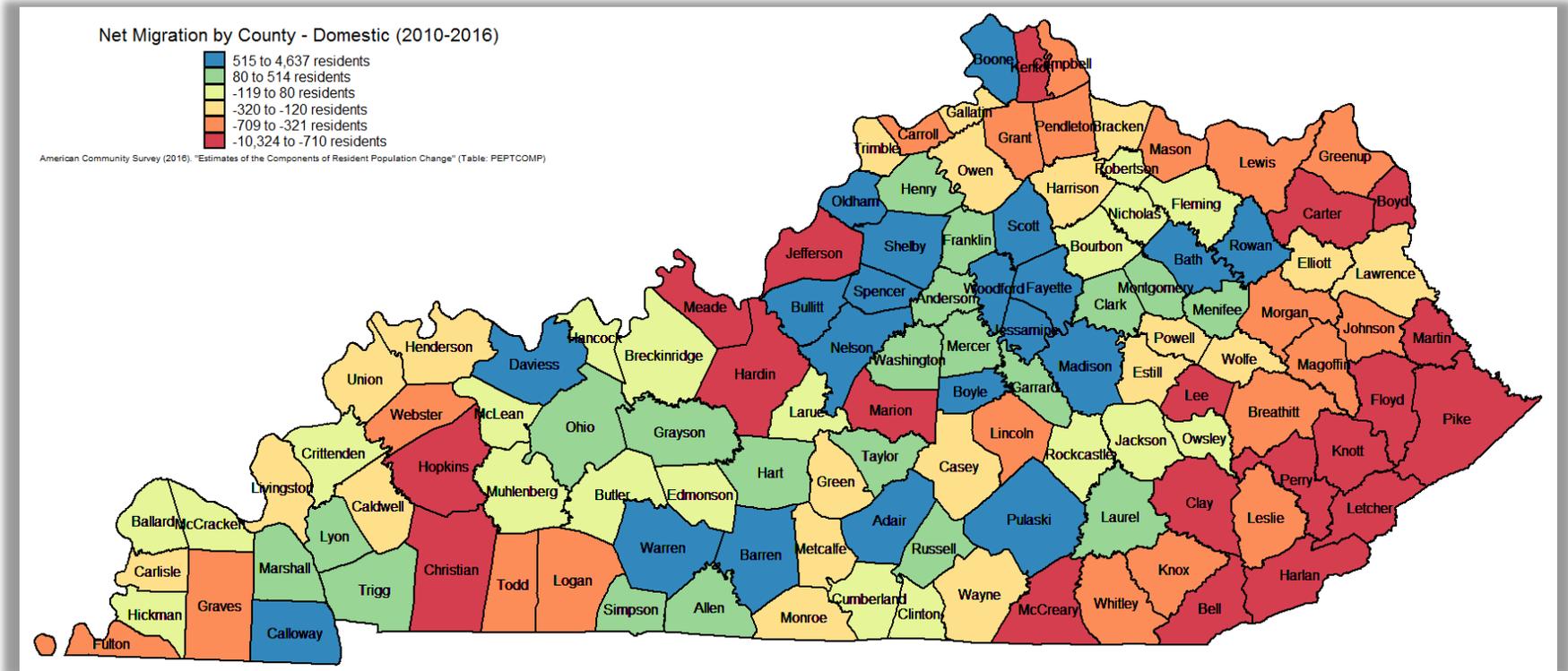
Table Four: Highest Net Increase and Decrease in Domestic Population by County (2010-2016)¹¹

Highest Net Increase		Highest Net Decrease	
County	Population	County	Population
Warren County	4,637	Christian County	-10,324
Scott County	4,429	Hardin County	-4,824
Madison County	4,163	Jefferson County	-4,741
Oldham County	4,014	Pike County	-3,768
Fayette County	3,528	Floyd County	-2,308
Bullitt County	3,159	Harlan County	-1,960
Boone County	2,732	Letcher County	-1,569
Shelby County	2,095	Meade County	-1,385
Boyle County	1,391	Boyd County	-1,365
Jessamine County	1,377	Bell County	-1,364

¹⁰ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

¹¹ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

Figure Four: Net Migration by County – Domestic (2010-2016)¹²



¹² American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

Net Migration – International¹³

Net Migration:¹⁴40,051

Net Increase: 40,198 (90 total counties)

Net Decrease: -147 (20 total counties)

Zero Migration: 10 total counties

Between 2010 and 2016, net migration of international individuals was a net gain for the state with 40,051 residents migrating into Kentucky. Only 20 counties had a net decrease in international migration, totaling 147 residents. Jefferson County had the highest net increase of international residents with a total of 13,950 individuals migrating here between 2010 and 2016. Grant County had the highest net decrease of international residents with a total of 28 residents leaving the county between 2010 and 2016. Figure Five (next page) displays a map of the net migration by county of international residents for the state of Kentucky between 2010 and 2016. Counties with the highest net increase are shaded in blue; counties with the highest net decrease are shaded in red. Table Five (below) displays the counties with the highest net increase and the highest net decrease in the state between 2010 and 2016.

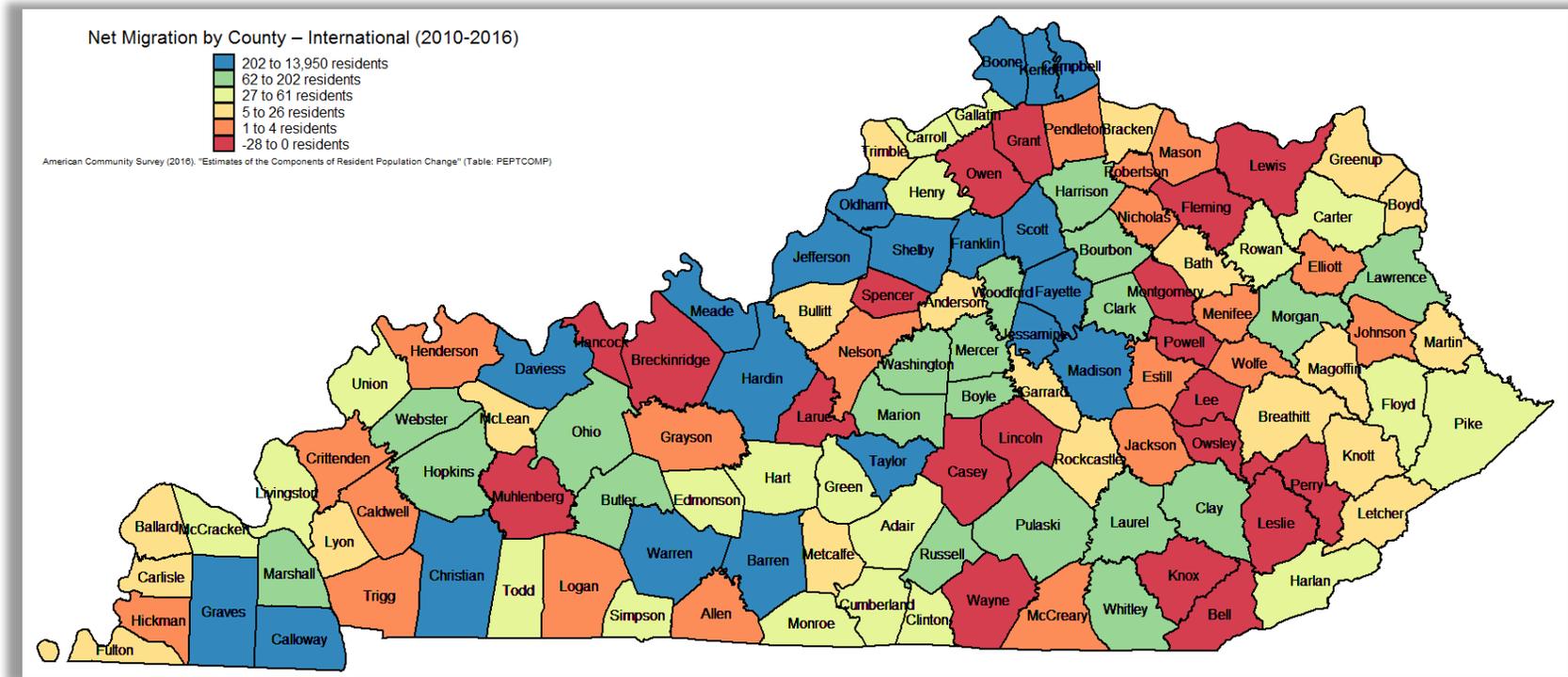
Table Five: Highest Net Increase and Decrease in International Population by County (2010-2016)

Highest Net Increase		Highest Net Decrease	
County	Population	County	Population
Jefferson County	13,950	Grant County	-28
Fayette County	7,553	Casey County	-25
Warren County	3,063	Wayne County	-16
Christian County	2,570	Larue County	-12
Hardin County	1,946	Lee County	-9
Boone County	1,602	Powell County	-7
Kenton County	1,017	Muhlenberg County	-7
Campbell County	851	Owsley County	-6
Calloway County	709	Montgomery County	-6
Jessamine County	560	Spencer County	-6

¹³ Net international migration for the United States includes the international migration of both native and foreign-born populations. Specifically, it includes: (a) the net international migration of the foreign born, (b) the net migration between the United States and Puerto Rico, (c) the net migration of natives to and from the United States, and (d) the net movement of the Armed Forces population between the United States and overseas. Net international migration for Puerto Rico includes the migration of native and foreign-born populations between the United States and Puerto Rico (U.S. Census Bureau).

¹⁴ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

Figure Five: Net Migration by County – International (2010-2016)¹⁵



¹⁵ American Community Survey (2016). "Estimates of the Components of Resident Population Change" (Table: PEPTCOMP)

Number of Households

The U.S. Census Bureau defines “households” as:

...all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live with any other persons in the structure and there is direct access from the outside or through a common hall.

A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters. There are two major categories of households, “family” and “nonfamily”. (See definitions of Family household and Nonfamily household). (U.S. Census, “Subject Definitions”)

Total number of households in Kentucky (2016): 1,718,217

Average Household Size by County: 2.51 (Max: 2.96; Min: 2.09)

Jefferson County has the highest concentration of households in Kentucky with 310,355 households residing within the county borders. Robertson County has the lowest concentration of households in Kentucky with 961 households residing within the county borders. Figure Six (next page) displays a map of Kentucky with the total number of households by county.

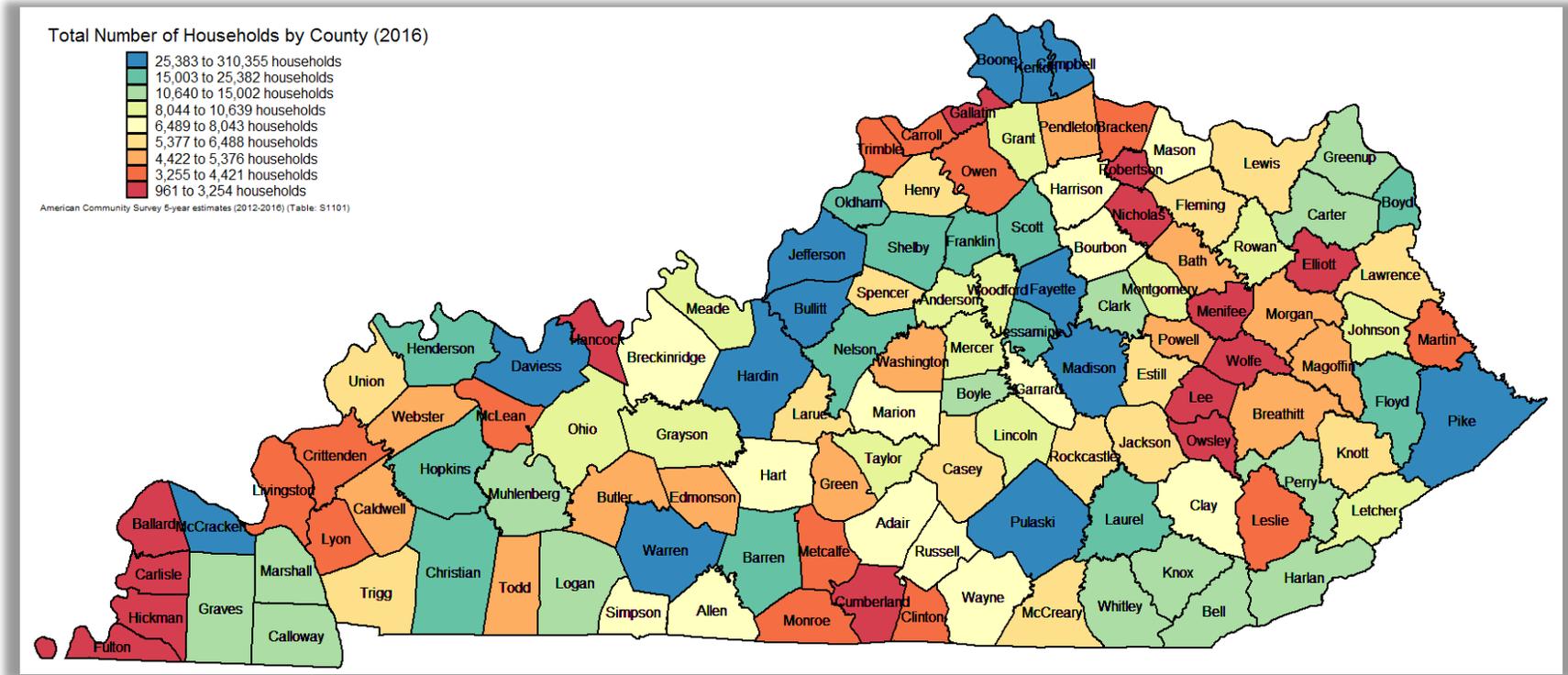
Table Six (below) outlines the counties with the highest and lowest number of households. The counties with the highest concentration of households corresponds to the counties with the greatest population (i.e. urban centers such as Louisville, Lexington, Bowling Green, and the greater Cincinnati area, in addition to Pikeville, Somerset, and Paducah). Counties with the lowest concentration of households are distributed across the state, with the greatest concentration in Eastern Kentucky (Elliot, Lee, Menifee, Owsley, and Wolfe counties) and Western Kentucky (Ballard, Carlisle, Fulton, and Hickman Counties).

Table Six: Highest and Lowest Number of Households by County¹⁶

Highest		Lowest	
County	Number of Households	County	Number of Households
Jefferson County	310,355	Robertson County	961
Fayette County	126,439	Owsley County	1,681
Kenton County	62,746	Hickman County	1,856
Warren County	45,974	Carlisle County	2,088
Boone County	45,649	Menifee County	2,521
Hardin County	40,422	Fulton County	2,611
Daviess County	39,282	Elliott County	2,624
Campbell County	35,954	Nicholas County	2,758
Madison County	32,409	Cumberland County	2,771
Bullitt County	28,533	Lee County	2,821

¹⁶ American Community Survey 5-year Estimates (2012-2016). “Households and Families” (Table: S1101)

Figure Six: Total Number of Households by County (2016)¹⁷



¹⁷ American Community Survey 5-year Estimates (2012-2016). "Households and Families" (Table: S1101)

Number of Households by Type

The U.S. Census Bureau Classifies households as:

- Married-Couple Family;
- Male householder, no wife present, family household;
- Female householder, no husband present, family household;
- Nonfamily household.

The predominant household type in Kentucky is “Married-Couple Family,” comprising 49% of the households in the state. Table Seven (below) lists the number of households within each U.S. Census Bureau classification, along with percentage of the total households for each classification.

Table Seven: U.S. Census Bureau Household Classifications and Corresponding Number of Households¹⁸

Household Type	Number of Households
Married-Couple Family ¹⁹	833,466 (49%)
Female householder, no husband present, family	220,274 (13%)
Male householder, no wife present, family	82,911 (5%)
Nonfamily household ²⁰	581,566 (34%)

The next pages include a series of maps outlining the distribution of household types by county and tables listing the highest and lowest counties by each classification.

¹⁸ American Community Survey 5-year Estimates (2012-2016). “Households and Families” (Table: S1101)

¹⁹ “A married couple, as defined for census purposes, is a husband and wife enumerated as members of the same household. The married couple may or may not have children living with them. The expression “husband-wife” or “married-couple” before the term “household,” “family,” or “subfamily” indicates that the household, family, or subfamily is maintained by a husband and wife. The number of married couples equals the count of married-couple families plus related and unrelated married-couple subfamilies.” (U.S. Census Bureau, “Subject Definitions”).

²⁰ “A nonfamily household consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related. (U.S. Census Bureau, “Subject Definitions”).

The U.S. Census Bureau defines a married couple as:

...a husband and wife enumerated as members of the same household. The married couple may or may not have children living with them. The expression "husband-wife" or "married-couple" before the term "household," "family," or "subfamily" indicates that the household, family, or subfamily is maintained by a husband and wife. The number of married couples equals the count of married-couple families plus related and unrelated married-couple subfamilies. (U.S. Census Bureau, "Subject Definitions").

Forty-nine percent of households in Kentucky are classified as a "Married-couple family household." The percentage of these households by county ranges between 40.26% (Lee County) and 67.65% (Oldham County). Figure Seven (next page) displays the concentration of households by county. Counties shaded in light green have lower concentrations of married couple families, while counties shaded in dark green have higher concentrations of these households. Table Eight (below) shows the counties with the highest and lowest concentrations of married couple households.

Table Eight: Highest and Lowest Percentage of "Married-couple family" Households by County²¹

Highest		Lowest	
County	Percentage of Households	County	Percentage of Households
Oldham County	68%	Lee County	40%
Spencer County	67%	Jefferson County	40%
Hancock County	61%	Fayette County	40%
McLean County	60%	Bell County	42%
Edmonson County	60%	Owsley County	42%
Livingston County	60%	Rowan County	42%
Scott County	59%	Fulton County	43%
Meade County	58%	Breathitt County	43%
Boone County	58%	Franklin County	43%
Pendleton County	58%	Powell County	44%

²¹ American Community Survey 5-year Estimates (2012-2016). "Households and Families" (Table: S1101)

An additional type of household is a family. The U.S. Census Bureau defines a family as:

...a group of two people or more (one of whom is the householder²³) related by birth, marriage, or adoption and residing together; all such people (including related subfamily members) are considered as members of one family. Beginning with the 1980 Current Population Survey, unrelated subfamilies (referred to in the past as secondary families) are no longer included in the count of families, nor are the members of unrelated subfamilies included in the count of family members. The number of families is equal to the number of family households, however, the count of family members differs from the count of family household members because family household members include any non-relatives living in the household.

With this definition in mind, the Census also classifies families with a female householder or male householder. The following maps and tables show the concentration of households by these classifications.

Thirteen percent of all households in Kentucky are classified as “Female householder, no husband present, family household.” In Kentucky, the percentage of households classified as a “Female householder, no husband present, family household” ranges between 7.48% (Lyon County) and 20.29% (Owsley County). Figure Eight (next page) displays the concentration of female householder households by county. Counties shaded in light red have lower concentrations of these households, while counties shaded in dark red have higher concentrations of these households. Table Nine (below) shows the counties with the highest and lowest concentrations of Female householder, no husband present, family household.

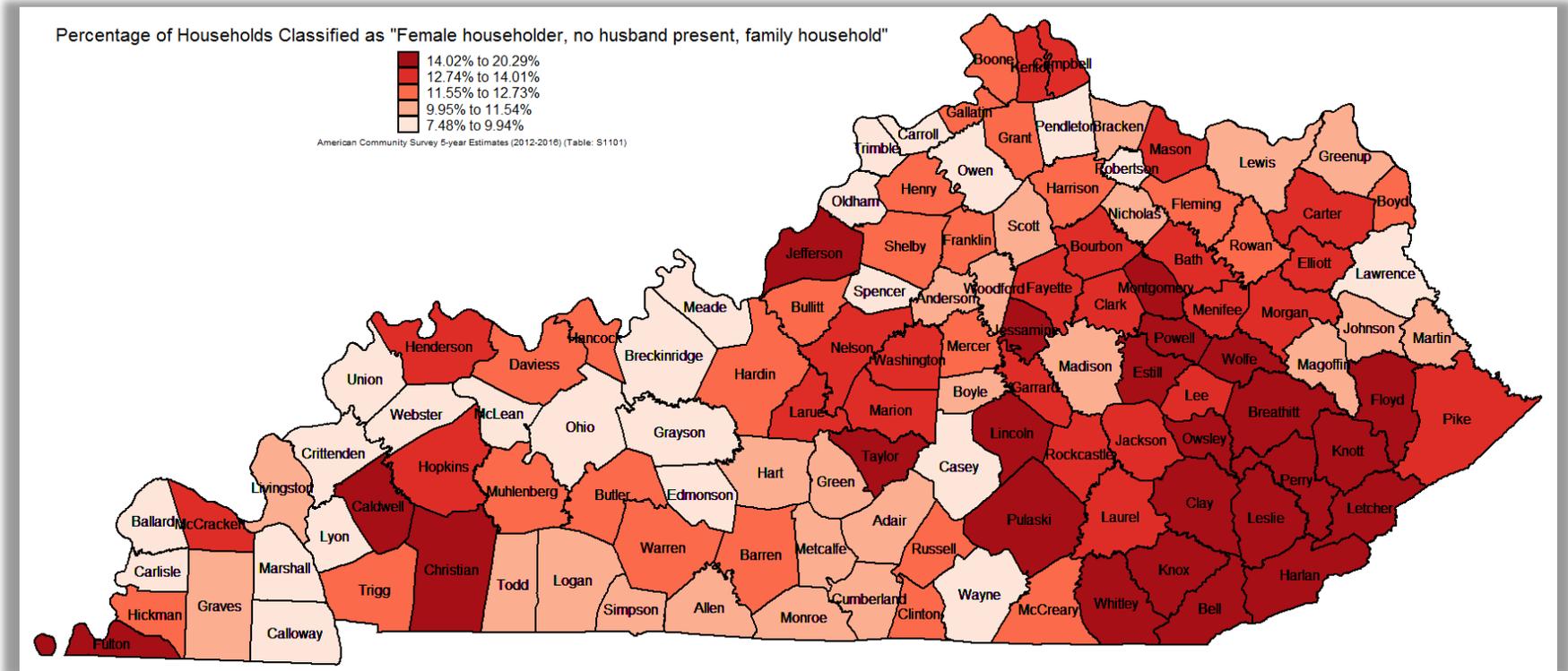
Table Nine: Highest and Lowest Percentage of “Female householder, no husband present” by County²⁴

Highest		Lowest	
County	Percentage of Households	County	Percentage of Households
Owsley County	20.3%	Lyon County	7.5%
Estill County	17.2%	McLean County	7.9%
Clay County	17.0%	Carlisle County	8.0%
Caldwell County	16.9%	Trimble County	8.1%
Bell County	16.6%	Casey County	8.1%
Powell County	16.6%	Robertson County	8.5%
Breathitt County	15.9%	Breckinridge County	8.5%
Montgomery County	15.9%	Calloway County	8.9%
Letcher County	15.6%	Webster County	8.9%
Knox County	15.6%	Pendleton County	8.9%

²³ “The householder refers to the person (or one of the people) in whose name the housing unit is owned or rented (maintained) or, if there is no such person, any adult member, excluding roomers, boarders, or paid employees. If the house is owned or rented jointly by a married couple, the householder may be either the husband or the wife. The person designated as the householder is the “reference person” to whom the relationship of all other household members, if any, is recorded.” (U.S. Census Bureau. “Subject Definitions.”)

²⁴ American Community Survey 5-year Estimates (2012-2016). “Households and Families” (Table: S1101)

Figure Eight: Percentage of Households Classified as "Female householder, no husband present, family household" (2016)²⁵



²⁵ American Community Survey 5 Year Estimate (2012-2016). "Households and Families." Table S1101

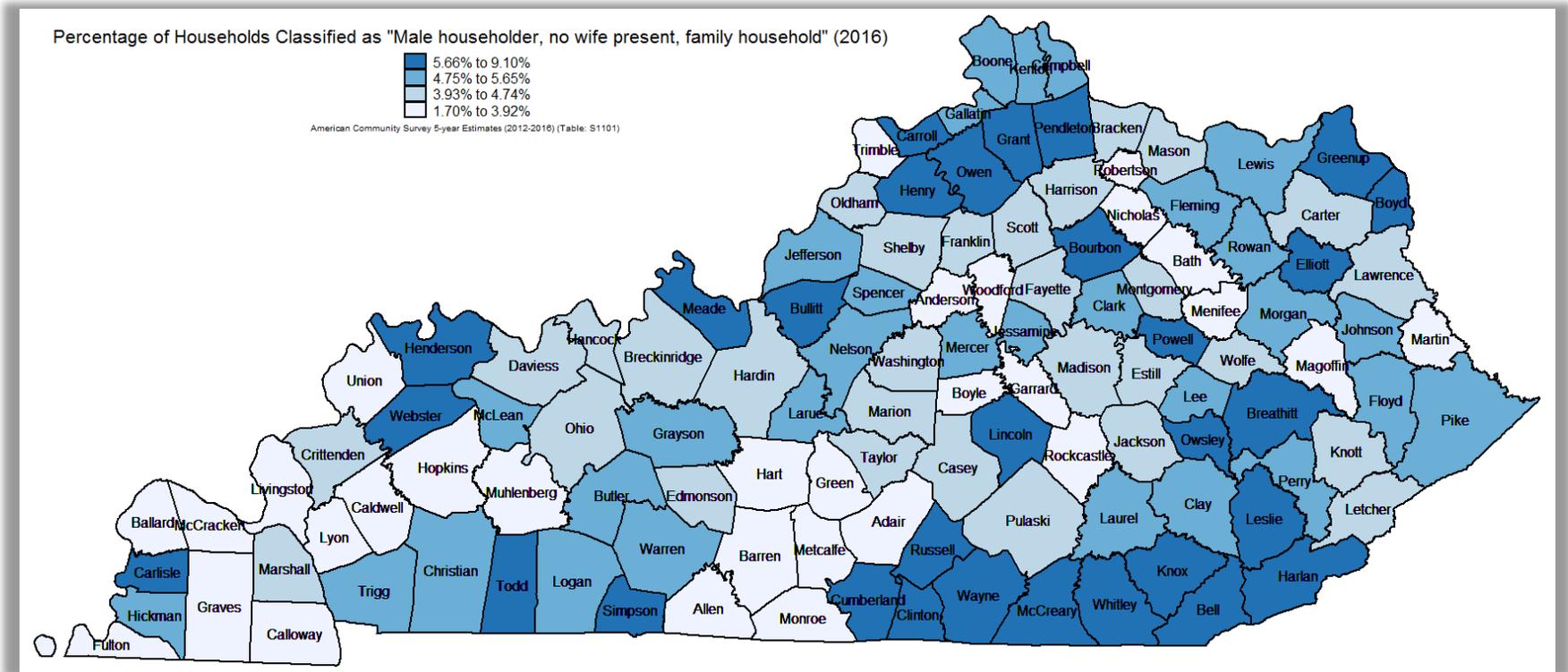
In Kentucky, the percentage of households classified as a “Male householder, no wife present, family household” ranges between 1.70% (Livingston County) and 9.10% (McCreary County) (5% of all households in the state). Figure Nine (next page) displays the concentration of male householder households by county. Counties shaded in light blue have lower concentrations of these households, while counties shaded in dark blue have higher concentrations of these households. Table Ten (below) shows the counties with the highest and lowest concentrations of Male householder, no wife present, family households.

Table Ten: Highest and Lowest Percentage of “Male householder, no wife present, family household” by County²⁶

Highest		Lowest	
County	Percentage of Households	County	Percentage of Households
McCreary County	9.10%	Livingston County	1.70%
Elliott County	9.03%	Robertson County	2.19%
Owsley County	8.39%	Lyon County	2.56%
Cumberland County	8.12%	Graves County	2.68%
Grant County	7.48%	Caldwell County	2.95%
Whitley County	6.72%	Martin County	3.03%
Carroll County	6.70%	Fulton County	3.10%
Harlan County	6.69%	Hopkins County	3.22%
Leslie County	6.63%	McCracken County	3.27%
Owen County	6.51%	Trimble County	3.32%

²⁶ American Community Survey 5-year Estimates (2012-2016). “Households and Families” (Table: S1101)

Figure Nine: Percentage of Households Classified as "Male householder, no wife present, family household"²⁷



²⁷ American Community Survey 5-year Estimates (2012-2016). "Households and Families" (Table: S1101)

The U.S. Census Bureau defines a “Non-family household” as a household comprised “...of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related” (U.S. Census Bureau. “Subject Definitions”).

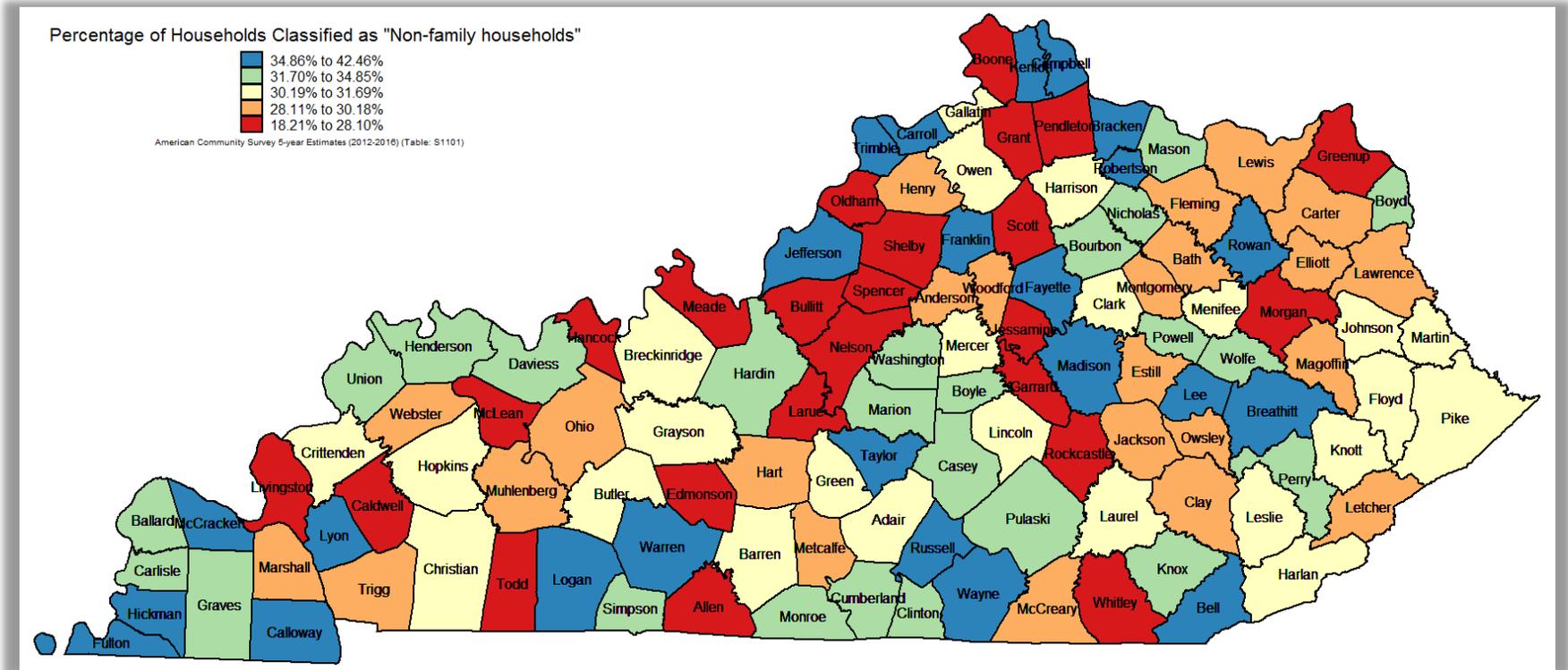
In Kentucky, the percentage of households classified as a “Non-family household” ranges between 18.21% (Spencer County) and 42.46% (Fayette County) (34% of all households in the state). Figure Ten (next page) displays the concentration of Non-family households by county. Counties shaded in red have lower concentrations of these households, while counties shaded in blue have higher concentrations of these households. Table Eleven (below) shows the counties with the highest and lowest concentrations of Non-family households in Kentucky.

Table Eleven: Highest and Lowest Percentage of “Non-family households” by County²⁸

Highest		Lowest	
County	Percentage of Households	County	Percentage of Households
Fayette County	42.5%	Spencer County	18.2%
Calloway County	42.1%	Oldham County	19.0%
Lee County	41.7%	Hancock County	22.4%
Franklin County	40.4%	Jessamine County	24.0%
Jefferson County	40.1%	Boone County	24.3%
Rowan County	40.0%	Scott County	25.6%
McCracken County	39.9%	Whitley County	25.8%
Lyon County	39.7%	Bullitt County	25.9%
Robertson County	39.4%	Garrard County	26.0%
Fulton County	39.1%	Shelby County	26.2%

²⁸ American Community Survey 5-year Estimates (2012-2016). “Households and Families” (Table: S1101)

Figure Ten: Percentage of Households Classified as "Non-family households"²⁹



²⁹ American Community Survey 5-year Estimates (2012-2016). "Households and Families" (Table: S1101)

Grandparents as Householder

One additional classification to take into account, in terms of household composition and householder classification, are households with a grandparent or grandparents who are living with their own grandchildren (children all under the age of 18).³⁰

In Kentucky, the percentage of households with grandparents listed as the householder ranges between 0.97% (Green County) and 8.53% (Grant County). Figure Eleven (next page) displays the percentage of grandparents living with their own grandchildren under 18 years by county. Counties shaded in blue have lower concentrations of these households, while counties shaded in red have higher concentrations of these households. Table Twelve (below) shows the counties with the highest and lowest concentrations of Grandparent householders in Kentucky.

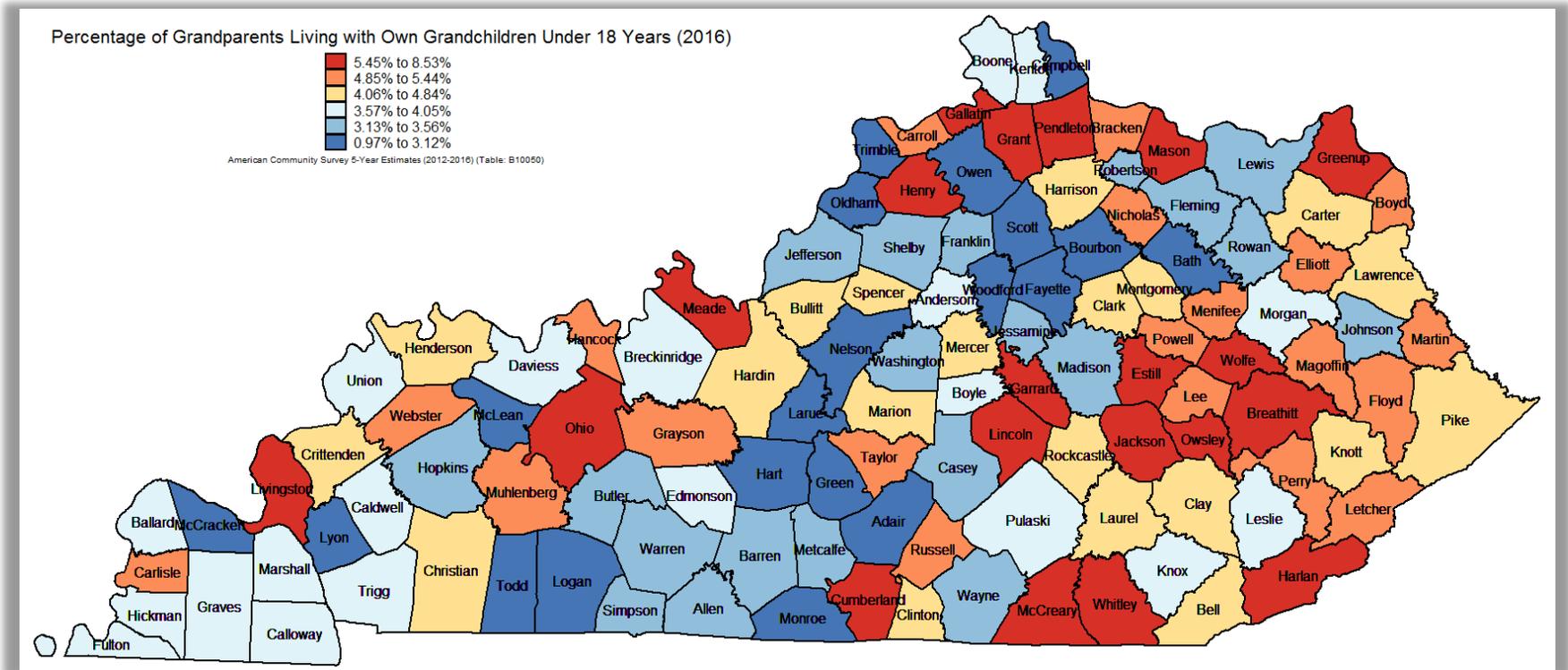
Table Twelve: Highest and Lowest Percentage of Households with Grandparents Living with Own Grandchildren Under 18 Years of Age by County³¹

Highest		Lowest	
County	Percentage of Households	County	Percentage of Households
Grant County	8.5%	Green County	0.98%
Jackson County	8.4%	Lyon County	1.35%
Martin County	8.1%	Mason County	1.77%
Gallatin County	7.4%	Fayette County	2.22%
Lincoln County	7.0%	Trimble County	2.24%
Estill County	6.5%	Larue County	2.34%
Whitley County	6.4%	Marshall County	2.44%
Garrard County	6.3%	Oldham County	2.45%
Livingston County	6.3%	Woodford County	2.49%
Greenup County	6.2%	Todd County	2.56%

³⁰ American Community Survey 5-Year Estimates (2012-2016). "Grandparents Living With Own Grandchildren Under 18 Years By Responsibility For Own Grandchildren By Length Of Time Responsible For Own Grandchildren For The Population 30 Years And Over." (Table: B10050)

³¹ American Community Survey 5-Year Estimates (2012-2016). "Grandparents Living With Own Grandchildren Under 18 Years By Responsibility For Own Grandchildren By Length Of Time Responsible For Own Grandchildren For The Population 30 Years And Over." (Table: B10050)

Figure Eleven: Percentage of Grandparents Living with Own Grandchildren Under 18 Years of Age (2016)³²



³² American Community Survey 5-Year Estimates (2012-2016). "Grandparents Living With Own Grandchildren Under 18 Years By Responsibility For Own Grandchildren By Length Of Time Responsible For Own Grandchildren For The Population 30 Years And Over." (Table: B10050)

Racial Demographics

The U.S. Census Bureau defines race as categories which "...reflect a social definition of race recognized in this country, and not an attempt to define race biologically, anthropologically, or genetically...[including]...racial and national origin or socio-cultural groups."³³ These categories include: White; Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; Some Other Race; and Two or More Races. Table Thirteen (below) provides the estimated number of households, the percentage of total households, and the Median Family Income for each racial classification. In Kentucky, 89% of households are classified as White, 7% of households are classified as Black or African American, and 2% of households are classified as Hispanic or Latino. Households classified as American Indian and Alaska Native, Asian, and Other make up less than 3% of households in the state.

Table Thirteen: Population Totals and Median Income by Race for Households in Kentucky (2016)³⁴

Racial Demographics	Population Estimate (Households)		Median Family Income
White	1,532,646	(89%)	\$40,598.50
Black or African American	134,835	(7%)	\$29,359.00
American Indian and Alaska Native	3,570	(<1%)	\$40,021.00
Asian	17,532	(1%)	\$58,284.50
Hispanic or Latino	37,871	(2%)	\$38,782.88
Other	9,356	(<1%)	\$35,621.00

Table Fourteen (a and b) (below and next page) provides the counties with the highest percentages of racial classifications. White households comprise 100% (Elliott County) to 73.4% (Fulton County) of counties across Kentucky. Black or African American households comprise 25.3% (Fulton County) to 0% (Elliott County) of counties across the Commonwealth. American Indian and Alaska Native households make-up 1.3% (Livingston County) to 0.1% (Jackson County); 38 counties have zero American Indian and Alaska Native households.

Table Fourteen (a): Percentage of County by Racial Classification³⁵

Racial Classification					
White		Black or African American		American Indian and Alaska Native	
County	Percentage	County	Percentage	County	Percentage
Elliott County	100%	Fulton County	25.2%	Livingston County	1.3%
Robertson County	99.7%	Christian County	21.9%	Rockcastle County	1.2%
Jackson County	99.6%	Jefferson County	20.5%	Simpson County	0.9%
Magoffin County	99.6%	Fayette County	14.4%	Wolfe County	0.8%
Carlisle County	99.4%	Hardin County	12.2%	Christian County	0.7%
Bracken County	99.3%	Simpson County	10.7%	Nicholas County	0.7%
Martin County	99.3%	McCracken County	10.4%	McLean County	0.6%
Clinton County	99%	Franklin County	9.7%	Laurel County	0.6%
Floyd County	99%	Warren County	9.3%	Lee County	0.6%
Trimble County	99%	Union County	9%	Calloway County	0.5%

³³ U.S. Census Bureau. American Factfinder Glossary. "Race."

³⁴ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

³⁵ American Community Survey 5 Year Estimates (2012-2016). "Race" (Table: B02001)

The percentage of Asian households ranges between 3.1% (Fayette County) to 0.1%³⁶ of households across Kentucky; 37 counties have zero households classified as Asian. Households classified as Hispanic or Latino range between 6.0% (Christian County) to 0.1%³⁷ of households in a county; eight counties have zero households classified as Hispanic or Latino. Households classified as “Other” range between 5.4% (Carroll County) and 0.1%³⁸ of households in a county; forty-three counties have zero households classified as “Other.”

Table Fourteen (b): Percentage of County by Racial Classification

Racial Classification					
Asian		Hispanic or Latino		Other	
County	Percentage	County	Percentage	County	Percentage
Fayette County	3.1%	Christian County	6.0%	Carroll County	5.4%
Boone County	2.5%	Shelby County	5.7%	Gallatin County	2.7%
Jefferson County	2.0%	Carroll County	5.4%	Scott County	2.1%
Warren County	2.0%	Gallatin County	5.1%	Wayne County	2.0%
Hardin County	1.8%	Fayette County	4.4%	Nicholas County	1.7%
Franklin County	1.4%	Bourbon County	4.3%	Warren County	1.7%
Calloway County	1.1%	Woodford County	4.0%	Fayette County	1.6%
Oldham County	1.0%	Hardin County	3.8%	Woodford County	1.4%
Kenton County	1.0%	Graves County	3.8%	Russell County	1.3%
Christian County	0.9%	Jefferson County	3.6%	Butler County	1.2%

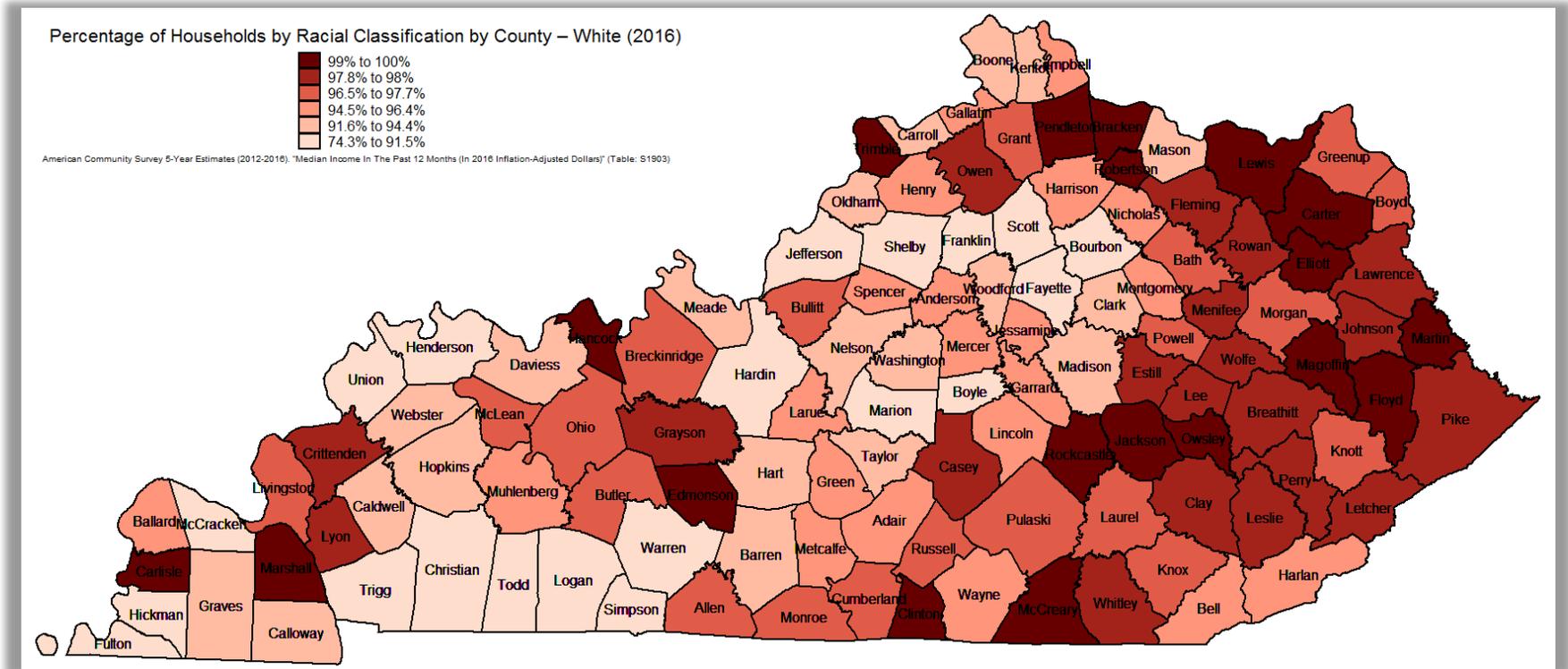
Figures Thirteen (a-f) (next pages) provide six maps showing the distribution of each racial classification by county across the Commonwealth.

³⁶ Livingston, Letcher, Hart, Graves, Garrard, Pendleton, Logan, Nelson, Wayne, Carter, Clark, Washington, Knott, Gallatin, and Russell Counties have 0.1% households classified as Asian.

³⁷ Perry, Muhlenberg, Lee, Floyd, Fulton, Livingston and Knott Counties have 0.1% of households classified as Hispanic or Latino.

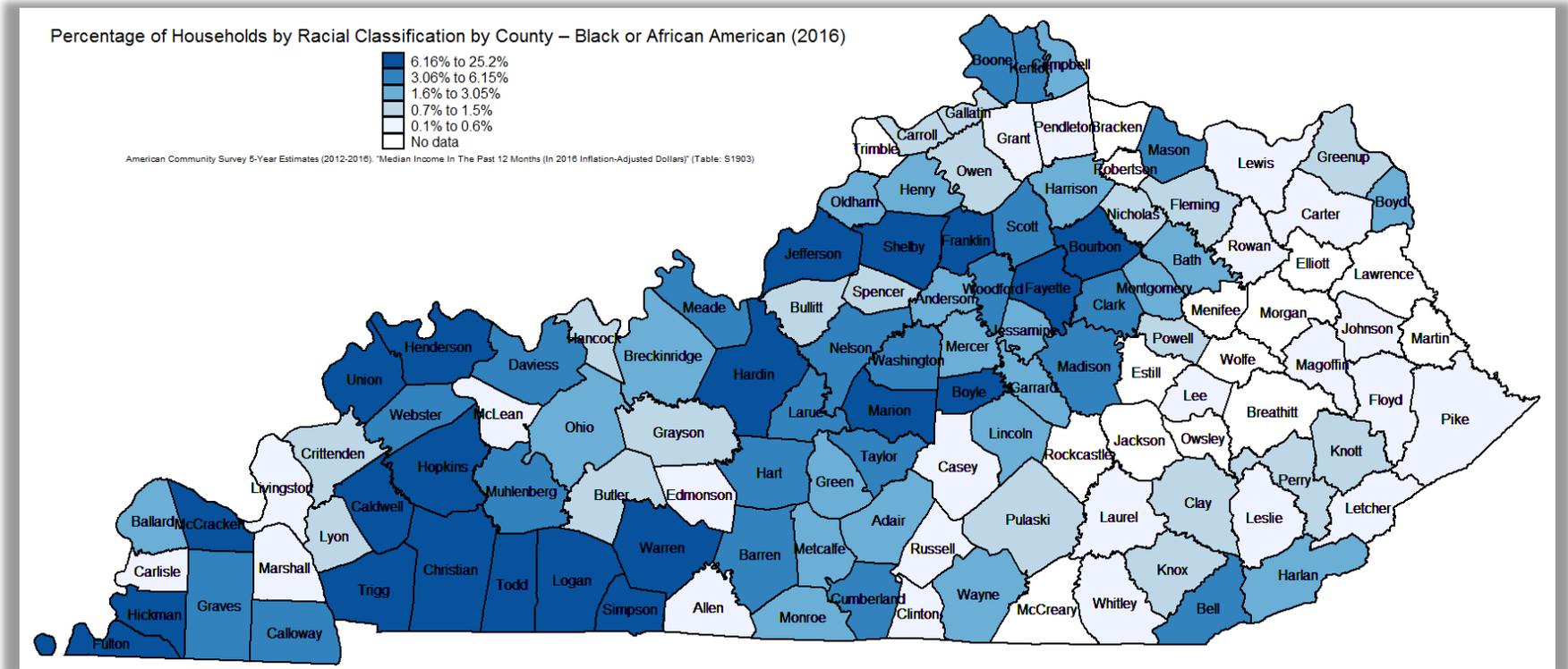
³⁸ Ohio, Daviess, Mason, Lincoln, Pulaski, Adair, McLean, Laurel, Greenup, Breckinridge, Taylor, Harlan, Letcher, and Bath Counties have 0.1% of households classified as Other.

Figure Thirteen (a): Percentage of Households by Racial Classification by County – White (2016) ³⁹



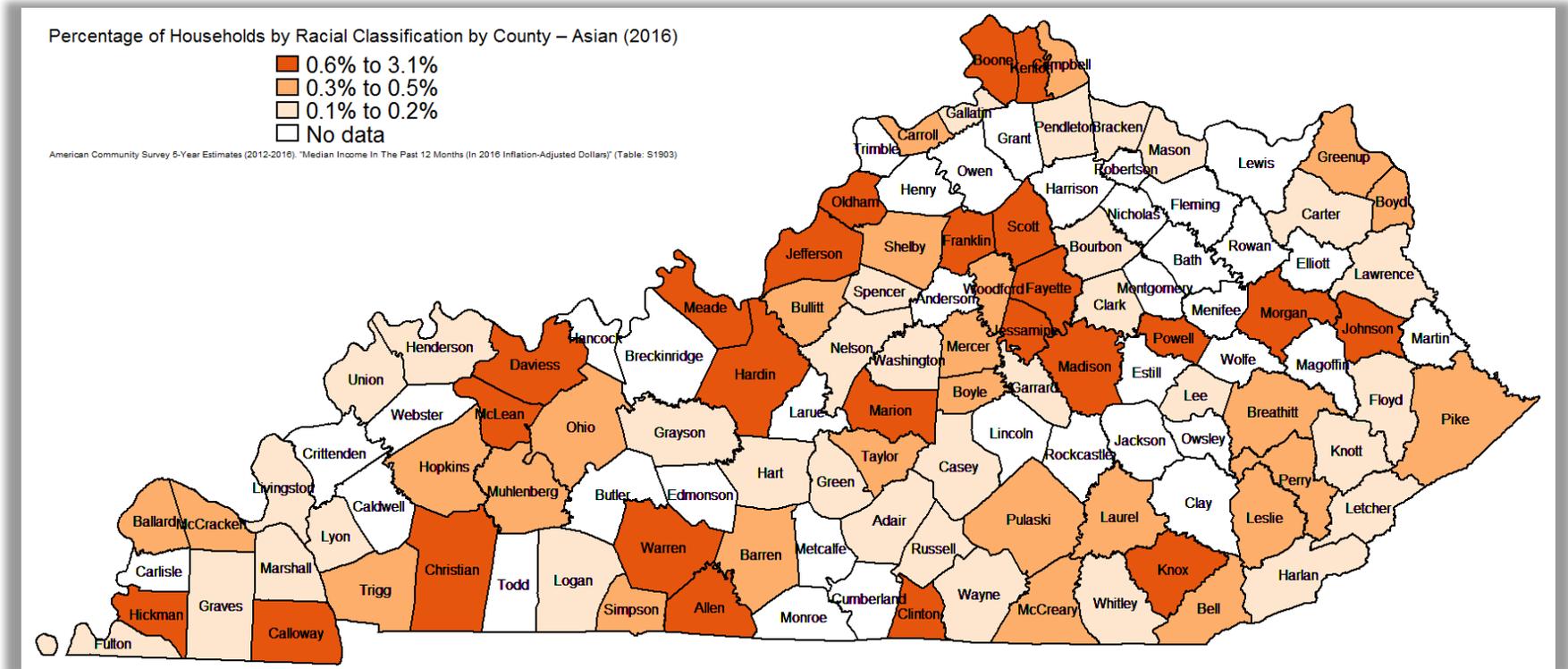
³⁹ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Figure Thirteen (b): Percentage of Households by Racial Classification by County – Black or African American (2016) ⁴⁰



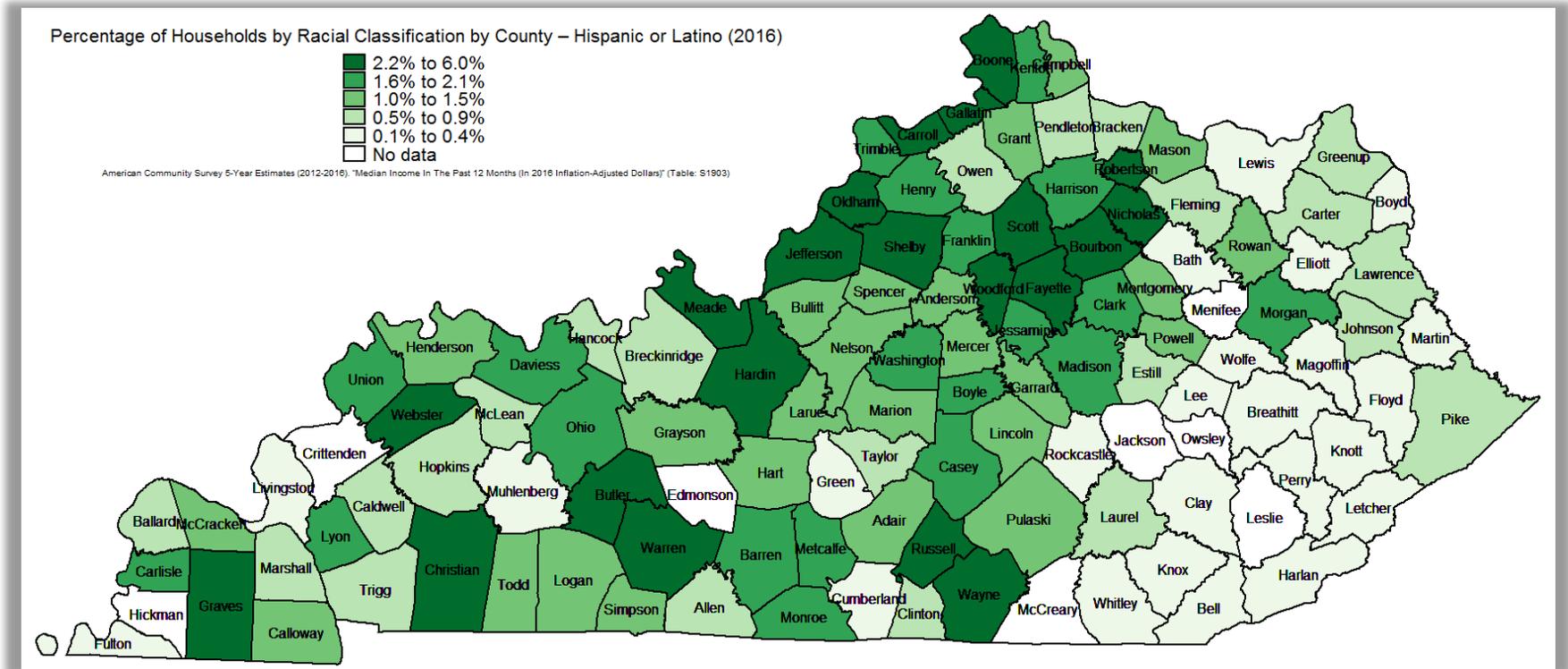
⁴⁰ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Figure Thirteen (d): Percentage of Households by Racial Classification by County – Asian (2016) ⁴²



⁴² American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Figure Thirteen (e): Percentage of Households by Racial Classification by County – Hispanic or Latino (2016) ⁴³

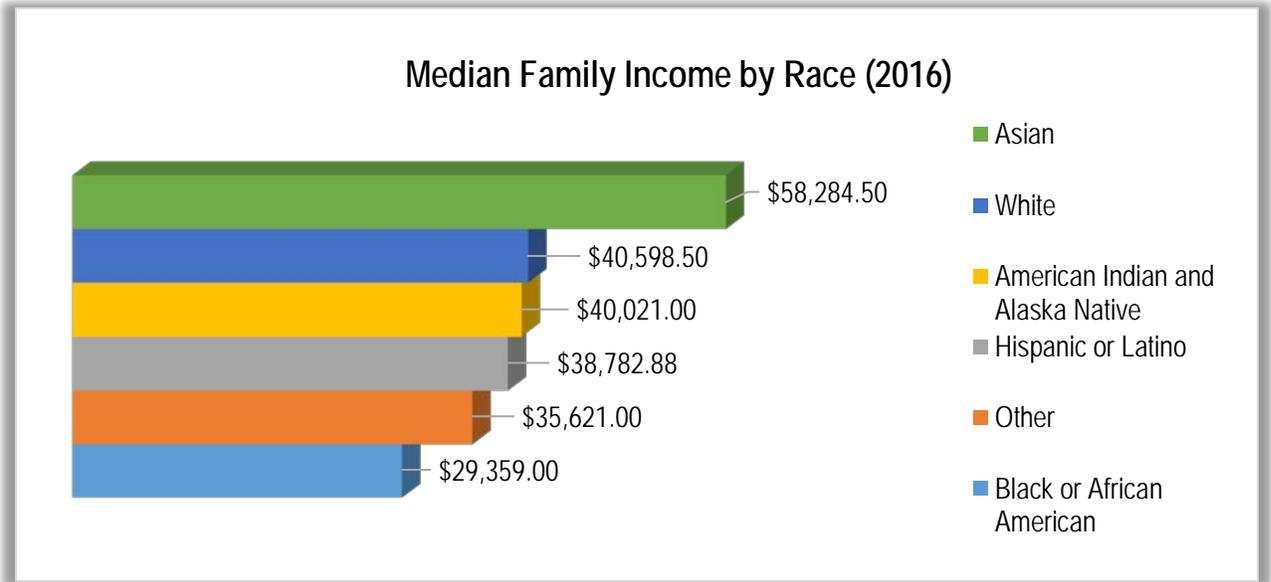


⁴³ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Median Family Income by Race

Median Family Income varies by race, ranging between \$29,359.00 (Black or African American households) and \$58,284.50 (Asian households)⁴⁵. The graph below displays median family income by race. However, the range of income within each racial demographic varies from county to county. Figures Fourteen (a-g) (below and next pages) display six maps of Median Family Income by Race.

Figure Fourteen (a): Median Family Income by Race (2016)⁴⁶

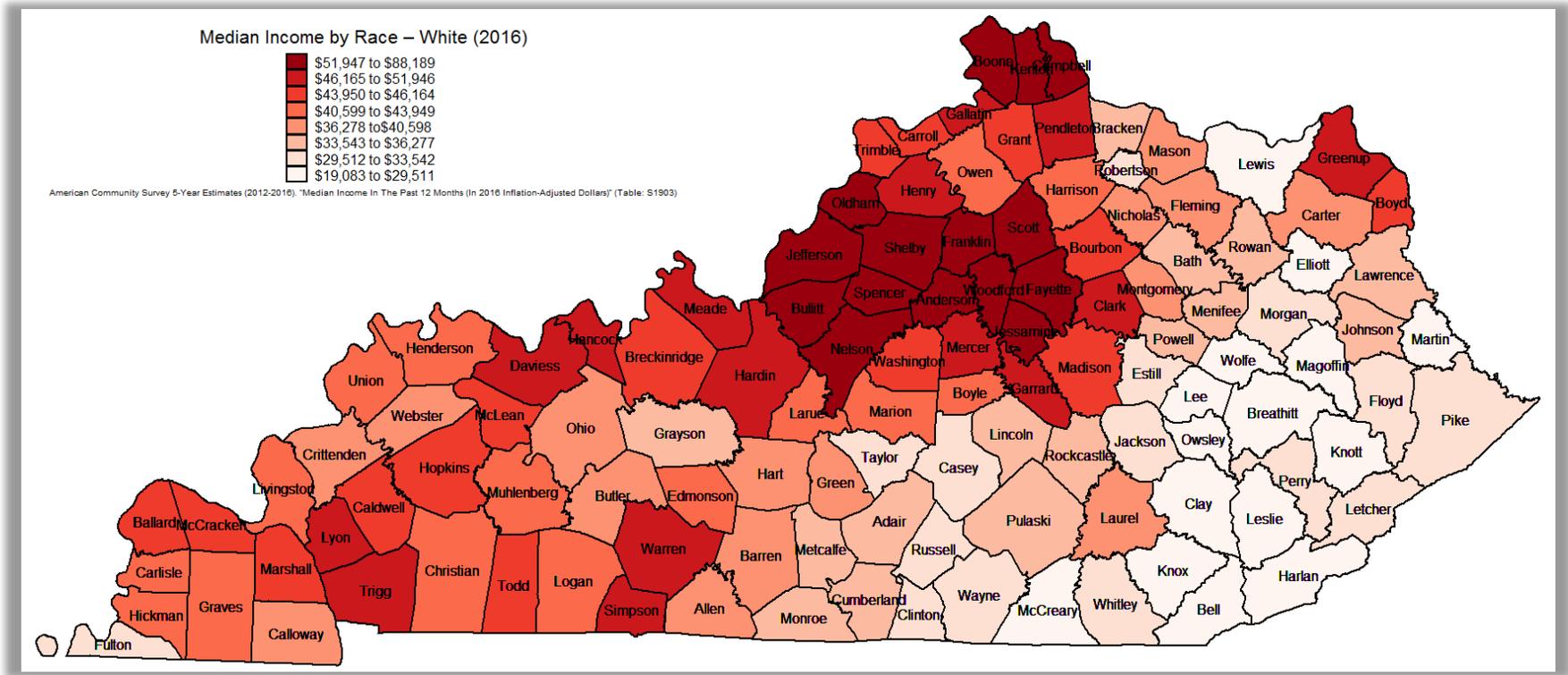


⁴⁵ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

⁴⁶ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Median Income for white households ranges between \$19,083 (McCreary County) and \$88,189 (Oldham County). Higher income is concentrated around urban centers, with the greater Cincinnati, Louisville, and Lexington areas having the highest income in the state for white households. Counties with the lowest income are concentrated to Eastern and South Central Kentucky.

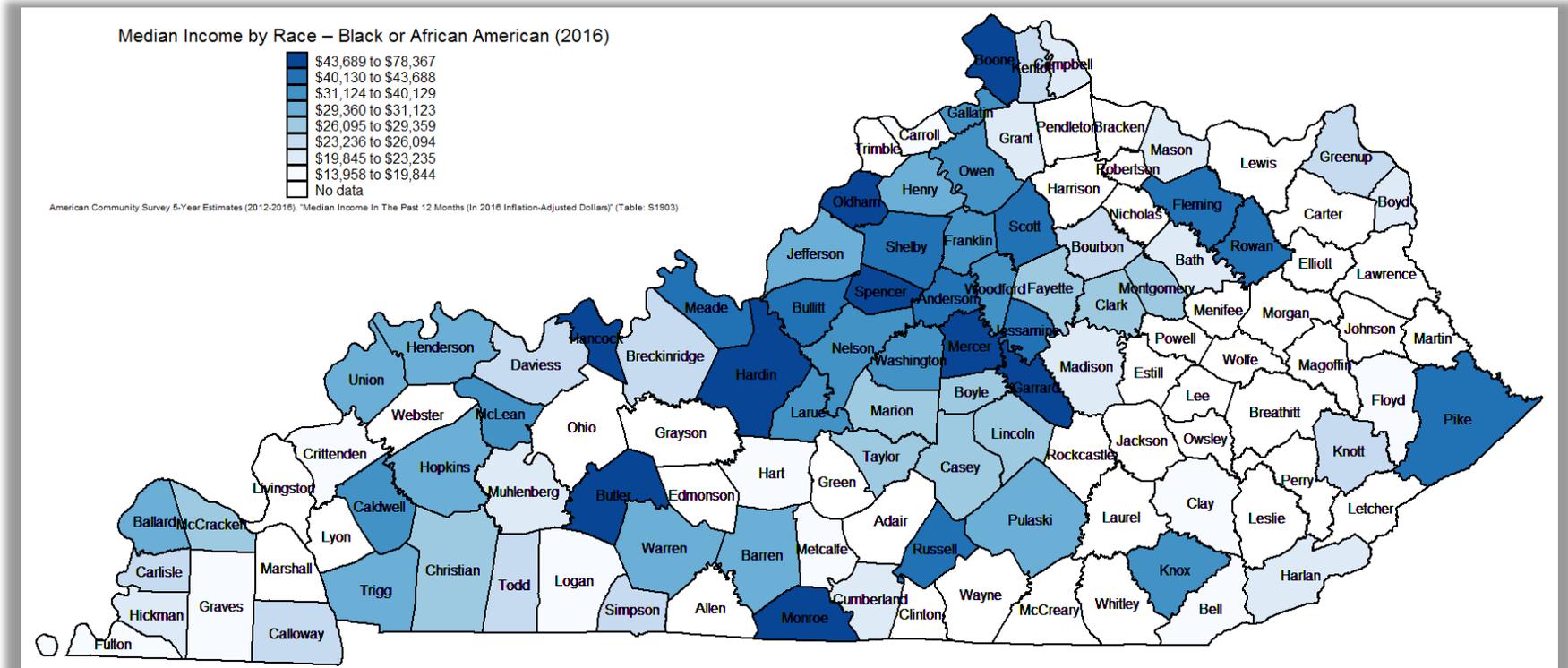
Figure Fourteen (b): Median Income by Race – White (2016)⁴⁷



⁴⁷ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Median Income for Black or African American households ranges between \$13,958 (Crittenden County) and \$78,367 (Oldham County) across 79 counties.

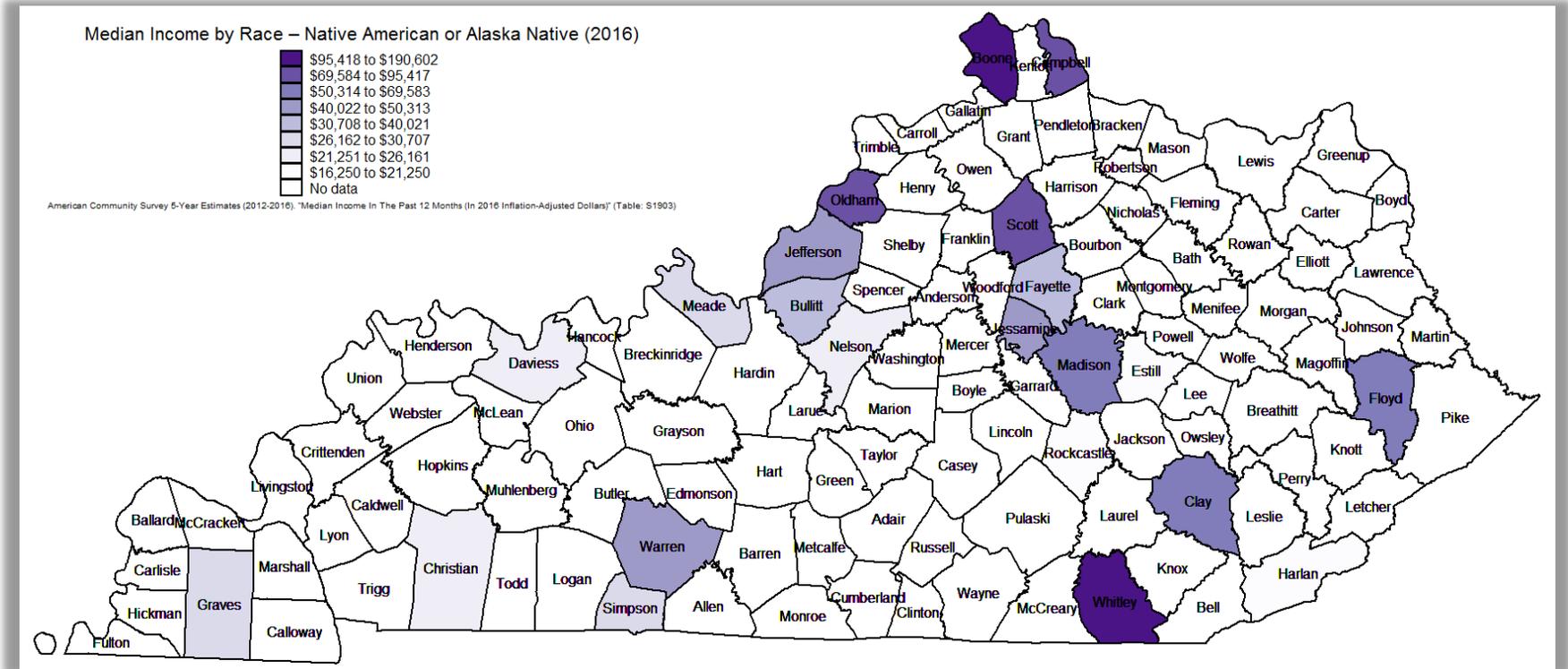
Figure Fourteen (c): Median Income by Race – Black or African American (2016)⁴⁸



⁴⁸ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Median Income for Native American or Alaska Native households ranges between \$16,250 (Harlan County) and \$190,602 (Boone County) across 22 counties.

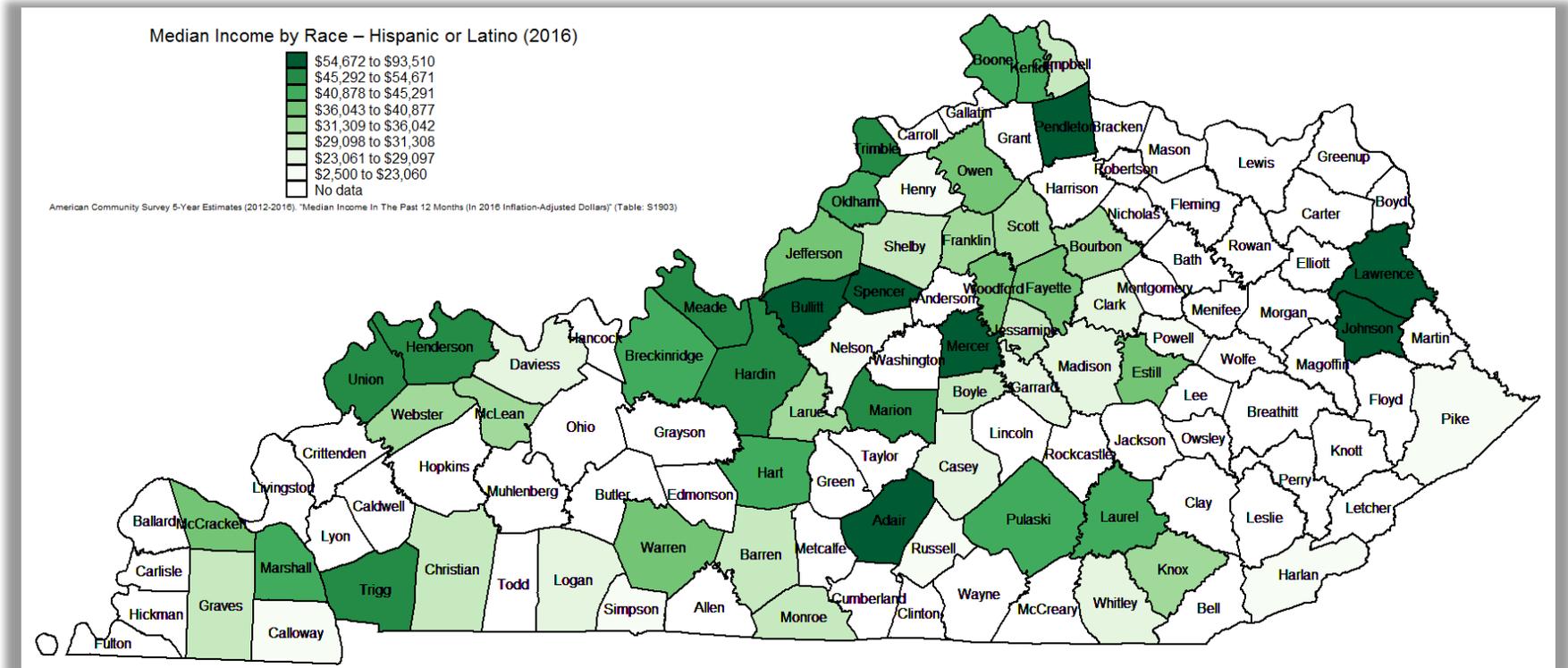
Figure Fourteen (d): Median Income by Race – Native American or Alaska Native (2016)⁴⁹



⁴⁹ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Median Income for Hispanic or Latino households ranges between \$2,250 (Harlan County) and \$93,510 (Pendleton County) across 59 counties.

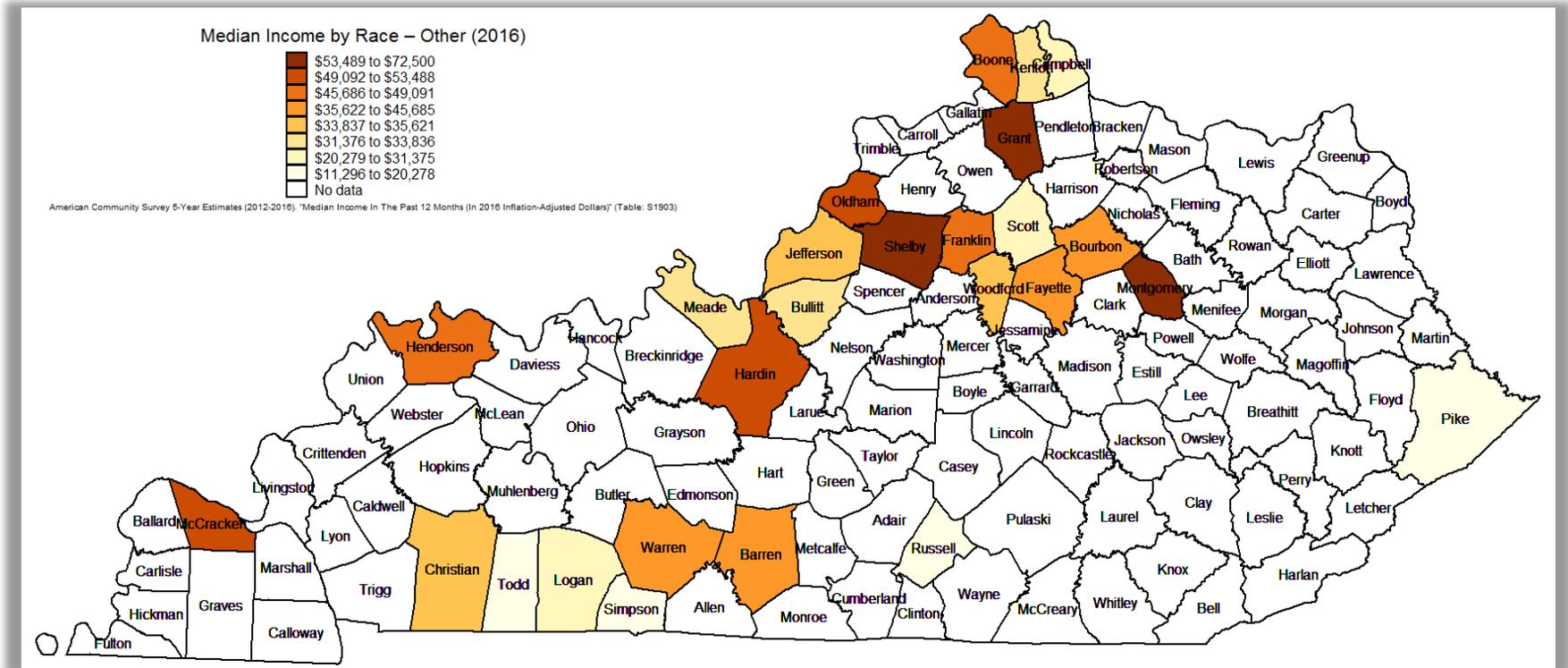
Figure Fourteen (f): Median Income by Race – Hispanic or Latino (2016)⁵¹



⁵¹ American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Median Income for households classified as “Other” ranges between \$11,296 (Simpson County) and \$72,500 (Shelby County) across 26 counties.

Figure Fourteen (g): Median Income by Race – Other (2016)⁵²



⁵² American Community Survey 5-Year Estimates (2012-2016). "Median Income In The Past 12 Months (In 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Aging population

As of 2016, the Census estimates that individuals 65 years of age and over make up approximately 15% of the total population in the Commonwealth of Kentucky. The concentration of this population ranges between 26% and 11% at the county level; this is a significant difference when thinking about allocating resources to this population based upon county level data. Robertson County (26%), Hickman County (23%), Lyon County (23%), Trigg County (21%) and Marshall County (21%) have the highest proportion of citizens 65 years of age and older.

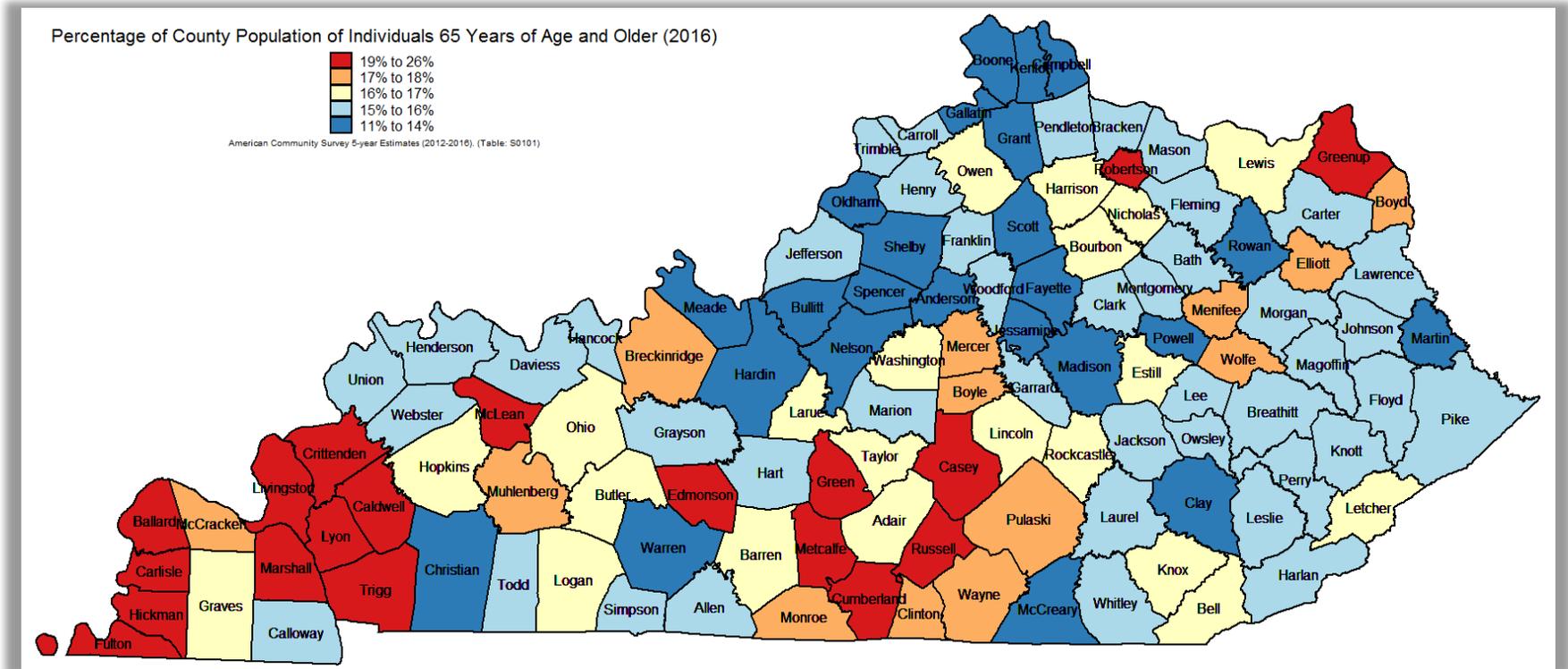
Figure Fifteen (next page) shows the present estimate from the Census of the percentage within each county of individuals who are 65 years of age and older. The counties shaded in red represent those counties with higher concentrations of individuals 65 and older. The counties shaded in blue represent those counties with lower concentrations of individuals 65 and older. In 2016, we saw higher concentrations of this population in South Central and Western Kentucky. As stated above, Robertson, Hickman, Lyon, Trigg, and Marshall Counties have the highest concentration of individuals 65 and older. Table Fifteen (below) lists the top ten counties with the greatest percentage of individuals 65 and older and the top ten counties with the smallest percentage of individuals 65 and older. Scott (11%), Christian (11%), and Boone (11%) Counties had the smallest increase in individuals 65 and older.

Table Fifteen: Counties with the Highest and Lowest Percentages of Individuals 65 Years and Older⁵³

Highest Percentage		Lowest Percentage	
County	Percent 65+	County	Percent 65+
Robertson County	26%	Scott County	11%
Hickman County	23%	Christian County	11%
Lyon County	23%	Boone County	11%
Trigg County	21%	Oldham County	12%
Marshall County	21%	Fayette County	12%
Cumberland County	20%	Warren County	12%
Livingston County	20%	Gallatin County	12%
Carlisle County	20%	Spencer County	12%
Crittenden County	19%	Hardin County	12%
Green County	19%	Meade County	12%

⁵³ American Community Survey 5 Year Estimates (2012-2016). "Age and Sex" (Table S0101)

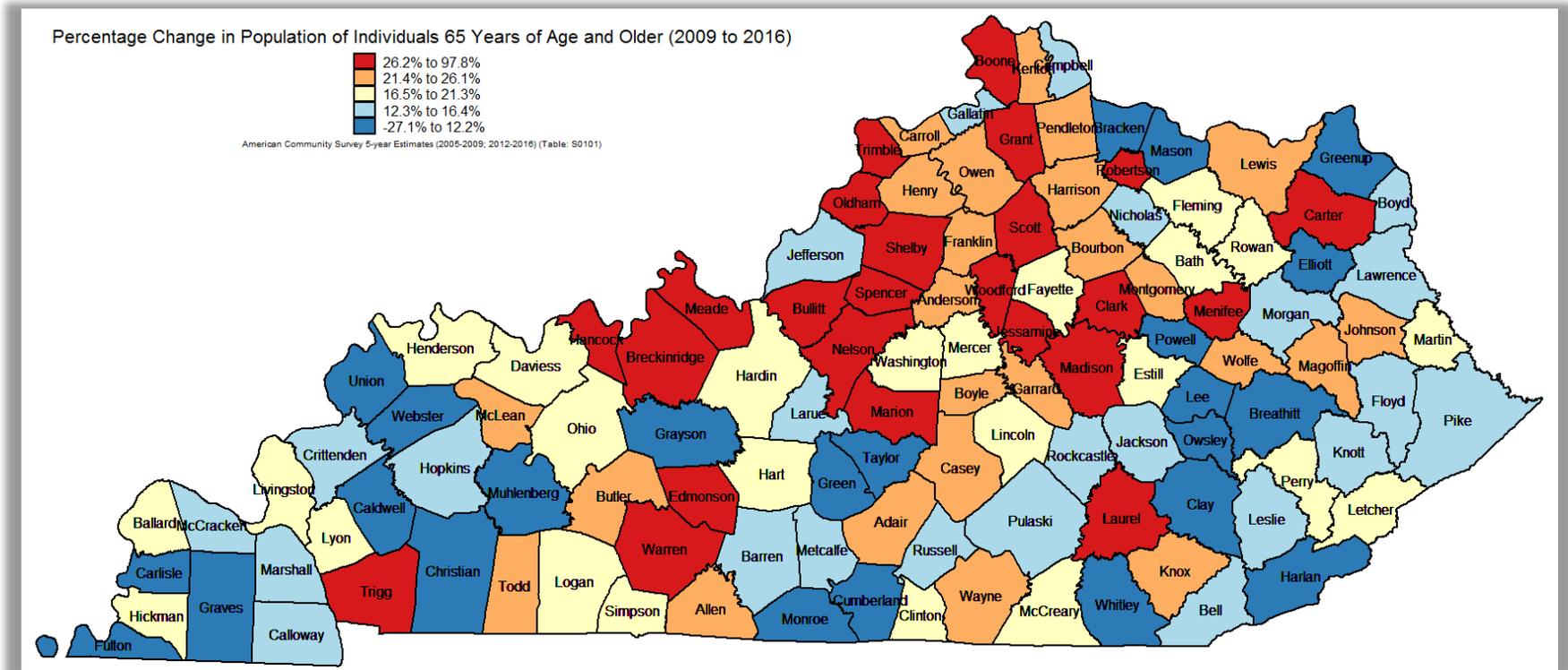
Figure Fifteen: Percentage of County Population of Individuals 65 Years of Age and Older (2016)⁵⁴



⁵⁴ American Community Survey 5 Year Estimates (2012-2016). "Age and Sex" (Table S0101)

In addition to the concentration of individuals in one time period, it is important to take into consideration the change in percentage of populations across time, much like we saw in Figure Two (“Percentage Change in Population in Kentucky by County between 2009 and 2016”). Figure Sixteen presents the Percentage Change in Elderly (65+) individuals residing in each county. The counties in red represent those counties with the greatest increase in this population between 2009 and 2016. These counties are: Robertson (97%), Oldham (57%), Bullitt (48%), Spencer (46%), Scott (45%), Jessamine (44%), Shelby (42%), and Woodford (41%). Counties with negative percent changes (or a decrease in the number of individuals 65 years of age and older) are listed in Table Sixteen (next page). These counties are mostly in Eastern Kentucky with the exception of Fulton County.

Figure Sixteen: Percentage Change in Population of Individuals 65 Years of Age and Older (2009 to 2016)⁵⁵



⁵⁵ American Community Survey 5 Year Estimates (2012-2016). “Age and Sex” (Table S0101)

Table Sixteen: Counties with a Negative Percentage Change in Individuals 65 Years of Age and Older

County	Percentage Change
Owsley	-27.1%
Powell	-18.4%
Elliott	-12.6%
Fulton	-4.6%
Lee	-1.0%
Whitley	-0.9%

Education Levels

High School Graduate or Higher

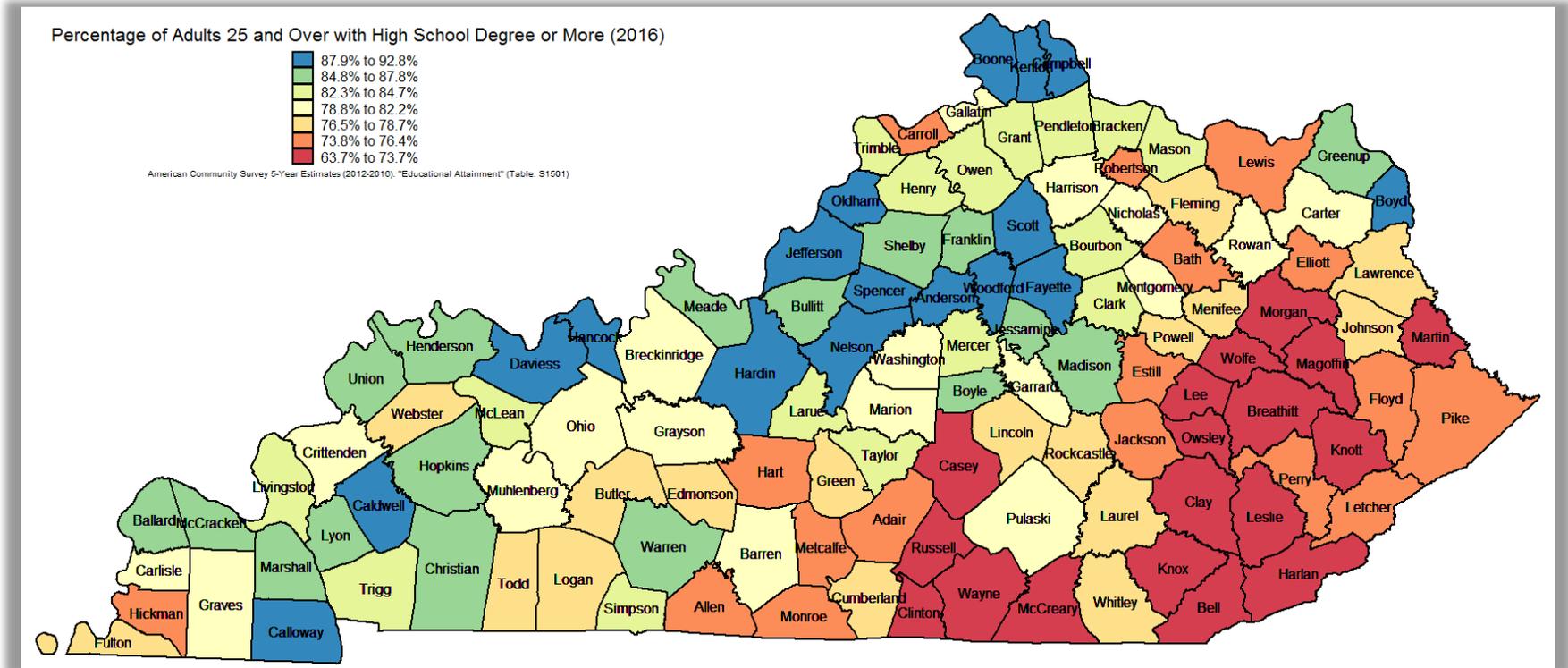
On average, 80.3% of Kentucky Adults 25 Years and Older have graduated from High School. The percentage of adults by county ranges between 63.7% (Clay County) and 92.8% (Oldham County). Figure Seventeen (next page) displays the concentration of adults by county. Counties shaded in red have lower concentrations of High School Graduates, while counties shaded in blue have higher concentrations of adults. Table Seventeen (below) shows the counties with the highest and lowest concentrations of adults with a High School degree.

Table Seventeen: Highest and Lowest Percentages of Adults 25 and Over with a High School Degree or More (2016)⁵⁶

Highest		Lowest	
County	Percentage of Adults	County	Percentage of Adults
Oldham County	92.8%	Clay County	63.7%
Boone County	92.4%	Leslie County	63.7%
Campbell County	90.1%	Lee County	67.9%
Scott County	90.0%	Bell County	68.1%
Fayette County	89.9%	Magoffin County	69.4%
Hardin County	89.6%	Wolfe County	69.5%
Spencer County	89.5%	Knox County	70.0%
Jefferson County	89.3%	Owsley County	70.2%
Kenton County	89.3%	Wayne County	70.8%
Boyd County	89.2%	Clinton County	71.2%

⁵⁶ American Community Survey 5 Year Estimates (2012-2016). "Educational Attainment" (Table S1501)

Figure Seventeen: Percentage of Adults 25 and Over with High School Degree or More (2016)⁵⁷



⁵⁷ American Community Survey 5 Year Estimates (2012-2016). "Educational Attainment" (Table S1501)

Bachelor's Degree or Higher

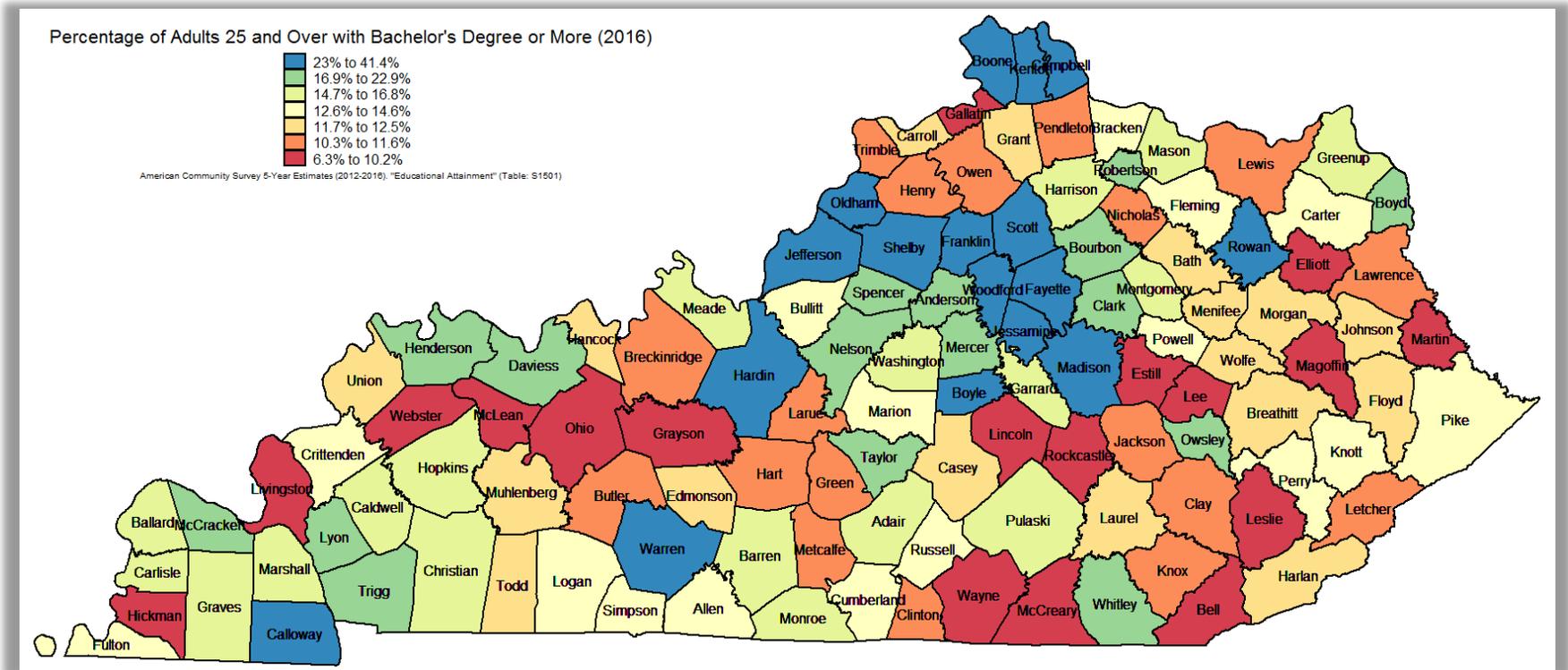
On average, 15.5% of Kentucky Adults 25 Years and Older have a Bachelor's Degree or higher. The percentage of adults by county ranges between 41.4% (Fayette County) and 6.3% (Martin County). Figure Eighteen (next page) displays the concentration of adults by county. Counties shaded in red have lower concentrations of adults with a Bachelor's Degree or higher, while counties shaded in blue have higher concentrations of these individuals. Table Eighteen (below) shows the counties with the highest and lowest concentrations of adults with a Bachelor's degree.

Table Eighteen: Highest and Lowest Percentages of Adults 25 and Over with a Bachelor's Degree or Higher (2016)⁵⁸

Highest		Lowest	
County	Percentage of Adults	County	Percentage of Adults
Fayette County	41.4%	Martin County	6.3%
Oldham County	39.8%	Lee County	7.6%
Woodford County	31.9%	McCreary County	7.7%
Jefferson County	31.8%	Hickman County	8.8%
Boone County	31.1%	Elliott County	8.8%
Campbell County	30.6%	Webster County	8.9%
Madison County	29.1%	Estill County	9.2%
Warren County	29.1%	McLean County	9.2%
Kenton County	29.1%	Wayne County	9.3%
Jessamine County	28.7%	Bell County	9.5%

⁵⁸ American Community Survey 5 Year Estimates (2012-2016). "Educational Attainment" (Table S1501)

Figure Eighteen: Percentage of Adults 25 and Over with Bachelor's Degree or Higher (2016)⁵⁹



⁵⁹ American Community Survey 5 Year Estimates (2012-2016). "Educational Attainment" (Table S1501)

Housing Characteristics

Total Housing Units in Kentucky: 1,942,944⁶⁰

Occupied Housing: 1,711,631 (88% of total housing units)

In Kentucky, there are, approximately, 1,942,944 housing units across the state (+/- 10,000 units). Of these units, 88%, or 1,711,631 units, are occupied by either renters or owners. All units are categorized by the U.S. Census Bureau by property type. These categories include: 1-unit detached structure, 1-unit attached structure, 2 units, 3-4 units, 5-9 units, 10-19 units, 20 or more units, Mobile Homes, and Boat/RV/Van. Table Nineteen (below) outlines the number of units by category and the overall percentage of each category. In Kentucky, 67% of the total housing units are 1-unit detached structures, followed by Mobile Homes at 12%.

Table Nineteen: All residential properties by number of units⁶¹ (ACS 2012-2016 Estimates)

Property Type	Number of Units	Overall Percentage
1-unit detached structure	1,302,769	67%
1-unit attached structure	48,354	2%
2 units	58,972	3%
3-4 units	79,245	4%
5-9 units	93,189	5%
10-19 units	65,330	3%
20 or more units	58,889	3%
Mobile Homes	234,795	12%
Boat/RV/Van	1,104	<1%

In 2010, the Census estimated that Kentucky had 1,927,164 total housing units in the state. Looking at the number of units estimated for 2016, we see a 0.82% increase in total units in the Commonwealth. However, this number is deceptive given that particular counties have seen growth far above this percentage. Table Twenty (next page) displays the counties with the greatest percentage change between 2010 and 2016 and also includes projections as of July 1, 2017. The number of housing units increased the most in Scott County, with a 10.45% increase estimated in 2016 and an estimated increase of 15.13% in 2017, compared to 2010. Warren County also had tremendous growth between 2010 and 2016 (9.10% increase in the number of housing units), which continued through 2017 (11.79% increase in the number of housing units).

⁶⁰ These calculations do not include Carlisle, Hickman, Owsley, or Robertson Counties.

⁶¹ American Community Survey (ACS). 2012-2016. "Comparative Housing Characteristics: Estimates; HOUSING OCCUPANCY" (Table CP04)

Table Twenty: Counties with the Greatest Percentage Change in Housing Units⁶²

County	Percentage Change in Housing Units between 2010 and 2016	Percentage Change in Housing Units between 2010 and 2017	Difference between 2016 and 2017
Scott County	10.45%	15.13%	4.67%
Warren County	9.10%	11.79%	2.69%
Hardin County	7.19%	7.94%	0.75%
Spencer County	6.22%	8.16%	1.94%
Bullitt County	6.07%	7.46%	1.39%
Boone County	6.01%	7.13%	1.12%
Meade County	5.49%	6.16%	0.67%
Shelby County	5.10%	7.17%	2.07%
Jessamine County	4.96%	5.87%	0.91%
Oldham County	4.86%	6.36%	1.50%
Hart County	4.69%	5.89%	1.20%
Nelson County	4.49%	5.26%	0.77%
Madison County	4.02%	5.04%	1.01%
Fayette County	4.00%	4.79%	0.79%

Between 2010 and 2016, forty-four counties⁶³ in Kentucky either had a negative percentage change (8 total counties) or percentage change of less than 1% (36 counties) in the number of housing units per county. Fulton County had the greatest decrease in the number of housing units by county at -0.74% in 2016 and -0.92% in 2017.

Table Twenty-One: Counties with the Smallest Percentage Change in Housing Units⁶⁴

County	Percentage Change in Housing Units between 2010 and 2016	Percentage Change in Housing Units between 2010 and 2017	Difference between 2016 and 2017
Fulton County	-0.74%	-0.92%	-0.18%
Boyd County	-0.65%	-0.73%	-0.09%
Cumberland County	-0.46%	-0.38%	0.08%
Green County	-0.38%	-0.28%	0.09%
Wayne County	-0.29%	-0.32%	-0.03%

⁶² American Community Survey (ACS) "Annual Estimates of Housing Unites for the United States, Regions, Division, States, and Counties: April 1, 2010 to July 1, 2017." (Table: PEPANNHU).

⁶³ Adair, Ballard, Bell, Boyd, Bracken, Caldwell, Carlisle, Carroll, Casey, Clark, Clinton, Crittenden, Cumberland, Estill, Fleming, Franklin, Fulton, Garrard, Graves, Grayson, Green, Greenup, Hancock, Harlan, Harrison, Hickman, Johnson, Kenton, Logan, Marion, Mason, McCreary, McLean, Monroe, Muhlenberg, Nicholas, Owsley, Pendleton, Pulaski, Robertson, Russell, Todd, Wayne, and Webster Counties.

⁶⁴ American Community Survey (ACS) "Annual Estimates of Housing Unites for the United States, Regions, Division, States, and Counties: April 1, 2010 to July 1, 2017." (Table: PEPANNHU).

Table Twenty-One (cont.): Counties with the Smallest Percentage Change in Housing Units⁶⁵

County	Percentage Change in Housing Units between 2010 and 2016	Percentage Change in Housing Units between 2010 and 2017	Difference between 2016 and 2017
Clinton County	-0.17%	-0.17%	0.00%
Caldwell County	-0.14%	-0.17%	-0.03%
McCreary County	-0.04%	0.00%	0.04%
Pulaski County	0.07%	0.16%	0.09%
Casey County	0.09%	0.31%	0.21%
Greenup County	0.12%	0.10%	-0.02%
Adair County	0.18%	0.42%	0.25%
Graves County	0.24%	0.30%	0.07%
Webster County	0.25%	0.35%	0.10%

⁶⁵ American Community Survey (ACS) "Annual Estimates of Housing Unites for the United States, Regions, Division, States, and Counties: April 1, 2010 to July 1, 2017." (Table: PEPANNHU).

Age of Housing

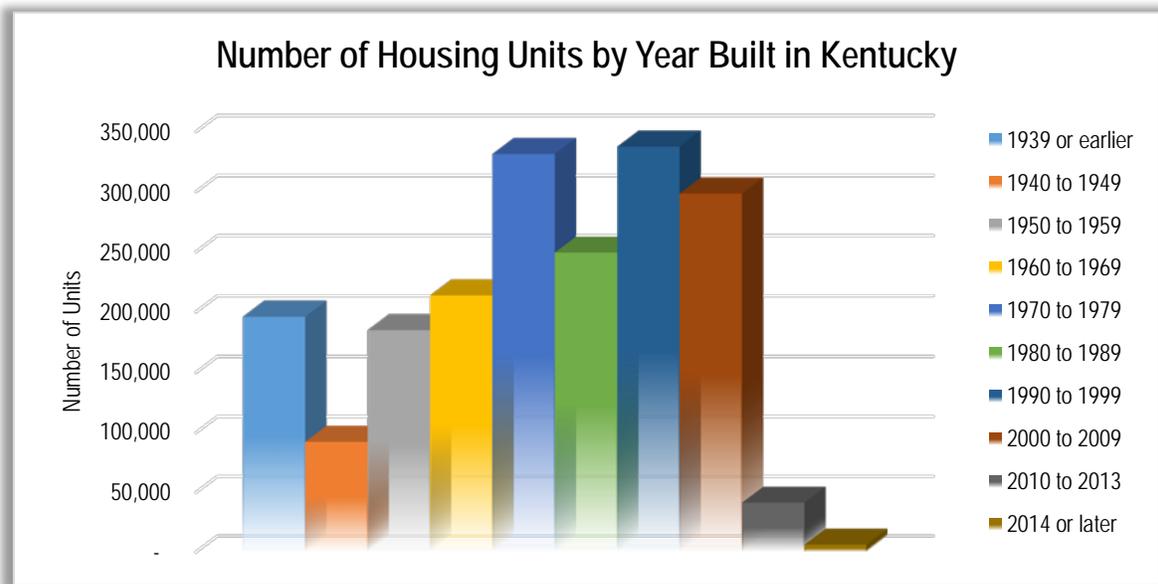
Only 2.44% of Kentucky's total housing stock was built after 2010, with 45% of housing being constructed between 1980 and 2009 and 52% being constructed before 1979. The table below outlines the number of units by decade and aggregates all units built before 1979 into one category.

Table Twenty-Two: Number of Housing Units by Year Built in Kentucky⁶⁷

Age of Housing Units	Number of Units	Percentage of Total
Built 2014 or later	6,151	<1%
Built 2010-2013	41,359	2%
Built 2000-2009	298,498	15%
Built 1990-1999	337,490	17%
Built 1980-1989	249,316	13%
Built 1979 and before	1,018,276	52%

Figure Twenty (below) depicts these numbers by decade via bar chart, disaggregating units built before 1979. The three decades with the highest levels of units constructed were 1970-1979 (331,419 units or 17% of the total units in Kentucky), 1990-1999 (337,490 units or 17% of the total units in Kentucky), and 2000 to 2009 (298,498 units or 15% of the total units in Kentucky).

Figure Twenty: Number of Housing Units by Year Built in Kentucky⁶⁸

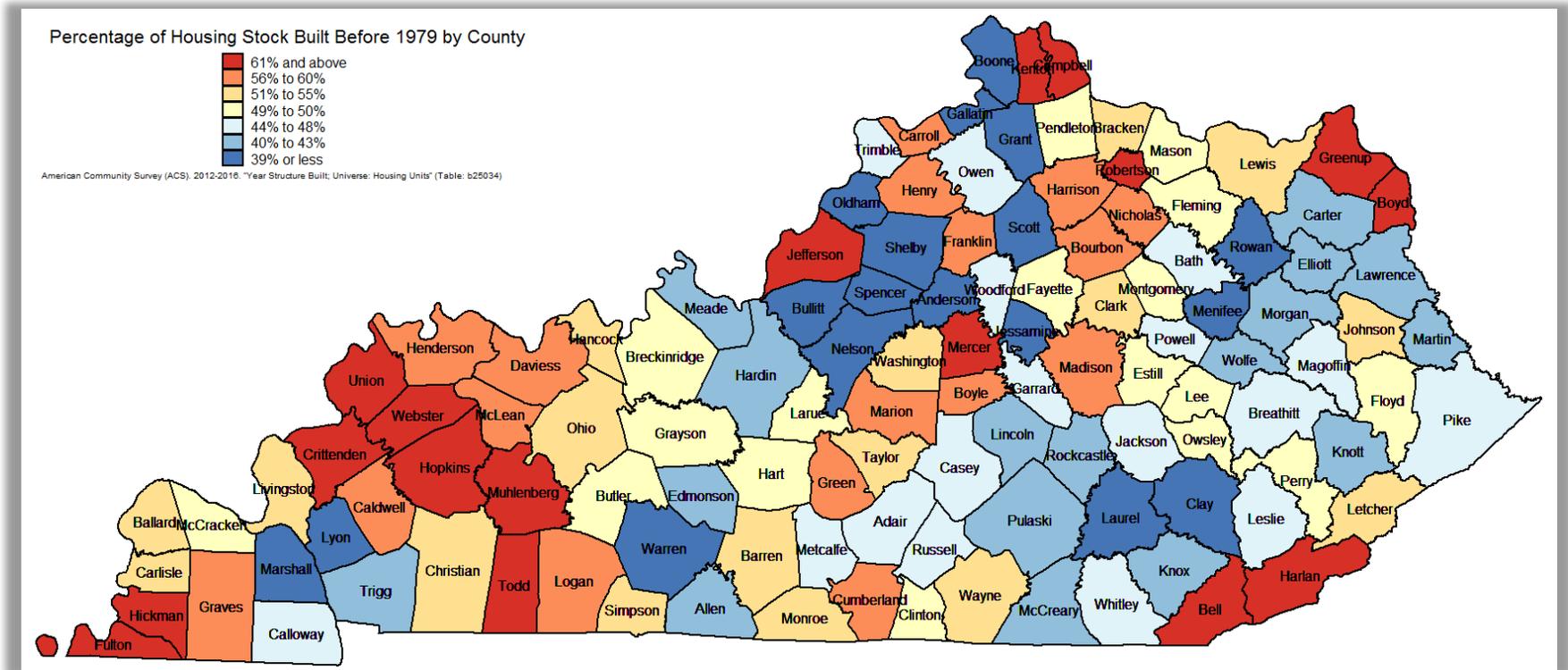


⁶⁷ American Community Survey (ACS). 2012-2016. "Year Structure Built; Universe: Housing Units" (Table: B25034)

⁶⁸ American Community Survey (ACS). 2012-2016. "Year Structure Built; Universe: Housing Units" (Table: B25034)

As with the overall volume of housing units across the state, the number of units constructed pre-1979 varies across the state of Kentucky from county to county. Figure Twenty-One displays a map of Kentucky with counties categorized by the percentage of housing stock in that county built before 1979. Boyd County has the highest concentration of housing units in this category at 70%, followed by Fulton (69%), Jefferson (67%), Hopkins (64%), Union (63%), and Webster (63%) counties. Counties with 61% or greater volume of units built before 1979 are shaded in red. Conversely, only 24% of housing units in Spencer County were built before 1979, followed by Boone (26%), Scott (30%), Menifee (30%), Gallatin (32%), and Oldham (33%) Counties.

Figure Twenty-One: Percentage of Housing Stock Built Before 1979 by County ⁶⁹



⁶⁹ American Community Survey (ACS), 2012-2016. "Year Structure Built; Universe: Housing Units" (Table: B25034)

House Heating Fuel

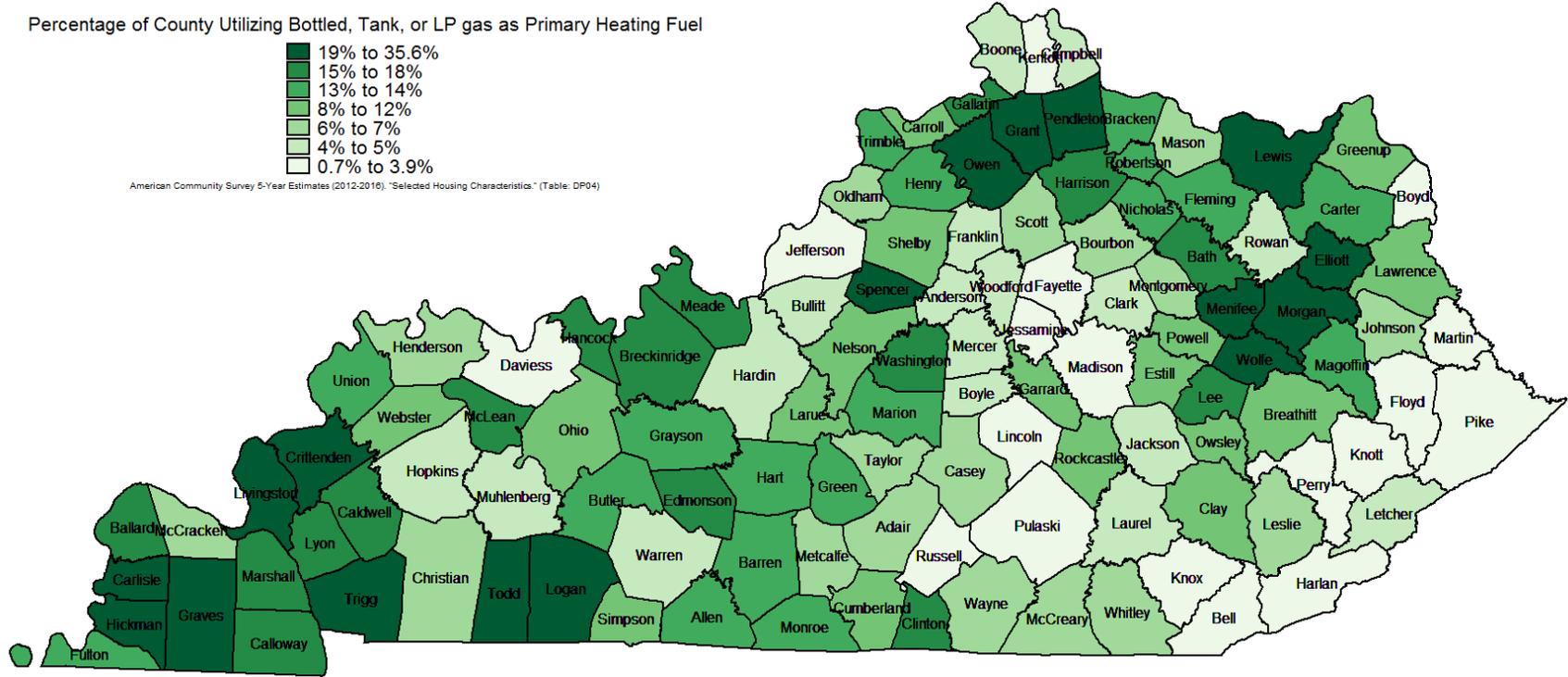
The U.S. Census Bureau estimates the primary "House Heating Fuel" utilized by occupied housing units⁷⁰. These fuels are listed as: Utility gas; Bottled, tank, or LP gas; Electricity; Fuel oil, kerosene, etc.; Coal or coke; Wood; Solar energy; Other fuel; and No fuel used. Table Twenty-Three lists the fuel type, the number of units utilizing that fuel type, and the percentage of the total occupied units represented by fuel type. The majority of Kentucky utilizes Electricity (52%). Figure Twenty-Two (a-i) (next pages) provides nine maps of the state by fuel type.

Table Twenty-Three: Number of Housing Units Utilizing a House Heating Fuel

House Heating Fuel Type	Number of Units	Percentage of Units
Utility gas	644,770	38%
Bottled, tank, or LP gas	106,577	6%
Electricity	881,641	52%
Fuel oil, kerosene, etc.	14,821	1%
Coal or coke	3,694	0.22%
Wood	48,476	3%
Solar energy	231	0.01%
Other fuel	5,659	0.33%
No fuel used	4,795	0.28%

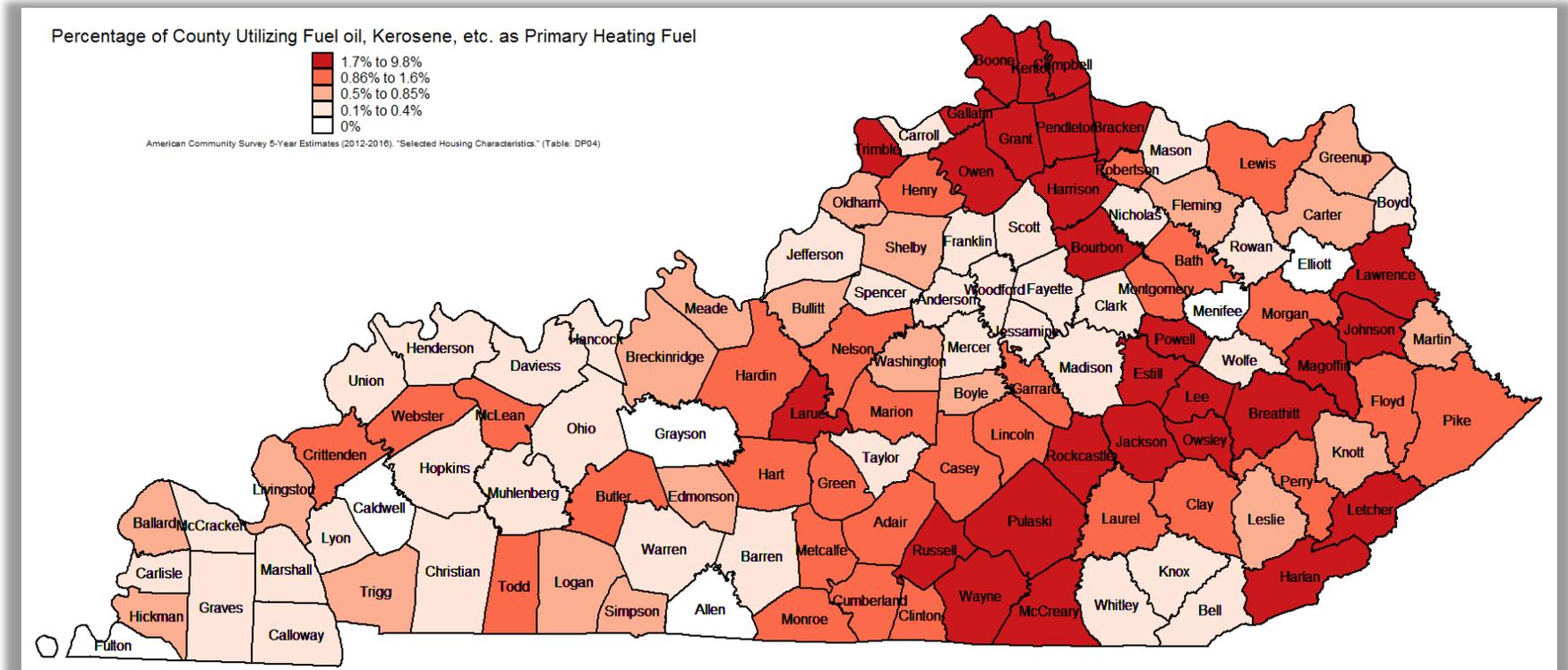
⁷⁰ American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Figure Twenty-Two (b): Percentage of County Utilizing Bottled, Tank, or LP gas as Primary Heating Fuel⁷²



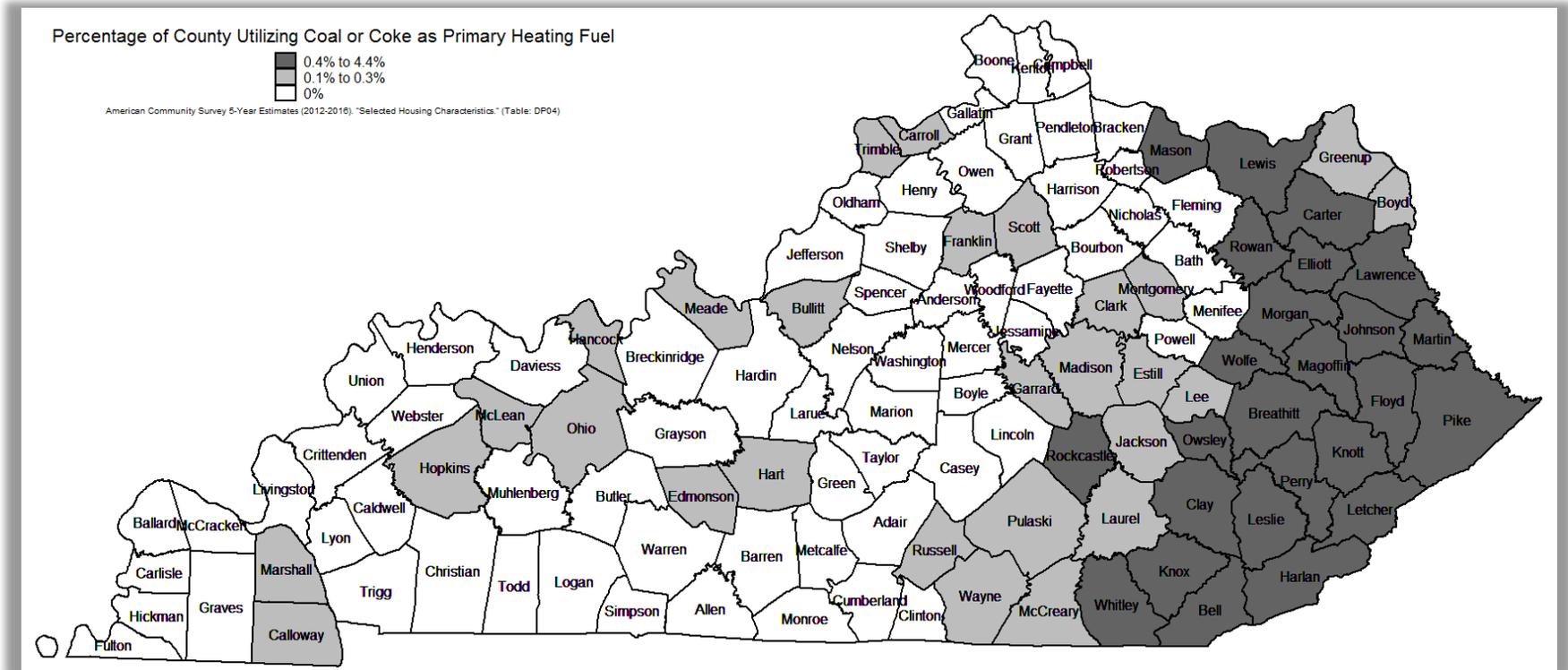
⁷² American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Figure Twenty-Two (d): Percentage of County Utilizing Fuel Oil, Kerosene, etc. as Primary Heating Fuel ⁷⁴



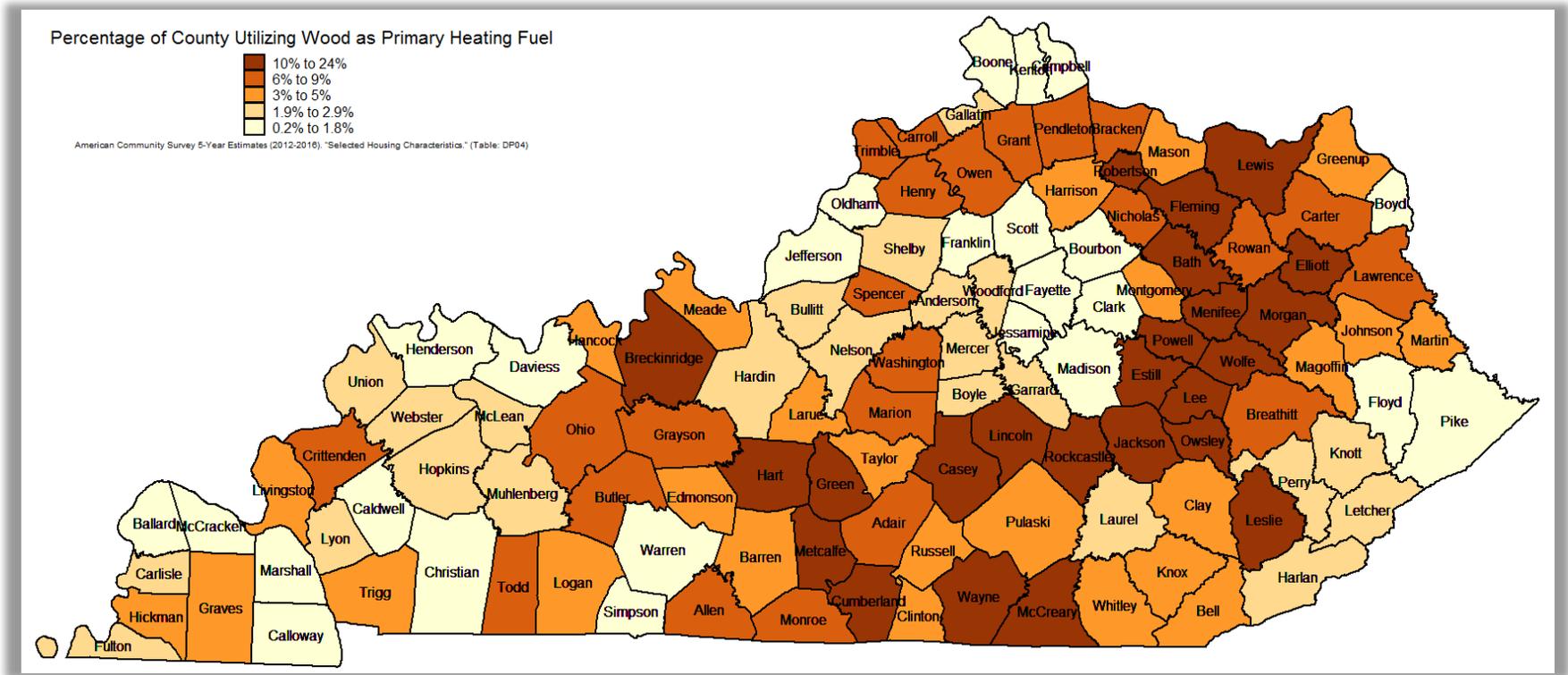
⁷⁴ American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Figure Twenty-Two (e): Percentage of County Utilizing Coal or Coke as Primary Heating Fuel ⁷⁵



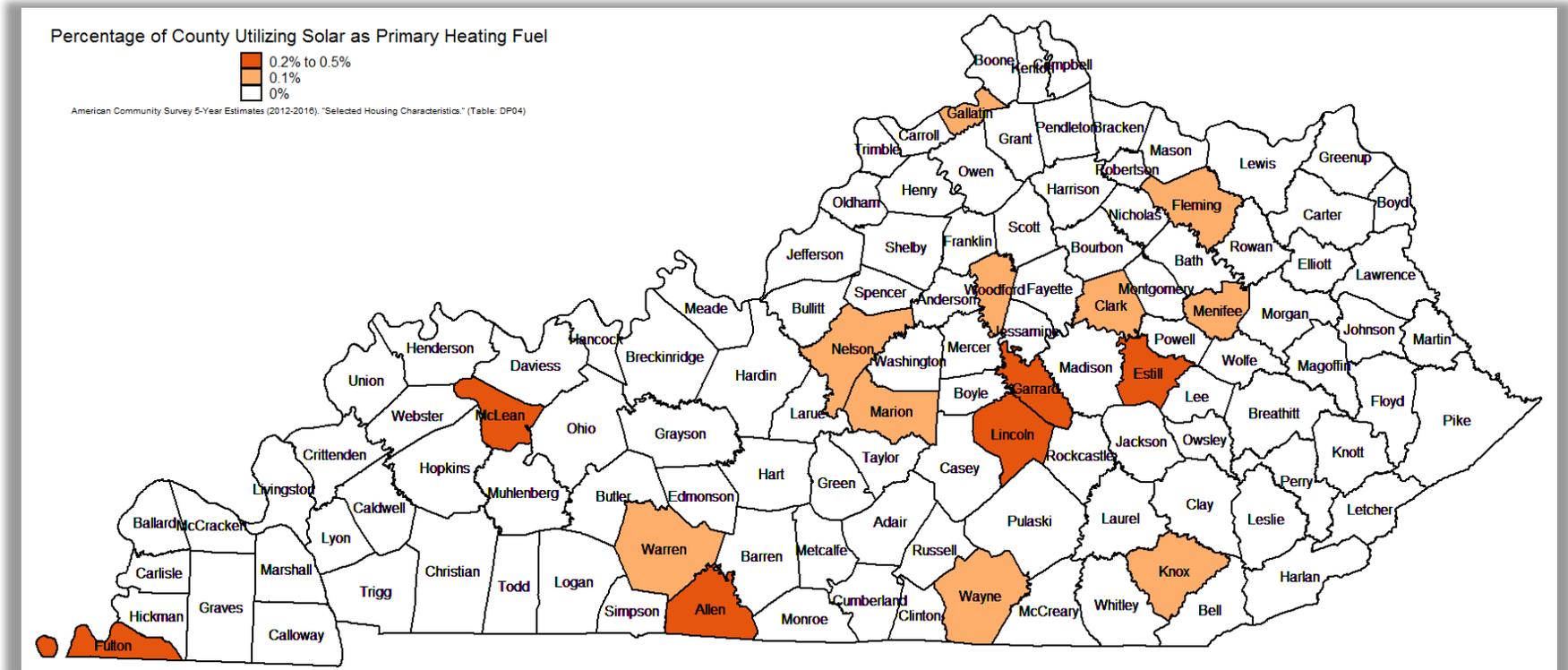
⁷⁵ American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Figure Twenty-Two (f): Percentage of County Utilizing Wood as Primary Heating Fuel ⁷⁶



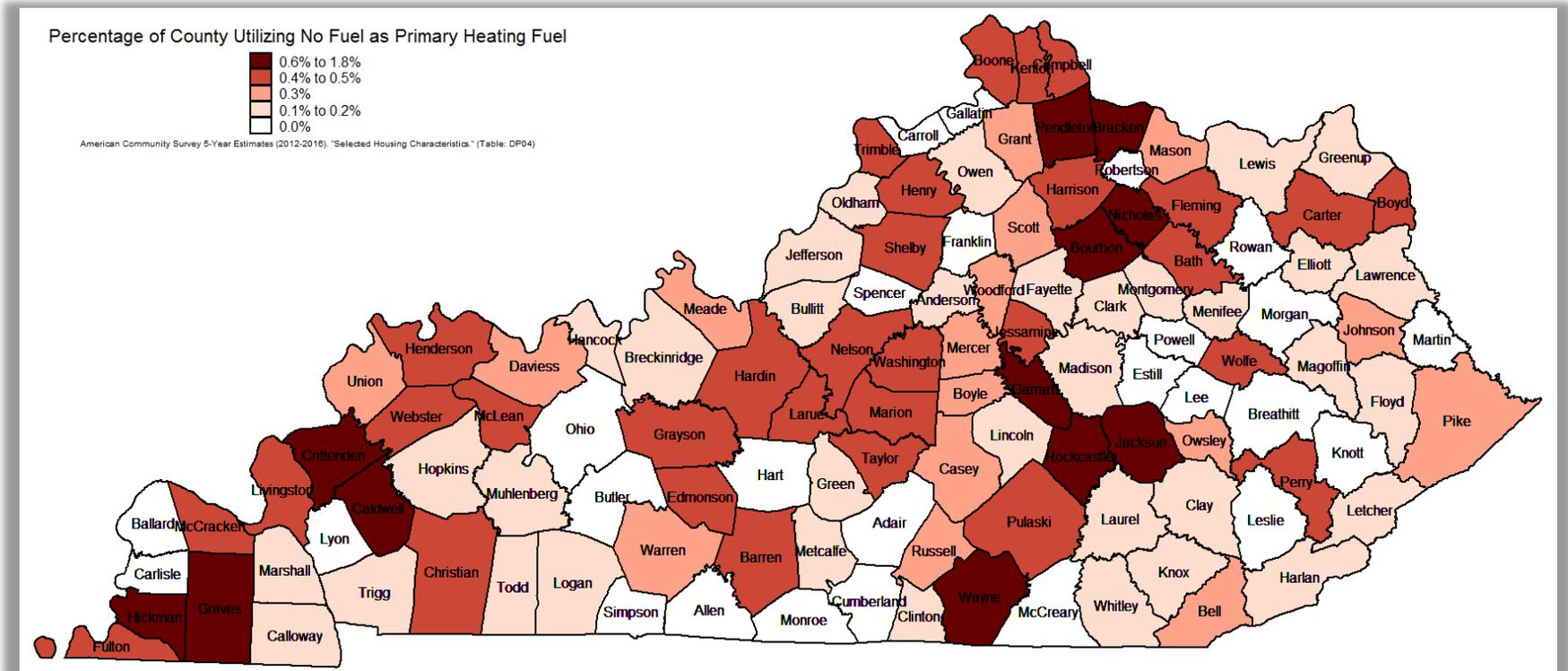
⁷⁶ American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Figure Twenty-Two (g): Percentage of County Utilizing Solar as Primary Heating Fuel⁷⁷



⁷⁷ American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Figure Twenty-Two (i): Percentage of County Utilizing No Fuel as Primary Heating Fuel⁷⁹



⁷⁹ American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table: DP04)

Occupied Housing Units by Occupant Type

Renters⁸⁰

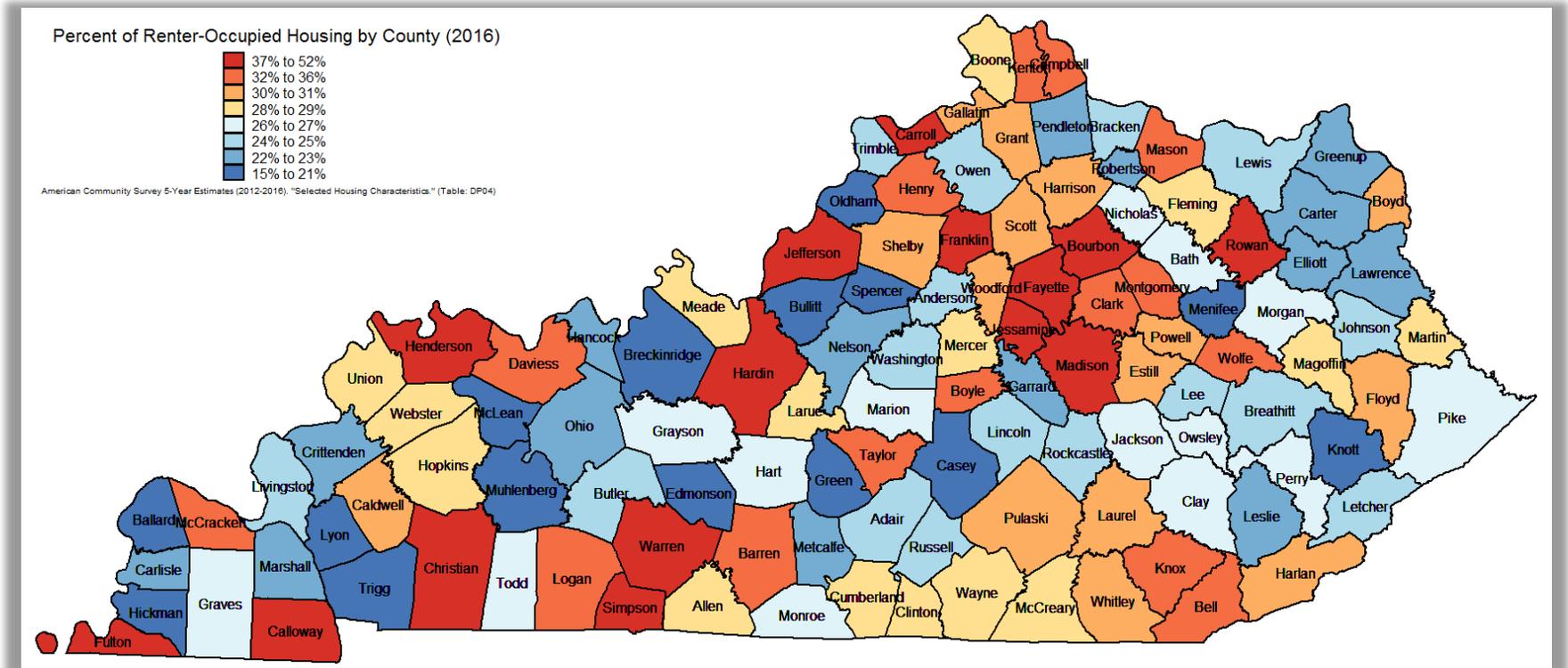
In Kentucky, 33% of occupied housing units are occupied by renters (570,314 households), ranging between 52% (Christian County) and 15.3% (Oldham County). Figure Twenty-Three (next page) displays a map of Kentucky with counties shaded by the percentage of renter occupying housing within each respective county. Counties shaded in red have the highest rates of renters, while counties shaded in blue have the lowest rates. Table Twenty-Four lists the counties with the highest and lowest percentage of renters residing in that county. The Median Household size of Renter Occupied Units in Kentucky is 2.44 people, ranging between 2.96 (Owen County) and 1.83 individuals (Lee County).

Table Twenty-Four: Highest and Lowest Percentages of Renter-Occupied Housing (2016)

Highest		Lowest	
County	Percentage of Renters	County	Percentage of Renters
Christian County	52.7%	Oldham County	15.3%
Fayette County	46.4%	Spencer County	15.8%
Warren County	42.6%	Bullitt County	17.5%
Madison County	40.6%	Ballard County	18.6%
Fulton County	40.1%	Trigg County	18.7%
Carroll County	39.1%	Lyon County	18.9%
Henderson County	38.9%	Hickman County	19.8%
Jefferson County	38.8%	Menifee County	20.2%
Rowan County	38.5%	Edmonson County	20.3%
Bourbon County	38.4%	Knott County	20.4%

⁸⁰ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04)

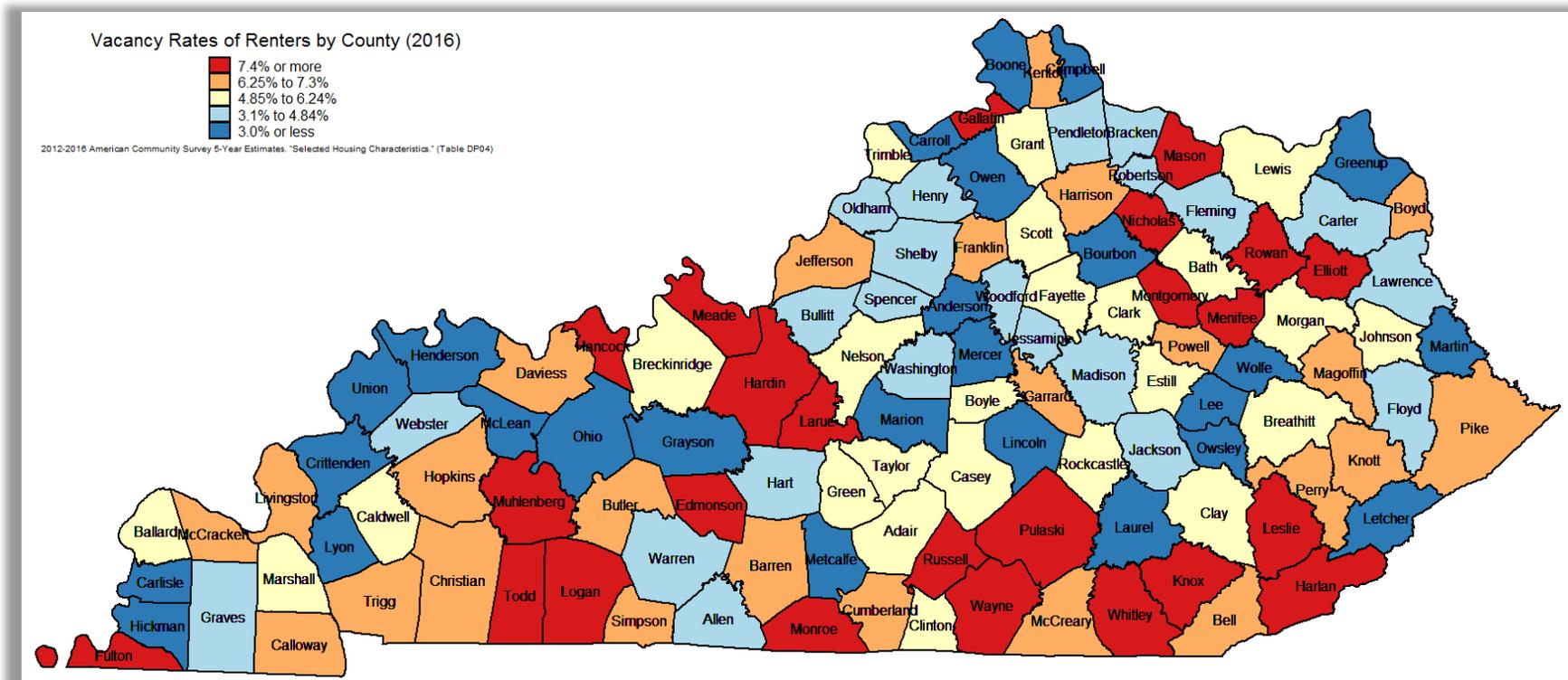
Figure Twenty-Three: Percent of Renter-Occupied Housing by County (2016)⁸¹



⁸¹ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04)

The Median Vacancy Rate among Renter-Occupied dwellings in the Kentucky is 5.4%, ranging between 16.7% (Muhlenberg and Elliot Counties) and 1.4% (Wolfe County). Figure Twenty-Four (below) displays the vacancy rates of renters by county. Counties shaded in red have higher vacancy rates, while counties shaded in blue have lower rates. Table Twenty-Five (next page) displays the highest and lowest percentages of vacancy rates in renter-occupied housing.

Figure Twenty-Four: Vacancy Rates of Renters by County (2016)⁸²



⁸² American Community Survey 5-Year Estimates (2012-2016). "Selected Housing Characteristics." (Table DP04)

Table Twenty-Five: Highest and Lowest Percentages of Vacancy Rates in Renter-Occupied Housing (2016)

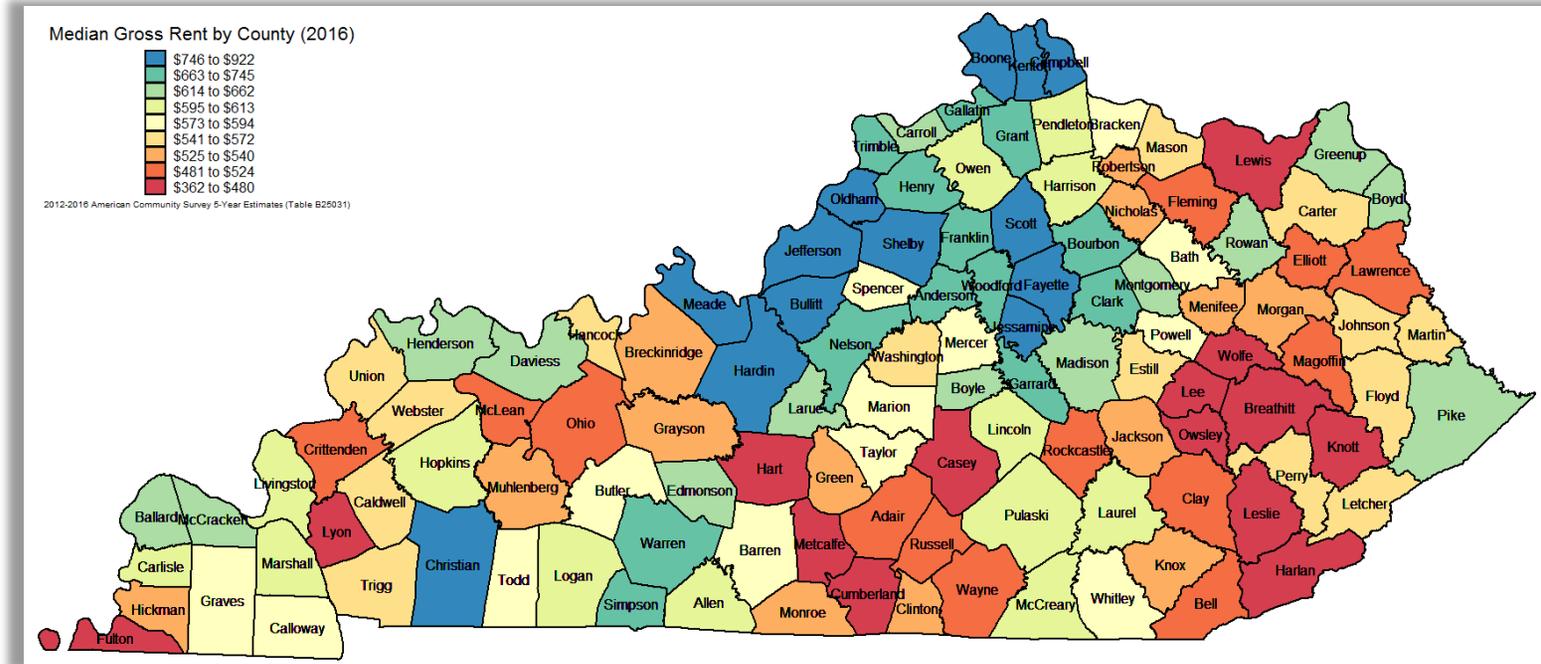
Highest		Lowest	
County	Vacancy Rate	County	Vacancy Rate
Elliott County	16.7%	Wolfe County	1.4%
Muhlenberg County	16.7%	Campbell County	1.8%
Rowan County	12.8%	Letcher County	1.8%
Larue County	12.6%	Carroll County	1.9%
Edmonson County	11.9%	Metcalfe County	1.9%
Mason County	11.8%	Anderson County	2.2%
Menifee County	11.5%	Ohio County	2.2%
Fulton County	11.3%	Carlisle County	2.5%
Todd County	11.1%	Crittenden County	2.5%
Wayne County	10.7%	Laurel County	2.6%

Median Gross Rent

Monthly housing expenditures vary across the state, in terms of the total monthly amounts a household or family will spend on their primary residence. The Census defines this as “median gross rent.” This tabulation “...provides information on the monthly housing cost expenses for renters. Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else).”⁸³

Median gross rent across the state ranges between \$362 per month (Owsley County) to \$922 per month (Boone County). The map below shows the distribution of Median Gross Rent across the state by county. The counties shaded in blue had the highest rent (ranging between \$746 and \$922 per month), while the counties shaded in red had the lowest rent (ranging between \$362 and \$480 per month). Higher Median Gross Rent in Kentucky pools around urban centers, such as Lexington, Louisville, Bowling Green, and the greater Cincinnati areas, but also includes Pike and Christian Counties.

Figure Twenty-Five: Median Gross Rent by County (2016)⁸⁴



⁸³ U.S. Census Bureau. “Median Gross Rent.” Retrieved from: <https://www.census.gov/quickfacts/fact/note/US/HSG860216>

⁸⁴ American Community Survey 5-Year Estimates (2012-2016). “Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent.” (Table B25031)

Table Twenty-Six (below) provides a breakdown of Median Gross Rent (MGR) for the state by the number of bedrooms. MGR ranges between \$435 for a studio rental (zero bedrooms) to \$924 for five or more bedrooms in a rental unit. Figures Twenty-Six (a-f) outline the Median Gross Rent for each county by the number of bedrooms, as classified by the U.S. Census Bureau. The counties highlighted in red denote higher median gross rent, while the counties shaded in blue indicate lower median gross rent. For the most part, we see the greatest concentration of higher rents in the urban centers across the state, focusing especially on the “Two Bedrooms” graph in the series.

Table Twenty-Six: Median Gross Rent by Bedrooms⁸⁵

Number of Bedrooms	Median Gross Rent	Minimum	Maximum
0 Bedrooms	\$435 ⁸⁶	\$203	\$ 696
1 Bedroom	\$398 ⁸⁷	\$200	\$ 679
2 Bedrooms	\$578	\$342	\$ 884
3 Bedrooms	\$710 ⁸⁸	\$497	\$1,109
4 Bedrooms	\$824 ⁸⁹	\$429	\$1,713
5 or more Bedrooms	\$924 ⁹⁰	\$327	\$1,724

⁸⁵ 2012-2016 American Community Survey 5-Year Estimates. “Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent.” (Table B25031)

⁸⁶ Data only available for 55 counties.

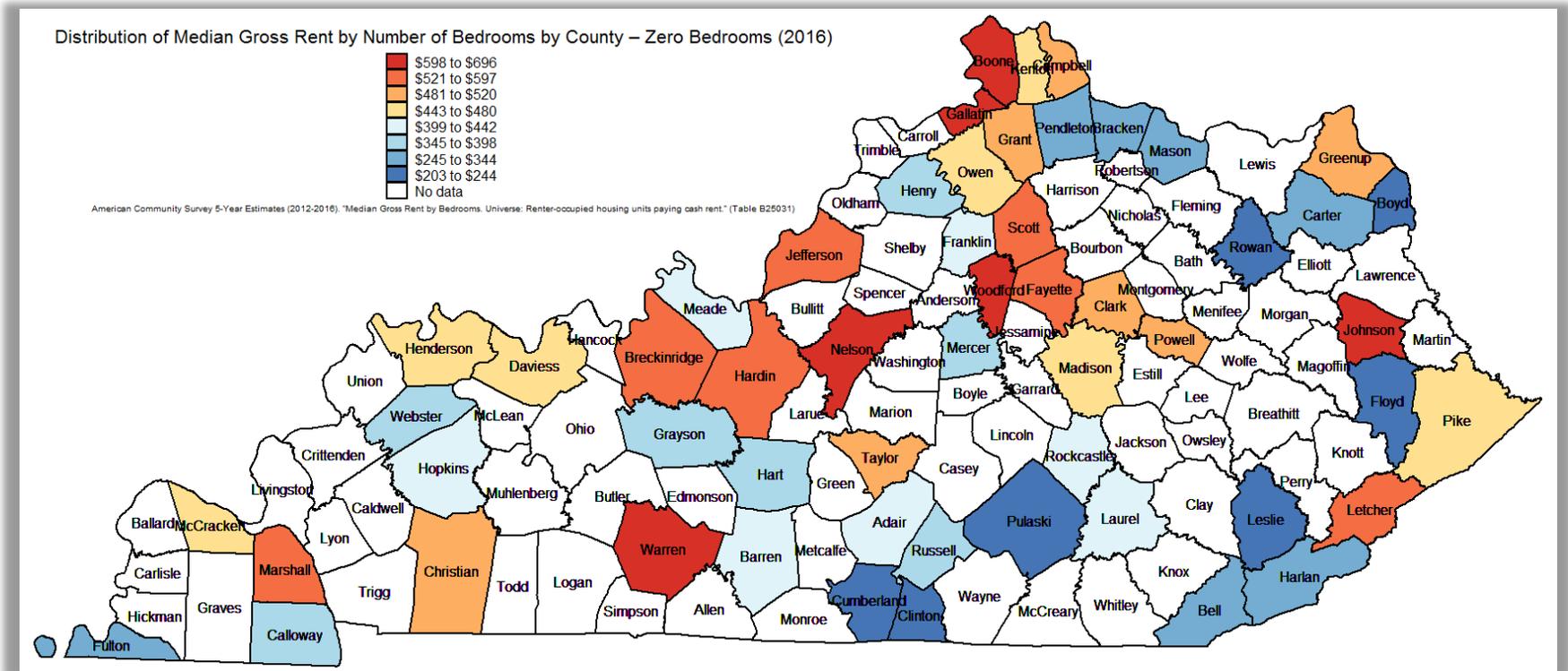
⁸⁷ Data not available for Trigg County.

⁸⁸ Data not available for Daviess County.

⁸⁹ Data not available for Elliott County, Owsley County, Caldwell County, Lee County, Menifee County, Crittenden County, Robertson County, McLean County, Breathitt County, Livingston County, Lawrence County, Hancock County, Marshall County or Todd County.

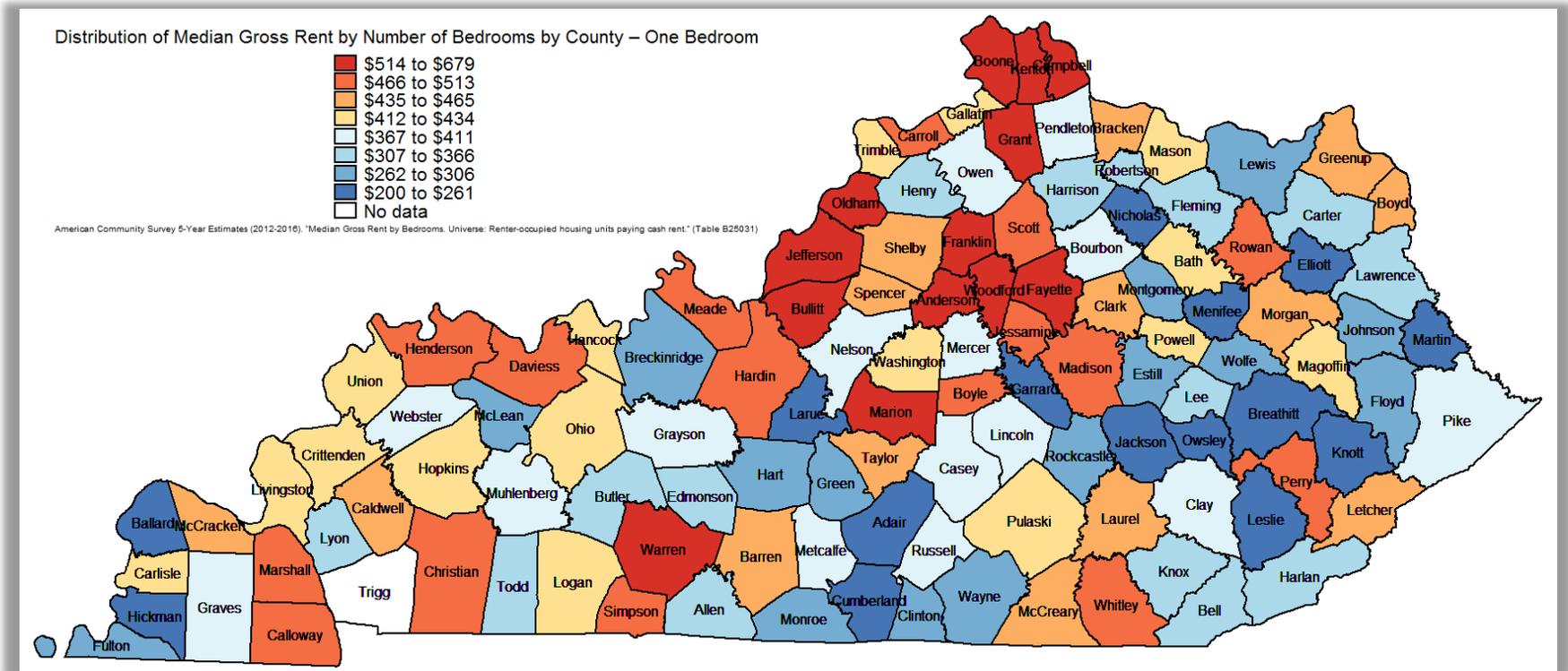
⁹⁰ Data only available for 42 counties.

Figure Twenty-Six (a): Distribution of Median Gross Rent by Number of Bedrooms by County – Zero Bedrooms (2016)⁹¹



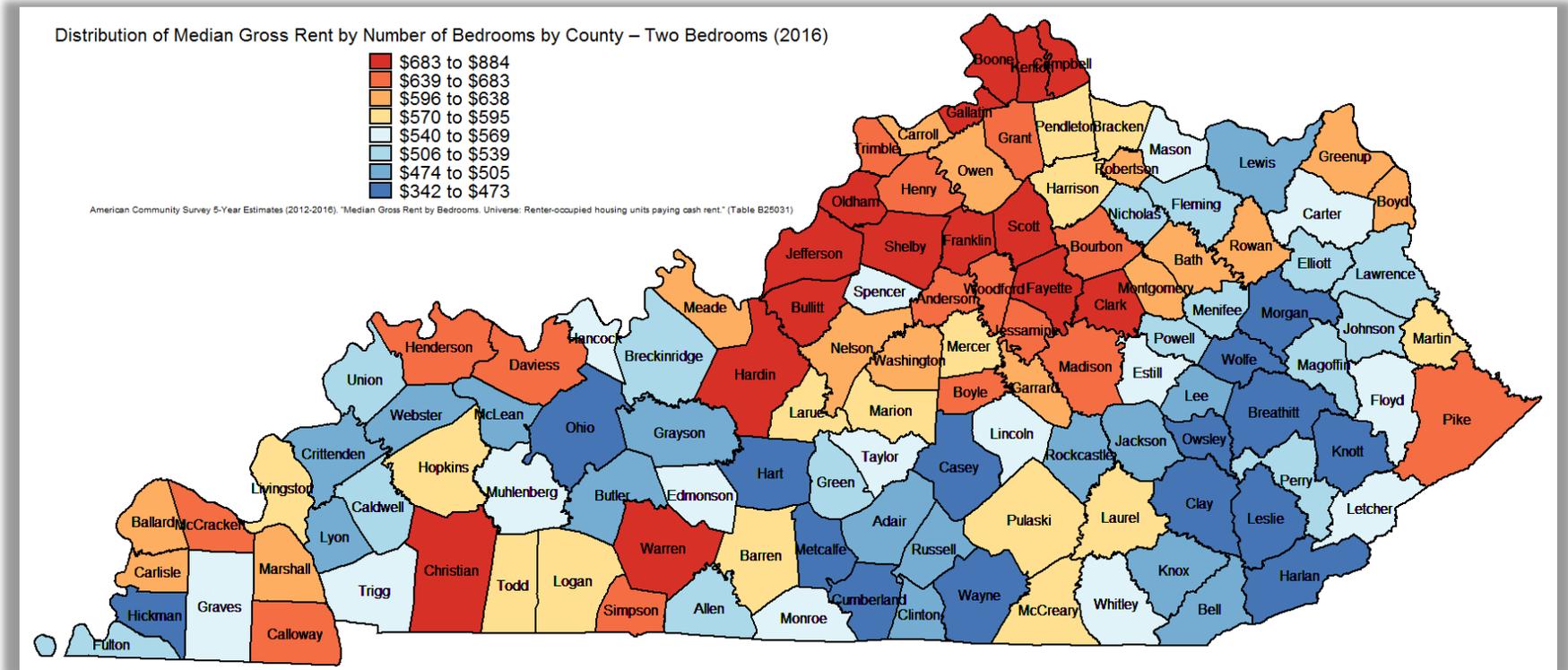
⁹¹ American Community Survey 5-Year Estimates (2012-2016). "Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent." (Table B25031)

Figure Twenty-Six (b): Distribution of Median Gross Rent by Number of Bedrooms by County – One Bedroom (2016)⁹²



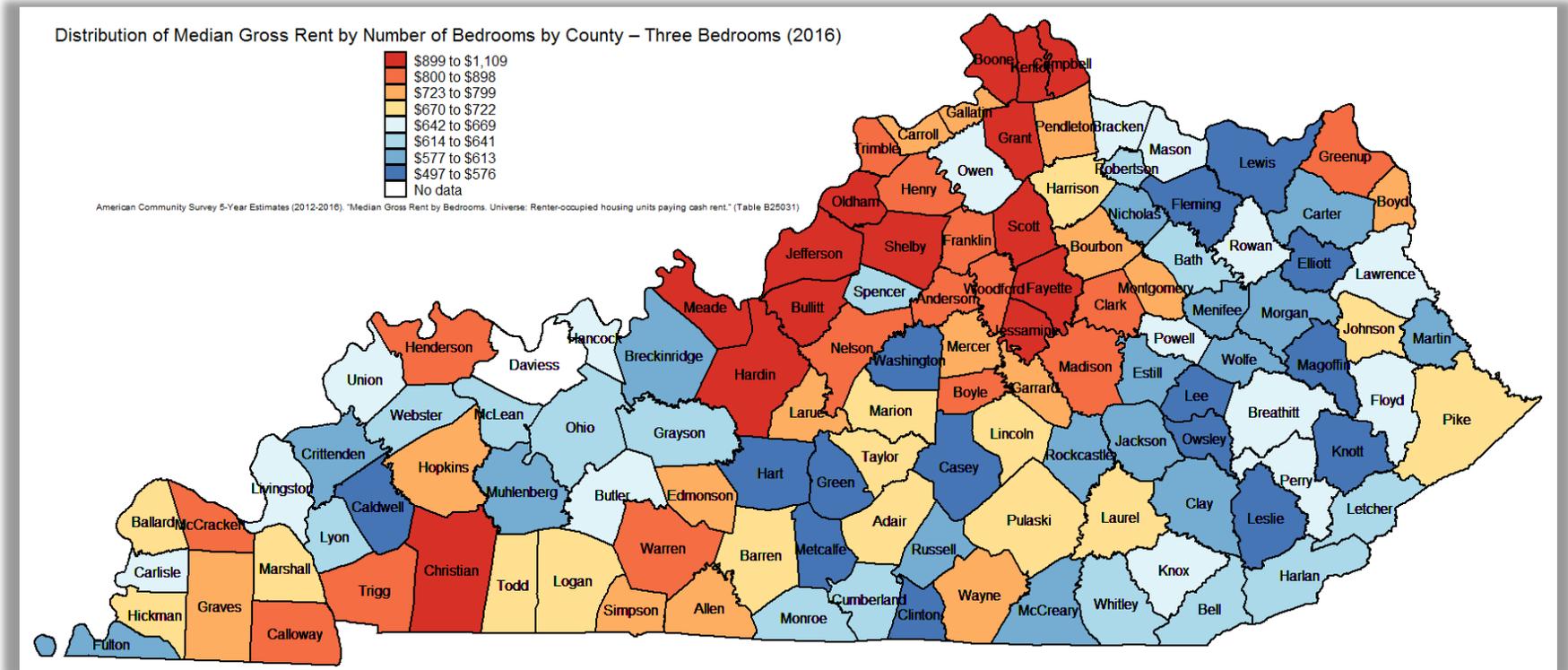
⁹² American Community Survey 5-Year Estimates (2012-2016). "Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent." (Table B25031)

Figure Twenty-Six (c): Distribution of Median Gross Rent by Number of Bedrooms by County – Two Bedrooms (2016)⁹³



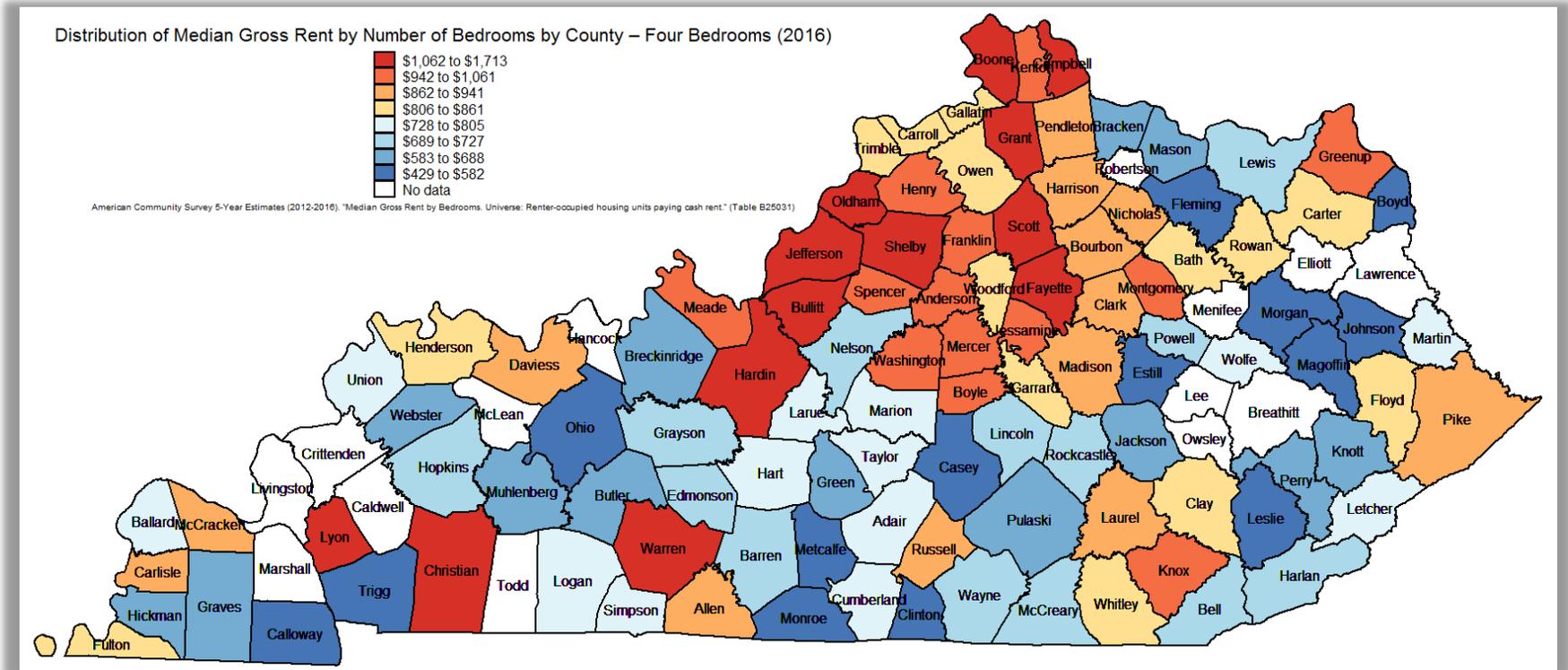
⁹³ American Community Survey 5-Year Estimates (2012-2016). "Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent." (Table B25031)

Figure Twenty-Six (d): Distribution of Median Gross Rent by Number of Bedrooms by County – Three Bedrooms (2016)⁹⁴



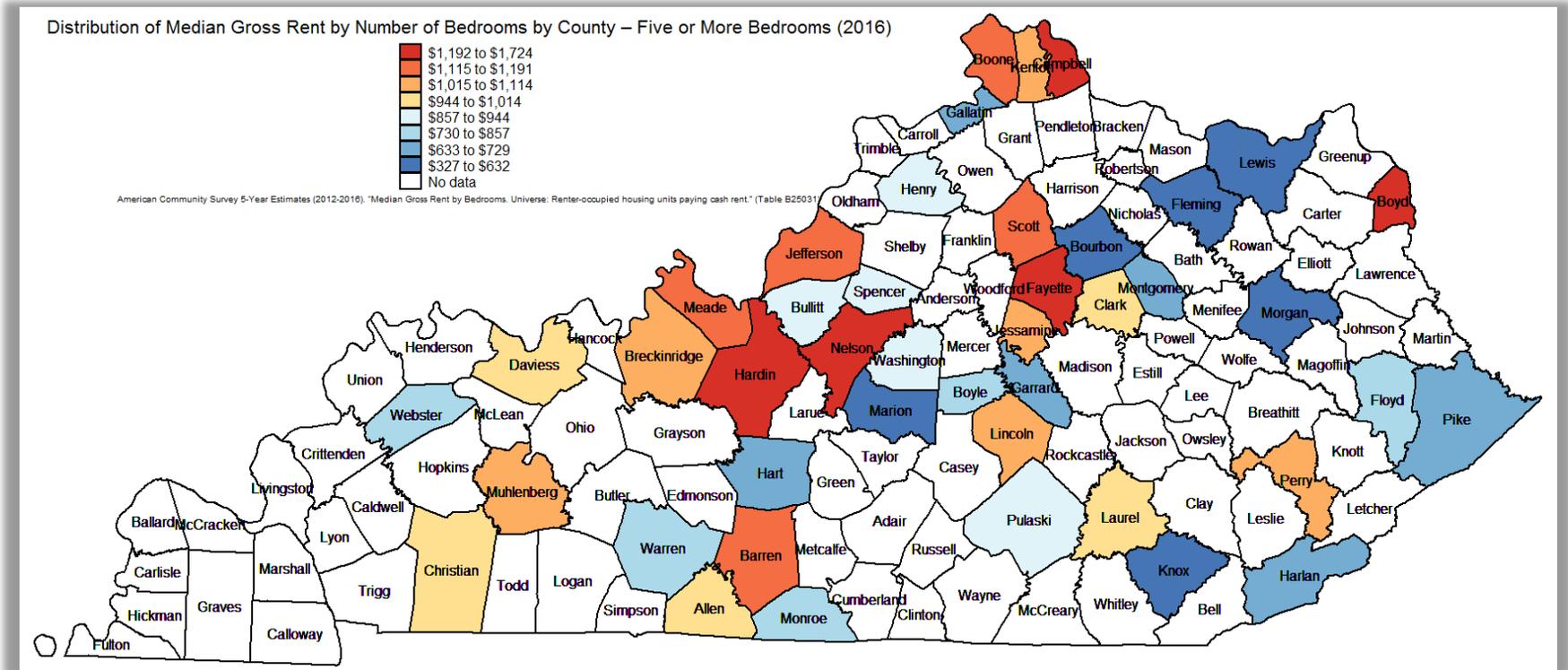
⁹⁴ American Community Survey 5-Year Estimates (2012-2016). "Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent." (Table B25031)

Figure Twenty-Six (e): Distribution of Median Gross Rent by Number of Bedrooms by County – Four Bedrooms (2016)⁹⁵



⁹⁵ American Community Survey 5-Year Estimates (2012-2016). "Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent." (Table B25031)

Figure Twenty-Six: Distribution of Median Gross Rent by Number of Bedrooms by County – Five or More Bedrooms (2016)⁹⁶



⁹⁶ American Community Survey 5-Year Estimates (2012-2016). "Median Gross Rent by Bedrooms. Universe: Renter-occupied housing units paying cash rent." (Table B25031)

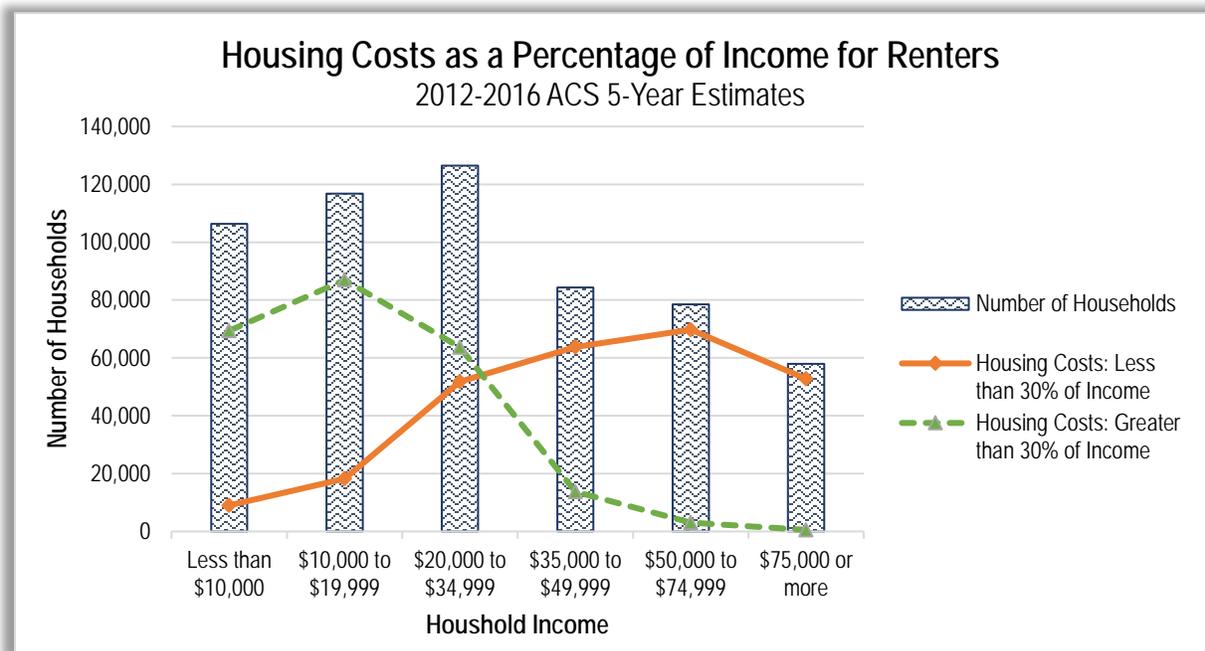
Housing Costs for Renters as a Percentage of Income

Table Twenty-Eight and Figure Twenty-Five (below) provide a breakdown by income brackets of the number of renter households whose housing costs are less than 30% of their income or greater than 30% of their income. Renter households earning less than \$10,000 and those earning between \$10,000 and \$19,999 per year have the highest housing cost burden, compared to the other four income brackets. We see a precipitous drop in the housing cost burden of renter households as the income brackets increase in income per annum.

Table Twenty-Seven: Housing Cost as a Percentage of Income for Renters⁹⁷

Income	Total Number of Households	Housing Costs	
		Less than 30% of Income Number of Households (%)	Greater than 30% of Income Number of Households (%)
Less than \$10,000 ⁹⁸	106,356	9,024 (8%)	69,344 (65%)
\$10,000 to \$19,999 ⁹⁹	116,755	18,273 (16%)	86,926 (74%)
\$20,000 to \$34,999 ¹⁰⁰	126,427	51,749 (41%)	63,620 (50%)
\$35,000 to \$49,999 ¹⁰¹	84,330	63,746 (76%)	13,716 (16%)
\$50,000 to \$74,999 ¹⁰²	78,458	69,756 (89%)	2,992 (4%)
\$75,000 or more ¹⁰³	57,988	52,783 (91%)	544 (1%)

Figure Twenty-Seven: Housing Costs as a Percentage of Income for Renters¹⁰⁴



⁹⁷ American Community Survey (ACS) 5-Year Estimates (2012-2016). "Household Income by Gross Rent as a Percentage of Household Income in the Past 12 Months." (Table B25074)

⁹⁸ Housing costs for 27,988 households (26%) earning less than \$10,000 per year were not computed by the U.S. Census.

⁹⁹ Housing costs for 11,556 households (10%) earning \$10,000 to \$19,999 per year were not computed by the U.S. Census.

¹⁰⁰ Housing costs for 11,058 households (9%) earning \$20,000 to \$34,999 per year were not computed by the U.S. Census.

¹⁰¹ Housing costs for 6,868 households (8%) earning \$35,000 to \$49,999 per year were not computed by the U.S. Census.

¹⁰² Housing costs for 5,710 households (7%) earning \$50,000 to \$74,999 per year were not computed by the U.S. Census.

¹⁰³ Housing costs for 4,661 households (8%) earning \$75,000 or more per year were not computed by the U.S. Census.

¹⁰⁴ American Community Survey (ACS) 5-Year Estimates (2012-2016). "Household Income by Gross Rent as a Percentage of Household Income in the Past 12 Months." (Table B25074)

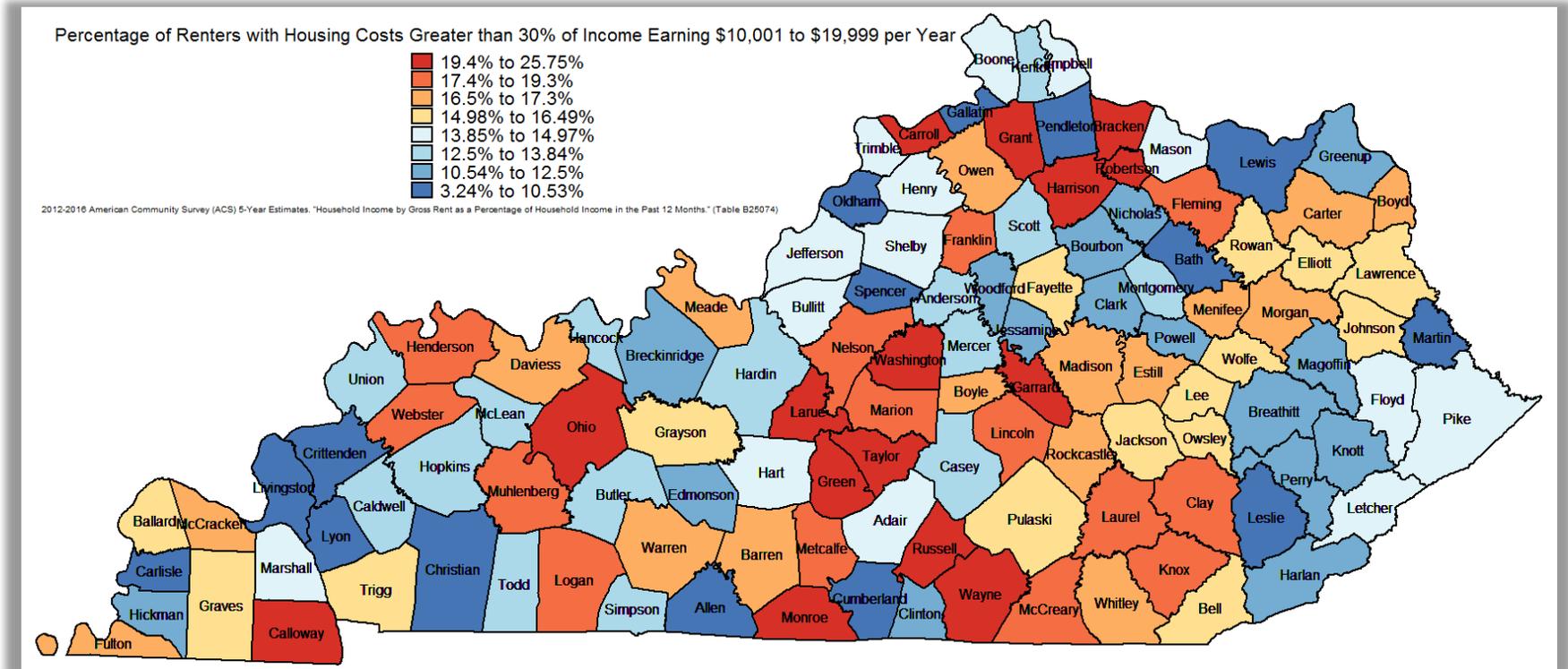
Figures Twenty-Eight (a-d) (next pages) provide a breakdown of renter housing costs amounting to 30% or more of monthly income by income bracket. The brackets included were for individuals making less than \$10,000 (19% of Renters), \$10,000 to \$19,999 (20% of Renters), \$20,000 to \$34,999 (22% of Renters), and \$35,000 to \$49,999 (15% of Renters). The final two income classifications (\$50,000 to \$74,999 and \$75,000 or more) were omitted from this series of figures as these brackets do not have data for over 80 counties in each classification. The maps shade counties with the highest percentages of renters by bracket in red and the lowest percentages in blue (denominator being total renters by county).

The highest concentration of renter households earning less than \$10,000 per year and spending more than 30% of income on housing costs are located in rural areas in Eastern and Western Kentucky. These counties include: Bell (29.43%), Wolfe (29.31%), Lee (28.79%), McCreary (26.43%), Pulaski (23.33%), and Lyon (22.73%) Counties. For households earning between \$10,000 and \$19,999 per year, Taylor County has the highest concentration of households with housing costs greater than 30% of income with 25.75% of this income bracket falling within this classification. Robertson County has the highest concentration of households with housing costs greater than 30% of income for households earning between \$20,000 and \$34,999 at 21.15%. There is a precipitous drop in percentage of households with housing costs greater than 30% of income when the income bracket moves to \$35,000 to \$49,999, as the highest percentages range between 29.43% and 21.15%; only 6.26% of households in Nicholas County with housing costs greater than 30% of income for households earning between \$35,000 and \$49,999. Table Twenty-Eight (below) displays the ten counties with the highest concentration of households with housing costs greater than 30% of income by income bracket.

Table Twenty-Eight: Counties with the Highest Concentration of Renter Households with Housing Costs Greater than 30% of Income

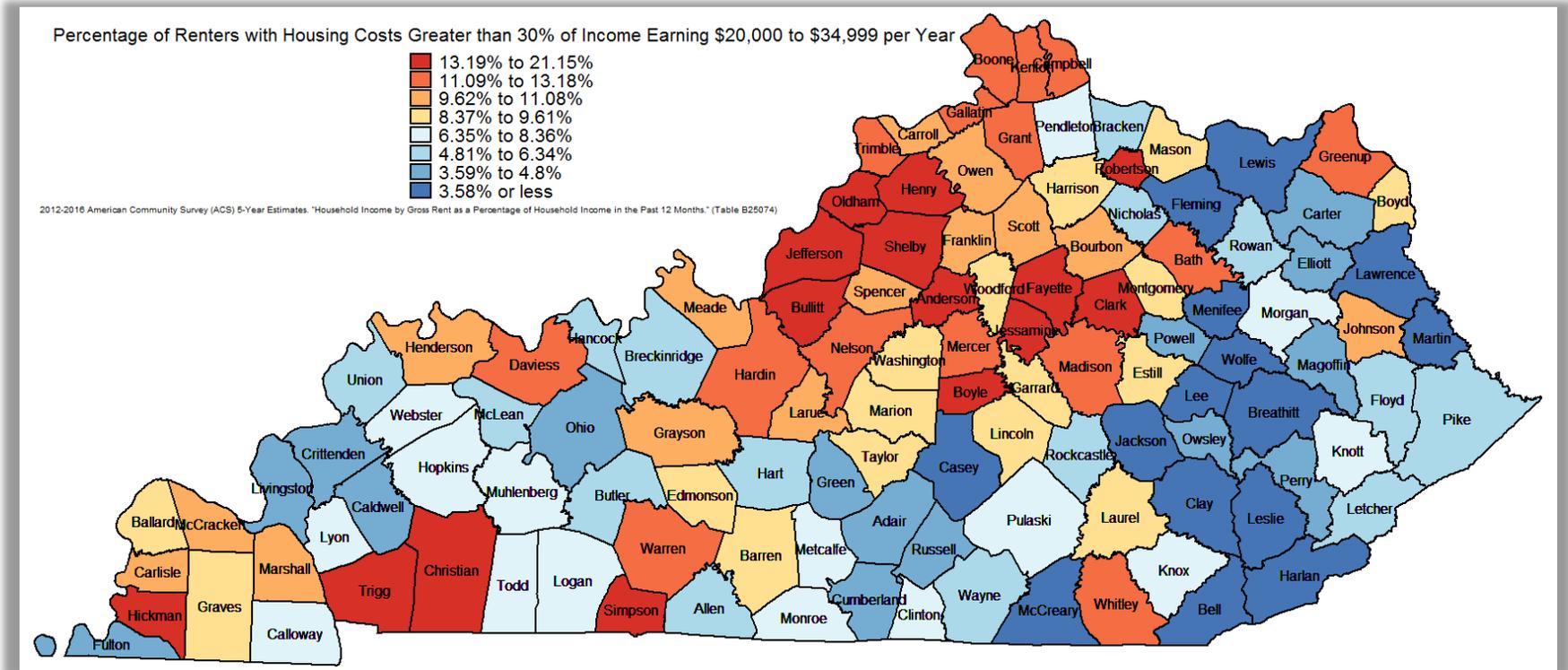
\$10,000 or Less Per Year		\$10,001 to \$19,999 Per Year		\$20,000 to \$34,999 Per Year		\$35,000 to \$49,999 Per Year	
Bell County	29.43%	Taylor County	25.75%	Robertson County	21.15%	Nicholas County	6.26%
Wolfe County	29.31%	Carroll County	25.08%	Clark County	17.04%	Christian County	5.80%
Lee County	28.79%	Garrard County	23.64%	Christian County	16.95%	Meade County	5.74%
McCreary County	26.43%	Wayne County	23.25%	Shelby County	16.60%	Boone County	5.21%
Pulaski County	23.33%	Russell County	22.55%	Oldham County	16.21%	Pendleton County	4.21%
Lyon County	22.73%	Larue County	20.97%	Bullitt County	15.85%	Bullitt County	3.87%
Clay County	21.66%	Calloway County	20.96%	Jessamine County	15.50%	Fayette County	3.85%
Fulton County	21.09%	Green County	20.86%	Trigg County	14.55%	Jefferson County	3.64%
Martin County	20.97%	Monroe County	20.71%	Henry County	14.55%	Franklin County	3.63%
Leslie County	20.94%	Robertson County	20.67%	Simpson County	14.31%	Campbell County	3.34%

Figure Twenty-Eight (b): Percentage of Renters with Housing Costs Greater than 30% of Income Earning \$10,001 to \$19,999 per Year¹⁰⁶



¹⁰⁶ 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Gross Rent as a Percentage of Household Income in the Past 12 Months." (Table B25074)

Figure Twenty-Eight (c): Percentage of Renters with Housing Costs Greater than 30% of Income Earning \$20,000 to \$34,999 per Year¹⁰⁷



¹⁰⁷ 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Gross Rent as a Percentage of Household Income in the Past 12 Months." (Table B25074)

Owners

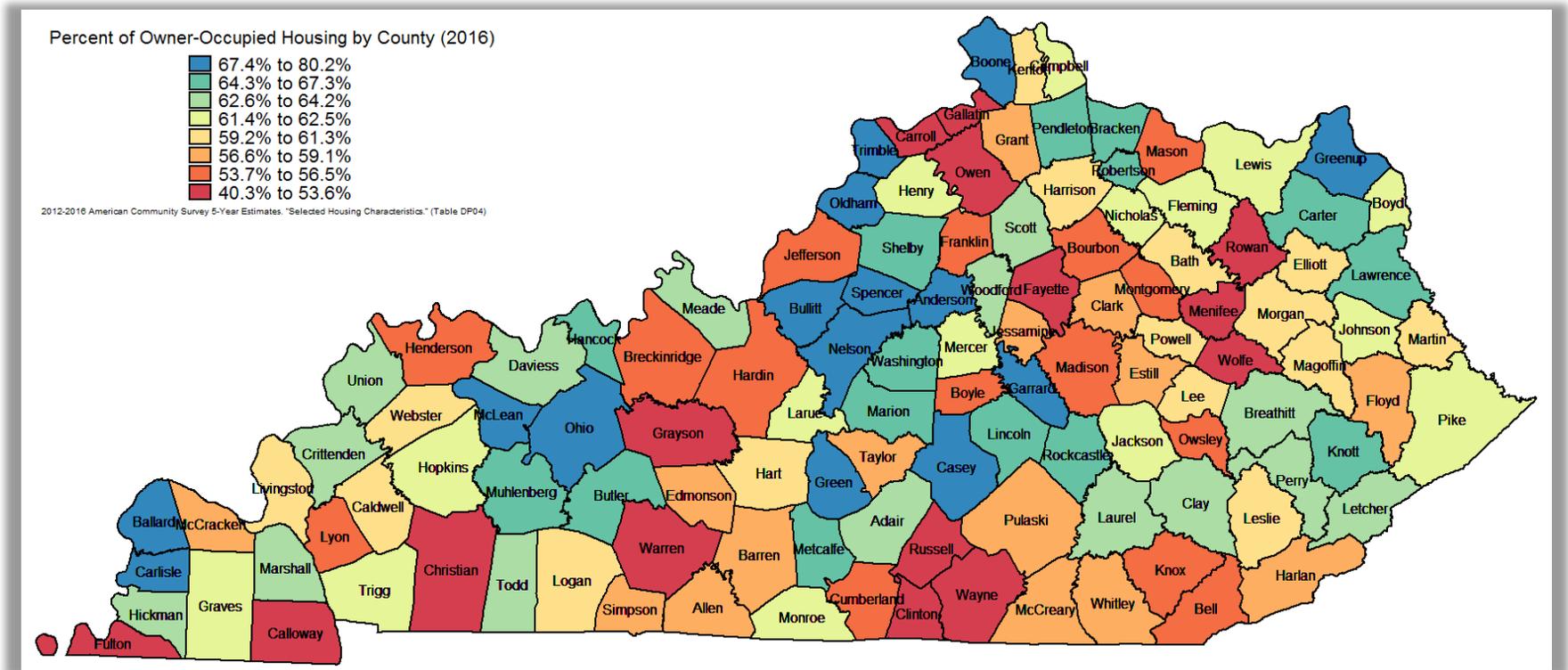
In Kentucky, 58.8% of occupied housing units are occupied by home-owners (1,147,903 households), ranging between 80.20% in Oldham County and 40.35% in Christian County. Figure Twenty-Nine (next page) displays a map of Kentucky with counties shaded by the percentage of owner-occupied housing within each respective county. Counties shaded in red have the lowest rates of owners, while counties shaded in blue have the highest rates. Table Twenty-Nine lists the counties with the highest and lowest percentage of owner-occupied housing in that county. The Median Household size of Owner-Occupied Units in Kentucky is 2.52 people, ranging between 3.02 individuals (Oldham County) and 2.13 individuals (Lyon County).

Table Twenty-Nine: Highest and Lowest Percentages of Owner-Occupied Housing by County (2016)¹⁰⁹

Highest		Lowest	
County	Percentage of Owners	County	Percentage of Owners
Oldham County	80.20%	Christian County	40.35%
Spencer County	78.43%	Fulton County	46.49%
Bullitt County	77.33%	Fayette County	48.78%
Nelson County	70.87%	Wolfe County	50.81%
McLean County	70.16%	Wayne County	50.98%
Anderson County	69.71%	Calloway County	51.24%
Garrard County	69.45%	Rowan County	51.48%
Boone County	68.67%	Owen County	51.81%
Trimble County	68.45%	Grayson County	52.20%
Casey County	68.34%	Menifee County	52.21%

¹⁰⁹ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04)

Figure Twenty-Nine: Percent of Owner-Occupied Housing by County (2016)¹¹⁰



¹¹⁰ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04)

Median Home Value

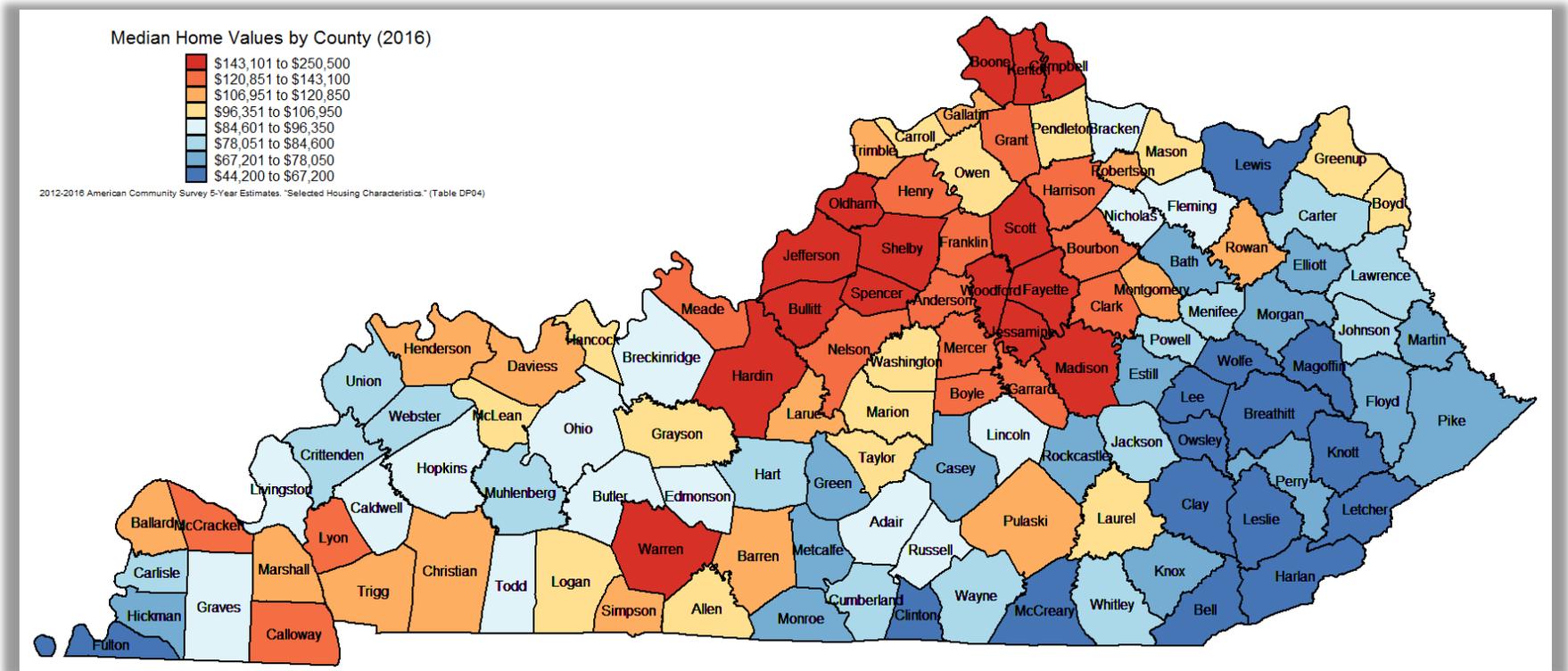
The median home value for home owners in Kentucky is \$96,750, with the highest median home value at \$250,500 (Oldham County) and the lowest median value at \$44,200 (Leslie County). Figure Thirty (next page) provides a map with the median home values by county (2016). The highest values in the state are shaded in red, while the lowest values are shaded in blue. Across the state, higher median home values are concentrated around urban areas, including Bowling Green, Louisville, Lexington, and the greater Cincinnati area. The lowest median home values in the state are concentrated to Eastern Kentucky but also includes Fulton County (western-most county). Table Thirty lists the highest and lowest median home values for 2016.

Table Thirty: Highest and Lowest Median Home Value (2016)¹¹¹

Highest		Lowest	
County	Median Home Value	County	Median Home Value
Oldham County	\$250,500	Leslie County	\$44,200
Spencer County	\$186,100	Breathitt County	\$49,600
Woodford County	\$182,700	Knott County	\$50,900
Boone County	\$178,300	Harlan County	\$52,700
Shelby County	\$176,800	Clay County	\$54,500
Fayette County	\$170,800	Magoffin County	\$56,500
Scott County	\$167,700	Letcher County	\$57,300
Jessamine County	\$160,500	Bell County	\$59,800
Campbell County	\$156,600	Fulton County	\$61,600
Jefferson County	\$154,100	McCreary County	\$62,500

¹¹¹ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04)

Figure Thirty: Median Home Values by County (2016)¹¹²



¹¹² 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04)

Home-Owner Vacancy Rates

The U.S. Census Bureau defines the "Homeowners Vacancy Rate" as "...the percentage relationship between the number of vacant units for sale and the total homeowner inventory. It is computed by dividing the number of vacant units for sale only by the sum of the owner-occupied units and the number of vacant units that are for sale only."¹¹³ The median vacancy rate among Owner-Occupied dwellings in the Kentucky is 1.7%, ranging between 7.6% (Gallatin County) and 0.2% (Russell County). Figure Thirty-One (next page) displays the vacancy rates of home owners by county. Counties shaded in red have higher vacancy rates, while counties shaded in blue have lower rates. Table Thirty-One (below) displays the highest and lowest percentages of vacancy rates in owner-occupied housing.

Table Thirty-One: Highest and Lowest Vacancy Rates for Home Owners (2016)

Highest		Lowest	
County	Vacancy Rate	County	Vacancy Rate
Gallatin County	7.6%	Russell County	0.2%
Livingston County	5.7%	Magoffin County	0.3%
Mason County	5.3%	Todd County	0.3%
Menifee County	5.0%	Elliott County	0.4%
Montgomery County	4.9%	Green County	0.4%
Owen County	4.4%	Hart County	0.4%
Hopkins County	4.1%	Larue County	0.4%
Hickman County	3.8%	Metcalfe County	0.4%
Breckinridge County	3.5%	Carter County	0.5%
Fleming County	3.5%	Robertson County	0.5%

¹¹³ U.S. Census Bureau. "Homeowner Vacancy Rate"

Monthly Home Owner Costs¹¹⁵

As with home value, monthly costs of home owners varies across the state of Kentucky, with the median monthly home owner cost for the entire state being \$578, ranging between \$1,313 in Oldham County and \$297 in Leslie County. Figure Thirty-Two (next page) shows the median monthly home owner costs by county across the state of Kentucky; the counties shaded in red have the highest costs, while the counties shaded in blue have the lowest costs. Counties with the highest costs are concentrated to the greater Louisville, Lexington, and Cincinnati Metropolitan areas. Counties with the lowest median monthly home owner costs are concentrated mostly to Eastern Kentucky with the exception of Cumberland and Clinton Counties. Table Thirty-Two (below) provides a list of the counties with the highest and lowest median monthly home owner costs.

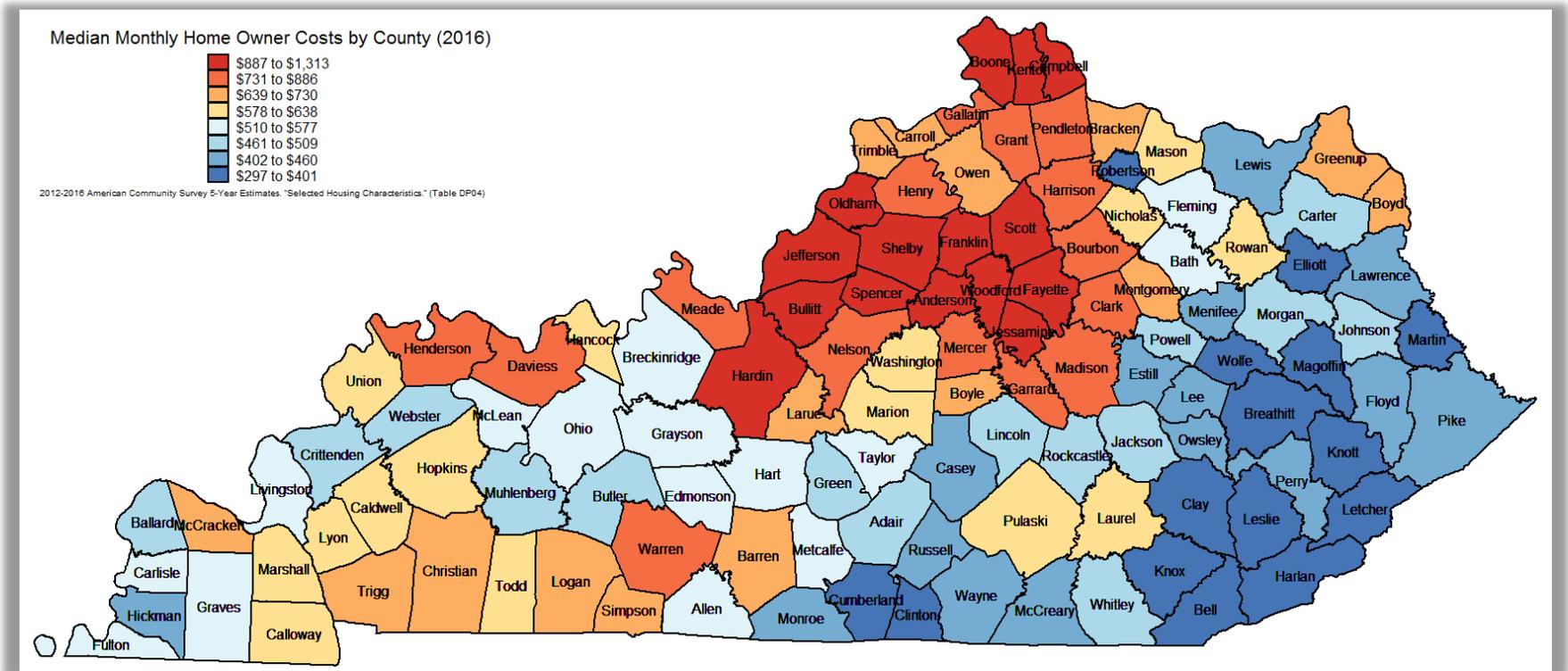
Table Thirty-Two: Highest and Lowest Median Monthly Home Owner Costs (2016)¹¹⁶

Highest		Lowest	
County	Median Monthly Costs	County	Median Monthly Costs
Oldham County	\$1,313	Leslie County	\$297
Boone County	\$1,186	Knott County	\$304
Spencer County	\$1,117	Breathitt County	\$342
Kenton County	\$1,051	Bell County	\$353
Campbell County	\$1,042	Letcher County	\$353
Fayette County	\$1,042	Clay County	\$360
Scott County	\$1,028	Harlan County	\$368
Shelby County	\$999	Martin County	\$377
Woodford County	\$976	Knox County	\$378
Jessamine County	\$974	Magoffin County	\$385

¹¹⁵ Monthly Owner Costs are defined by the U.S. Census Bureau as "...monthly owner costs are calculated from the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees."

¹¹⁶ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04). Median Monthly Home Owner Costs calculated from SMOCAPI variable.

Figure Thirty-Two: Median Monthly Home Owner Costs by County (2016)¹¹⁷



¹¹⁷ 2012-2016 American Community Survey 5-Year Estimates. "Selected Housing Characteristics." (Table DP04). Median Monthly Home Owner Costs calculated from SMOCAPI variable.

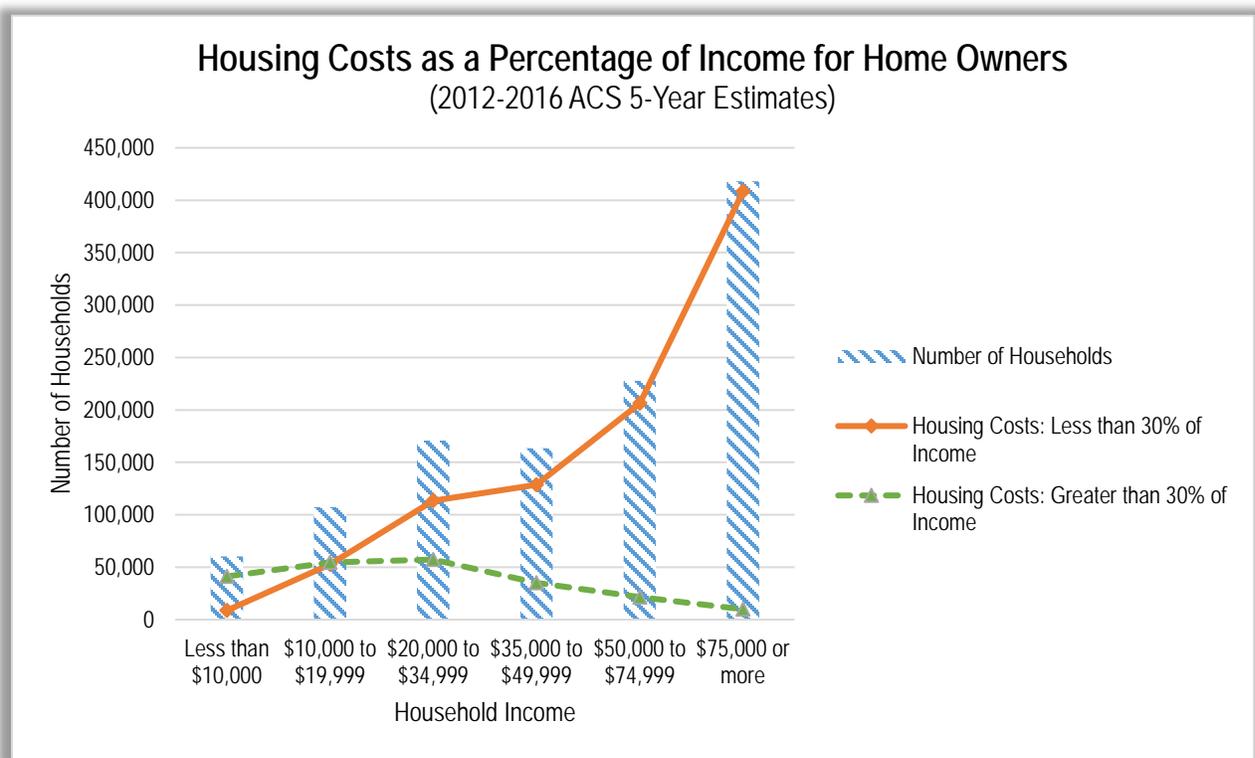
Housing Costs for Homeowners as a Percentage of Income

We see a dramatic difference between homeowners and renters in terms of the housing cost burden or housing costs comprising 30% or greater of monthly incomes. Table Thirty-Three and Figure Thirty-Three (below) provide a breakdown by income brackets of the number of homeowner households whose housing costs are less than 30% of their income or greater than 30% of their income. The majority of households earning less than \$10,000 per year (68% of this income bracket) have housing costs greater than 30% of income. Housing costs comprise a smaller percentage of income as income increases, especially once income per year surpasses \$35,000.

Table Thirty-Three: Housing Cost as a Percentage of Income for Home Owners¹¹⁸

Income	Number of Households	Housing Costs	
		Less than 30% of Income	Greater than 30% of Income
Less than \$10,000 ¹¹⁹	60,421	8,673 (14%)	41,301 (68%)
\$10,000 to \$19,999	107,227	52,586 (49%)	54,641 (51%)
\$20,000 to \$34,999	170,694	113,392 (66%)	57,302 (34%)
\$35,000 to \$49,999	163,582	128,438 (79%)	35,144 (21%)
\$50,000 to \$74,999	227,752	206,387 (91%)	21,365 (9%)
\$75,000 or more	418,227	408,341 (98%)	9,886 (2%)

Figure Thirty-Three: Housing Costs as a Percentage of Income for Home Owners



¹¹⁸ 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Selected Monthly Owner Costs as a Percentage of Household Income in the past 12 months; Owner-occupied housing units." (Table B25095)

¹¹⁹ Housing costs for 10,447 households (17%) earning less than \$10,000 per year were not computed per the U.S. Census.

Figures Thirty-Four (a-d) (next pages) provide a breakdown of homeowner housing costs amounting to 30% or more of monthly income by income bracket. The brackets included were for individuals making less than \$10,000 (5% of Homeowners), \$10,000 to \$19,999 (9% of Homeowners), \$20,000 to \$34,999 (15% of Homeowners), and \$35,000 to \$49,999 (14% of Homeowners). The final two income classifications (\$50,000 to \$74,999 and \$75,000 or more) were omitted as the average percentage was lower than 2% for households' monthly expenditures exceeding 30% of monthly income; these households also comprise 57% of homeowners. The maps below shade counties with the highest percentages of homeowners by bracket in red and the lowest percentages in blue (denominator being total homeowners).

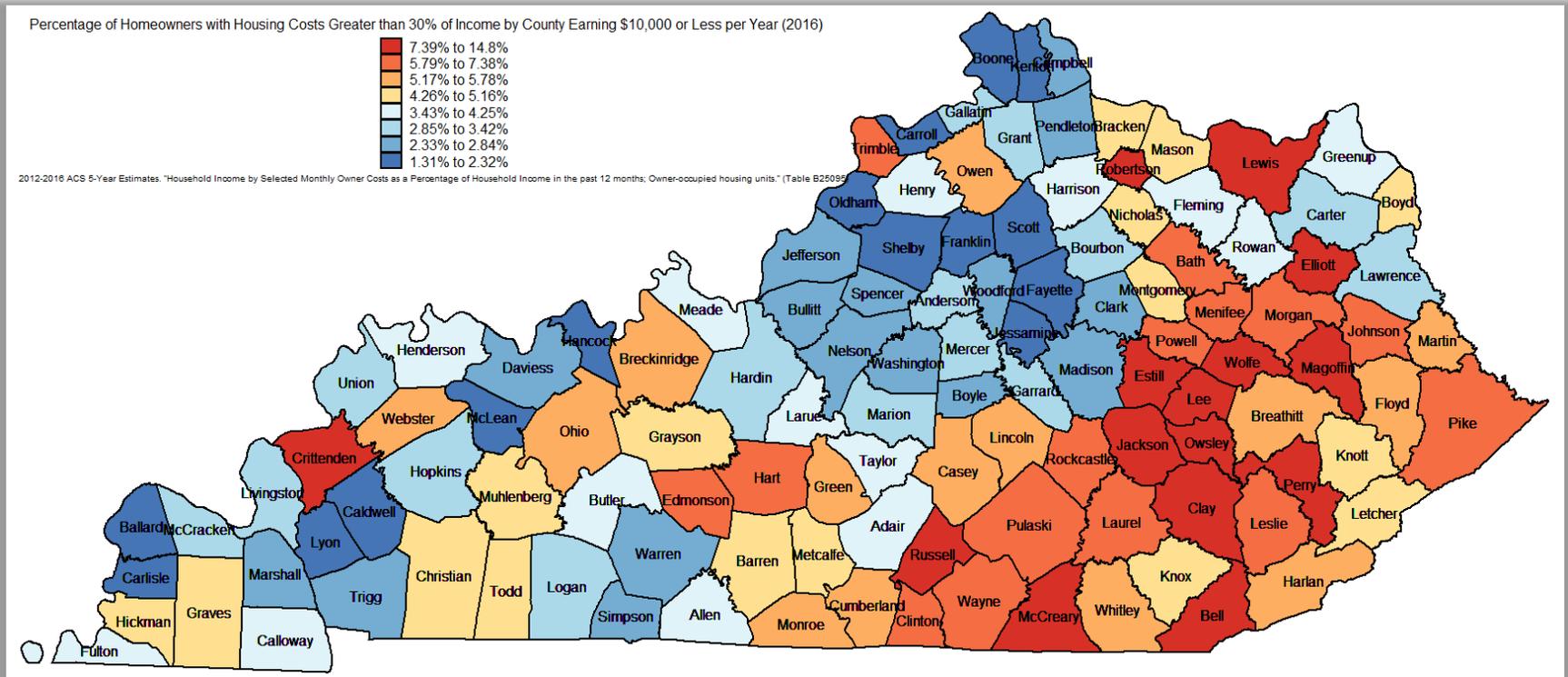
The highest concentration of homeowners earning less than \$10,000 per year and spending more than 30% of income on housing costs are located in rural areas in Eastern Kentucky. These counties include: Owsley, Lee, Clay McCreary, Elliot, Magoffin and Robertson Counties. For homeowner households earning between \$10,000 and \$19,999 per year, McCreary County has the highest concentration of households with housing costs greater than 30% of income with 11.7% of this income bracket falling within this classification. Bath County has the highest concentration of homeowner households with housing costs greater than 30% of income for households earning between \$20,000 and \$34,999 at 8.1%. In the final income bracket (\$35,000 to \$49,999), Grant County has the highest percentage of homeowner households with housing costs greater than 30% of income at 5.9%. Table Thirty-Four (below) displays the ten counties with the highest concentration of households with housing costs greater than 30% of income by income bracket.

Table Thirty-Four: Counties with the Highest Concentration of Home-Owner Households with Housing Costs Greater than 30% of Income¹²⁰

\$10,000 or Less Per Year		\$10,001 to \$19,999 Per Year		\$20,000 to \$34,999 Per Year		\$35,000 to \$49,999 Per Year	
Owsley County	14.8%	McCreary County	11.7%	Bath County	8.1%	Grant County	5.9%
Lee County	12.6%	Powell County	10.5%	Taylor County	8.0%	Martin County	5.8%
Clay County	11.2%	Jackson County	9.2%	Carlisle County	7.9%	Wolfe County	5.7%
McCreary County	11.0%	Estill County	8.9%	Anderson County	7.9%	Trimble County	5.5%
Elliott County	9.5%	Metcalfe County	8.7%	Montgomery County	7.8%	Campbell County	4.9%
Magoffin County	8.8%	Lee County	8.3%	Gallatin County	7.7%	Jessamine County	4.7%
Robertson County	8.5%	Monroe County	8.2%	Lyon County	7.6%	Clark County	4.4%
Jackson County	8.5%	Bath County	8.0%	Fulton County	7.5%	Barren County	4.2%
Lewis County	8.3%	Menifee County	7.7%	Owen County	7.3%	Hart County	4.2%
Russell County	7.9%	Rowan County	7.6%	Clinton County	7.0%	Logan County	4.1%

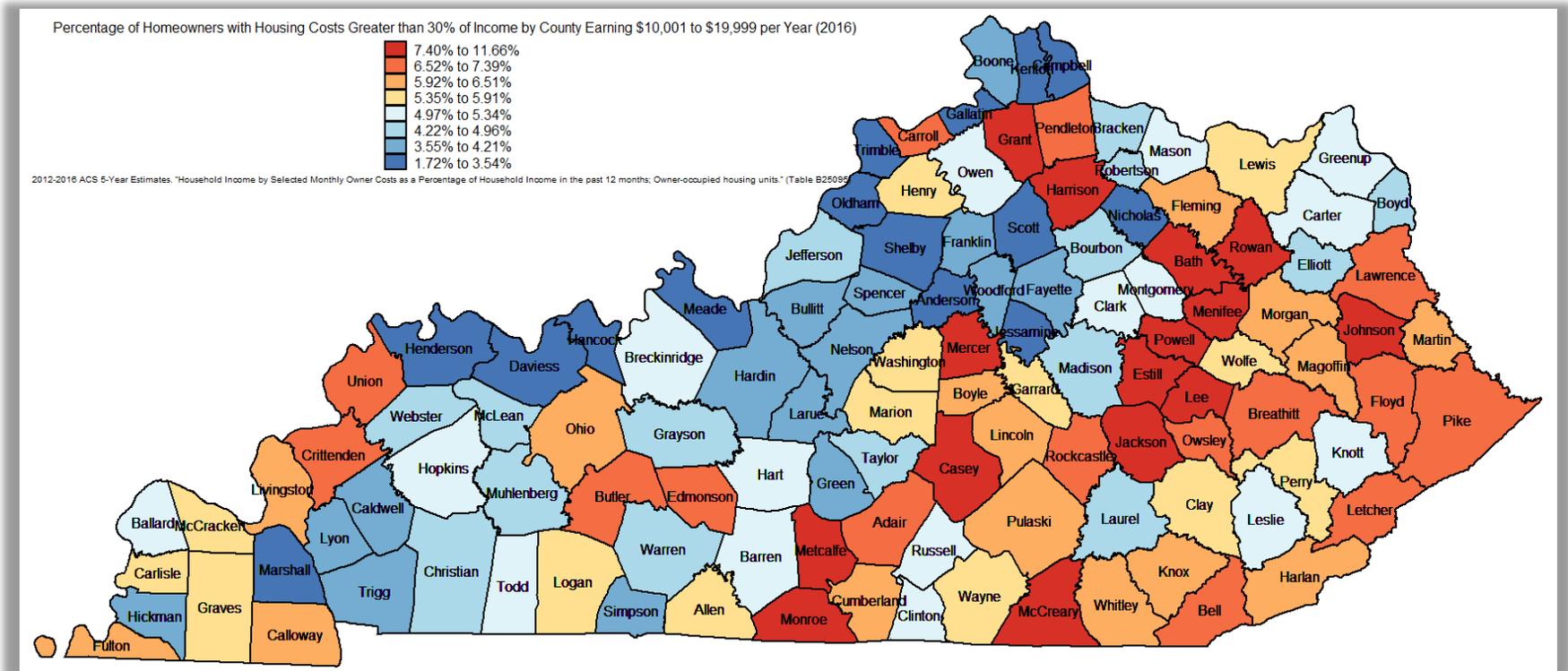
¹²⁰ 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Selected Monthly Owner Costs as a Percentage of Household Income in the past 12 months; Owner-occupied housing units." (Table B25095)

Figure Thirty-Four (a): Percentage of Homeowners with Housing Costs Greater than 30% of Income by County Earning \$10,000 or Less per Year (2016)¹²¹



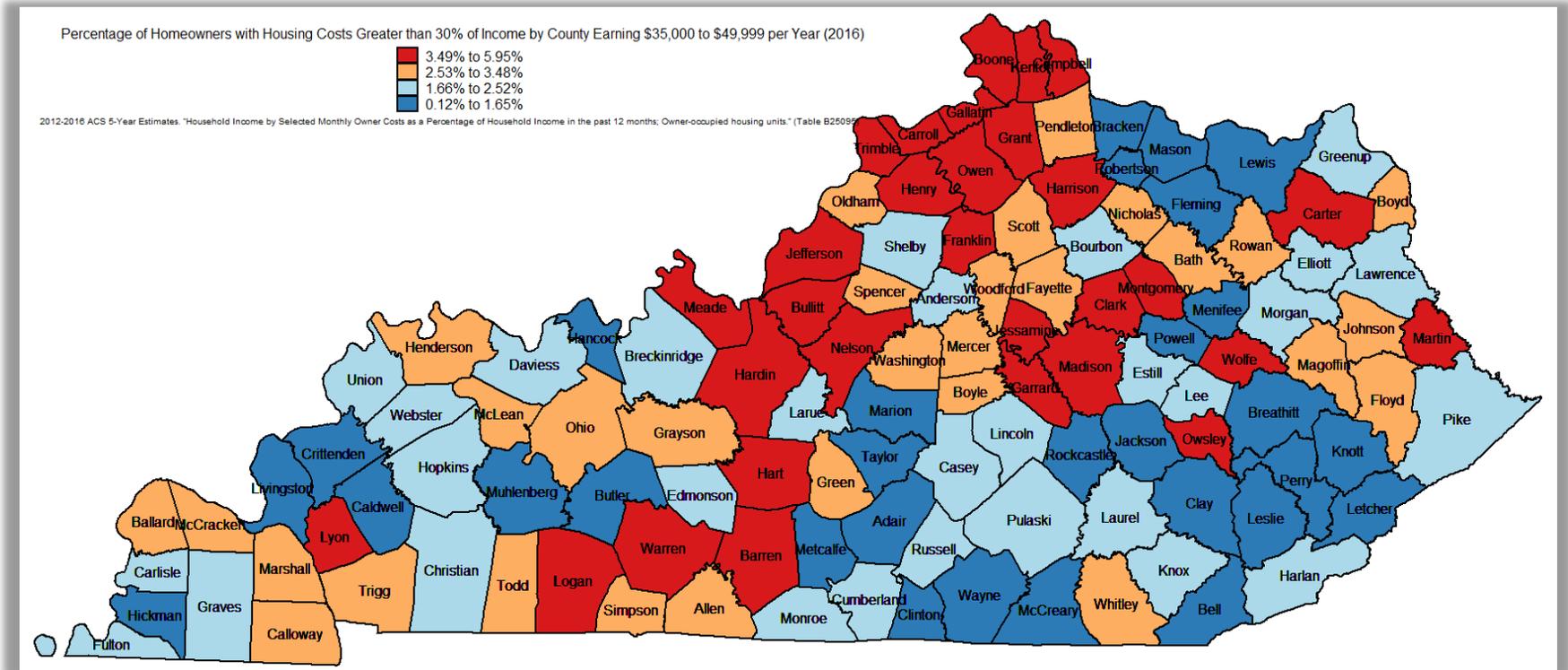
¹²¹ 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Selected Monthly Owner Costs as a Percentage of Household Income in the past 12 months; Owner-occupied housing units." (Table B25095)

Figure Thirty-Four (b): Percentage of Homeowners with Housing Costs Greater than 30% of Income by County Earning \$10,001 to \$19,999 per Year (2016) ¹²²



¹²² 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Selected Monthly Owner Costs as a Percentage of Household Income in the past 12 months; Owner-occupied housing units." (Table B25095)

Figure Thirty-Four (d): Percentage of Homeowners with Housing Costs Greater than 30% of Income by County Earning \$35,000 to \$49,999 per Year (2016)¹²⁴



¹²⁴ 2012-2016 American Community Survey (ACS) 5-Year Estimates. "Household Income by Selected Monthly Owner Costs as a Percentage of Household Income in the past 12 months; Owner-occupied housing units." (Table B25095)

Economic Factors

Public Transportation

As discussed at the various KHC summit sessions, an important factor determining where individuals chose to live is transportation and access to public transit. Kentucky does not have a state-wide transit system. Instead, this is left to municipalities and city-county governments to provide this service for its citizens. Seven Transit Authorities are recognized and supported by the Federal Transit Authority and are listed below in Table Thirty-Five. This lists the agency providing the transit service; the city in which the agency is headquartered (HQ City); the urbanized area (UZA name); and the total service area population. This service population equals 2,970,018 citizens, but this includes the greater Cincinnati area and “Kentuckiana” in the greater Louisville metro area. Even including these populations in the total, this means that only 67% of Kentucky’s citizens have access to public transportation.

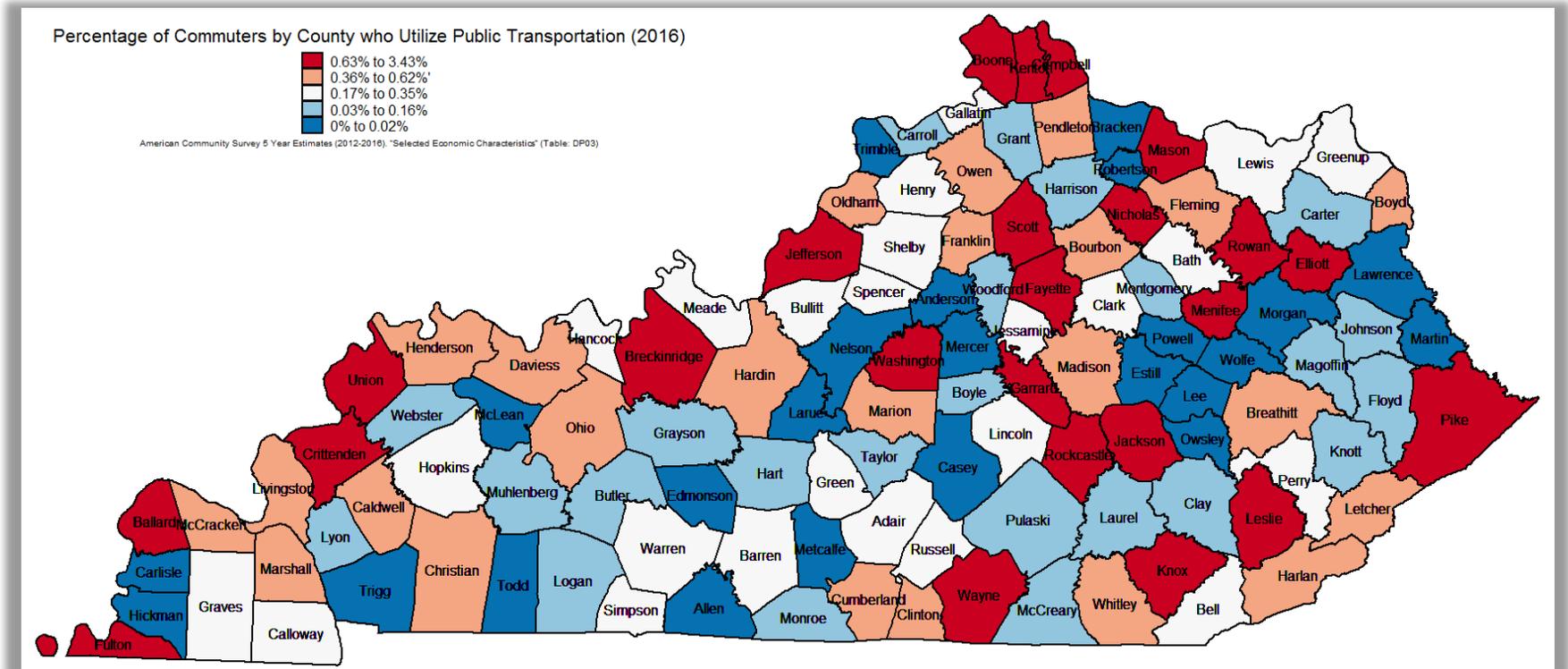
Table Thirty-Five: Kentucky Public Transit Authorities (November 2017)¹²⁵

Agency	HQ City	UZA Name	Service Area Population
Lexington Transit Authority	Lexington	Lexington-Fayette, KY	295,803
Transit Authority of River City	Louisville	Louisville/Jefferson County, KY-IN	806,893
Transit Authority of Northern Kentucky	Fort Wright	Cincinnati, OH-KY-IN	278,653
The City of Bowling Green/Community Action of Southern Kentucky	Bowling Green	Bowling Green, KY	63,616
Transit Authority of Central Kentucky	Elizabethtown	Elizabethtown-Radcliff, KY	137,401
Kentuckiana Regional Planning and Development Agency	Louisville	Louisville/Jefferson County, KY-IN	1,171,346
Audubon Area Community Services, Inc.	Owensboro	Owensboro, KY	216,306

However, there are options across the state that are private, non-profit, or municipality supported transit networks (133 total agencies), where an individual can call to utilize these services. With the addition of these agencies, public transit is expanded beyond the federally recognized and supported authorities. Adair, Allen, Bath, Butler, Edmonson, Green, Logan, Marshall, Menifee, Metcalfe, and Simpson counties do not have local transit available to them within that specific county. Many times agencies will cross county borders but will only do so for an additional fee to the individual requesting services. Figure Thirty-Five (next page) shows the overall percentage of commuters who utilize public transportation. In Kentucky, the percentage of commuters utilizing this mode of transportation ranges between 0% to only 3.43%, with most commuters electing to utilize a personal vehicle, carpool, or walk to their place of employment in the place of public transportation.

¹²⁵ Federal Transit Administration. National Transit Database. “Monthly Module Raw Data Release.” November 2017.

Figure Thirty-Five: Percentage of Commuters by County who Utilize Public Transportation (2016)¹²⁶

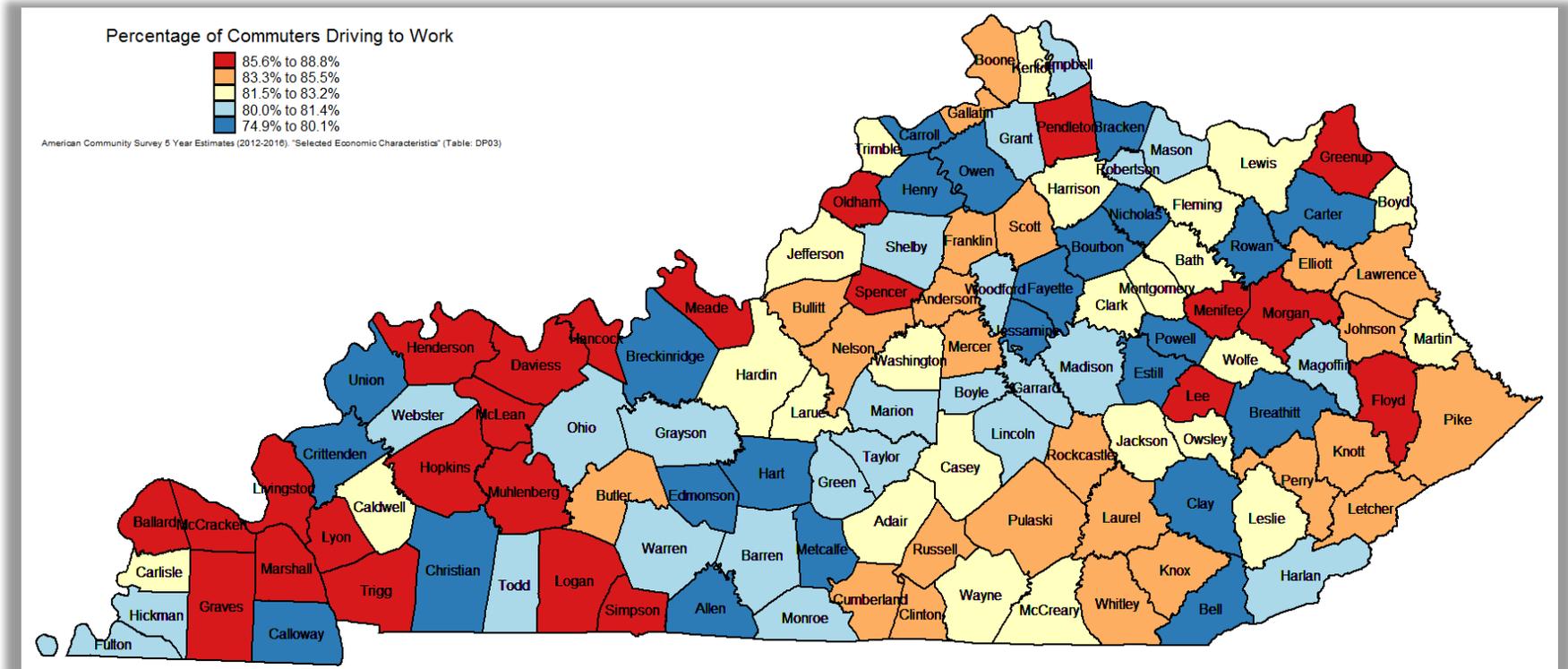


¹²⁶ American Community Survey 5 Year Estimates (2012-2016). "Selected Economic Characteristics" (Table: DP03)

Commuting

The Census also provides an estimate of the number of workers who utilize their own vehicle in order to daily commute to work. In the Commonwealth, this percentage ranges from 74% (Powell County) to 88% (Hancock County). Figure Thirty-Six (below) shows the percentage of commuters who drive to work as opposed to carpooling, using public transportation, walking, or working from home. The counties highlighted in purple have the greatest concentration of commuters driving to work. The counties highlighted in orange have the lowest concentration of commuters driving to work. Table Thirty-Six (next page) lists the counties with the highest and lowest percentage of commuters driving to work.

Figure Thirty-Six: Percentage of Commuters Driving to Work (2016)¹²⁷



¹²⁷ American Community Survey 5 Year Estimates (2012-2016). "Selected Economic Characteristics" (Table: DP03)

Table Thirty-Six: Percentage of Commuters Driving to Work ¹²⁸

Highest Percentage of Commuters		Lowest Percentage of Commuters	
County	Percentage of Commuters	County	Percentage of Commuters
Hancock County	88.87%	Powell County	74.99%
Spencer County	88.84%	Bell County	75.04%
Simpson County	88.75%	Hart County	75.12%
Lee County	87.97%	Clay County	75.66%
Hopkins County	87.91%	Breckinridge County	76.12%
Muhlenberg County	87.90%	Allen County	76.16%
Lyon County	87.80%	Christian County	76.56%
Ballard County	87.76%	Nicholas County	76.87%
Meade County	87.61%	Owen County	77.28%
Floyd County	86.94%	Breathitt County	77.36%

As the majority of the population commutes to work using their personal vehicle, the average commute time impacts individuals' overall quality of life. Figure Thirty-Seven (next page) displays the average commute time by county. Average commute time by county in Kentucky ranges between 16.5 minutes to 38.5 minutes. McCreary County has the longest average commute time at 38.5 minutes; Christian County has the shortest average commute time at 16.5 minutes. Table Thirty-Seven (below) displays the counties in Kentucky with the longest average commute time (minutes).

Table Thirty-Seven: Counties with the Longest Average Commute Time (minutes)¹²⁹

County	Average Commute Time (minutes)	County	Average Commute Time (minutes)
McCreary County	38.5	Morgan County	34.1
Bracken County	36.6	Wolfe County	34.1
Robertson County	35.8	Pendleton County	34
Elliott County	35.4	Lawrence County	33.5
Garrard County	34.1		

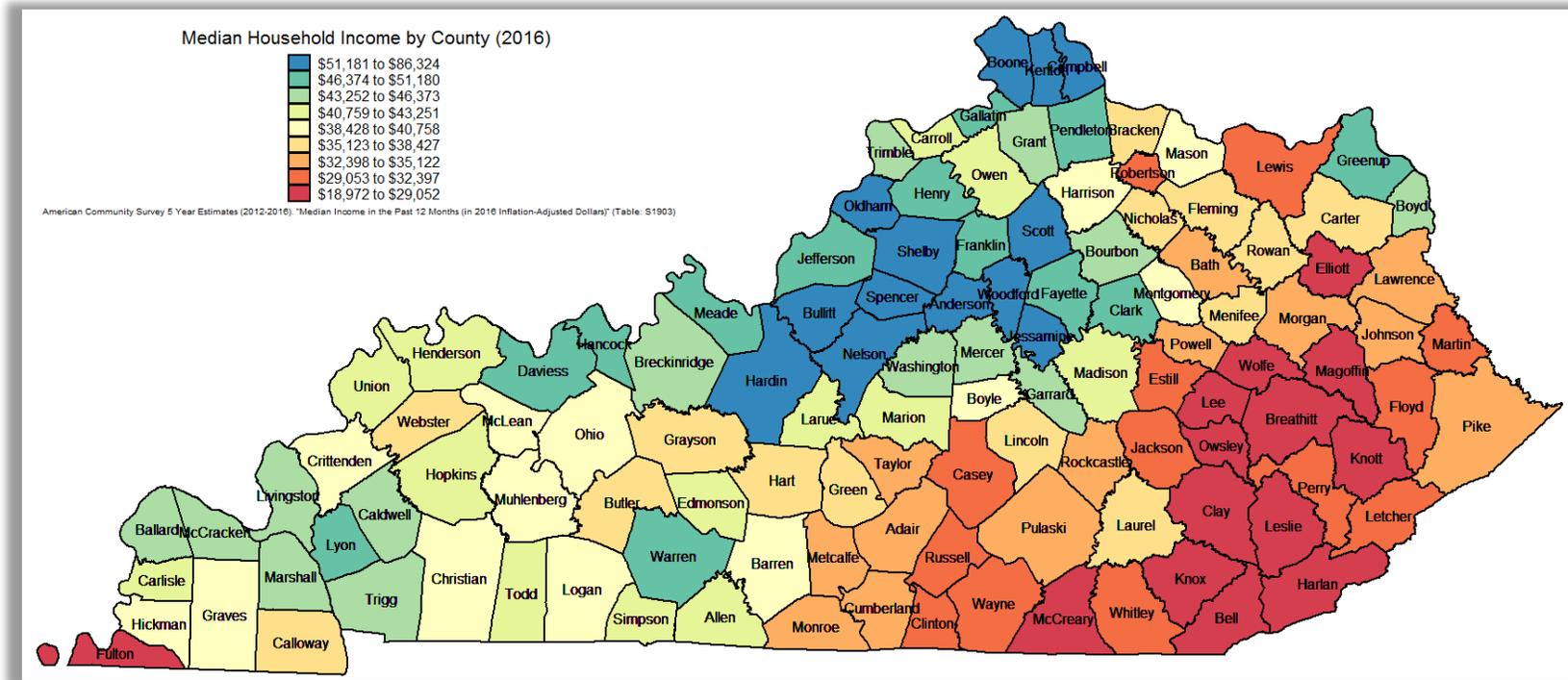
¹²⁸ American Community Survey 5 Year Estimates (2012-2016). "Selected Economic Characteristics" (Table: DP03)

¹²⁹ American Community Survey 5 Year Estimates (2012-2016). "Selected Economic Characteristics" (Table: DP03)

Income

Income across the state of Kentucky varies widely with the spread of median household income¹³¹ ranging between \$86,000 and \$18,000; this is different than the average as it provides a “halfway” point between the upper and lower numbers represented in the county level data. These numbers are computed for all household classifications, including families¹³² and non-family¹³³ households. Median household income in McCreary County is the lowest in the state at \$18,972 per anum. Oldham County has the highest median household income at \$86,324. Figure Thirty-Eight displays the range of median household income across the state. The counties shaded in blue and green have higher median income with blue being the highest bracket; the counties shaded in yellow/orange/red have lower median income with red being the lowest bracket. The largest concentration of low income households is in Eastern Kentucky.

Figure Thirty-Eight: Median Household Income by County (2016)¹³⁴



¹³¹ Median Household Income is the amount which divides the income distribution into two equal groups, half having income above that amount, and half having income below that amount. (U.S. Census Bureau)

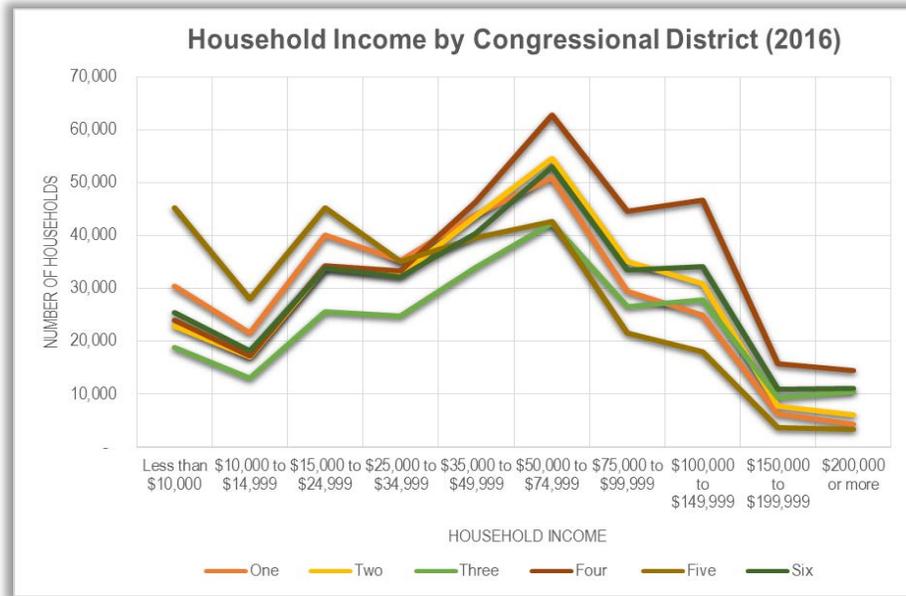
¹³² "A family group is any two or more people (not necessarily including a householder) residing together, and related by birth, marriage, or adoption. A household may be composed of one such group, more than one, or none at all. The count of family groups includes family households, related subfamilies, and unrelated subfamilies." (U.S. Census, Current Population Survey, Subject Definitions, "Family")

¹³³ "A nonfamily household consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related." (U.S. Census, Current Population Survey, Subject Definitions, "Household, nonfamily")

¹³⁴ American Community Survey 5 Year Estimates (2012-2016). "Median Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)" (Table: S1903)

As one can imagine, these numbers translate in huge income disparities between congressional districts, with the first and fifth districts having the highest concentration of households with income less than \$25,000 per year. Figure Thirty-Nine shows the ranges in household income and the concentration of population by Congressional District in each category. The raw numbers for this figure are shown in the tables under Figure Thirty-Nine. Appendix A lists the counties located in each Congressional District.

Figure Thirty-Nine: Household Income by Congressional District (2016)¹³⁵



Household Income					
Congressional District	Less than \$10,000	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999
One	30,447	21,637	40,052	35,250	43,903
Two	22,899	17,031	33,953	32,529	43,690
Three	18,817	12,953	25,604	24,802	33,985
Four	23,962	17,263	34,307	33,329	46,301
Five	45,174	27,988	45,304	35,078	39,608
Six	25,478	18,115	33,811	32,155	40,423

Household Income					
Congressional District	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 or more
One	50,835	29,411	24,910	6,195	4,284
Two	54,614	35,139	30,916	7,658	6,054
Three	42,338	26,628	27,785	9,373	10,482
Four	62,770	44,601	46,723	15,723	14,396
Five	42,599	21,527	18,055	3,750	3,287
Six	53,052	33,423	34,110	10,933	11,092

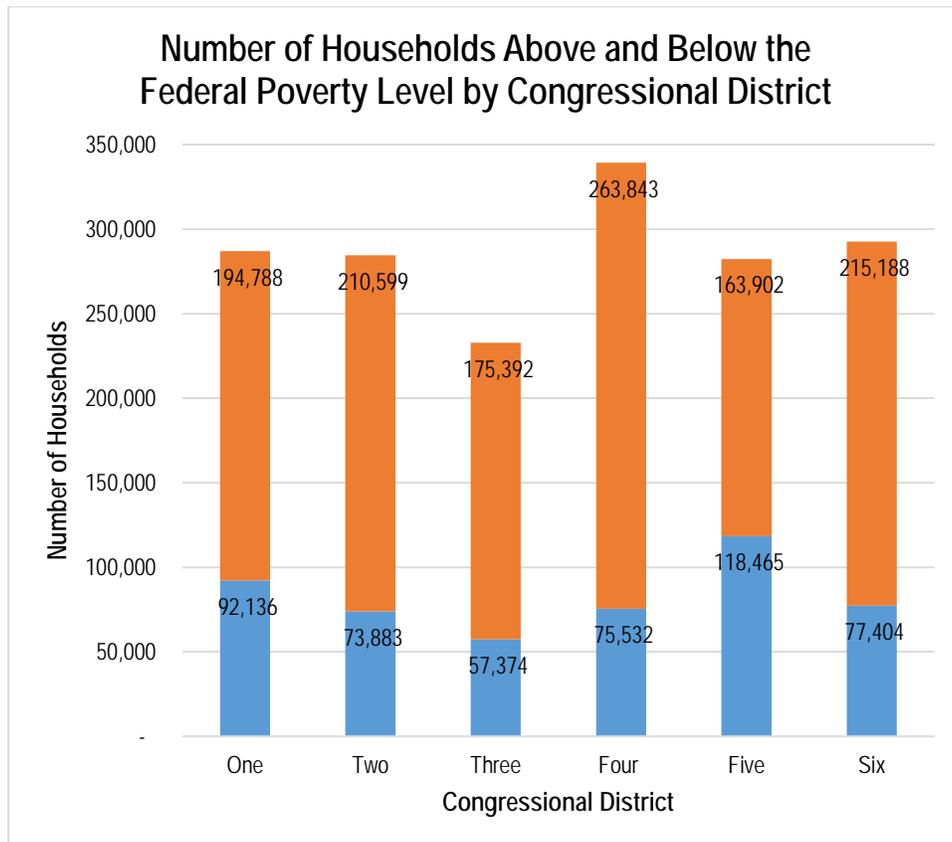
¹³⁵ American Community Survey 5 Year Estimates (2012-2016). "Median Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Table Thirty-Eight and Figure Forty below outline the percentage of households below the Federal Poverty Line (FPL). The fifth congressional district has the highest concentration of impoverished households at 42.0% (118,465 total households). The fourth congressional district has the lowest concentration of households below the FPL at 22.3% (75,532 households).

Table Thirty-Eight: Percentage of households below the Federal Poverty Line (FPL) by Congressional District (Family of 4 making less than \$24,999 annually)¹³⁶

Congressional District	%_FPL
One	32.1%
Two	26.0%
Three	24.6%
Four	22.3%
Five	42.0%
Six	26.5%

Figure Forty: Number of Households Above and Below the Federal Poverty Level by Congressional District¹³⁷



¹³⁶ American Community Survey 5 Year Estimates (2012-2016). "Median Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)" (Table: S1903)

¹³⁷ American Community Survey 5 Year Estimates (2012-2016). "Median Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars)" (Table: S1903)

Employment

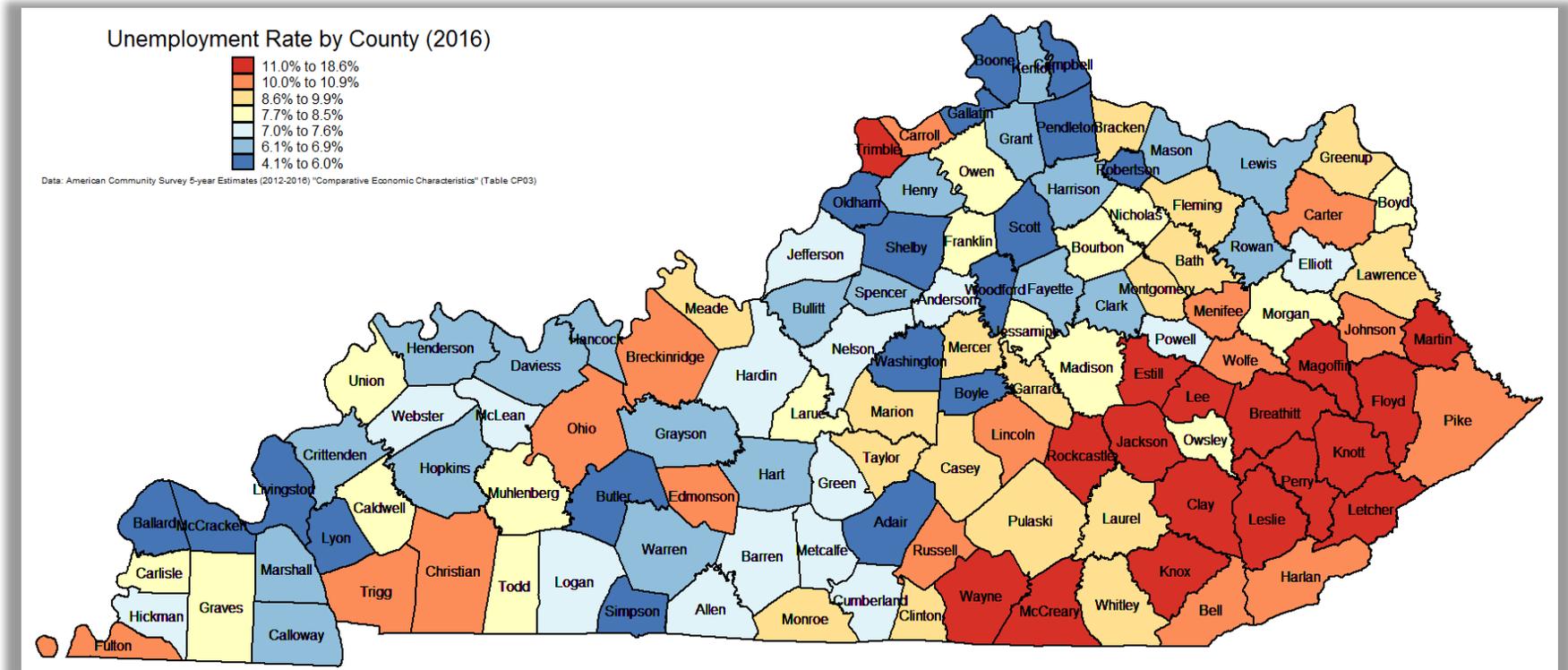
The unemployment rate in Kentucky for 2016 was approximately 5.3% (Seasonally Adjusted rate) (U.S. Bureau of Labor Statistics). However, this percentage ranged greatly across the Commonwealth, with values between 18.6% (Martin County) and 4.1% (Oldham County) recorded in 2016. McCreary County has the second highest employment rate in the Commonwealth at 17.6% in 2016. The table below displays ten counties with the highest unemployment rates in 2016. Figure Forty-One (next page) displays a map of the state with unemployment rate by county. The counties in blue have the highest unemployment rate while the counties in red have the lowest. For the most part, counties with high unemployment are concentrated in Eastern Kentucky.

Table Thirty-Nine: Counties with the Highest Unemployment Rate in 2016¹³⁸

County	Unemployment Rate (2016)
Martin County	18.6%
McCreary County	17.6%
Leslie County	17%
Perry County	15.2%
Trimble County	15%
Knott County	14.8%
Lee County	13.8%
Estill County	13.7%
Knox County	13.3%
Letcher County	12.9%

¹³⁸ American Community Survey 5 Year Estimates (2012-2016). "Employment Status." Table: S2301

Figure Forty-One: Unemployment Rate by County (2016)¹³⁹

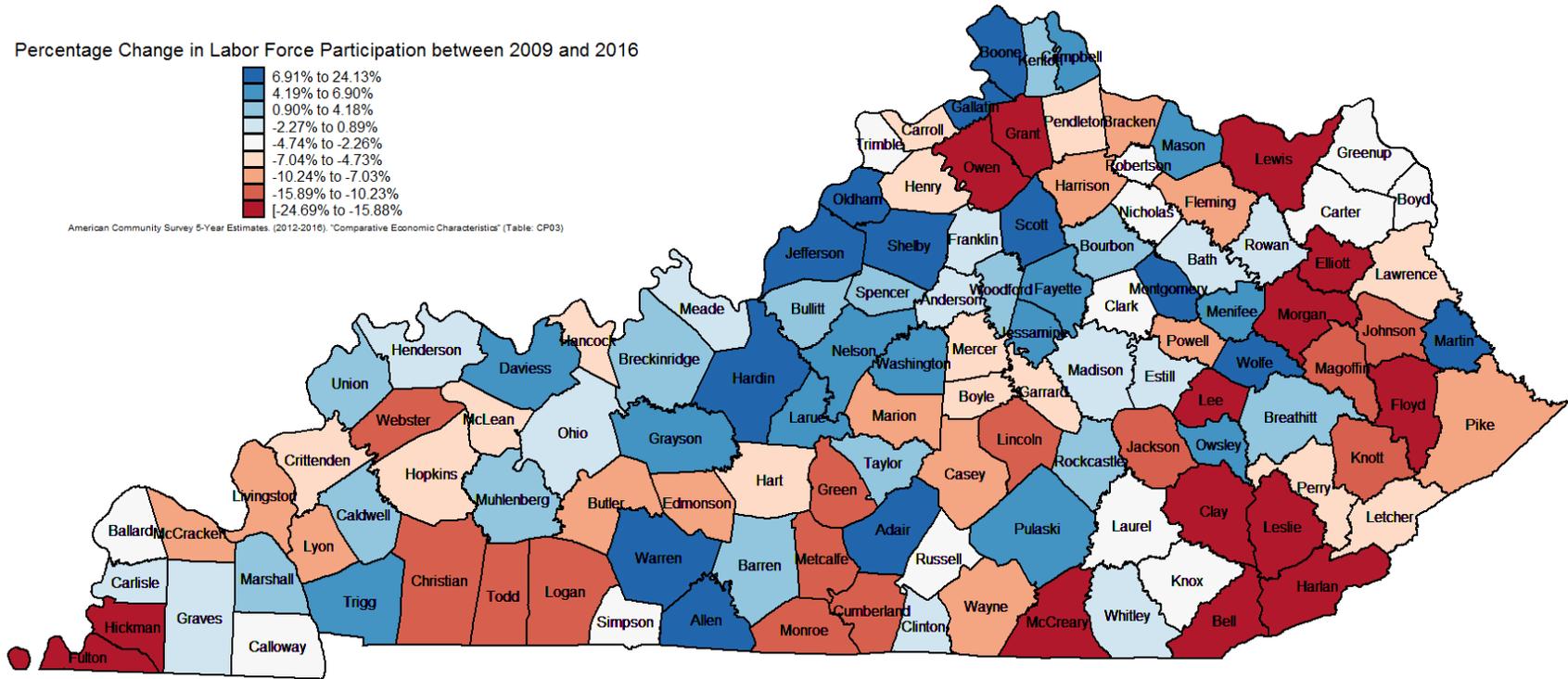


Between 2009 and 2016, unemployment rates shifted; however, this does not tell the complete story regarding employment within counties. Unemployment rates are calculated including the number of active job seekers at a labor given time; this leaves out potential labor force participants. Figure Forty-Two (next page) displays the change in of labor force participants¹⁴⁰ by county between 2009 and 2016; this allows us to take into account the entire labor force, including unemployed individuals, within all counties in Kentucky. The counties in red represent those counties with a negative change, while those in blue represent a positive change. Within this frameworks (positive versus negative change in labor force participation), 74 counties had a negative change in labor force participation and 46 counties had a positive change in labor force participation.

¹³⁹ American Community Survey 5-Year Estimates. (2012-2016). "Employment Status" (Table: S2301)

¹⁴⁰ Labor Force Participants include "all non-institutionalized civilians who are either employed or unemployed" (*U.S. Census, July 18, 2017*)

Figure Forty-Two: Percentage Change in Labor Force Participation between 2009 and 2016¹⁴¹



¹⁴¹ American Community Survey 5-Year Estimates. (2012-2016). "Comparative Economic Characteristics" (Table: CP03)

The following two tables outline the top and bottom ten counties in terms of Labor Force Participation growth across the Commonwealth. Owen County had a 24.69% decrease in Labor Force Participation between 2009 and 2016; currently, Owen County has an unemployment rate of 8.5%. Scott County had the greatest increase in the number of individuals in the labor force between 2009 and 2016 at 24.13%; the unemployment rate in Scott County for 2016 was 5.3%.

Table Forty: Top Ten Counties with Decreasing Labor Force Participation between 2009 and 2016¹⁴²

County	Percent Change
Owen County	-24.69%
Leslie County	-23.51%
Hickman County	-21.34%
McCreary County	-19.90%
Lewis County	-19.03%
Lee County	-19.03%
Morgan County	-18.74%
Elliott County	-17.59%
Clay County	-17.51%
Harlan County	-17.30%

Table Forty-One: Top Ten Counties with Increasing Labor Force Participation between 2009 and 2016

County	Percent Change
Scott County	24.13%
Hardin County	20.94%
Adair County	15.14%
Warren County	13.78%
Wolfe County	11.71%
Oldham County	11.12%
Allen County	11.04%
Gallatin County	9.26%
Montgomery County	8.98%
Martin County	8.13%

¹⁴² American Community Survey 5-Year Estimates. (2012-2016). "Comparative Economic Characteristics" (Table: CP03)

It is also important to look at employment in terms of industry or area where individuals are working. The table below displays the number of workers in each industry as outlined by the American Community Survey (ACS, 2016).

Table Forty-Two: Employment by Industry in Kentucky (2016)¹⁴³

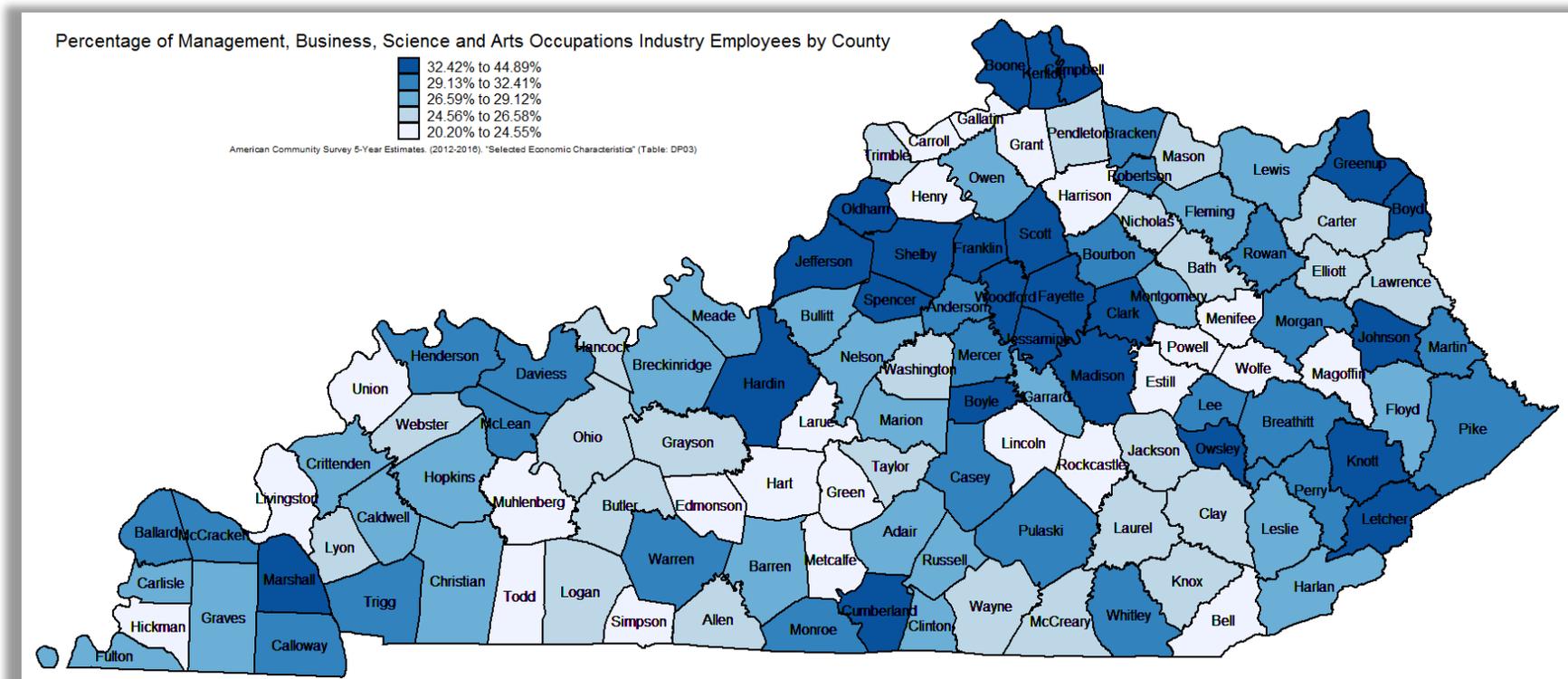
Industry ¹⁴⁴	Number in Industry	Percentage
Management, business, science, and arts occupations	632,394	18.011%
Educational services, and health care and social assistance	458,772	13.066%
Sales and office occupations	454,253	12.938%
Production, transportation, and material moving occupations	328,189	9.347%
Service occupations	319,664	9.104%
Manufacturing	274,015	7.804%
Retail trade	229,338	6.532%
Natural resources, construction, and maintenance occupations	179,689	5.118%
Arts, entertainment, and recreation, and accommodation and food services	167,921	4.783%
Professional, scientific, and management, and administrative and waste management services	151,371	4.311%
Transportation and warehousing, and utilities	114,006	3.247%
Construction	113,338	3.228%
Finance and insurance, and real estate and rental and leasing	104,566	2.978%
Other services, except public administration	88,734	2.527%
Public administration	83,467	2.377%
Wholesale trade	48,474	1.381%
Agriculture, forestry, fishing and hunting, and mining	48,229	1.374%
Information	31,958	0.910%

The following five maps display the distribution of the top five industries across the state: Management, business, science, and arts occupations (18.0%); Educational services, and health care and social assistance (13.0%); Sales and office occupations (12.9%); Production, transportation, and material moving occupations (9.3%); and Service occupations (9.1%). The county level percentages were calculated by taking the number of workers in each industry by county and dividing them by the total number of employed, civilian labor force by corresponding county.

¹⁴³ American Community Survey 5-Year Estimates. (2012-2016). "Selected Economic Characteristics" (Table: DP03)

¹⁴⁴ Definitions for all Industries are outline on the Census website: <https://www.census.gov/programs-surveys/economic-census/technical-documentation/methodology/classification.html>

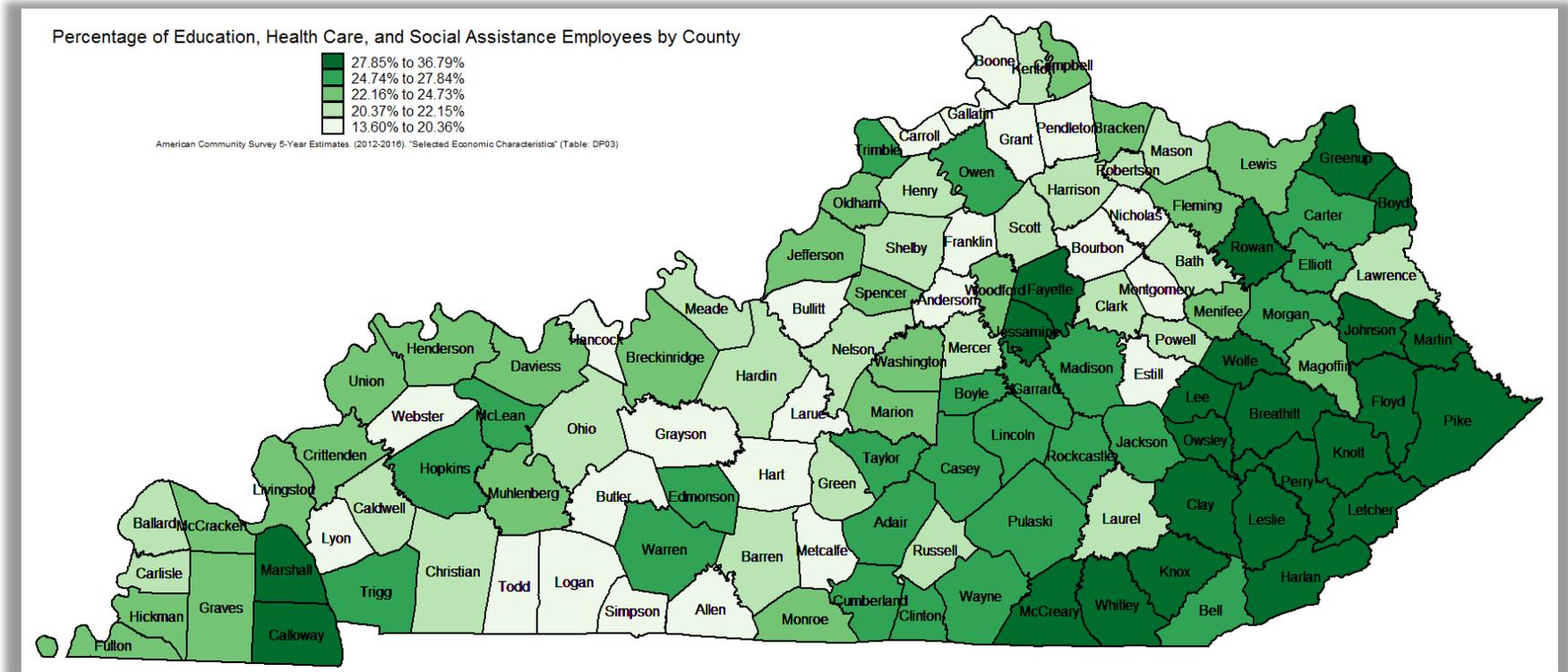
Figure Forty-Three: Percentage of Employed, Civilian Labor Force Working in the Management, Business, Science and Arts Occupations Industry¹⁴⁵



The darker blue areas indicate a high concentration of employment in the Management, Business, Science and Arts Occupations Industry. Within each county, this industry accounts for 44.89% to 20.20% of employment. For the most part, this industry has the highest percentage of employment within the greater Louisville, Lexington, and Northern Kentucky areas. Forty-five percent of Oldham County and 42% of Fayette County's Employed, Civilian Labor force are employed within this industry.

¹⁴⁵ American Community Survey 5-Year Estimates. (2012-2016). "Selected Economic Characteristics" (Table: DP03)

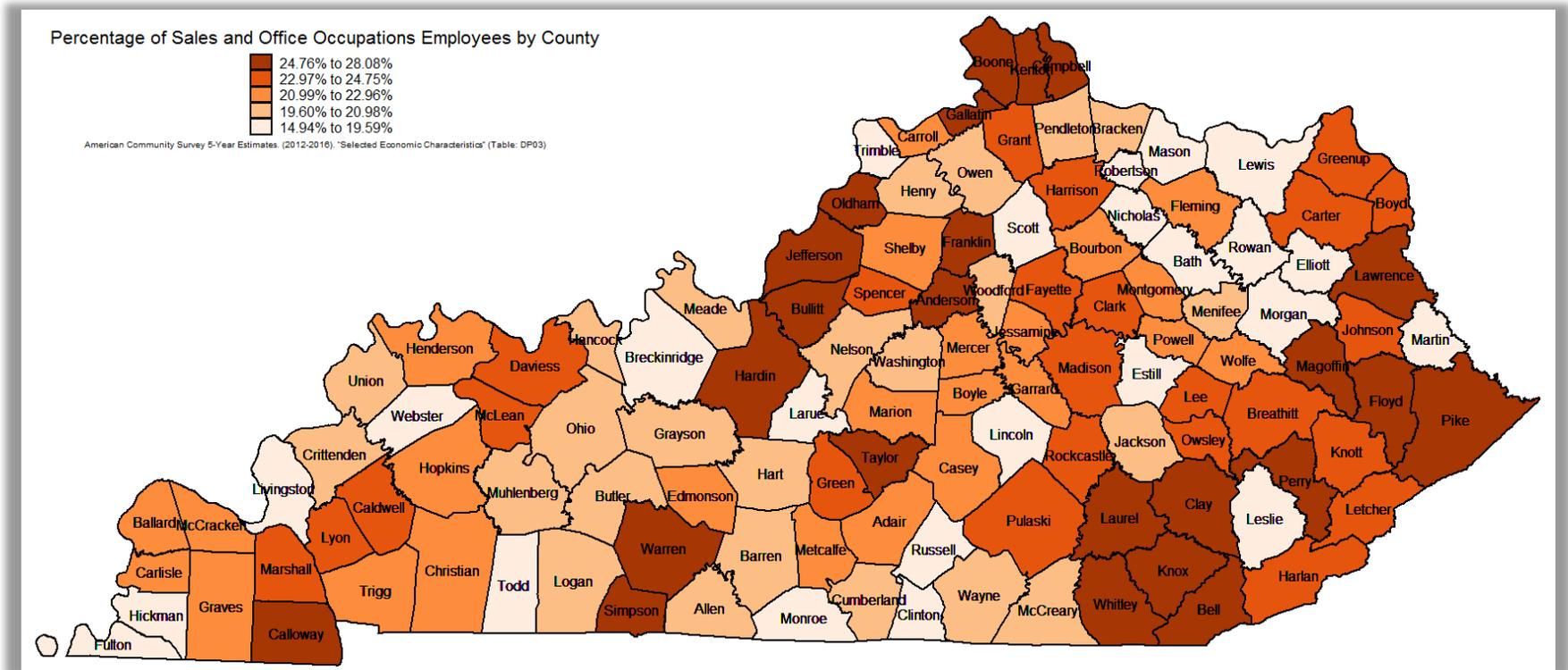
Figure Forty-Four: Percentage of Employed, Civilian Labor Force Working in the Educational Services, Health Care, and Social Assistance Industry¹⁴⁶



The map above displays the percentage of the employed civilian labor force that are working in the Educational Services, and Health Care and Social Assistance Industry. Magoffin, Knott, and Letcher Counties have 36% of their Employed Civilian Labor Force working within this industry.

¹⁴⁶ American Community Survey 5-Year Estimates. (2012-2016). "Selected Economic Characteristics" (Table: DP03)

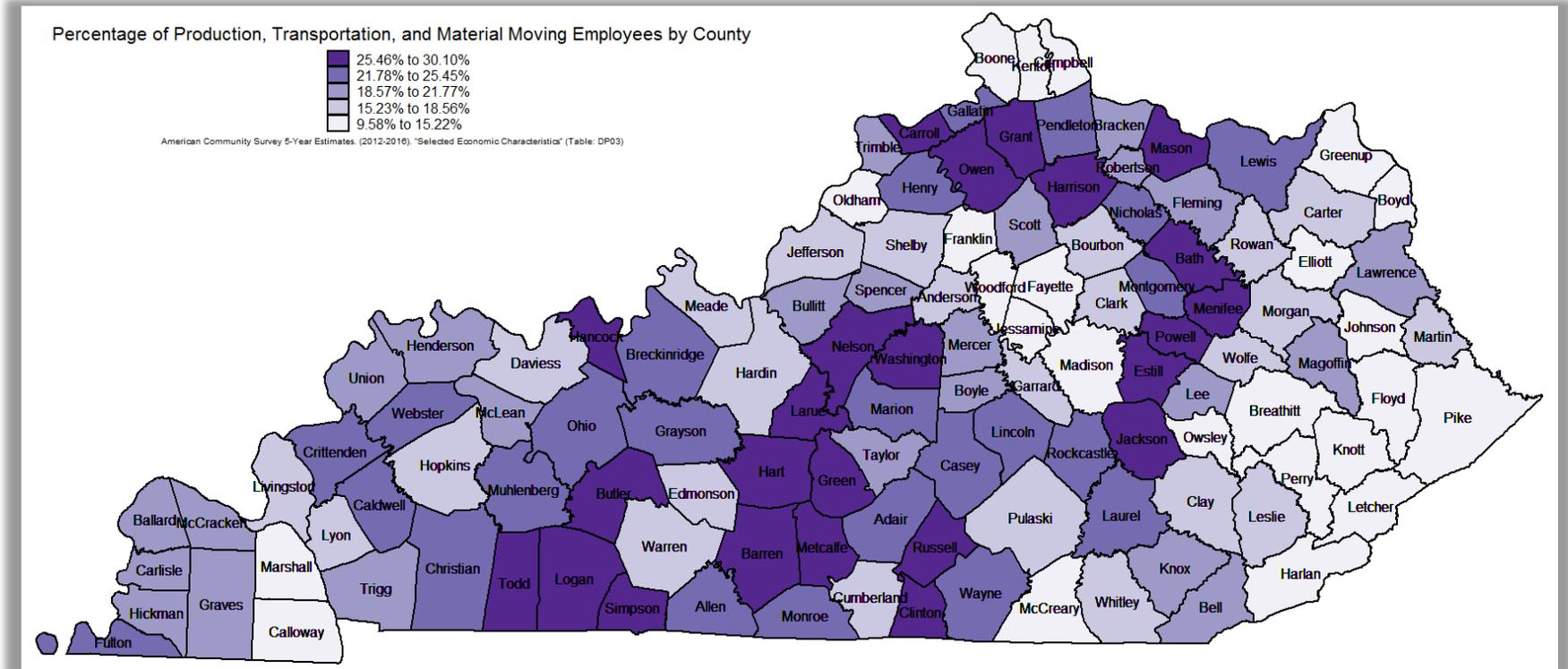
Figure Forty-Five: Percentage of Employed, Civilian Labor Force Working in the Sales and Office Occupations Industry¹⁴⁷



The map above displays the percentage of the employed civilian labor force that are working in Sales and Office Occupations Industry; this industry employs between 14.94% and 28.08% of the labor force within counties. Bullitt (28.08%), Whitley (27.92%), Laurel (27.77%), Boone (27.73%) and Floyd (27.17%) counties have the greatest concentration of this industry.

¹⁴⁷ American Community Survey 5-Year Estimates. (2012-2016). "Selected Economic Characteristics" (Table: DP03)

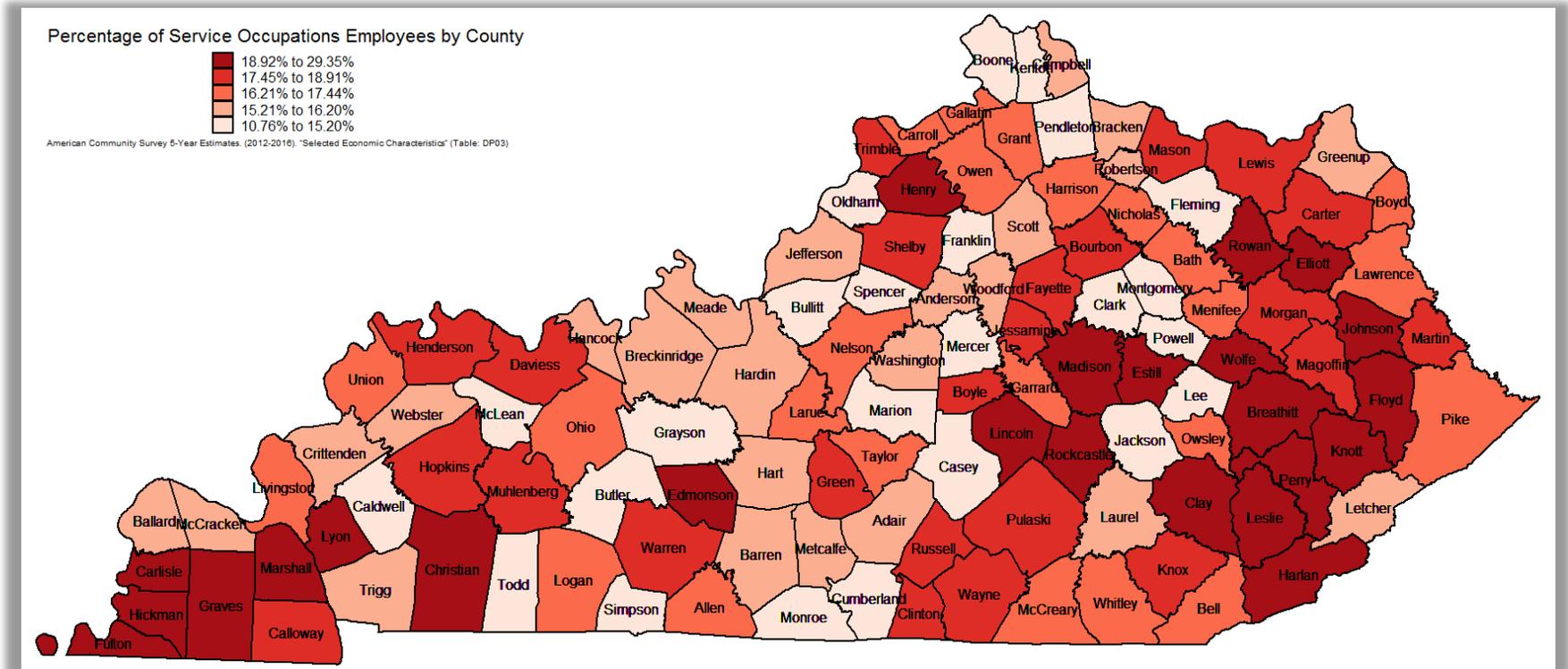
Figure Forty-Six: Percentage of Employed, Civilian Labor Force Working in the Production, Transportation, and Material Moving Occupations Industry¹⁴⁸



The map above displays the percentage of the employed civilian labor force that are working in the Production, Transportation, and Material Moving Occupations Industry; this industry employs between 9.58% and 30.10% of the labor force within counties. Marion (30.10%), Larue (29.75%), Hancock (29.14%), Washington (27.78%), and Powell (27.64%) counties have the greatest concentration of this industry.

¹⁴⁸ American Community Survey 5-Year Estimates. (2012-2016). "Selected Economic Characteristics" (Table: DP03)

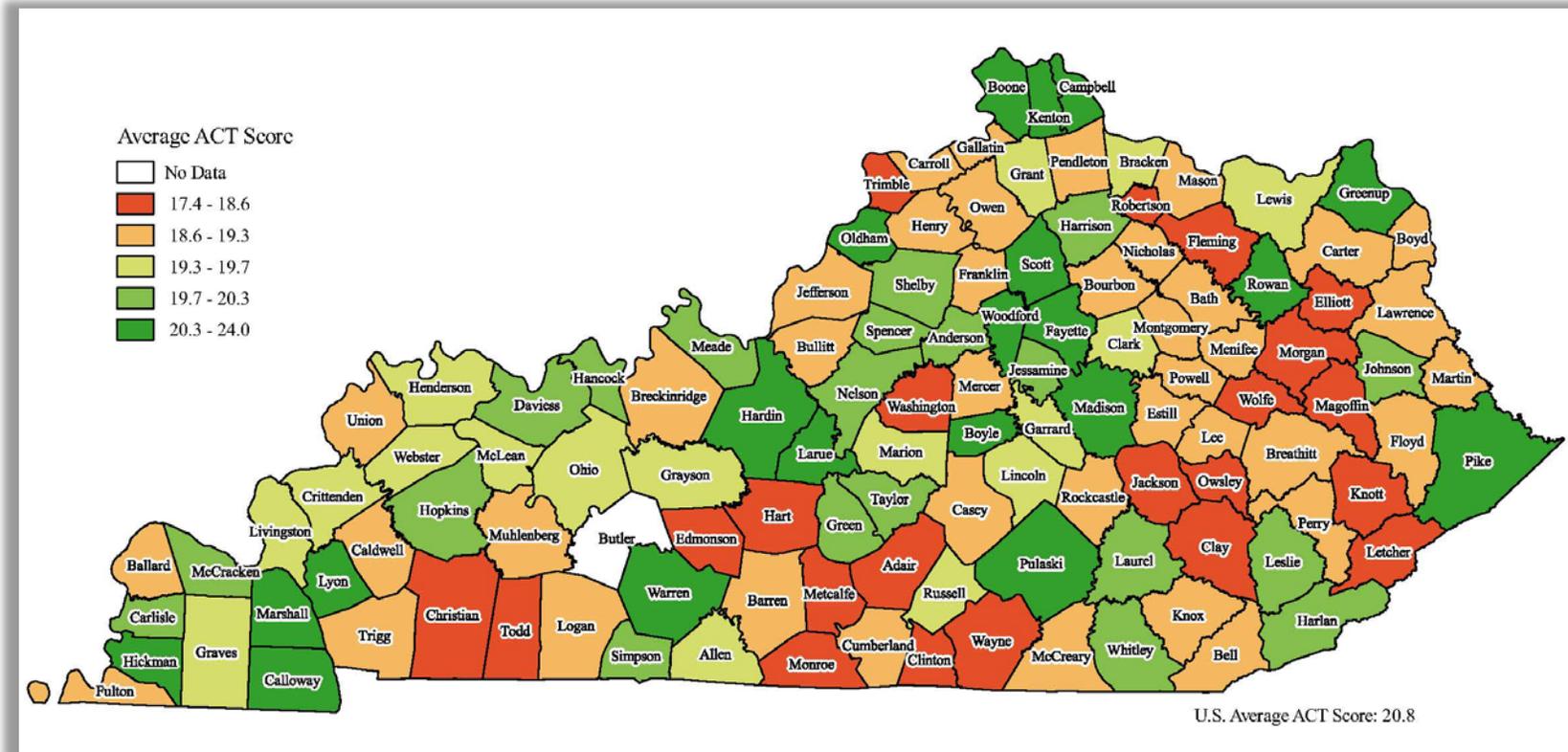
Figure Forty-Seven: Percentage of Employed, Civilian Labor Force Working in the Service Occupations Industry¹⁴⁹



The map above displays the percentage of the employed civilian labor force that are working in the Service Occupations Industry; this industry employs between 10.76% and 29.35% of the labor force within counties. Wolfe (29.35%), Breathitt (24.56%), Rowan (22.96%), Fulton (22.72%), and Lincoln (21.52%) counties have the greatest concentration of this industry.

¹⁴⁹ American Community Survey 5-Year Estimates. (2012-2016). "Selected Economic Characteristics" (Table: DP03)

Figure Fifty: Average American College Testing (ACT) Score for High School Students by County in Kentucky¹⁵²



The American College Testing (ACT) that gauges a student’s proficiency in four required topics and one optional topic: English, math, reading, science, and writing (optional). The four individual scores for each section are aggregated into a composite score, which ranges from one to thirty-six. Nationally, the average ACT score for high school students is 20.8. In Kentucky, the average ACT score for high school students is 19.8, with the lowest average score in Elliott County (17.4) and the highest average composite score in Rowan County (24.0). The map (above) shows the average ACT score by county. Counties shaded in green have higher average ACT scores, while counties shaded in red have low average ACT scores. No data are available for Butler County.

¹⁵² Kentucky Department of Education. Datasets: ACT (Assessment). Retrieved from: <https://applications.education.ky.gov/src/DataSets.aspx>

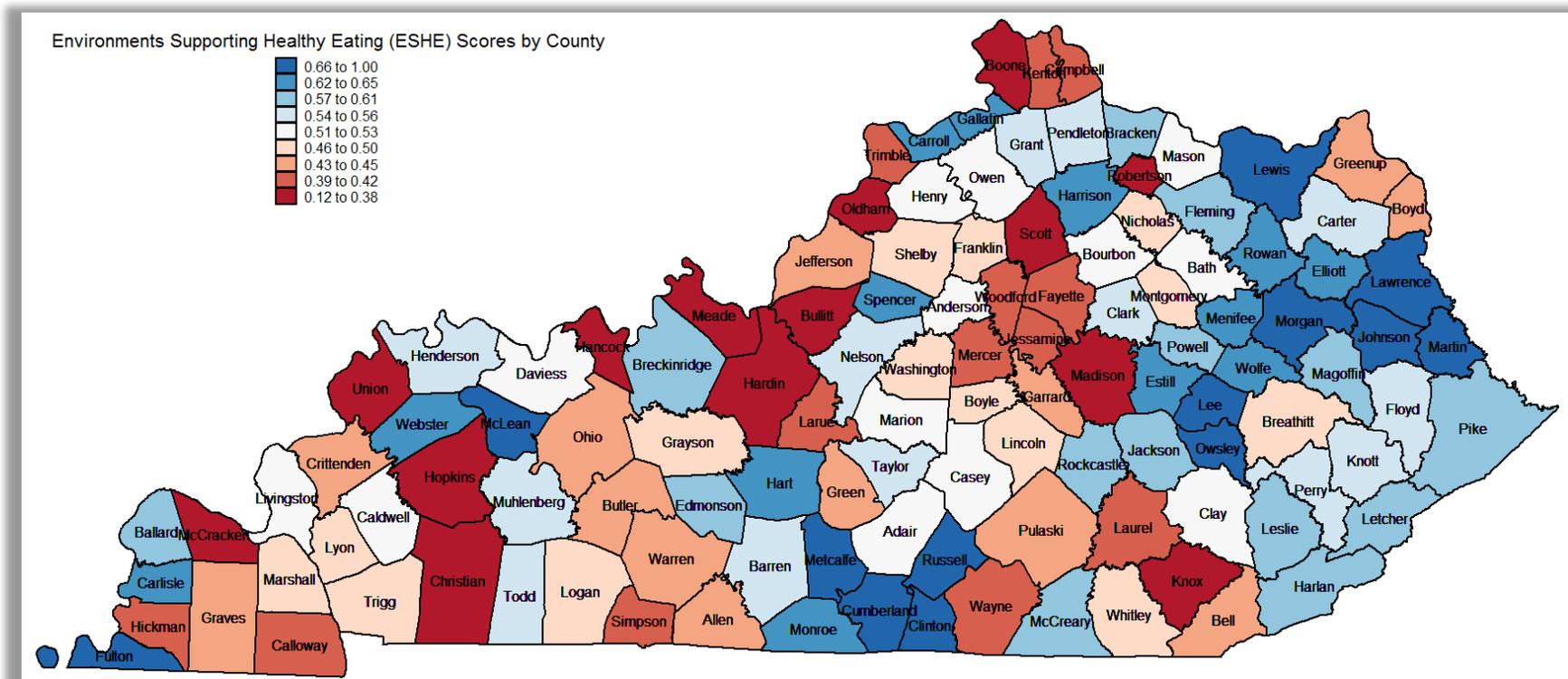
Factors Influencing Health

Access to food

Community Commons, administered and maintained by the University of Missouri who curates the CARES Vulnerable Populations Footprint tool, generates the “Environments Supporting Healthy Eating” (ESHE) index¹⁵³ each year from U.S. Census data and a series of interviews and focus groups. This index includes weighted averages of the following: Low Income Adequate Food Access, Access to SNAP Stores, Access to WIC Stores, Access to Farmers Markets, and Low Income Access to Farmers Markets. Each county receives a score ranging from zero to one, where one signifies the most supportive food environment within the state. In Kentucky, they estimate that Owsley County has the most supportive environment for healthy eating, while Robertson County has the least supportive environment. Figure Fifty-One (next page) displays the ranges of ESHE scores for all counties in the Commonwealth. Overall, the lowest ESHE Scores for Kentucky counties are concentrated in urban areas, suggesting that food deserts in these communities may be driving survey responses lower than in other areas of the state.

¹⁵³ Community Commons. ““Environments Supporting Healthy Eating” (ESHE). Retrieved from: <https://www.communitycommons.org/groups/childhood-obesity-gis/eshe>

Figure Fifty-One: Environments Supporting Healthy Eating (ESHE) Scores by County¹⁵⁴



¹⁵⁴ Community Commons. "Environments Supporting Healthy Eating" (ESHE). Retrieved from: <https://www.communitycommons.org/groups/childhood-obesity-gis/eshe>

Access to Health Care

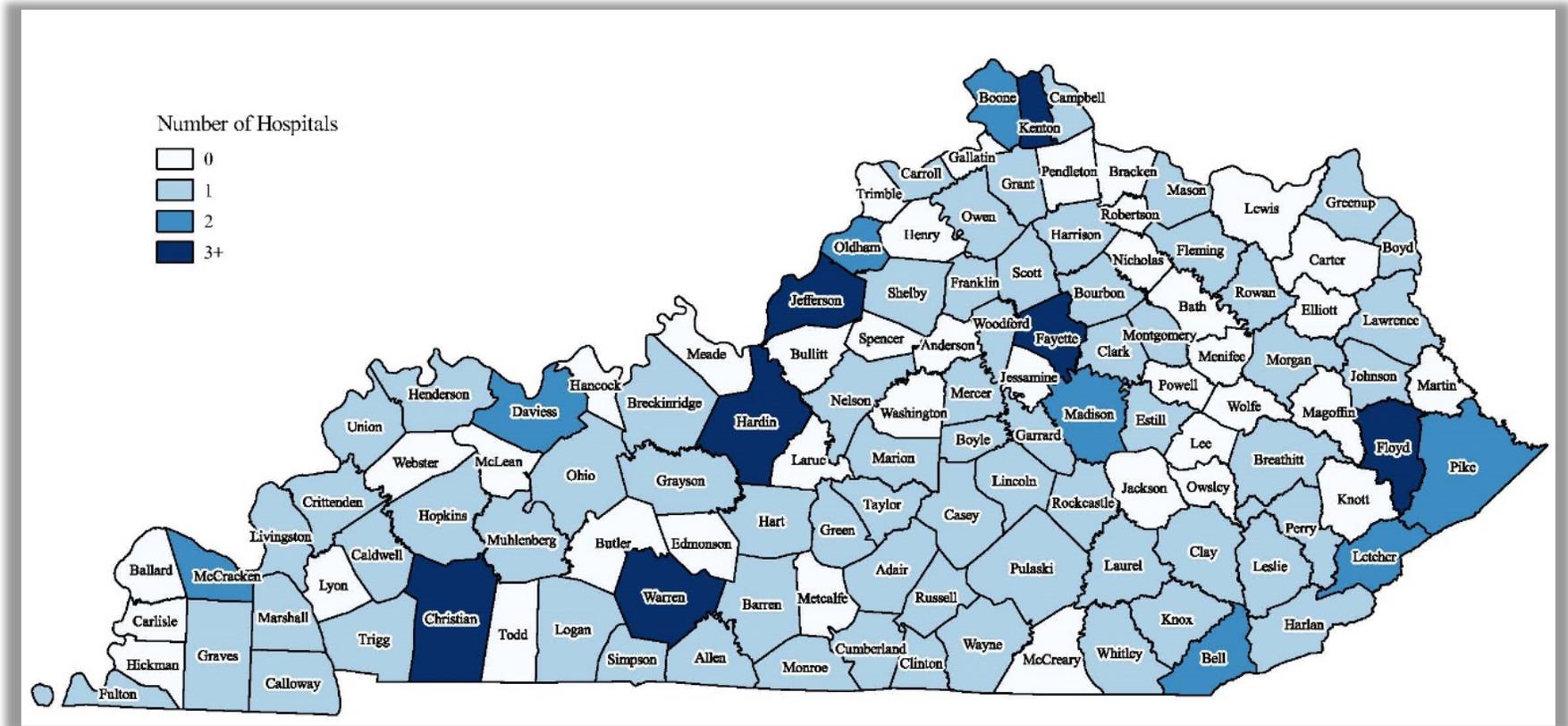
The Dartmouth Atlas of Health Care (2015) provides a list of major medical centers or hospitals by county that provide 24 hour medical care within the county limits. Figure Fifty-Two shows the number of facilities by county. Most counties with a major medical center have only one facility (66 counties); Bell, Boone, Daviess, Letcher, Madison, McCracken, Oldham and Pike Counties have two facilities. Table Forty-Three (below) lists the counties that have more than two major medical centers; Jefferson County has the greatest number with 15. Twenty-eight Kentucky counties do not have a major medical center or hospital within their borders. Figure Fifty-Two (next page) provides a map of the state displaying the number of major medical centers or hospitals by county.

Table Forty-Three: Counties with the Greatest Number of Major Medical Centers or Hospitals¹⁵⁵

County	Number of Hospitals
Jefferson	15
Fayette	9
Kenton	4
Warren	4
Christian	3
Floyd	3
Hardin	3

¹⁵⁵ Dartmouth Atlas of Health Care (2015). Retrieved from: <http://www.dartmouthatlas.org/>

Figure Fifty-Two: Number of Major Medical Centers or Hospitals by County (2015)¹⁵⁶

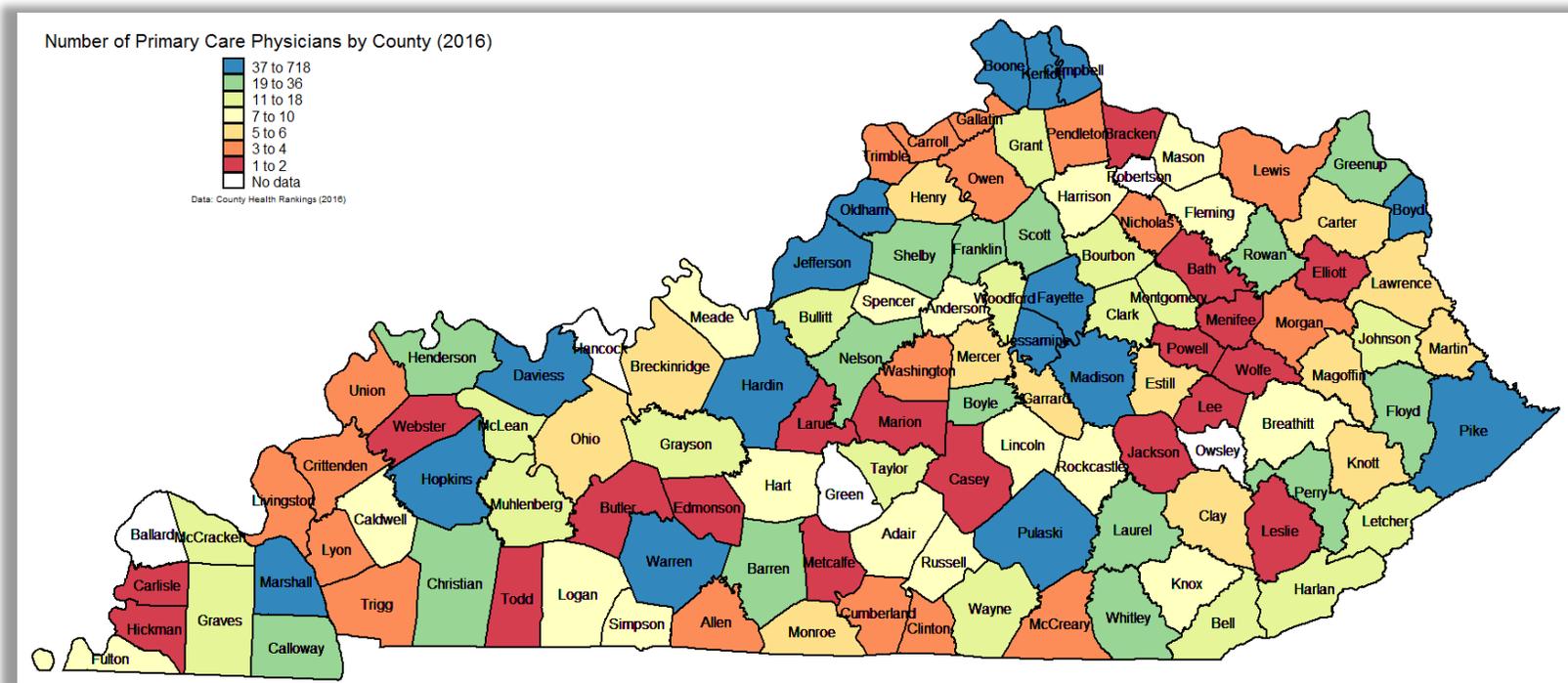


¹⁵⁶ Dartmouth Atlas of Health Care (2015). Retrieved from: <http://www.dartmouthatlas.org/>

The presence of a major medical facility directly influences the number of physicians working within a county, with greater numbers of physicians living in working in these counties. However, many physicians work in private practice outside of the purview of a health care conglomerate and would not be recorded within this metric. Figure Fifty-Three (below) displays the number of primary care physicians by county.

The number of primary care physicians (County Health Rankings, 2017) ranges between one (Bath, Butler, Edmonson, Elliott, Hickman, Larue, Metcalfe, Todd and Wolfe Counties) to 718 (Jefferson County). Ballard, Green, Hancock, Owsley, and Robertson Counties have no data recorded in 2017. As we can see in the map, the number of primary care physicians are, like we saw with hospitals, concentrated the most around areas that are densely populated. In counties with only one to two physicians, the ratio of primary care doctors to population are staggering (e.g. Bath County has a ratio of 1 physician to 12,113 county residents) and many of these counties do not have a 24 hour facility in which its residents can seek medical assistance in case of emergency (e.g. Bath County has zero 24 hour medical facilities).

Figure Fifty-Three: Number of Primary Care Physicians by County (2016)¹⁵⁷



¹⁵⁷ County Health Rankings. (2016). "Kentucky Rankings Data." Retrieved from: <http://www.countyhealthrankings.org/rankings/data/KY>

Appendix A: List of Counties by Congressional District and District Population

1st Congressional District	2nd Congressional District	3rd Congressional District	4th Congressional District	5th Congressional District	6th Congressional District
Population: 720,774	Population: 733,610	Population: 726,812	Population: 731,100	Population: 723,855	Population: 733,205
Adair	Barren	Jefferson	Boone	Bell	Anderson
Allen	Boyle		Boyd	Boyd	Bath
Ballard	Breckinridge		Bracken	Breathitt	Bourbon
Caldwell	Bullitt		Campbell	Carter	Clark
Calloway	Butler		Carroll	Clay	Estill
Carlisle	Daviess		Gallatin	Elliott	Fayette
Casey	Edmonson		Grant	Floyd	Fleming
Christian	Garrard		Greenup	Harlan	Franklin
Clinton	Grayson		Harrison	Jackson	Harrison
Crittenden	Green		Henry	Johnson	Jesamine
Cumberland	Hancock		Jefferson	Knott	Madison
Fulton	Hardin		Kenton	Knox	Menifee
Graves	Hart		Lewis	Laurel	Montgomery
Henderson	Jessamine		Mason	Lawrence	Nicholas
Hickman	Larue		Oldham	Lee	Powell
Hopkins	Meade		Owen	Leslie	Robertson
Livingston	Mercer		Pendleton	Letcher	Scott
Logan	Nelson		Shelby	Lincoln	Wolfe
Lyon	Spencer		Spencer	Magoffin	Woodford
Marion	Warren		Trimble	Martin	
Marshall	Washington			McCreary	
McCracken				Morgan	
McLean				Owsley	
Metcalfe				Perry	
Monroe				Pike	
Muhlenberg				Pulaski	
Ohio				Rockcastle	
Russell				Rowan	
Simpson				Wayne	
Taylor				Whitley	
Todd					
Trigg					
Union					
Washington					
Webster					

*Boyd, Harrison, Jefferson, Jessamine, Spencer, and Washington Counties are split between districts