



Housing Ties to Economic and Workforce Development

The NKADD region needs to build 6,650 housing units to support economic development in the next 5 years, which equates to 1,330 units per year. This 5-year production target breaks down in the following ways:

- 3,260 units for workforce households (wage range \$15 \$25, monthly housing costs \$500 \$1,500), including 1,860 1- and 2-bedroom units, to increase the region's economic development and employment, including housing that is attainable by prevailing wage-earners in new jobs centers.
- 500 units for very low-income households (monthly housing costs below \$320)
- 4,220 one- and two-bedroom units, reflecting a shift in demographics and preferences away from the three- and four-bedroom single family houses that have been the primary mode of production for the past 20 years.





Key takeaways for the northern and southern counties

Boone, Kenton, Campbell

- Workforce job creation is out-pacing workforce housing: The logistics industry is central to job growth in the region, generating demand for high-growth but lower wage "workforce" jobs. Today, there are 2.68 workforce jobs for each housing unit they could afford.
- Monoculture of single-family homes is not aligned with household income and size: The supply of single-family, 3-4 bedroom homes outpaces the demand. Targeting 'missing middle' homes would better account for the diversity of incomes and smaller household sizes.
- 'Missing middle' houses and affordability strategies are required to continue economic growth: Economic growth creates a strong labor demand. A lack of housing affordable for jobs being created will make it harder and more expensive for employers to find and recruit labor at prevailing market wages.

Grant, Gallatin, Carroll, Pendleton, Owen

- Job Density is Constant: Job growth is concentrated in northern counties industry clusters while the southern counties maintain a steady baseline of jobs. Job creation generates demand for housing. The majority of housing demand is being met closer to the jobs.
- Land in closer proximity to jobs is not fully saturated: Suburban development is occurring in the northernmost portions of the southern counties at the limit for commutes to jobs.
 Available land in the northern counties is being prioritized by market developers.
- Exceptions exist: Carrollton is generating manufacturing jobs, but workforce and middleincome housing is lacking. Development of workforce housing near Carrollton seems like a market possibility and could increase available labor supply.

NKADD's economic engine is producing jobs but not the appropriate housing stock

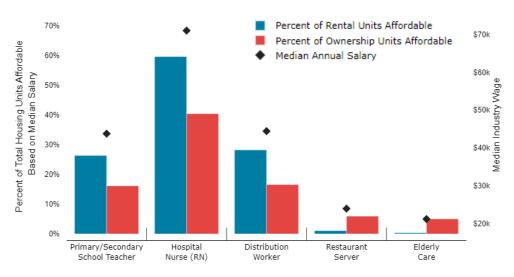
Currently, 60% of NKADD occupations generate an annual average salary below \$60,000 (generally considered "workforce" jobs). This includes the current top 6 occupations by employment share (warehousing, school teachers, temp workers, couriers, and restaurant servers). Looking ahead, 67% of job growth will occur in this workforce segment over the next decade.

Today there are **2.21 workforce earners per home affordable at that income level**. This assumes that at a \$60,000 income, a person could affordably pay a maximum of \$1,500 in rent or a monthly mortgage on a median home price in the of \$128,380. The high demand relative to low supply increases housing costs, generating cost-burdened households. This imbalance also puts upward pressure on wages and forces longer commutes as people seek housing elsewhere. This puts strain on employers by either reducing the labor pool available and impinging profitability. Consequently, the inability to produce adequate workforce housing can hamper the long-term economic development strategies currently employed around the logistics and manufacturing sectors in Northern Kentucky.

The economic reality is 'workforce' jobs are held across age groups and life stages. Many are sole income earners in households that would prefer independent living units. Ensuring adequate housing supply is essential for increasing general prosperity and livability. Subsidized housing programs can generate new affordable apartments, as does Naturally Occurring Affordable Housing (NOAH). Strategies to increase this housing stock and to preserve NOAH rents are necessary and viable strategies to ensure adequate workforce housing.

Housing Units Affordable Relative to Wages

Source: JobsEQ, Stantec



This chart shows how a School Teacher's median wage is \$43,740 per year, and the amount of the region's housing that is affordable at this wage is 26% of the rentals and 16% of the for-sale housing.

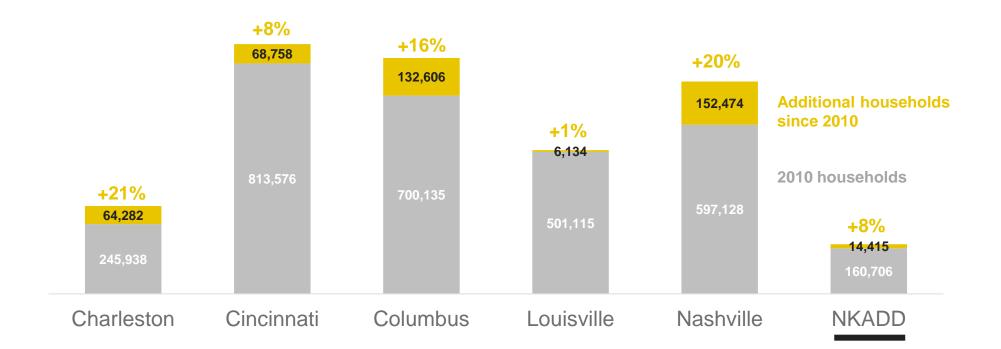


NKADD trails behind Charleston, Columbus, and Nashville in % growth since 2010

NKADD's growth of 8% is similar to that of the wider Cincinnati region.

Increase in number of households, 2010-2021

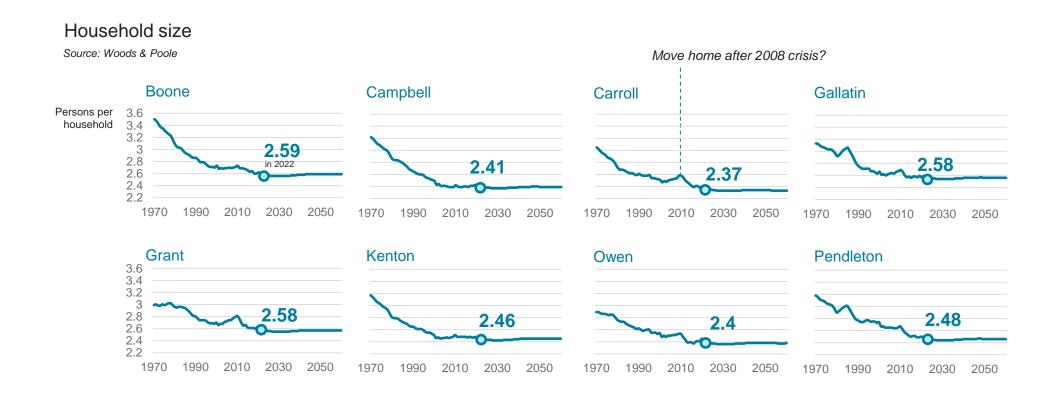
Source: ACS





Average household size has dropped but is steadying across all counties

All counties are converging on smaller households



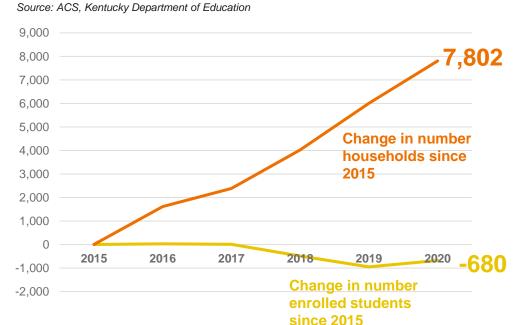


NKADD public school enrollment dropped between 2015 and (January) 2020, while the number of households in NKADD grew by 7,800

The growth in overall households since 2015 has not led to a growth in students enrolled in public schools. This is attributable to the changing demographics of the region and country, where there are fewer family households and more households without children (singles, couples, and elderly households).

As shown here, the NKADD region has added several thousand new households since 2015, but the net change in public school enrollment has been flat. With an increase in households far outpacing recent increases in enrollment, the number of public enrolled students per household dropped from 0.28 in 2015 to 0.24 in 2023. While this analysis does not include charter and private schools, the relative trend in year-over-year enrollment is assumed to be similar to public schools.

Change in total households and public enrollment, NKADD total, 2015-2020



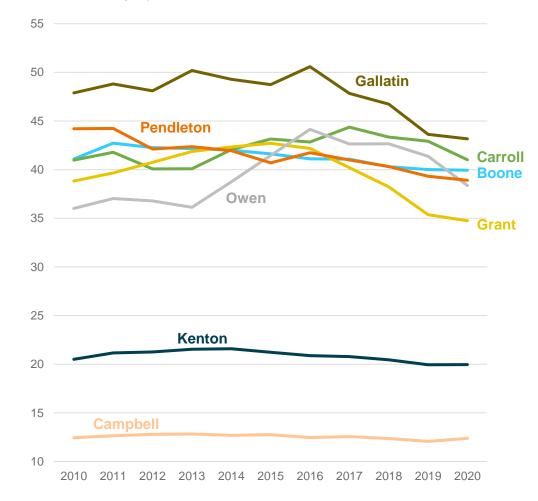


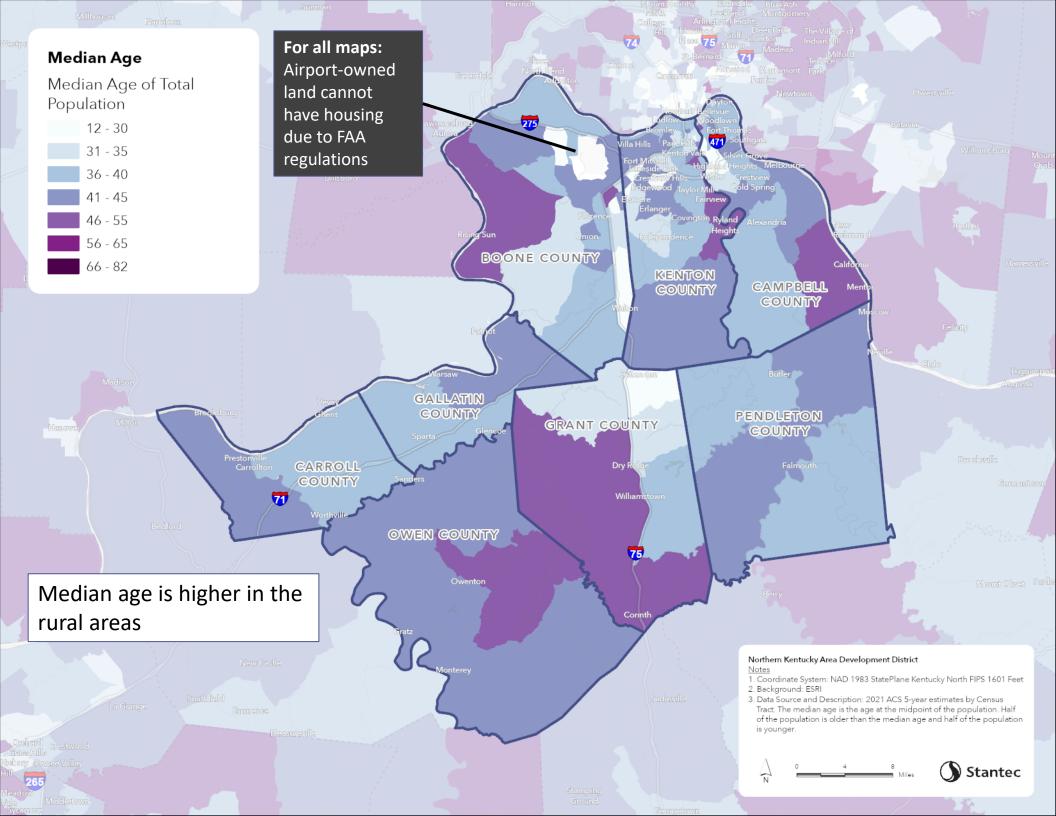
The number of enrolled students per household has dropped since 2010 in most NKADD counties.

This graph shows the number enrolled students per 100 households. Though the Boone and Campbell school districts grew slightly, all other NKADD school districts saw a drop in enrollment between January 2015 and January 2020 – for an NKADD total change from 47,014 to 46,334 enrolled students.

Number of enrolled students per 100 households

Source: ACS, Kentucky Department of Education



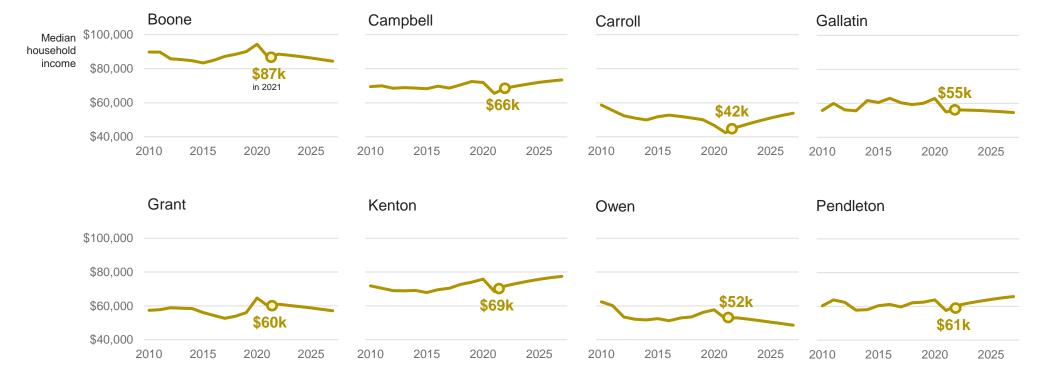


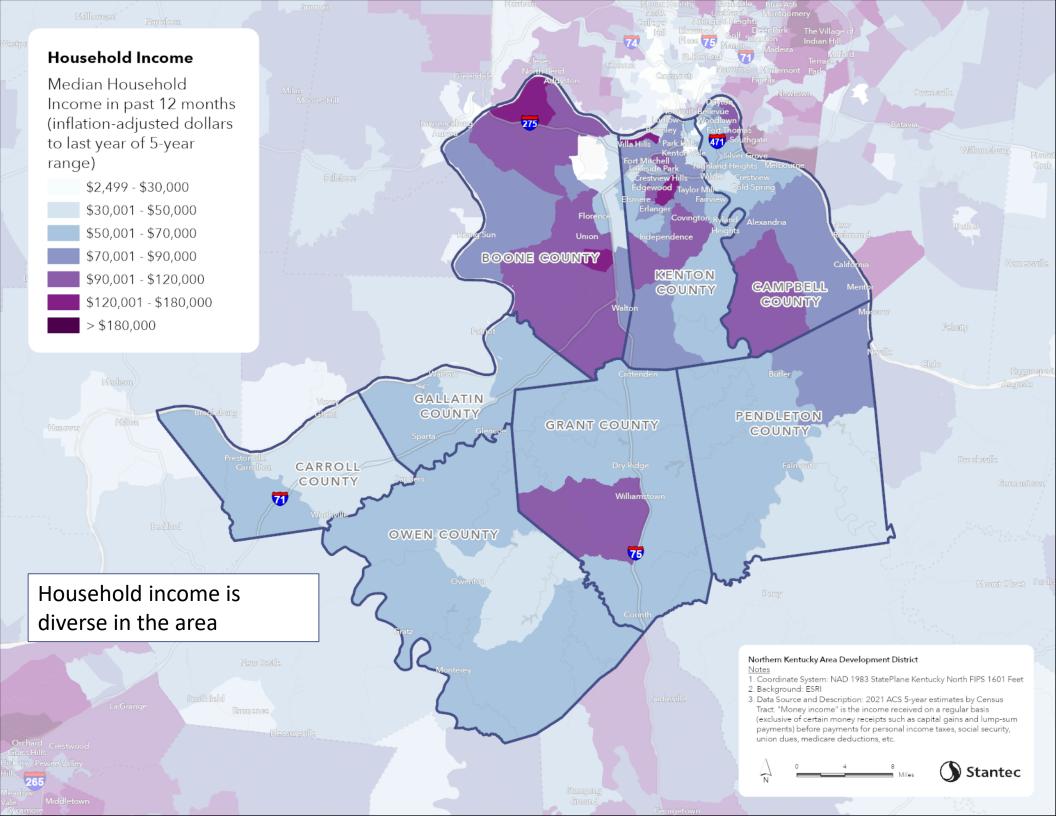


Median household income is projected to see an increase in Campbell, Carroll, Kenton, and Pendleton Counties.

Median household income

Source: ACS, ESRI, in constant 2022 dollars



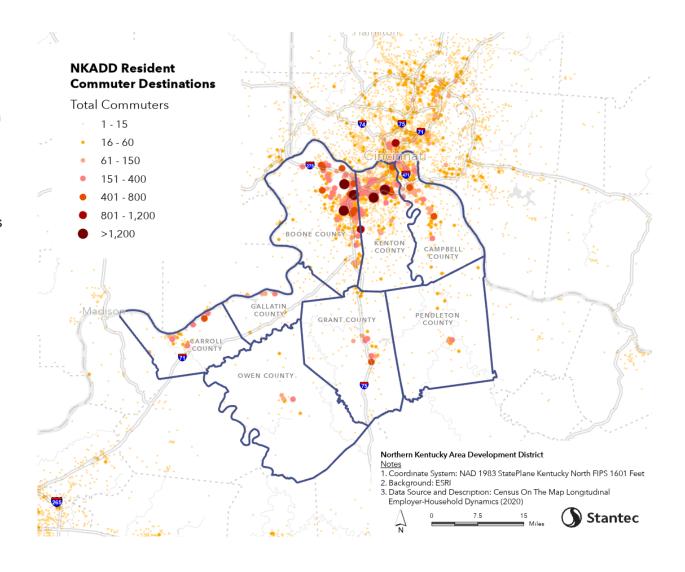


Commuting pattern for NKADD residents, showing employment destinations

NKADD Commute patterns demonstrate high levels of suburb-to-suburb commutes. While radial commutes into Cincinnati remain important, Boone and Kenton are major employment centers in their own right, with Carroll a larger rural employment hub.

Commuting across suburbs is an increasing trend in many urban locations, and one that poses challenges to historic transit patterns that radially extend out of cities.

This points to the need for greater coordination across the NKADD region in housing and transit planning.



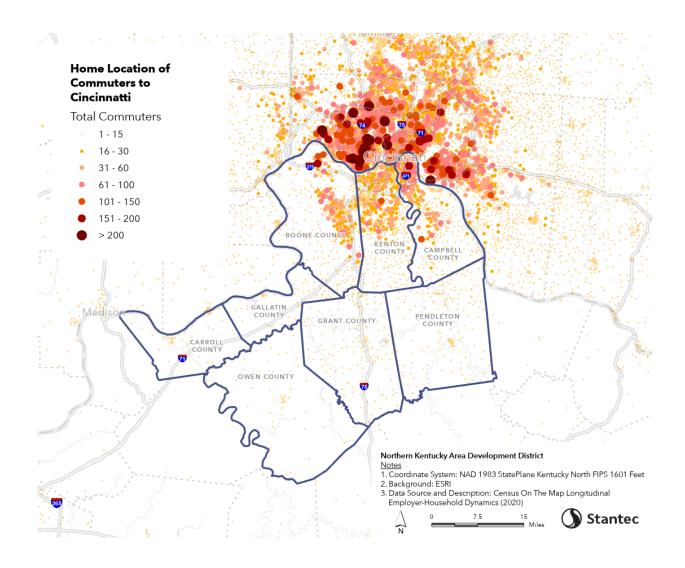


Commuting pattern to Cincinnati, showing resident locations

25,133 people commute from Kentucky into the city of Cincinnati, or 10.6% of total commuters.

Commuters are more heavily concentrated in northern Kenton and Campbell county, and more likely to work in higher wage New Economy jobs clustered downtown. New multi-family housing in Covington and Newport are specifically designed to attract young professionals into historic urban areas, while newer construction single family suburban housing in Campbell, Kenton, and Boone attracts larger and older households.

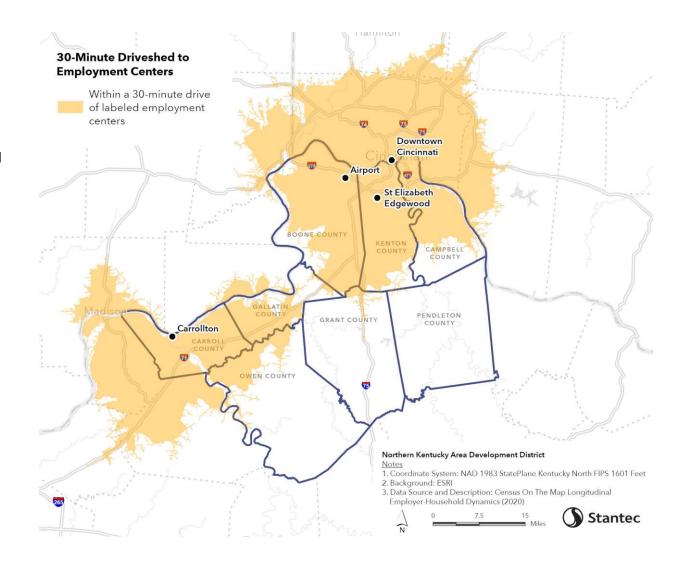
Commuters also extend deeper into newer, large single family housing construction in Boone County and Alexandria in Campbell County.





Areas within a 30-minute drive of large employment centers

Most of Boone, Campbell, Carroll, Kenton, and Gallatin Counties are within a half-hour driving commute to one or more major employment centers, while very few to no parts of Owen, Grant, and Pendleton Counties can reach these employment centers within a half-hour commute.





The Cincinnati Region's steady growth and job composition reflects the national "New Economy"

Region has seen slow overall job growth in 20 years. Eds and Meds and new economy low wage jobs have increased their share, while mid-wage blue collar jobs have decreased. Each of these segments is covered in more detail in the following section.

New Economy High Wage: Finance, Insurance, and Real Estate (FIRE), Management, Professionals and Information. 'Head' jobs concentrated in corporate HQ's and regional campuses. 'Sticky' in an era of globalization.

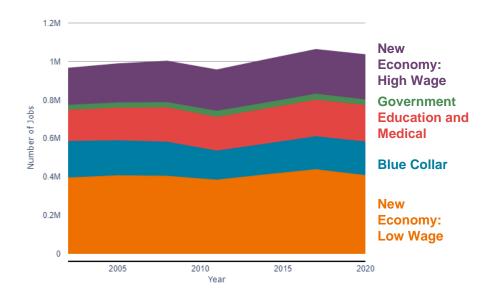
New Economy Low Wage: Hospitality, retail, logistics, and service sector work. Low-productivity, lower-wage jobs, but high employment numbers. Linked to the consumption of higher income earners.

Education and Medical ("Eds and Meds"): Geographically 'sticky' jobs (not likely to move) are central to urban locations. Incomes range from low-wage homecare workers, lower-middle teacher salaries to high-end doctors or administrators.

Government: Public sector jobs. Consistent over time, with slight uptick during times of increased public sector spending (recession) and dips during public sector withdrawal.

Blue Collar: Manufacturing, construction, and extraction jobs with middle incomes. While construction jobs are 'sticky', manufacturing saw stark declines after 2000 with globalization. Manufacturing clusters together and is more 'sticky' in skilled industries like aircraft engine manufacturing.

Cincinnati Metropolitan Region Employment Structure





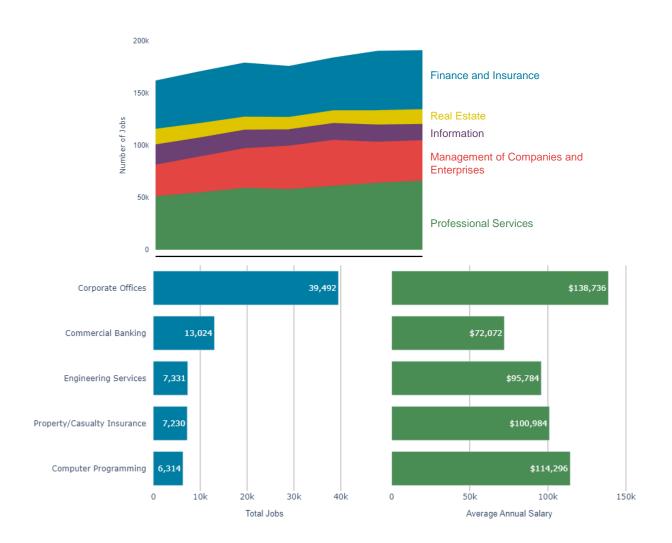
High Wage New Economy Jobs

18% growth in total high wage new economy jobs, while the ratio increased from 16.72% of all jobs in 2002, to 18.39% in 2020.

Most common occupations include working in corporate offices, commercial banking, engineering, and insurance with high average annual surveys. Science-based professionals are employed in the manufacturing sector in chemicals, agricultural processing, and manufacturing.

Large employers include First Financial, Procter&Gamble, GE Aviation, GE Honda Aero Engines, CFM International, the American Financial Group, Archer Daniels Midland, and Kroger Supermarkets.

Fidelity Investments, CITI Group Bank, and Archer Daniels Midland are the largest Northern Kentucky-based finance and management jobs, while scientists and engineers work in professional roles at Duro Hilex, Mubea, Ashland and Bosch.





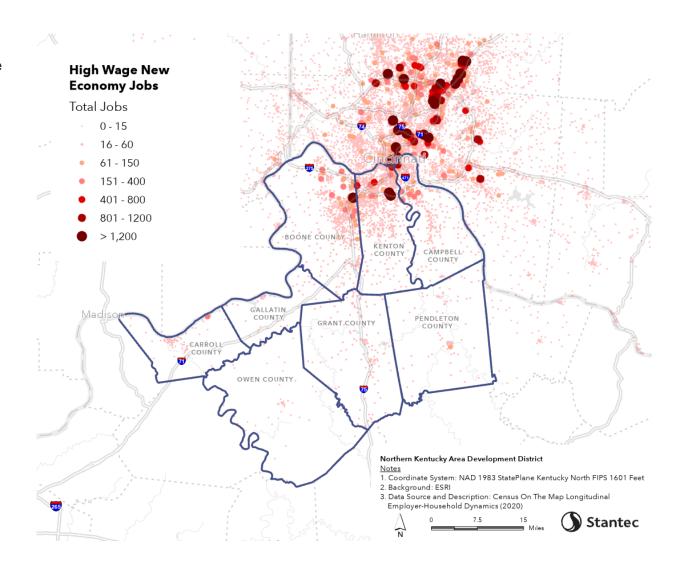
High Wage New Economy Jobs

"New Economy" high wage jobs include Finance, Insurance, and Real Estate, the management of corporations, professional and technical services, and information jobs.

These jobs are concentrated through the northeastern suburbs with some concentration in Boone and Kenton.

Historically located in downtowns, followed by a generation of relocating corporate headquarters to higher wage suburbs. Relocation to urban centers started to occur prior to COVID. Spatial concentration is uncertain due to new office trends.

NKADD contains 14% of total high wage new economy jobs.





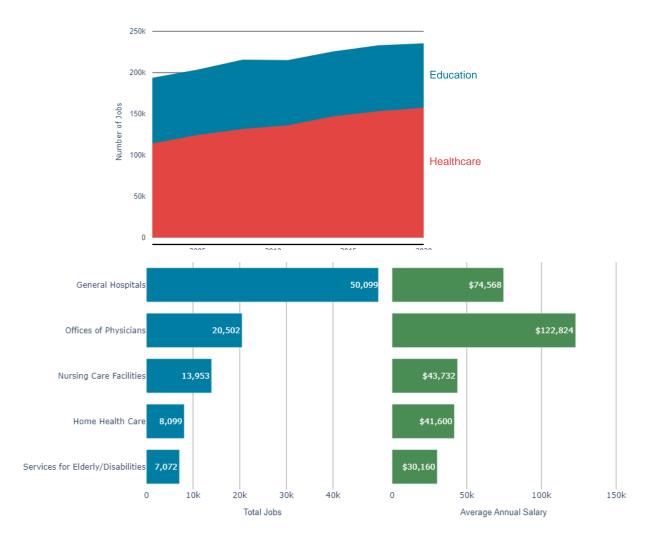
"Eds and Meds" Jobs

A net change of 21.6% with healthcare driving the net increase.

Increased from 20% of all jobs in 2002, to 22.7% in 2020. The increase is driven by growth in healthcare needs as population ages (2.1% annual growth), more than enough to cancel out a small net decline in education jobs.

Most common industrial occupations include working in General Hospitals, Physician Offices, and Home health care.

Doctors and nurses secure higher income in hospitals compared to low-wage home and elderly care services.





"Eds and Meds" Jobs

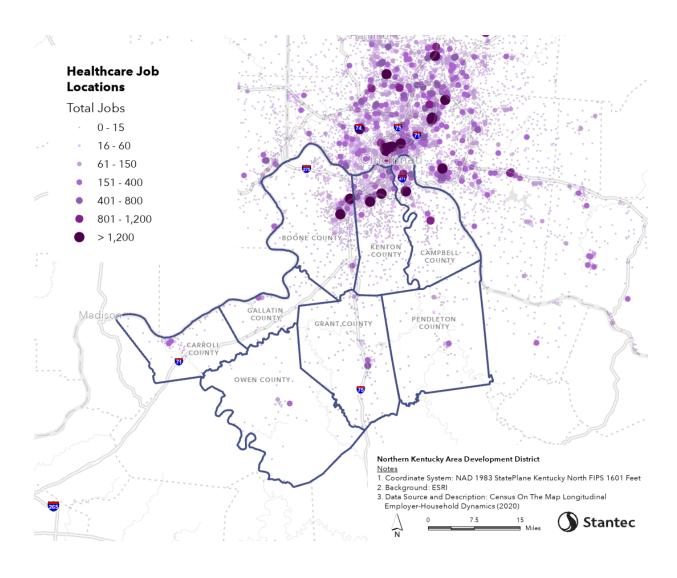
Eds and Meds is a colloquial term to refer to Education and Healthcare jobs. These range from home health care workers on the low end of the wage scale, nurses and teachers in the middle, and doctors and administrators at the top of the wage scale. These jobs are increasingly central to urban locations.

The city of Cincinnati contains higher education centers and central metropolitan hospitals, adding to its employment share

15.23% of Eds and Meds are located in NKADD at a proportion below the regional average.

Christ Hospital, Cincinnati Childrens Hospital and St. Elizabeth Healthcare system with hospitals and satellite campuses throughout the region. Elderly care, and home care are spatially dispersed.

Education includes Northern Kentucky University, Thomas More University and Gateway Community and Technical College.



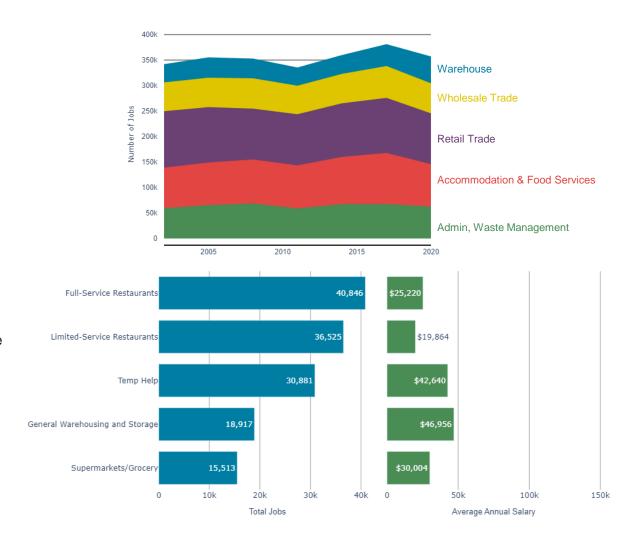


Low Wage New Economy Jobs

There has been low growth of 3.14% since 2002, increasing from 39.22% of all jobs in 2002, to 40.79% in 2020. This is the region's largest employment base.

Most common occupations include working in restaurants, temping, warehouse, grocery stores, and in retail. Annual salaries are on the very low-end of the income scale.

Total employment in the sector fluctuates with consumption. Wages saw growth at the tail end of the 2010s for the first time in twenty years as labor markets tightened and inflation remained low. However, any wage growth was quickly counteracted by inflation. Low rates of unionization and low labor productivity ultimately long-term wage growth in the sector.



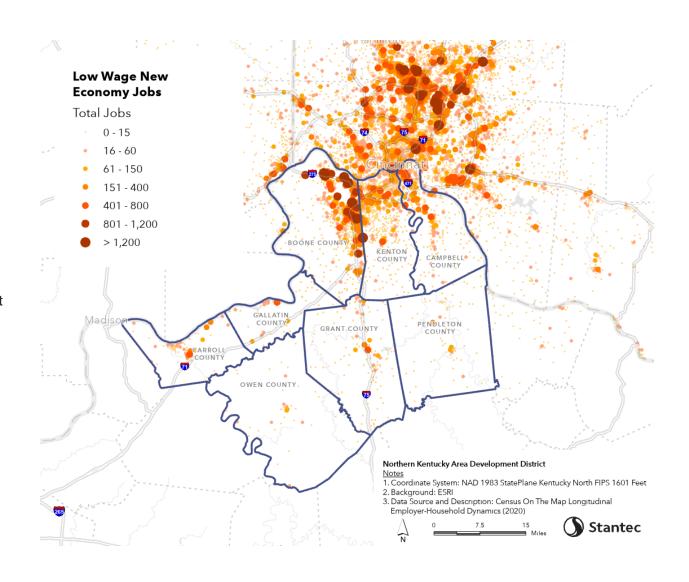


Low Wage New Economy Jobs

24.17% of regional total in NKADD at a ratio higher than the regional average.

Retail and hospitality are spatially disbursed, locating where consumption from high end jobs drive increased effective demand for services. Since productivity is low in the sector, employers add more labor for increased demand, hence its large total share of jobs in post-industrial economies.

The region's main 'logistics' clusters are in northern Boone County and Northeast Cincinnati. Logistics clusters are located in suburban locations, providing access to urban locations but also the required land for large warehouses. Boone's regional logistics cluster combines local e-commerce, a national hub for Amazon's air freight, and the local regional airport.





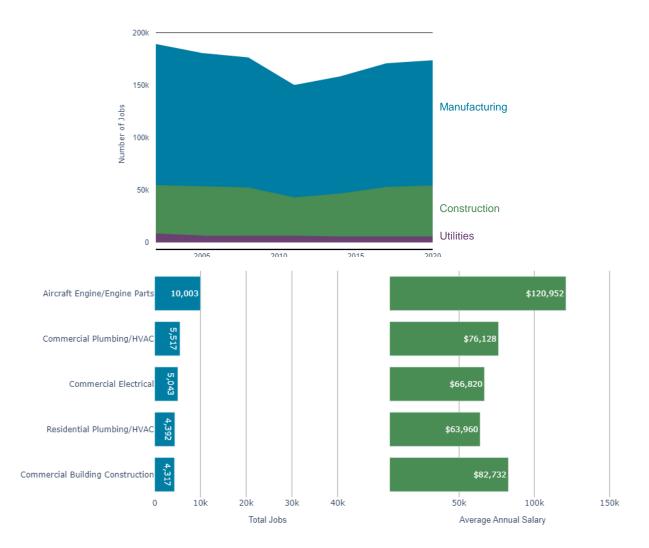
Blue Collar Jobs

Similar to many locations nationwide, there has been an 8.1% decline since 2002 in manufacturing due to globalization. The ratio of blue-collar jobs decreased from 19.72% of all jobs in 2002, to 16.91% in 2020.

Most common industrial occupations include aircraft manufacturing, followed thereafter by commercial and residential construction.

High-skill, unionized manufacturing jobs and skilled trades drive higher wages than service sector.

Total employment is in decline, driven predominantly by losing manufacturing jobs (most severe declines prior to 2002). It is unclear how the Cincinnati region is poised to benefit from reshoring (typically more concentrated further south in the Sunbelt), but former Rust Belt cities are seeing increases in manufacturing labor.





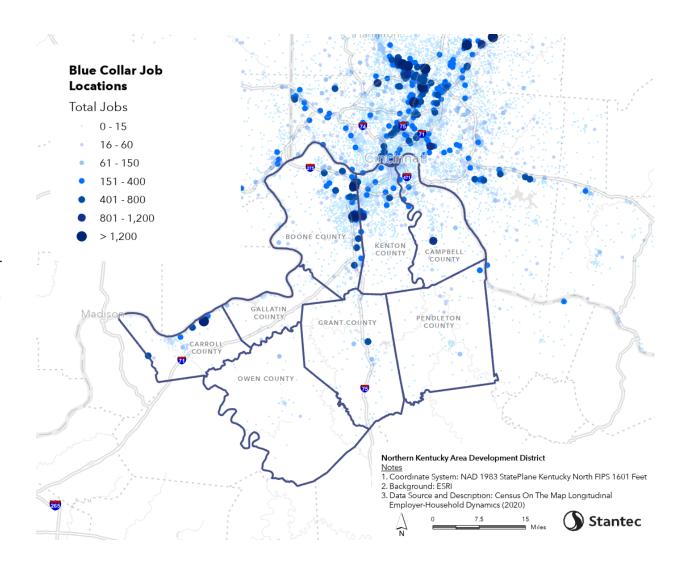
Blue Collar Jobs

18.23% of regional total in NKADD, a slightly higher locational quotient compared to the rest of the region.

A handful of manufacturing clusters exit in the region. High value Aerospace manufacturing is located north of Cincinnati, a cluster that continues to grow due to specialized skills and knowledge in the region.

In NKADD, a manufacturing cluster stretches from southern Florence down I-71 into Walton, with major food processing jobs. Another cluster exists in Carroll County, home to chemical manufacturers.

Construction jobs are spatially dispersed, but an important source of mid-wage employment.





The region's housing gap shows competitive segments in blue and misaligned supply in red

Gap Snapshot Results

- NKADD needs to provide housing for the lowest income
- The housing supply is overly weighted towards 3-bedroom units in the \$900 to \$2000 per month range, while the population characteristics indicate a stronger demand for 1- and 2bedroom units, especially ownership



John Green Lofts, Covington: Studios, 1-bed, 2-bed for \$1000 to \$2800 per month

Difference between housing supply and housing demand

Source: Stantec

		Rent				Own			
Household Income Required	Max Monthly Housing Cost	1BR	2BR	3BR	4BR+	1BR	2BR	3BR	4BR+
Less than \$15000	\$313	-3,886	-3,780	-1,911	-336	-326	-576	-649	-766
\$15,000-24,999	\$521	-2,650	-2,777	-1,590	-404	-211	-586	-852	-731
\$25,000-34,999	\$729	-1,801	-2,720	-1,669	-287	-95	-395	-777	-748
\$35,000-49,999	\$1,042	-2,390	-3,014	-1,631	-445	20	1,607	70	-1,148
\$50,000-74,999	\$1,563	-1,997	-1,773	30	-646	-164	4,258	7,016	-71
\$75,000-99,999	\$2,083	-571	2,602	4,419	197	-228	1,265	8,769	3,191
\$100,000-149,999	\$3,125	-459	-375	538	2,524	-192	-519	-2,387	7,399
\$150,000-199,999	\$4,167	-131	-212	-267	123	-50	-396	-2,938	-657
\$200,000 or more		-141	-231	-178	-76	-40	-318	-2,091	-3,857

Blue cells denote a deficit of housing at that size and price point. The darker the color, the deeper the deficit. Conversely, red units represent a housing surplus, or where the supply of housing is larger than current demand.



Connecting housing need to the region's Area Median Income (AMI) of \$103,600

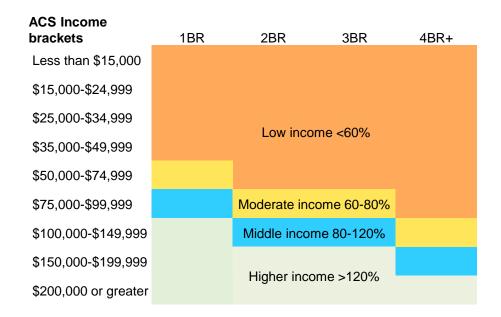
HUD establishes Income Limits (ILs) per country for determining eligibility for assisted housing programs, such as low-income housing tax credit (LIHTC) based on the area median income (AMI) and the number of people in the household.

- Households with 60% AMI and below qualify as low-income and contribute to qualifying for tax subsidy.
- 60-80% is moderate income.
- 80-120% is middle and may require incentives for housing production.
- More than 120% is considered market rate for housing production.

These figures are for the <u>Cincinnati</u>, <u>OH-KY-IN HUD Metro FMR Area</u>, which includes the NKADD region except Carroll, Grant, and Owen counties, which have a lower AMI. The lower AMI in those three counties are reflected in the county profiles section.

Income bracket and bedroom by AMI group

Source: ACS, ESRI, HUD



Income limits by household size

Source: HUD	1 person	2 person	3 person	4 person	5 person	6 person	7 person	8 person
Low-income limit (60%)	\$ 43,560	\$ 49,740	\$ 55,980	\$ 62,160	\$67,140	\$ 72,120	\$ 77,100	\$ 82,080
Moderate income limit (80%	\$ 58,020	\$ 66,300	\$ 74,590	\$ 82,880	\$ 91,170	\$ 96,140	\$ 103,600	\$ 107,740
Middle income limit (120%)	\$ 87,020	\$ 99,460	\$ 111,890	\$ 124,320	\$ 136,750	\$ 144,210	\$ 155,400	\$ 161,620
Bedrooms (Stantec estimate) 1BR	1-2BR	2BR	2-3BR	3BR	3-4BR	4BR+	4BR+

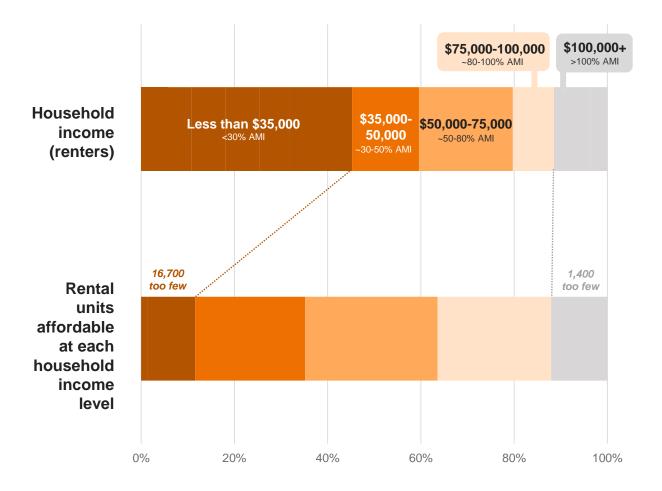


There are currently too few rentals for very lowincome renters

There is a large gap at the lowest levels of income between the number of households and the availability of rental housing. The result of this mismatch is a segment of the population that is rent-burdened, meaning they spend more than 25% of their income on rent. The higher end of rental properties monthly costs is also larger than the population to support those costs.

Renter household incomes versus rental units at aligned prices

Source: ACS, ESRI

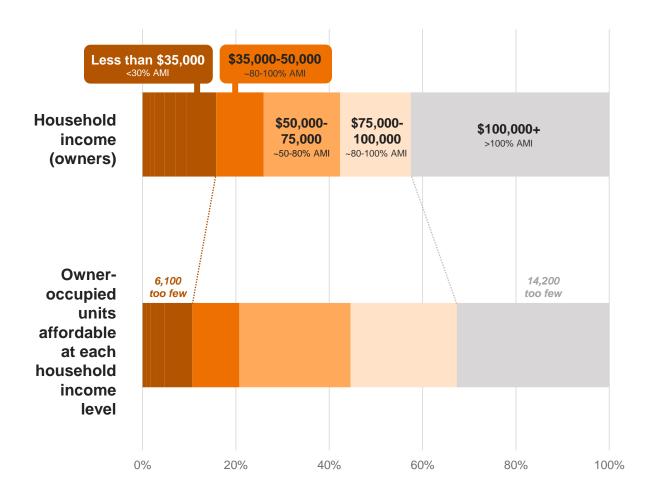




There is a slight gap in ownership housing for very low-income ownership

There is a small gap between the number of very low-income homeowners and very affordable housing. At the other end of the spectrum, there is a high-earning segment that is likely able to pay less than 25% of their income on housing in the region.

Homeowner household incomes versus ownership units at aligned prices Source: ACS, ESRI





Middle-income brackets are expected to stay fairly stable as NKADD grows.

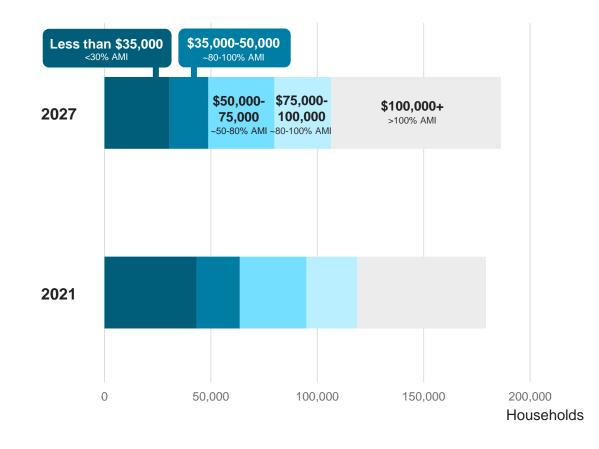
This graphs tracks total household change over time by income to indicate overall trends as well as growth or reduction within individual income brackets.

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.

The decrease in lowest incomes (<\$35k/year, or about \$16/hour for an individual) may relate to competition for employees which has increased wages as well as inflation.

NKADD Households, by income bracket, 2021 and 2027

Source: ACS, ESRI





NKADD's 5-year production target is 6,650 units total at a rate of about 1,330 units per year

Key takeaways

In the next 5 years, there will be a need for 1,860 additional 1- and 2-bedroom units for low- and moderate-incomes (monthly housing costs \$500 - \$1,500) and about 500 units for very low-income households (monthly housing costs below \$320). The higher number of rentals because that is who is current moving, and rentals are currently underrepresented in the market.

Summary by category

Demand by bedroom

1.200 1-beds

1.810 2-beds

2.180 3-beds

1,460 4-beds+

Demand by tenure

1,850 rentals

4,770 owner-occupied

Demand by AMI

3,025 Low income <60% 940 Moderate income 60-80% 1,015 Middle income 80-120% 1,660 Higher income >120%

5-year region-wide production target

Source: ACS, ESRI, HUD

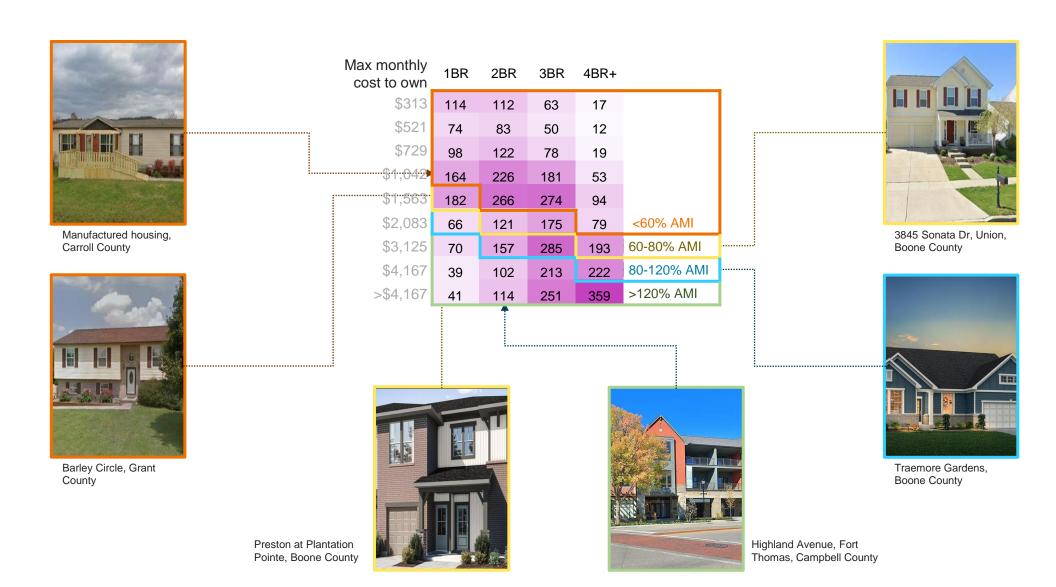
	Rent					Ov	vn		
Maximum monthly housing cost	1BR	2BR	3BR	4BR+	1BR	2BR	3BR	4BR+	
\$313	44	43	24	7	114	112	63	17	
\$521	29	32	19	5	74	83	50	12	
\$729	38	47	31	7	98	122	78	19	
\$1,042	64	88	70	20	164	226	181	53	
\$1,563	71	104	106	36	182	266	274	94	
\$2,083	25	47	68	31	66	121	175	79	<60% AMI
\$3,125	27	61	111	75	70	157	285	193	60-80% AMI
\$4,167	15	39	83	87	39	102	213	222	80-120% AMI
More than \$4,167	16	45	98	140	41	114	251	359	>120% AMI

Notes:

- Darker purples indicate proportionally higher production volumes needed.
- Lighter purples and white indicate proportionally lower production volumes needed.
- The region's Area Median Income (AMI) = \$103,600 except Carroll, Grant, and Owen counties

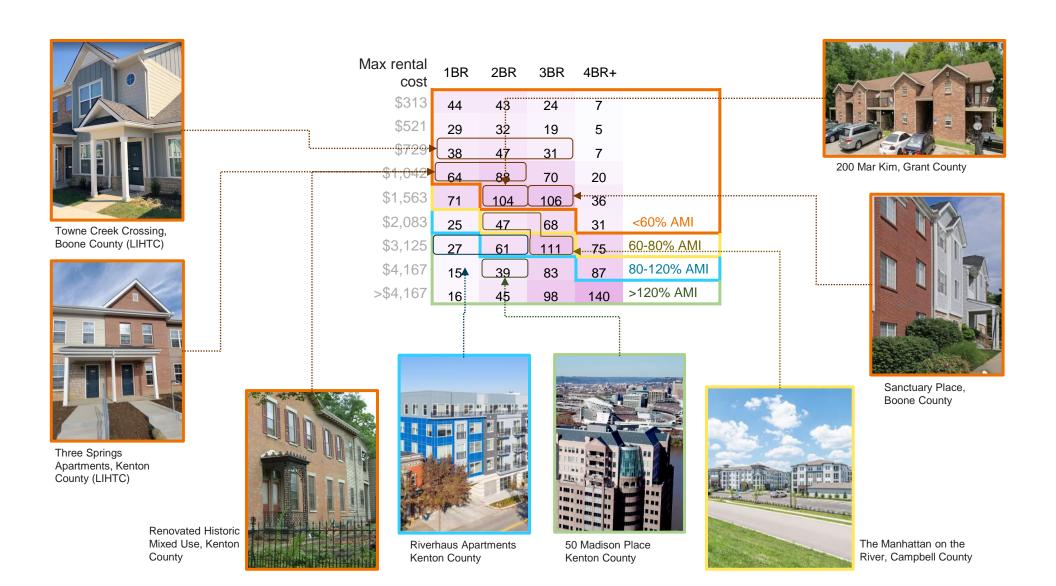


Recent **ownership** development per bedroom size and cost segments in relation to the expected 5-year demand





Recent **rental** development per bedroom size and cost segments in relation to the expected 5-year demand

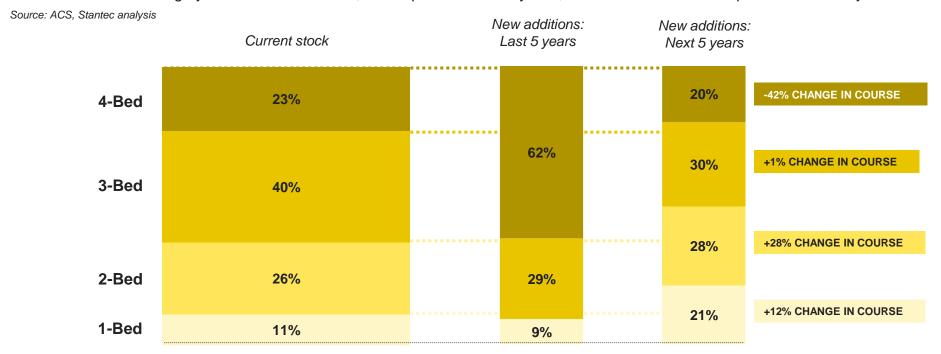




Future development should steer towards smaller units and away from 4+ bedroom houses

This course correction brings future development more in line with the overall current housing stock and is a shift away from the last 5 years of development practice

Current stock of housing by number of bedrooms, development in last 5 years, & recommended development for next 5 years

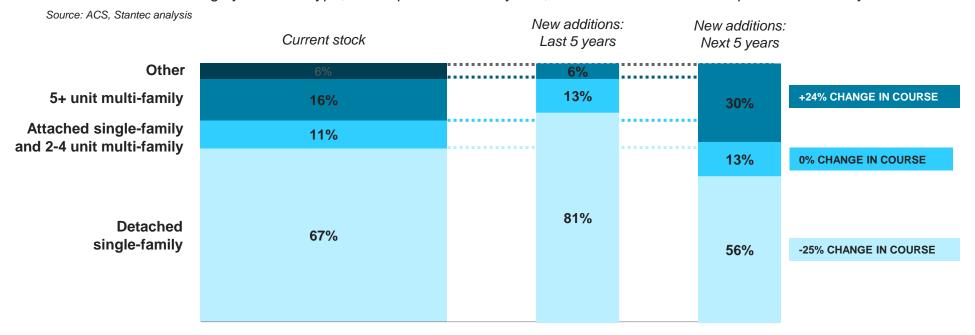




Future development should steer towards multifamily and away from detached single-family

This course correction adjusts for the shortfall of multifamily development in the last 5 years.

Current stock of housing by structure type, development in last 5 years, and recommended development for next 5 years

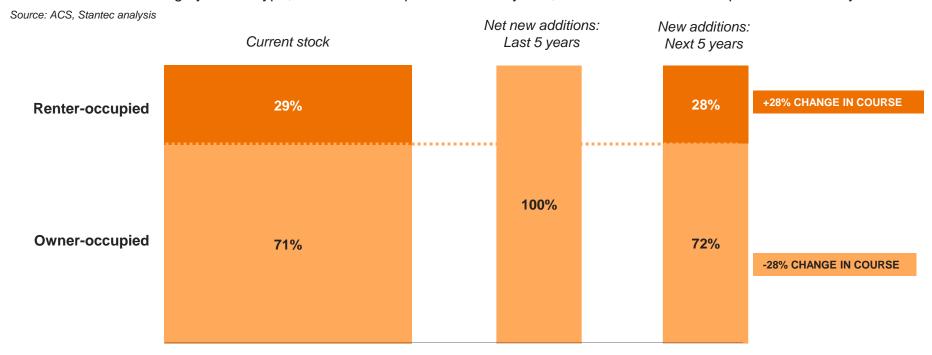




Rental properties should account for a larger portion of future development

This course correction adjusts for the shortfall of net new multifamily rental development in the last 5 years. While some new rental has been built, rental housing has also been lost in Newport, Covington City Heights, conversions to single-family ownership in Bellevue and other locations, as well as rentals converted to short term rentals.

Current stock of housing by tenure type, net new development in last 5 years, & recommended development for next 5 years





NKADD has some of the least restrictive development regulations in the country...

... but, there are still some actions that can be taken to improve housing production where needed that are covered in the housing toolkit.

WRLURI index created as a composite of 12 sub-indexes which measure survey responses to various questions, such as caps on production / permitting, housing restrictions, outcomes, etc.

According to WRLURI, lightly regulated areas like NKADD have the following characteristics:

- · Moderate levels of involvement by local political officials.
- Lower levels of community pressure
- Fewer reviewing bodies for projects that do not require zoning changes
- There are likely dimensional standards that prevent higher density development but no formal cap on residential density
- · Less exaction fees than other areas
- An average 3.7-month delay between project application and receiving a decision from the government (versus more than 8 months in highly regulated areas)

Local housing regulation index, high numbers are more restrictive

Source: Wharton Residential Land-Use Regulatory Index 2020

