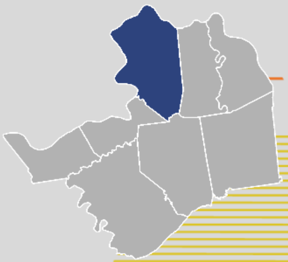
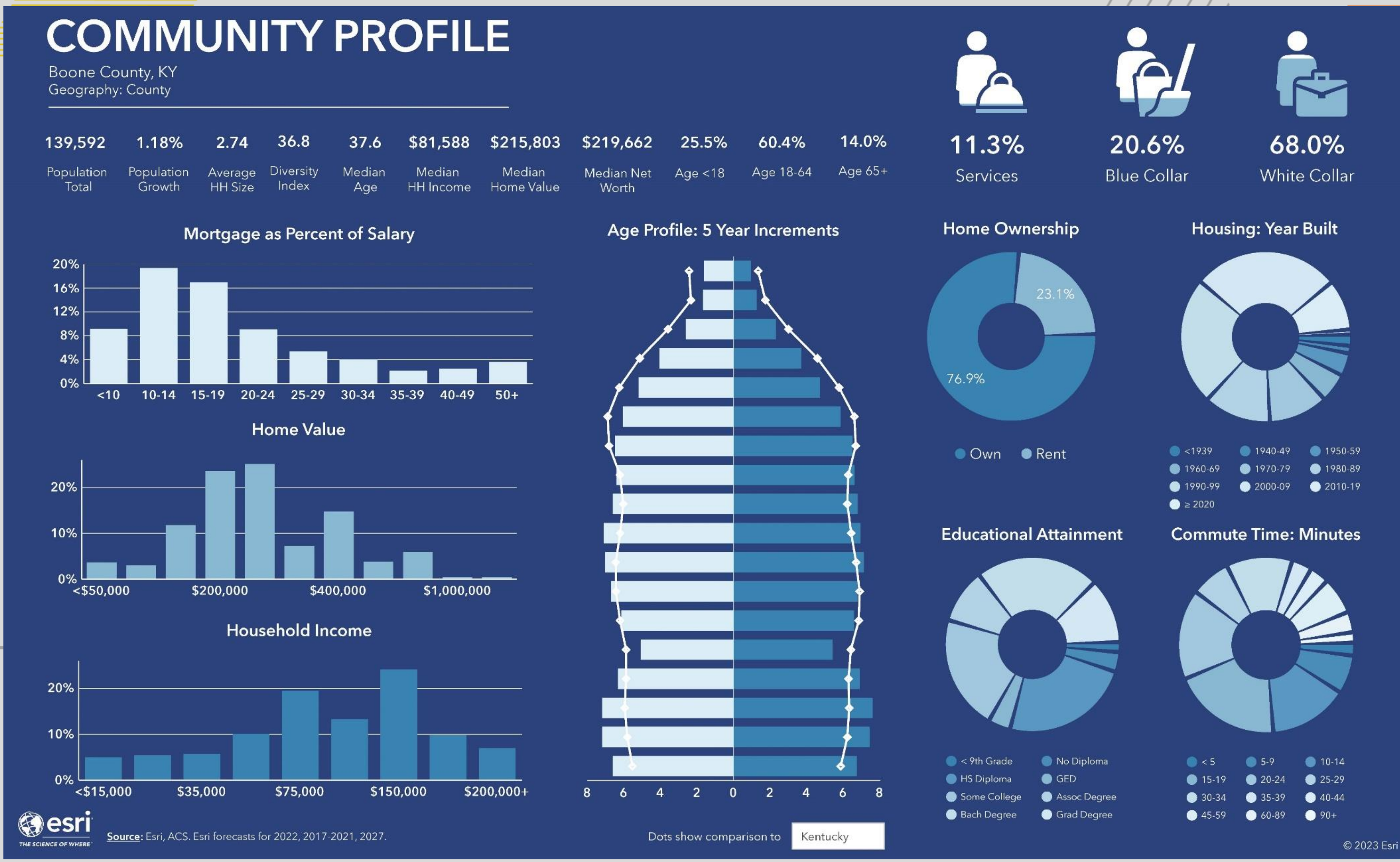


Boone County



High Level Analytical Take-Aways

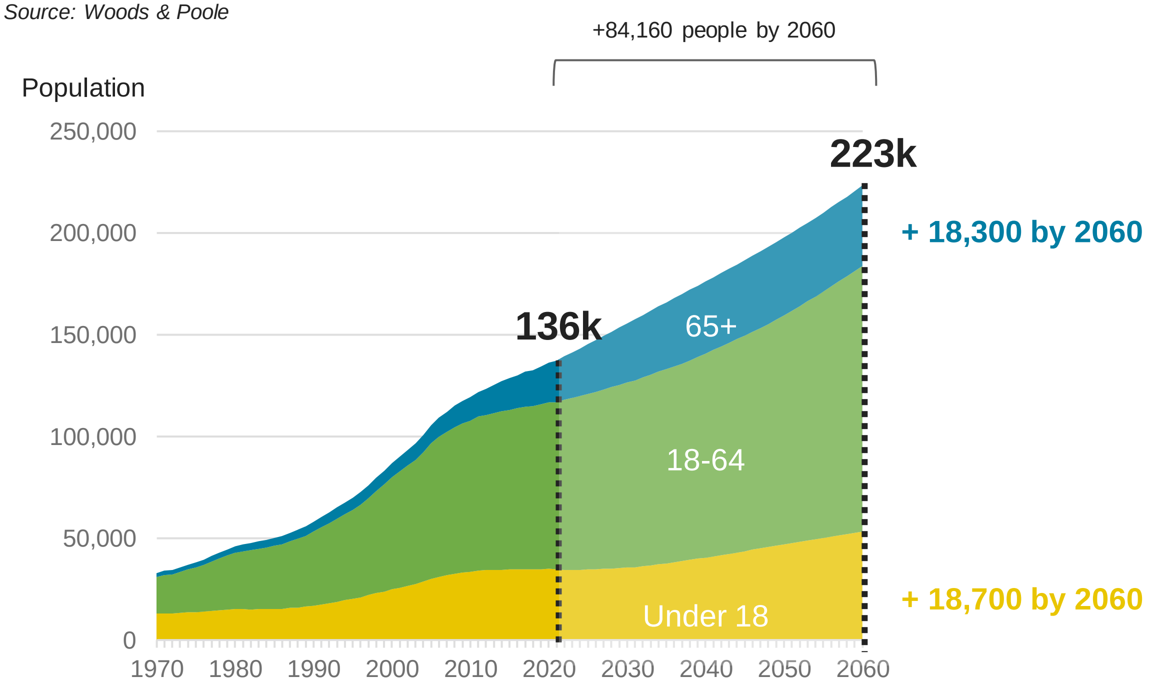
- **Connectivity:**
  - Boone County and its cities of Florence and Burlington are regional centers for the NKADD region. It has high trip ends per square foot for shopping, recreation and employment.
  - Florence and Burlington development scores highly relative to elsewhere in the region for walkability, indicating higher density housing development near regional draws.
  - The southern half of the county – Walton and Union – are proximally located to the logistics industry concentrated by the airport to the North and to the manufacturing parks extending south. Newer retail development is producing a node south of Florence that provides everyday services for newer subdivisions in the southern half of the county and extending into Owen.
- **Economy:**
  - Boone's economy contains structural diversity, but its largest growth segment is in logistics and transportation. These jobs range from lower end salaries in temporary and entry-level warehouse jobs, to middle income salaries at the airport, logistics management, and in trucking. Lower-wage jobs are a heavy part of the logistics employment structure, and many entry-level workers will continue to earn incomes below the county median. Pockets of lower-income neighborhoods are located in Burlington, Hebron and east of Florence, where people are more rent-burdened. These neighborhoods are also disproportionately people of color and foreign born, indicative of racial and ethnic disparities in the employment market.
  - Extending south from Florence to Walton is a robust manufacturing cluster that complements regional strengths in plastics, engines, and food processing that provides a mix of lower-wage routine labor and higher skilled professional and engineering services.
- **Housing:**
  - Boone's housing market grew faster than anywhere else in the region during the 2000s. Housing development is concentrated in single family development and rental complexes affordable for middle to upper-middle incomes, often in larger sizes relative to existing household demand. New developments often target higher income workers that commute into Cincinnati.
  - A gap exists for housing for lower-income workers in the fastest growing sectors, with these workers often commuting from western Kenton, northern Grant County and other NKADD counties. New development in the higher ends may relieve pricing pressure in the middle, but without broader opportunities for both low-income ownership and rental, the county's broader economic competitiveness may be hindered.
  - New housing in Walton and Union are providing a mix of suburban single-family and 'missing middle' condos, townhomes, and affordable rentals. This housing stock could be expanded in the years to come.

Boone County's young and old populations are projected to grow by a similar amount by 2060

Boone County, KY is expected to experience significant population growth until 2060, with estimates projecting an increase of over 84,000 residents. The county is also expected to become more diverse, with a growing Hispanic population.

Population, by age group

Source: Woods & Poole



Boone County is projected to add 64,000 more jobs by 2060. The sector mix is not projected to change as significantly as in other counties

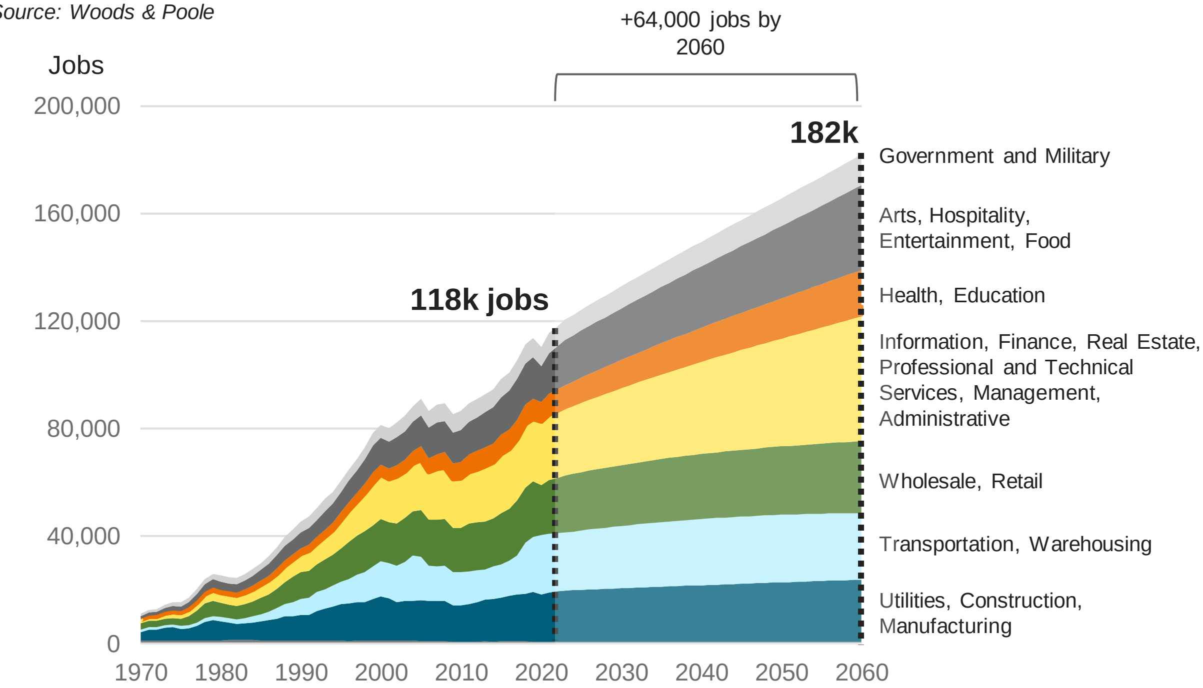
The employment data used by Woods & Poole comprise the most complete definition of the number of jobs by county.

The employment data are by two-digit North American Industry Classification System (NAICS) industry. Woods & Poole has estimated the NAICS industry data for 1969-2000 from the BEA SIC 1969-2000 employment industry data and the NAICS employment industry data for the years 2001-2020. The employment data include wage and salary workers, proprietors, private household employees, and miscellaneous workers.

The accuracy of Woods & Poole's projections has been comparable to the accuracy of other regional forecasting programs, such as the Department of Commerce Bureau of Economic Analysis (BEA) and Census Bureau projections over comparable forecast horizons.

Employment, by sector

Source: Woods & Poole



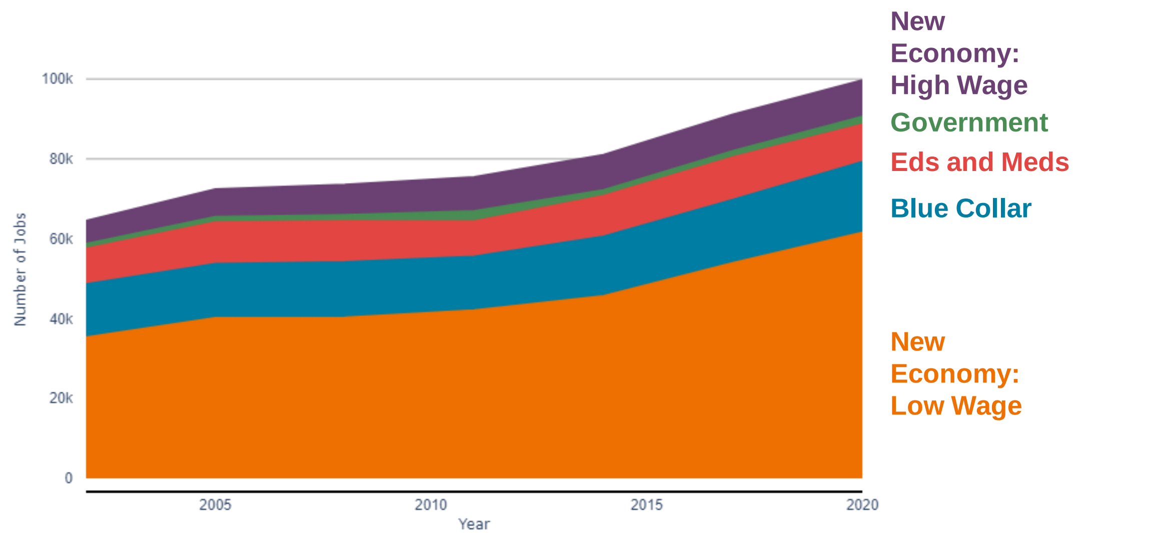
Boone County is a logistics hub

Boone is a major employment hub, with more people working in Boone than employed people who live in Boone! 27,829 people live in and work in Boone County, making Boone County residents the largest share of all holders of Boone County jobs. They are closely followed by Kenton County and Hamilton County residents commuting into Boone jobs.

Boone's main employment sectors are in the logistics economy, with warehousing, couriers, air transport workers central to the region's growth since 2013. This tightly couples with Amazon's expansion in the region and its centrality to Amazon's broader distribution network. These jobs pay low-middle income salaries, whereas broader transport jobs pay middle-income salaries. The logistics sector is complemented by lower-wage service sector jobs with the lowest incomes, and a mix of higher income professional jobs situated at local regional corporate offices such as ADM in Florence.

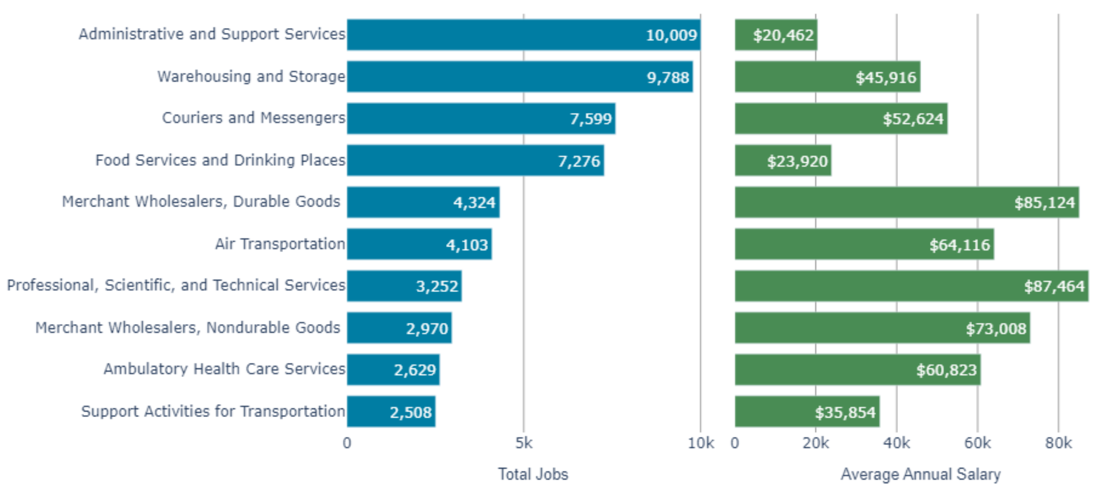
County Industrial Structure

Source: LEHD, 2002-2020



County Wages in Key Occupations

Source: BLS: Quarterly Census of Employment and Wages (3Q 2022)
**sample is not exhaustive of all employees, but is indicative of proportions*

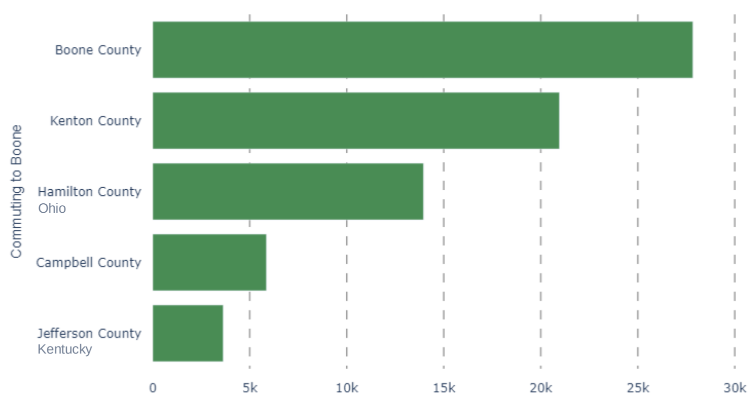


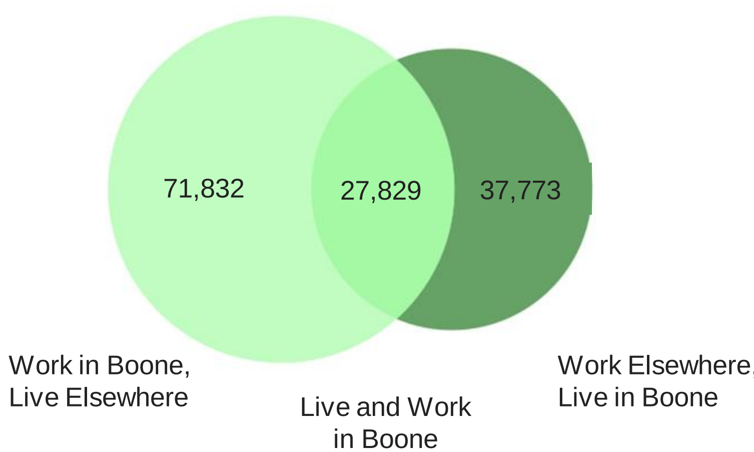
Boone is an employment hub that imports labor

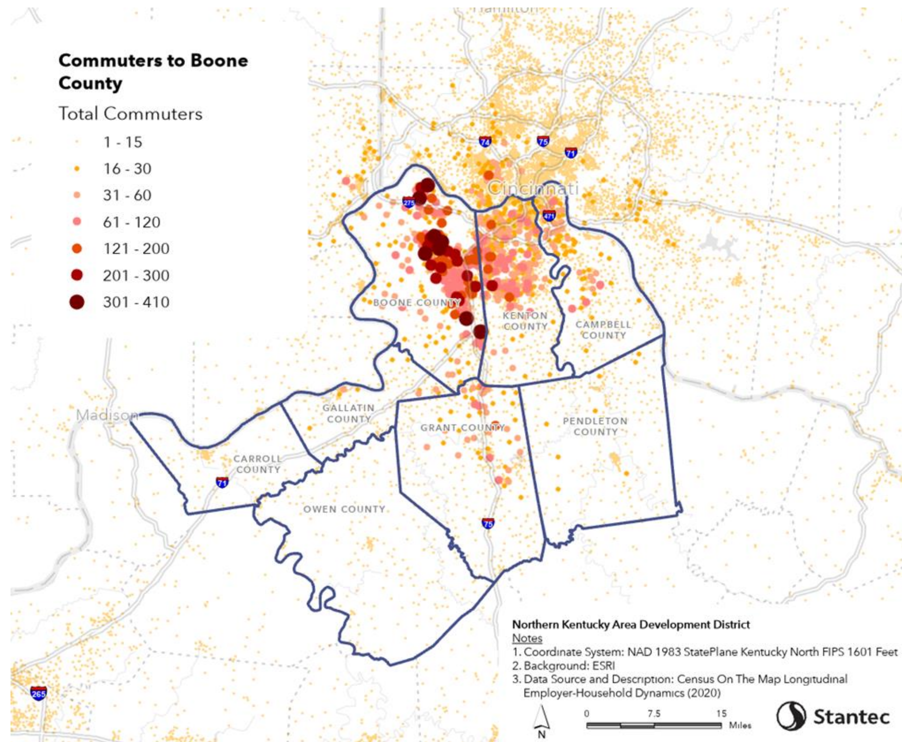
Chart and map of home locations for county employees

Commuting to County Jobs

Source: LEHD, 2020







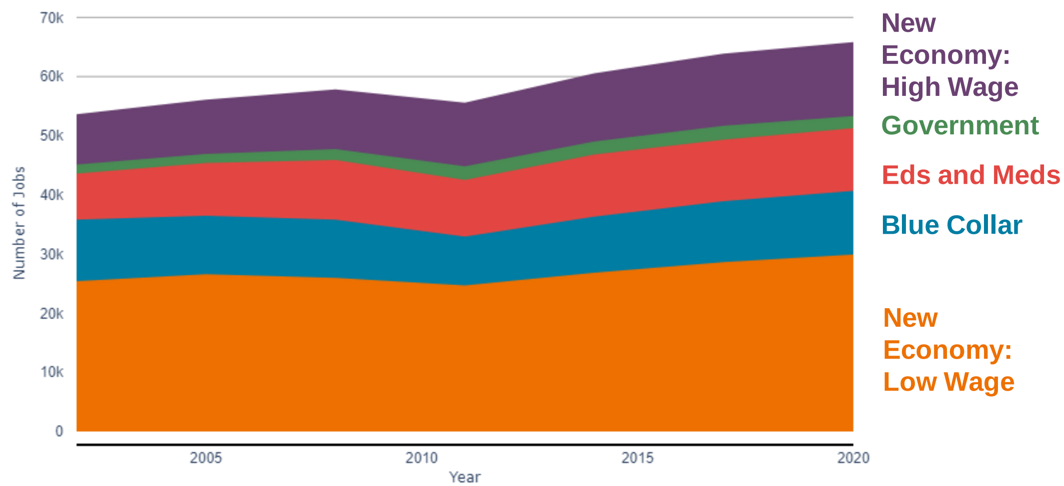
Boone Residents: Work in higher paid jobs

More Boone County residents work in New Economy High Wage positions, Education, and Healthcare than the amount of those jobs located in the County. These residents predominantly live in newer Boone single-family subdivisions and commute to Cincinnati, Covington or Newport. More than 3,000 workers also commute to Jefferson County in Indiana – a number more than any other NKADD county. In addition to the large amount of middle-income logistics jobs, this elevates Boone's median household income to north of $81,000, the highest in the region.

As a result, we can deduce that Boone County imports large sections of its low-wage logistics labor force from other parts of the broader Cincinnati and NKADD region.

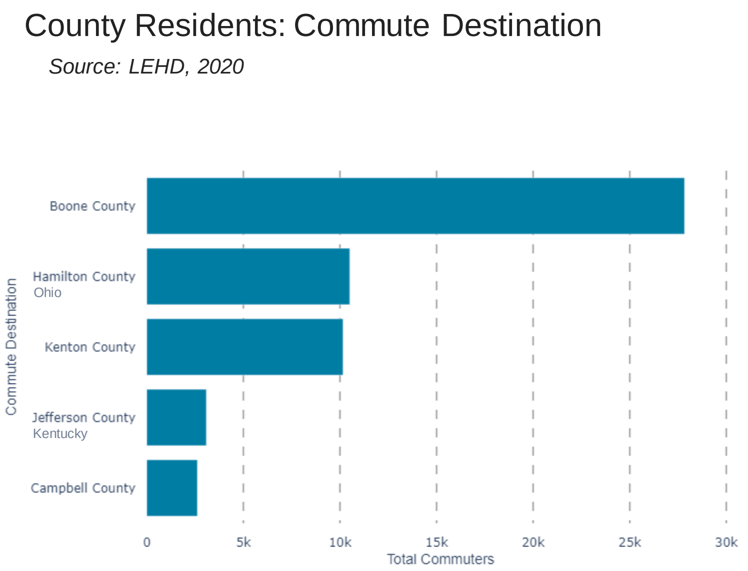
County Residents: Industry Sector Employed

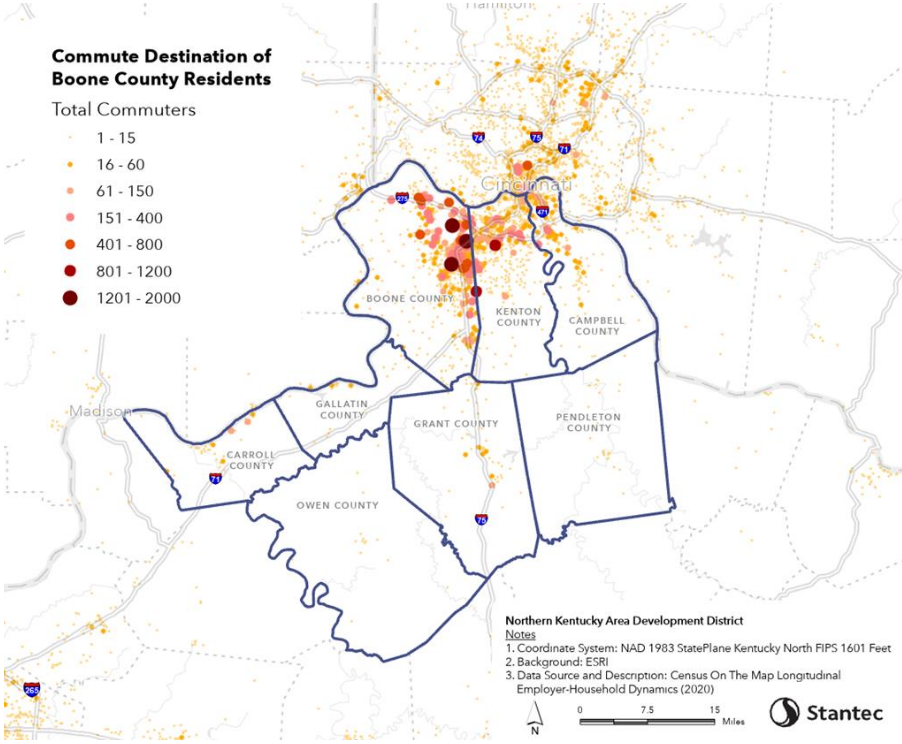
Source: LEHD, 2002-2020



A large proportion of residents work locally

Chart and map of work locations for county residents





Boone is deficient in smaller, less expensive rental units as well as 1- and 2-bed ownership units

Housing demand in Boone reflects the higher household incomes of its residents, and the robust lower to lower-middle income structure of its economy. As households continue to get smaller and new residents enter into the job market in entry roles, demand will persist for lower wage rental and ownership opportunities. Investing in housing that is less than $1,380 in monthly costs - or 30% of the average warehouse job salary - will ensure Boone's regional competitiveness as a logistics hub, putting less upward pressure on wages.

Housing demand: households profiled by tenure, size, and spending capacity

Source: Woods & Poole, Replica, ACS, CoStar, Apartments.com, Padmapper

		Rent				Own			
Household Income Required	Max Monthly Housing Cost	1BR	2BR	3BR	4BR+	1BR	2BR	3BR	4BR+
Less than $15000	$313	512	490	254	39	66	343	619	195
$15,000-24,999	$521	744	622	298	64	92	491	878	229
$25,000-34,999	$729	480	695	384	55	58	384	930	262
$35,000-49,999	$1,042	645	917	531	114	90	656	1,978	637
$50,000-74,999	$1,563	517	980	691	152	122	917	3,263	1,383
$75,000-99,999	$2,083	297	699	664	258	85	554	2,462	1,374
$100,000-149,999	$3,125	75	315	368	124	82	655	4,268	3,739
$150,000-199,999	$4,167	24	90	122	59	23	263	1,881	2,798
$200,000 or more	--	32	56	45	11	11	122	964	2,038

Boone is deficient in smaller, less expensive rental units as well as 1- and 2-bed ownership units

Housing development in Boone County has been robust as the county grows into a major employment cluster. Historic housing production focused on creating mid-tier affordable housing product in suburban sub-divisions, converting former rural land into residential land uses. These units – in particular new construction – is focused for higher income households in the region, putting a strain on the lower and middle-end of the housing market. This is producing a disjuncture where many of Boone's lower and middle income logistics workers are instead living further afield in pursuit of more affordable options.

Housing supply: units categorized by tenure, size, and monthly cost

Source: Woods & Poole, Replica, ACS, CoStar, Apartments.com, Padmapper

		Rent				Own			
Household Income Required	Max Monthly Housing Cost	1BR	2BR	3BR	4BR+	1BR	2BR	3BR	4BR+
Less than $15,000	$313	0	0	0	0	2	163	667	24
$15,000-24,999	$521	3	5	0	0	7	88	582	18
$25,000-34,999	$729	504	140	61	0	8	83	331	31
$35,000-49,999	$1,042	1,220	1,991	119	0	28	546	483	45
$50,000-74,999	$1,563	1,043	2,903	1,091	0	64	2,326	3,086	326
$75,000-99,999	$2,083	38	1,862	1,716	79	23	1,055	7,084	1,308
$100,000-149,999	$3,125	18	242	632	633	23	610	6,305	7,286
$150,000-199,999	$4,167	0	0	15	88	11	82	914	2,687
$200,000 or more	--	0	0	0	0	6	32	231	770

Boone is deficient in smaller, less expensive rental units as well as 1- and 2-bed ownership units

The housing gap clearly indicates Boone's continued focus on single family and rental housing for higher income households. The mismatch between current housing demand and market supply means that lower income renters are competing with higher income persons for similar middle-income housing, pushing prices upwards. Opportunity exists for both higher end development to release pressure in the middle, and a significant need for lower income housing across size and ownership structure.

Difference between supply and demand: units by tenure, size, and monthly cost

Source: Woods & Poole, Replica, ACS, CoStar, Apartments.com, Padmapper

		Rent				Own			
Household Income Required	Max Monthly Housing Cost	1BR	2BR	3BR	4BR+	1BR	2BR	3BR	4BR+
Less than $15000	$313	-512	-490	-254	-39	-64	-180	48	-171
$15,000-24,999	$521	-743	-621	-298	-64	-85	-403	-296	-211
$25,000-34,999	$729	-437	-681	-380	-55	-50	-301	-599	-231
$35,000-49,999	$1,042	-617	-797	-502	-114	-62	-110	-1,495	-592
$50,000-74,999	$1,563	-485	-708	-149	-152	-58	1,409	-177	-1,057
$75,000-99,999	$2,083	-279	645	717	-179	-62	501	4,622	-66
$100,000-149,999	$3,125	-57	-73	218	509	-59	-45	2,037	3,547
$150,000-199,999	$4,167	-24	-90	-107	29	-12	-181	-967	-111
$200,000 or more	--	-32	-56	-45	-11	-5	-90	-733	-1,268

Note on interpretation: Blue cells denote a deficit of housing at that size and price point. For example, there is a deficit of one- and two-bedroom units in the home ownership market. The darker the color, the deeper the deficit. Red cells represent a housing surplus, or where the supply of housing is larger than current demand. Here, there is a surplus of 3- and 4-bedroom units in mid-price ranges.

New Construction (Since 2000) in Boone for Ownership

New construction in Boone for home-ownership is concentrated in single-family subdivisions targeting 3-4BR+ households earning between $75,000 per year and $150,000. Construction in this range includes many major subdivisions outside of Burlington, Florence, and extending south into Walton. Newer subdivisions are emerging in Walton and Owen with price points starting in the low $300,000 range, or approx. $2,035 per month.

Manufactured homes remain the main option for home ownership for low-income households, whereas new condos are targeted for smaller households earning above $50,000. Condos are concentrated in Southeastern Florence, but spare in comparison to single family detached.

Boone's housing serves more than just its local workforce, with Boone County market-rate development currently serving households that tend to earn more than the most common logistics and transport jobs hosted in the region. 20.4% of new single-family homes are affordable for households earning the county's median household income.

		Condominium				Duplex	Manufactured Home		Single Family				Town house
Household Income Required	Max Costs	1BR	2BR	3BR	4BR+	4BR+	2BR	3BR	1BR	2BR	3BR	4BR+	2BR
Less than $15,000	$313	0	0	0	0	0	2	17	0	0	86	2	0
$15,000-24,999	$521	0	34	0	0	0	7	88	0	1	60	2	0
$25,000-34,999	$729	0	1	0	0	0	2	23	0	2	89	18	0
$35,000-49,999	$1,042	2	64	1	0	0	3	17	0	2	93	23	1
$50,000-74,999	$1,563	3	703	19	19	0	0	13	2	22	154	23	13
$75,000-99,999	$2,083	4	459	103	6	3	1	0	2	92	2,356	329	0
$100,000-149,999	$3,125	1	181	17	1	1	0	0	9	221	3,004	3,819	0
$150,000-199,999	$4,167	0	0	0	0	0	0	0	7	48	498	1,866	0
$200,000 or more	--	0	0	0	0	0	0	0	2	25	151	591	0

Source: Woods & Poole, Replica, ACS, CoStar, Apartments.com, Padmapper

Ownership development examples

Condos

2234 Jackson Court, Florence KY
Suburban Condominiums

1, 2 and 3 Bedrooms

Ranges from $180,000-200,000
($1,280 month cost of ownership)

Suburban Single Family

3845 Sonata Dr, Union, KY

Single family housing in new suburban subdivisions.

3-4+ Bedrooms.

Range $280,000-$450,000
($2,230 month cost of ownership)

Condos

New Development: Preston at Plantation Pointe
1001 Maggie's Way, Florence KY
Developer: Drees Homes

2-3 Bedrooms

Prices Start at $264,450
($1,800 month cost of ownership)

Suburban Single Family

New Development, Traemore Gardens, Union, KY
Developer: Drees Homes (Large builder of regional suburban homes)

Bedrooms: 3 and up

Houses range $509,000 and above
($3,375 month cost of ownership)

New Construction (Since 2000) in Boone, Rentals

New construction in Boone for the rental market is concentrated in large 'Garden Style' rental complexes with amenities. Rents mostly range from $1,000-$1,500 for this development type.

Single family homes and single condominium units for rent tend to be more expensive, whereas Low-Rise apartment homes, duplexes, and small apartment buildings offer some more affordable rent options.

It is rare to find units for less than $700, especially amongst newer construction as construction costs rise.

		Apartments			Condominium				Duplex			Garden			Low-Rise			Mobile Home		Single Family				Town house
Household Income Required	Max Costs	1BR	2BR	3BR	1BR	2BR	3BR	4BR+	2BR	3BR	4BR+	1BR	2BR	3BR	1BR	2BR	3BR	2BR	3BR	1BR	2BR	3BR	4BR+	3BR
Less than $15,000	$313	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$15,000-24,999	$521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$25,000-34,999	$729	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
$35,000-49,999	$1,042	45	20	0	0	0	0	0	138	0	0	177	339	0	0	33	10	0	0	0	0	1	0	1
$50,000-74,999	$1,563	0	62	141	4	23	0	0	0	0	0	411	1,314	234	0	0	0	40	54	0	0	22	0	0
$75,000-99,999	$2,083	0	0	0	2	743	82	9	1	0	1	0	106	142	0	0	0	1	3	0	20	448	16	0
$100,000-149,999	$3,125	0	0	0	0	32	25	6	0	1	50	0	0	0	0	0	0	0	0	5	13	208	223	0
$150,000-199,999	$4,167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	69	0
$200,000 or more	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Woods & Poole, Replica, ACS, CoStar, Apartments.com, Padmapper

Rental development Types

Garden

Towne Creek Crossing
13173 Service Road, Walton KY
LIHTC Affordable Units
Developer: Woda Cooper Companies

44 Units
1, 2, and 3 Bedrooms

Rent
1 Bed = $647
2 Bed = $776
3 Bed = $889

Garden

Windridge Townhomes
6700 Hopeful Rd, Florence KY

1, 2, and 3 Bedroom Units

Rent
1 Bed = $1,459
2 Bed = $1,614
3 Bed = $2,038

Mid-Rise

Tapesty Turfway
4787 Houston Rd, Florence KY

1, 2 and 3 Bedrooms

Rent
1 Bed = $1,400
2 Bed = $1,675
3 Bed = $2,050

Low-Rise

Sanctuary Place
1900 Sanctuary Place
Hebron, KY

1, 2, and 3 Beds

Rent
1 Bed = $945
2 Bed = $1,275
3 Bed = $1,520

Boone County is projected to add 8,100 households in the next ten years.

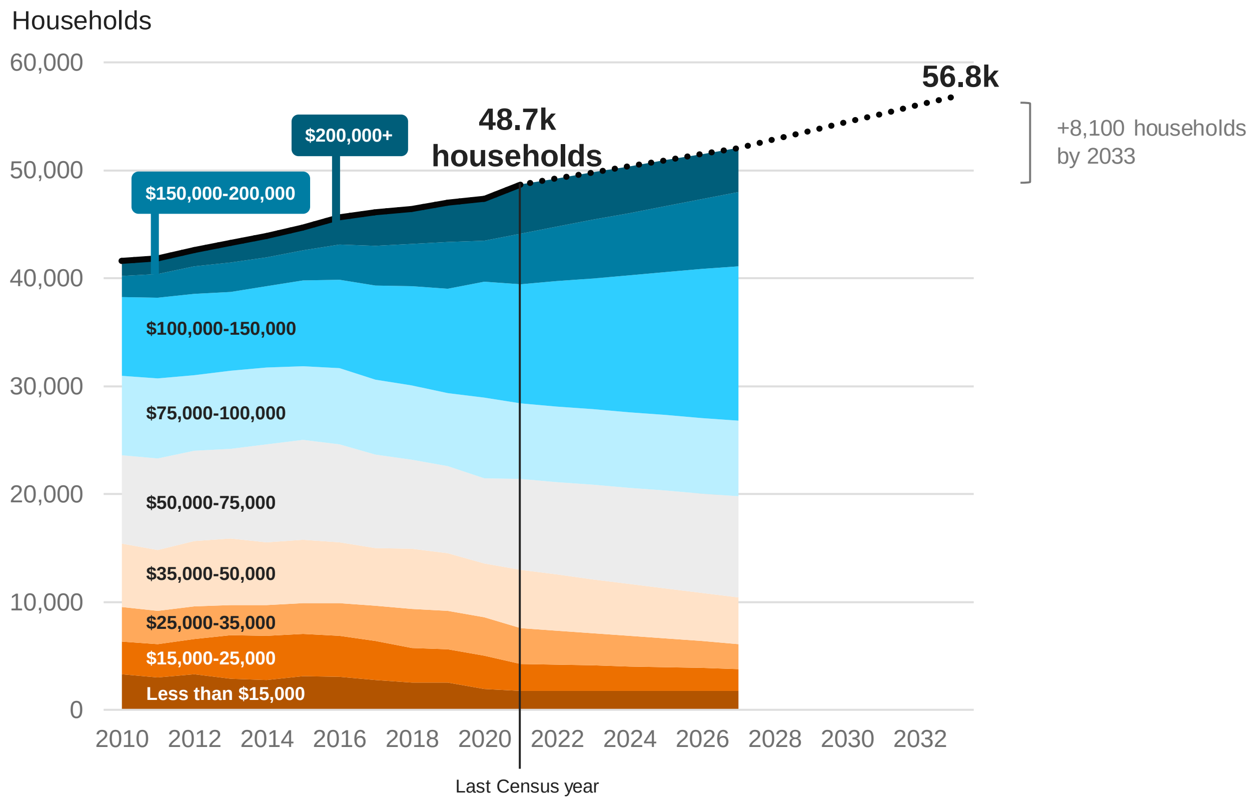
This table tracks total household change over time by income to indicate overall trends as well as growth or reduction within individual income brackets.

These income brackets correspond to household income and housing unit cost levels on other charts in this section to help compare the current status with historical and future conditions.

Boone County is rapidly growing, especially in the higher-income segments.

Boone County Households, by income bracket

Source: ACS, ESRI, Woods & Poole



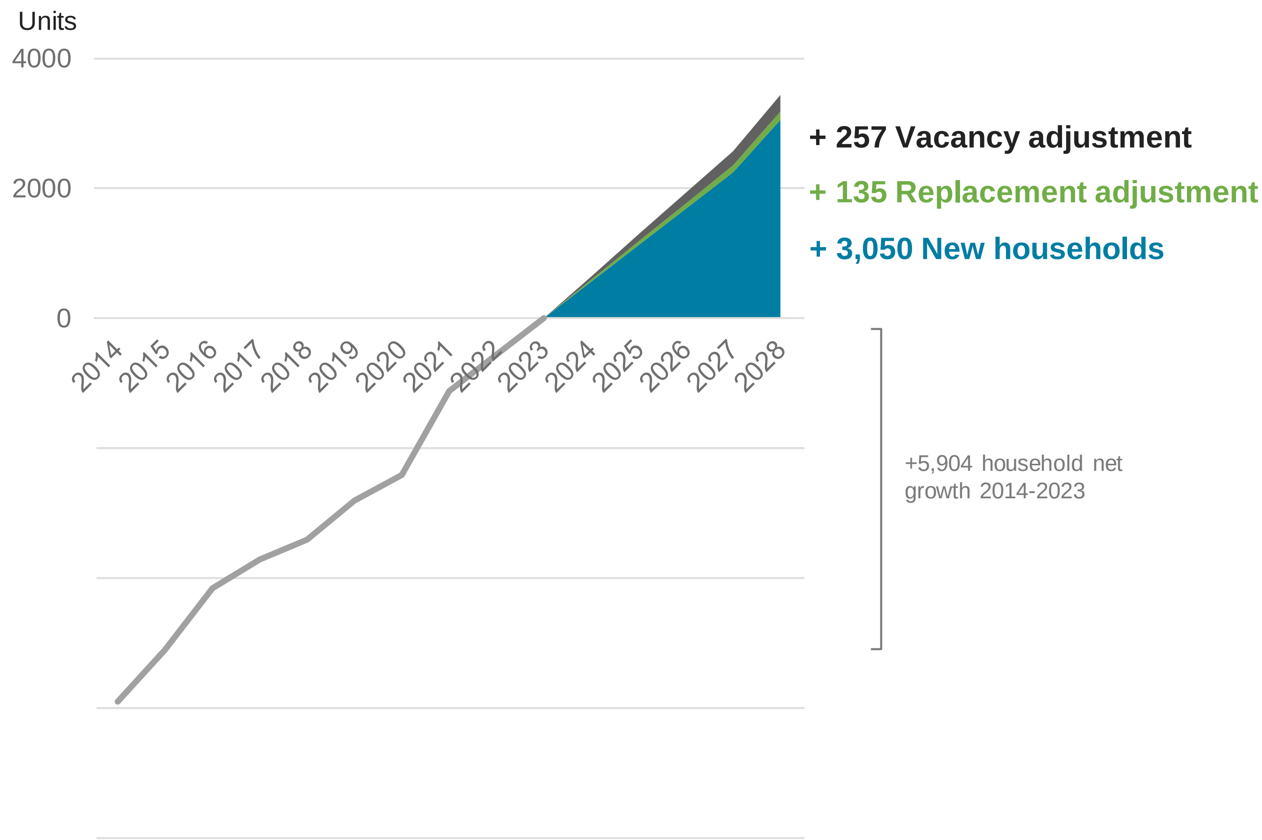
Production needs

This forecast indicates the housing production necessary over the next 5 years to accommodate projected new households while also incorporating other market dynamics such as organic unit replacement and vacancy fluctuations.

The totals at right combine to represent the number of new units required to meet demand driven by these new households.

2028 Housing production need forecast: **3,443 units**

Source: ACS, ESRI, Woods & Poole



Five-year production need

This step in the analysis translates the production need forecast into a distribution of needed housing units in terms of cost, tenure (rent/own), and bedroom count.

Larger numbers indicate unit types (cost/tenure/size) that should be developed at higher volumes to meet expected household growth.

Smaller numbers indicate unit types less urgently in need based on projected household growth.

The table is annotated with the approximate % AMI levels associated with each monthly cost bracket to help indicate which batches of units might require subsidy or other support to deliver. In general, housing that is affordable to households at or above 120% AMI is considered feasible to develop without subsidy.

5-year production need: new units by tenure, size, and monthly cost to accommodate the forecasted household growth and any replacement and vacancy adjustment

Maximum monthly housing cost	*Rent* 1BR	2BR	3BR	4BR+	*Own* 1BR	2BR	3BR	4BR+	
$313	77	70	30	9	4	9	14	4	
$521	38	39	18	4	2	5	9	3	
$729	72	80	37	8	3	13	23	7	
$1,042	136	162	83	20	7	34	74	26	
$1,563	131	163	98	24	9	41	113	47	
$2,083	30	45	32	9	2	13	52	30	<60% AMI
$3,125	31	56	47	17	3	19	90	76	60-80% AMI
$4,167	25	51	44	17	3	23	111	145	80-120% AMI
More than $4,167	31	71	55	41	8	37	184	300	>120% AMI

Notes:

- *.Darker purples indicate proportionally higher production volumes needed.*
- *Lighter purples and white indicate proportionally lower production volumes needed.*
- *The county's Area Median Income (AMI) = $103,600*