Data Snapshot
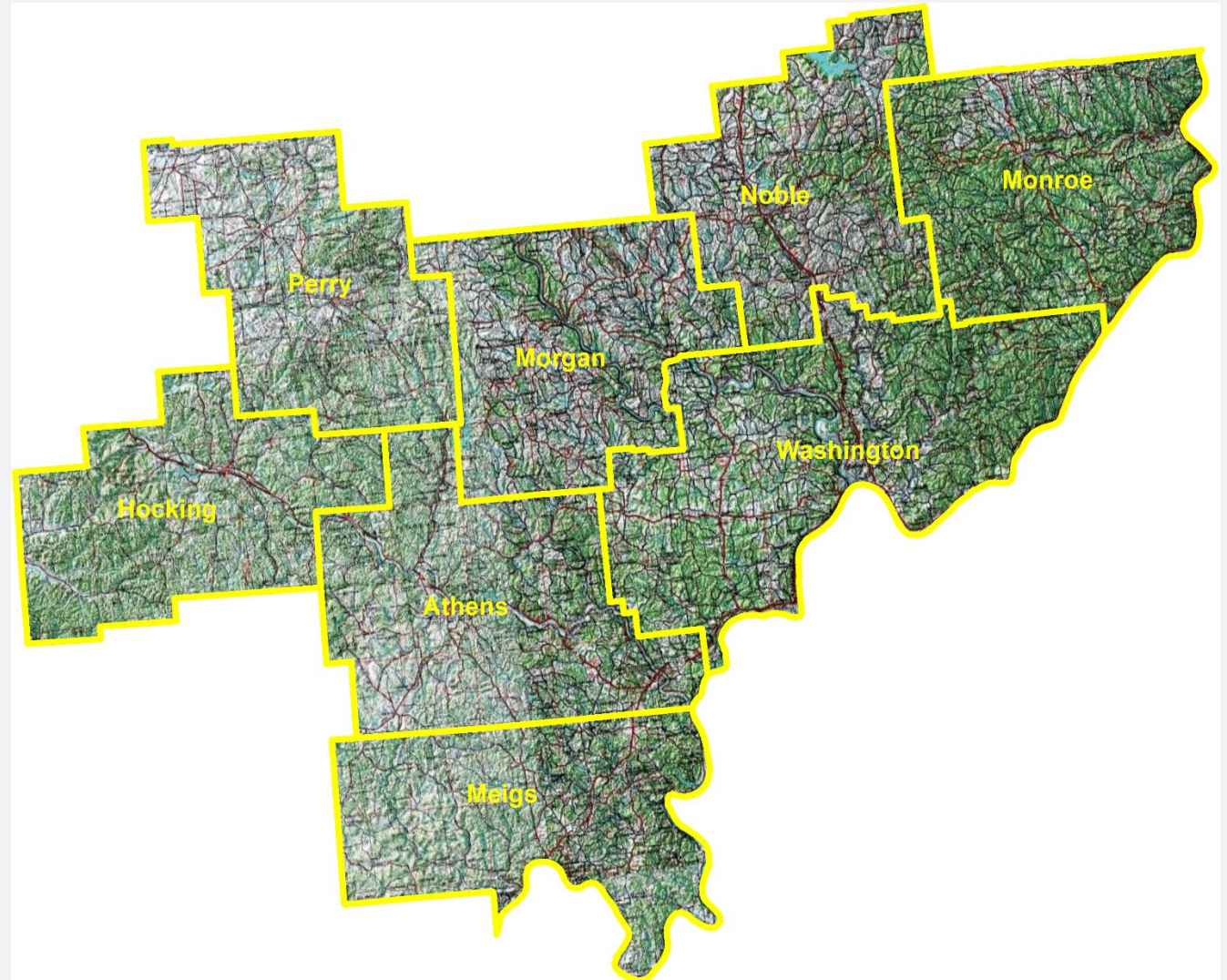
Buckeye Hills Region, Ohio

Regional Data Snapshot
May 2020 Update

PURDUE UNIVERSITY

Center for Regional Development
Advancing Collaboration : Energizing Regions

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Data Snapshot // Buckeye Hills Region

Buckeye Hills (8 County Region)

Area	1,890.81 sq. mi.
Counties	Athens, OH Hocking, OH Meigs, OH Monroe, OH Morgan, OH Noble, OH Perry, OH Washington, OH
Metropolitan Classification	Athens: Micro Hocking: Metro Meigs: Noncore Monroe: Noncore Morgan: Noncore Noble: Noncore Perry: Metro Washington: Micro
EDA Distress Criteria 2018	Distressed by Income and Unemployment

Data Snapshot // Buckeye Hills Region
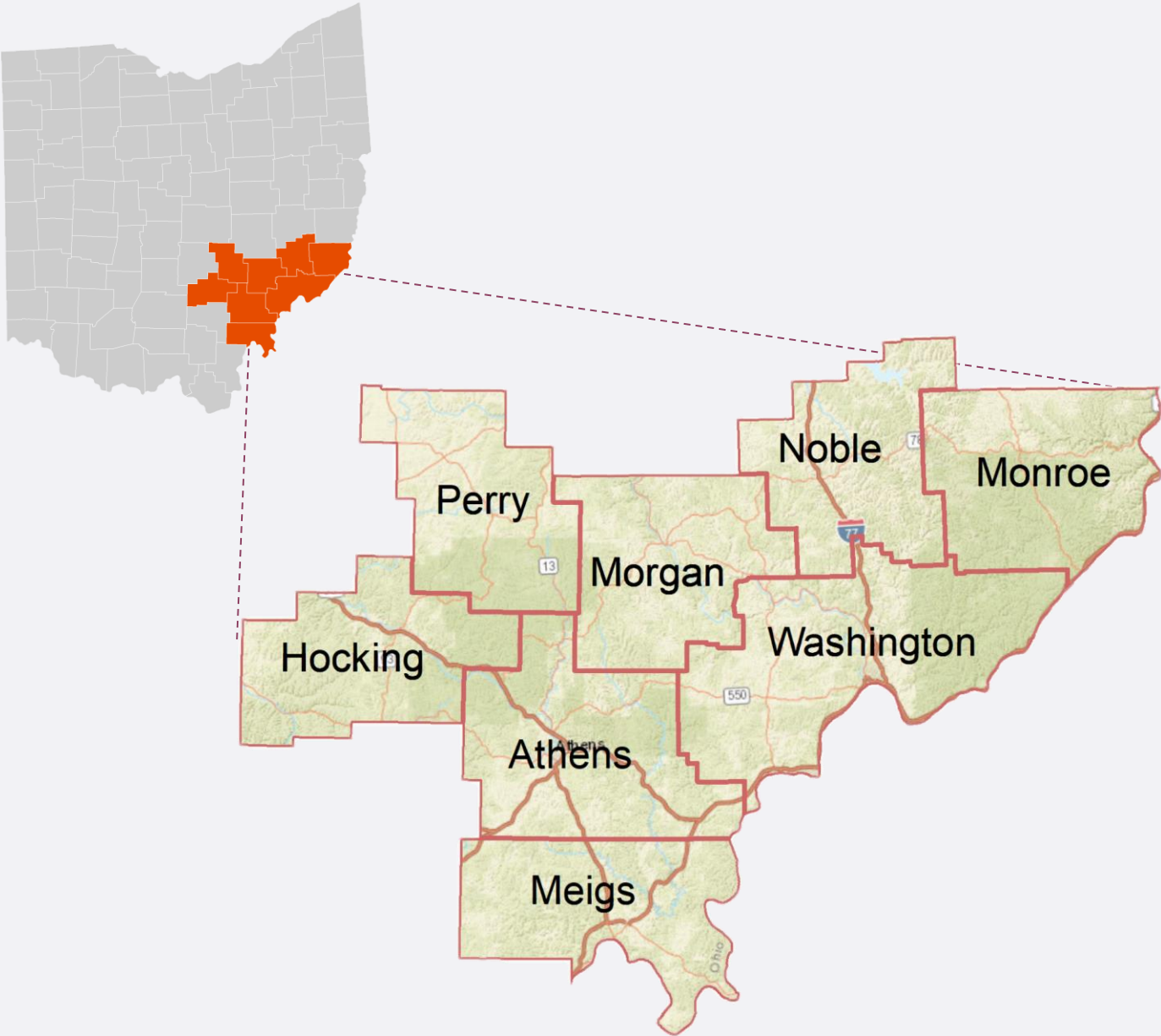
Section 01

Introduction

Purpose

This document provides information and data about the Buckeye Hills Region that can be used to guide regional decision-making.

The Data Snapshot showcases a variety of demographic, economic and labor market information that local leaders, community organizations and others can use to gain a better perspective on current conditions and opportunities in their region.

To strengthen the value and usability of the information, we showcase the data using a variety of visual tools, such as charts, graphs and tables. In addition, we offer key points about the data as a way of assisting the user with the interpretation of the information presented.

Finally, short takeaway messages are offered at the end of each section in order to highlight some of the more salient findings.
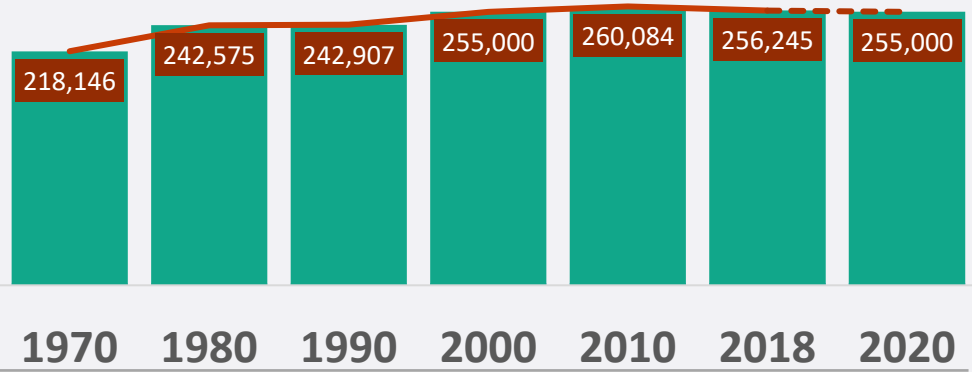
Section 02

Quality of Life

Quality of Life

Population Change

Total Population Projections

218,146	242,575	242,907	255,000	260,084	256,245	255,000
1970	**1980**	**1990**	**2000**	**2010**	**2018**	**2020**

The region's population increased steadily from 1970 to 2010 followed by a slight decline estimated for 2018 and projected for 2020. Domestic migration (in migrants minus out migrants) caused the maximum decline in the 18 year period. In contrast, international migration has added populations. Natural increase (births minus deaths) became negative for 2010 to 2018 indicating the aging of the population.

> The total population is projected to decrease by 0.5 percent between 2018 and 2020.

Components of Population Change, 2000-2018

	2000-2010	2010-2018
Natural Increase	3,531	-471
International Migration	1,616	2,624
Domestic Migration	-5,700	-6,335
Total Change	**-553**	**-4,182**

Note: Sum of components may not match with the total population change because of residuals

Sources: U.S. Census Bureau – 1990 Census, 2000 Decennial Census, 2010 Decennial Census, 2018 Estimates, Estimates of the Components of Resident Population Change

Quality of Life

Population Pyramids

Year 2000

Male   Female

Age Cohort

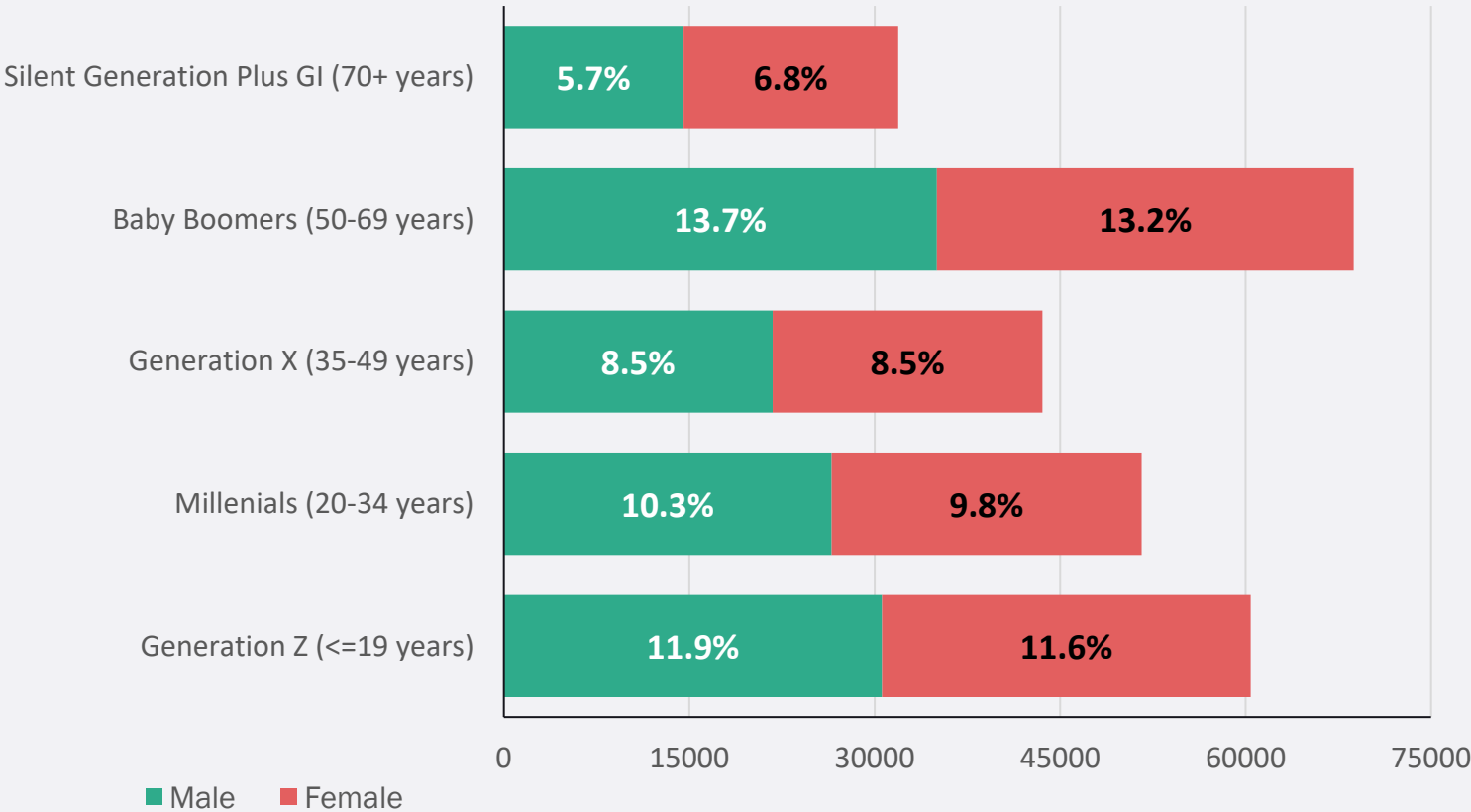| Age	Male	Female
80+	1.1%	2.2%
70-79	2.6%	3.4%
60-69	4.0%	4.2%
50-59	5.7%	5.7%
40-49	7.4%	7.3%
30-39	6.8%	6.6%
20-29	7.9%	7.5%
10-19	7.8%	7.7%
0-9	6.3%	5.9%

Percentage of the population

Year 2018

Male   Female

Age Cohort

Age	Male	Female
80+	1.7%	2.6%
70-79	4.0%	4.2%
60-69	6.9%	6.5%
50-59	6.7%	6.7%
40-49	5.6%	5.7%
30-39	5.6%	5.5%
20-29	7.6%	7.2%
10-19	6.7%	6.7%
0-9	5.2%	5.0%

Percentage of the population
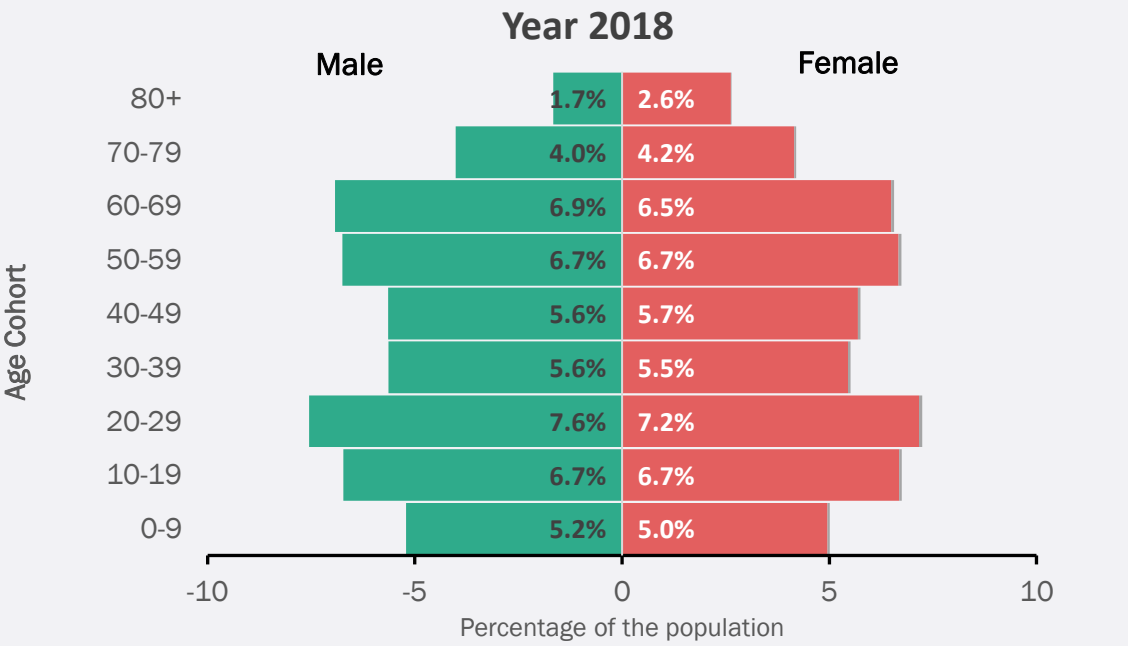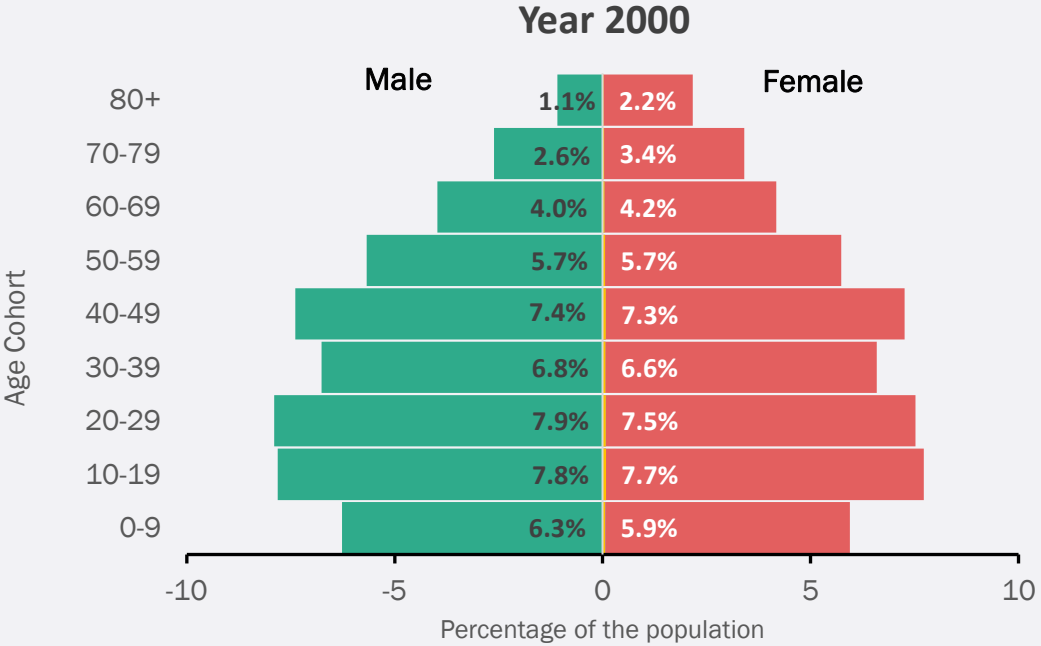
The proportion of males and females in the Buckeye Hill Region changed marginally between 2000 and 2018. The female population declined from 50.5 percent (128,825 persons) in 2000 to 49.9 percent (127,831 persons) in 2018. Bigger changes, however, occurred in specific age-groups. Population aged 50-years or more increased from nearly 29 to 39 percent, a 10 percentage point increase. The younger population under 20-years old decreased from nearly 28 to 23 percent in the 18 years period. Prime working age, residents 30 to 49 years, declined from 28 to 22 percent from 2000 to 2018.

Demography

Generational Chart, 2018

Generation	Male	Female
Silent Generation Plus GI (70+ years)	5.7%	6.8%
Baby Boomers (50-69 years)	13.7%	13.2%
Generation X (35-49 years)	8.5%	8.5%
Millenials (20-34 years)	10.3%	9.8%
Generation Z (<=19 years)	11.9%	11.6%

■ Male ■ Female

Members of the Silent Generation are 70 years and above. Some of them fought in Word Wars and experienced the Great Depression of 1930s.
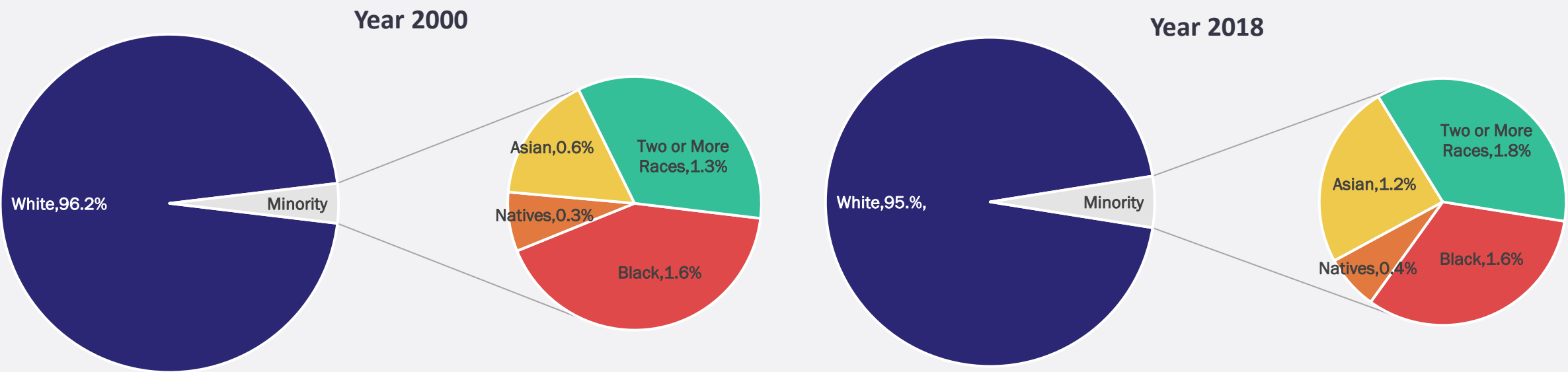
Baby Boomers is the generation after World War II. They are now 50 to 70 years old and nearing retirement age. They experienced the U.S. economic growth and prosperity. This is a large generational cohort with a strong work ethic.

Generation X is now 35 to 50 years old. This generation has experienced technological advances (Internet and automation) and tries to keep up with the new technology.

Millennials are now 20 to 34 years old. This generation is diverse and has adapted to technology.

Generation Z are teenagers and the most technologically savvy generation. They have never known life without cell phones.

Source: Population Estimates, U.S. Census Bureau

Quality of Life

Race

Year 2000

White,96.2%

Minority

Asian,0.6%

Two or More Races,1.3%

Natives,0.3%

Black,1.6%

Year 2018

White,95.%,

Minority

Two or More Races,1.8%

Asian,1.2%

Natives,0.4%

Black,1.6%

Note: Natives are comprised of American Indian and Alaskan Native, and Native Hawaiian and Other Pacific Islander.

The number of white residents in the Buckeye Hills Region decreased marginally from 96.2 percent to 95 percent between 2000 and 2018. As a result, minority population increased from 3.8 percent to only 5 percent in the 18 year period. Asians and two or more races increased by 1,540 and 1,372 individuals, respectively. Among the minority population, Blacks represented the most sizable segment of the population with 4,174 individuals in 2018.

Quality of Life

Ethnicity
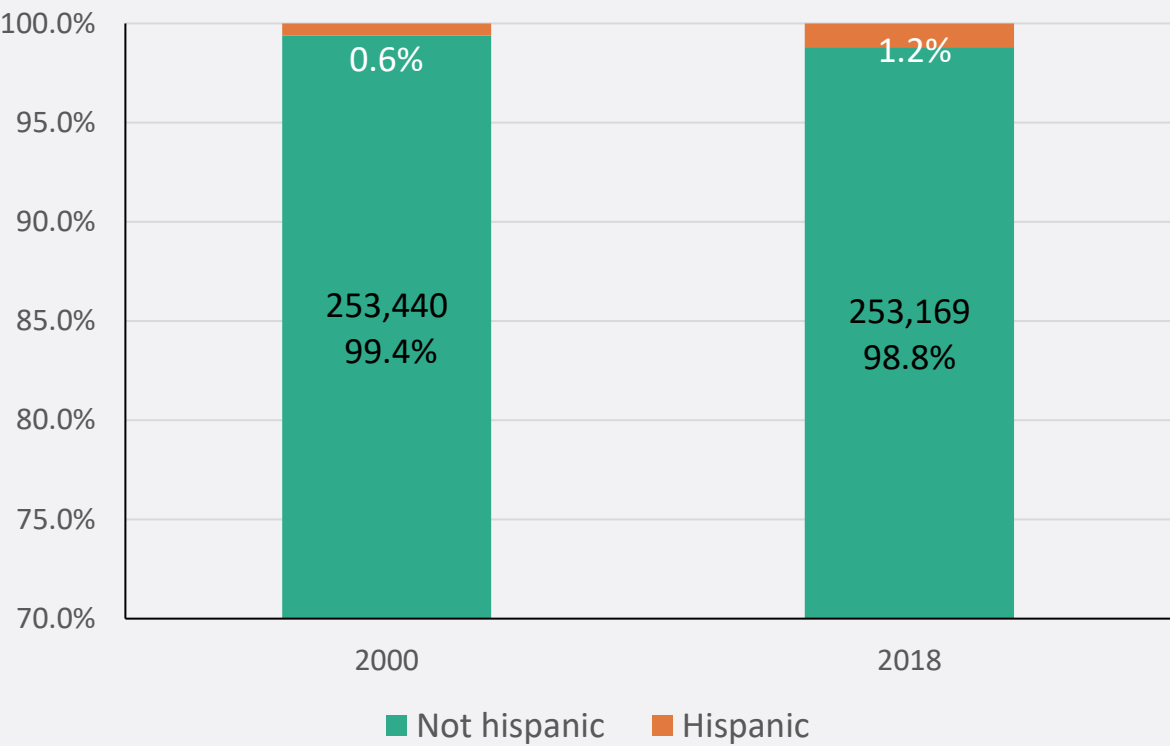
Hispanics are individuals of any race whose ancestors are from Mexico, Puerto Rico, Cuba, Spain, the Dominican Republic or any other Spanish-speaking Central or South American country.

There were 1,560 Hispanics in 2000, a number that increased to 3,076 individuals in 2018, almost a twofold increase in the 18-year period.

Chart values:
- 2000: Hispanic 0.6%; Not hispanic 253,440 / 99.4%
- 2018: Hispanic 1.2%; Not hispanic 253,169 / 98.8%

Legend: ■ Not hispanic ■ Hispanic

Quality of Life

Housing Units by Tenure

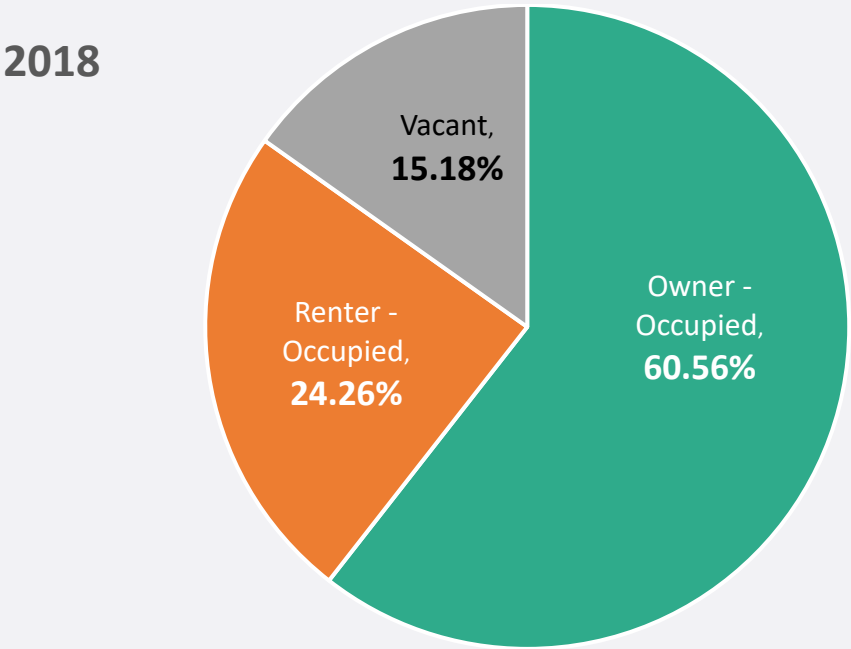|	2000		2018	
Total Occupied Housing Units	**96,672**	**88.12%**	**98,678**	**84.82%**
Owner-Occupied	71,338	65.03%	70,452	60.56%
Renter-Occupied	25,334	23.09%	28,226	24.26%
Total Vacant Housing Units	**13,030**	**11.88%**	**17,658**	**15.18%**

In 2018, nearly a quarter of housing units in Buckeye Hills Region were renter-occupied. At the same time, 6 in 10 housing units were owner-occupied. Approximately 3 in 20 housing units were vacant in 2018, whereas in 2000 around 2 in 20 housing units were vacant.

Occupied Housing units

2000: 96,672 — 2010: 99,636 — 2018: 98,678

Data Snapshot // Buckeye Hills Region

Source: Census 2000, Census 5-year ACS 2014-2018

Quality of Life

Housing Units by Tenure

2000

- Vacant, **11.88%**
- Renter - Occupied, **23.09%**
- Owner - Occupied, **65.03%**

2018

- Vacant, **15.18%**
- Renter - Occupied, **24.26%**
- Owner - Occupied, **60.56%**
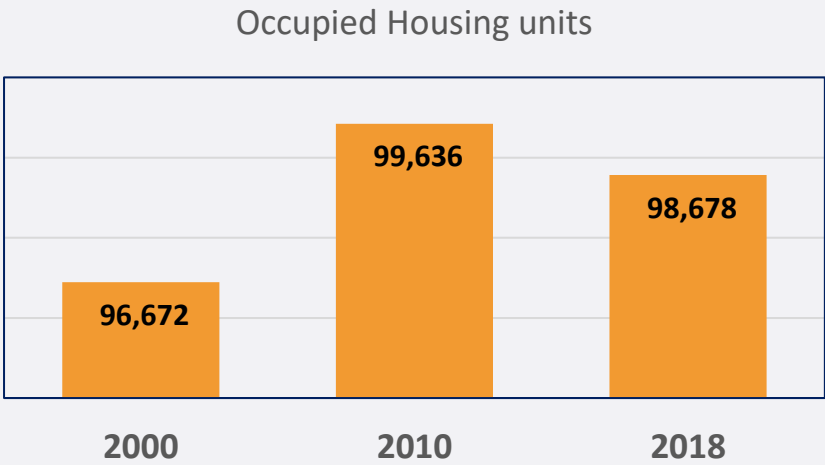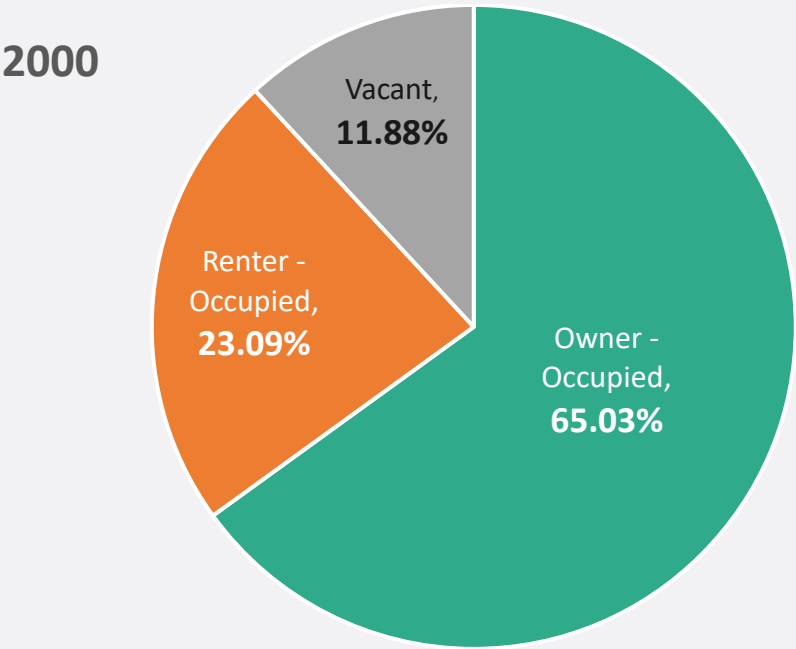
From 2000 to 2018, owner occupied housing units declined in proportion and in numbers (loss of 886 units), while renter occupied (gain of 2,892 units) and vacant housing units (gain of 4,628 units) increased in proportion and in numbers.
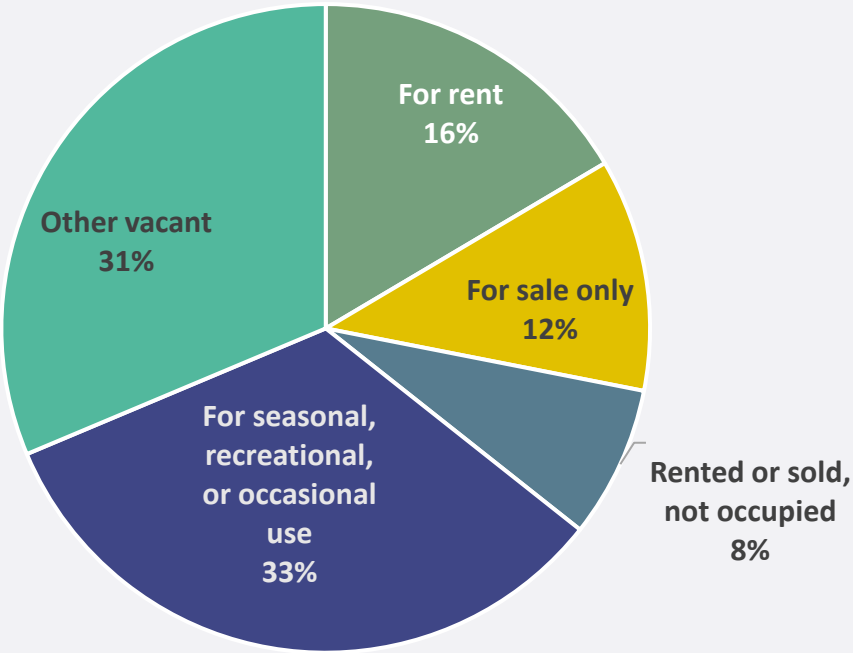
Quality of Life

Type of Housing Structures

	2000		2010		2018	
1 detached	74,740	68.1%	70,692	71.0%	81,571	70.1%
1 attached	1,035	0.9%	1,093	1.1%	1,048	0.9%
2 apartments	3,048	2.8%	2,447	2.5%	2,855	2.5%
3-4 apartments	3,214	2.9%	3,032	3.0%	3,273	2.8%
5-9 apartments	2,410	2.2%	2,343	2.4%	2,646	2.3%
10 or more apartments	4,013	3.7%	4,043	4.1%	5,182	4.5%
Mobile or other types (boat, RV)	21,242	19.4%	15,931	16.0%	19,761	17.0%
Total	**109,702**	**100.0%**	**99,636**	**100.0%**	**116,336**	**100.0%**

Occupied housing units (ownership + renter) have increased from 2000 to 2018. As a result, the number of units increased in almost every housing type. Single family detached housing units remain the predominant housing type with 70.1% of total units. It is followed by mobile homes and manufactured housing units with 17% share.
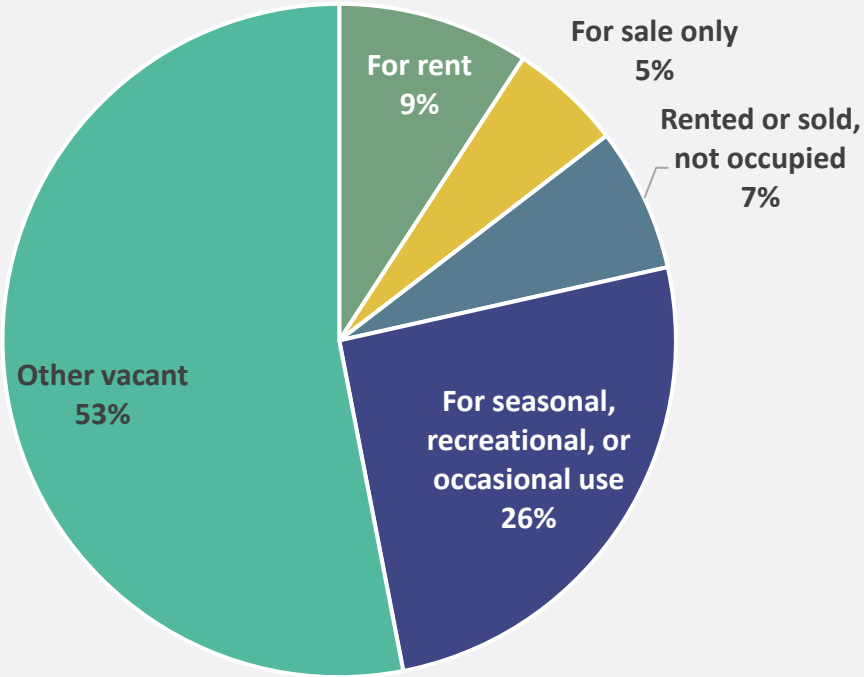
Note: ACS_10 only provide the percentage of types of housing structures, resulting in some small error due to "rounding off" (their sum may be close but not be equal to 100%)

Data Snapshot // Buckeye Hills Region

Source: 2000 Decennial Census; 2005-2010 and 2014-2018 ACS 5-year Estimates

Quality of Life

Housing Units by Vacancy Type

2000

For rent 16%
For sale only 12%
Rented or sold, not occupied 8%
For seasonal, recreational, or occasional use 33%
Other vacant 31%

2018

For rent 9%
For sale only 5%
Rented or sold, not occupied 7%
For seasonal, recreational, or occasional use 26%
Other vacant 53%

Housing units in other vacant category increased proportionately and in numbers from 2000 to 2018. There were 4,083 other vacant units in 2000, which increased to 9,367 units in 2018, a 22-percentage point increase in 18 years. Seasonal, recreational or occasional housing units increased slightly from 4,301 units in 2000, which marginally increased to 4,494 units in 2018 despite a decline in percent between 2000 and 2018.

Quality of Life

Monthly Housing Costs, 2018

	Occupied Housing Units	Percent (%)
Less than $300	12,933	13.11%
$300 - $499	21,307	21.59%
$500 - $799	25,687	26.03%
$800 - $999	12,977	13.15%
$1000 - $1499	14,956	15.16%
$1500 and more	8,065	8.17%
No cash rent	2,753	2.79%

Source: 2014-2018 ACS 5-year Estimates

Quality of Life

Monthly Housing Costs as a Percentage of Income, 2018

Income	Less than 20 percent (Housing units)		20 to 29 percent (Housing units)		30 percent or more (Housing units)	
Less than $20,000	1,802	1.8%	2968	3.0%	14748	14.9%
$20,000 to $34,499	5,711	5.8%	6022	6.1%	4596	4.7%
$35,000 to $49,999	8,069	8.2%	4175	4.2%	1946	2.0%
$50,000 to $74,999	12,199	12.4%	3835	3.9%	1341	1.4%
$75,000 or more	23,515	23.8%	2816	2.9%	562	0.6%
Zero or negative income	1,620 (1.6%)					
No cash rent	2,753 (2.8%)					

Note: Total Occupied (owner and renter) housing units in 2018: 98,678

In 2018, 23.6 percent of housing units were cost-burdened and unaffordable given that 30 percent or more of their monthly income was being spent on housing costs.

Quality of Life

Income and Poverty

	2001	2009	2018
Total Population in Poverty	15.3%	20.7%	19.5%
Minors (Under Age 18) in Poverty	19.8%	27.2%	23.2%
Real Median Household Income ($2018)*	$44,808	$43,540	$46,900
Real Per Capita Income ($2018)*	$30,379	$31,718	$36,531

*Real median household income is the middle-income value in the county. Half of the county's households fall above this line and half below. Real per capita personal income is the average income per person in the county.

Individual and minor poverty rates have varied in Buckeye Hills Region. In 2018, individual poverty rate was 19.5 percent, close to the high-poverty threshold of 20%. In 2009, poverty rate was nearly 21%, thus exceeding the high-poverty threshold. Minor poverty rates have been above the high poverty thresholds in both 2009 and 2018. Specifically, almost a quarter of population 18 years of age or younger were below the federal poverty line threshold in 2018. Real median household income has fluctuated but increased by $2,092 from 2001 to 2018, while the real per capita income increased by $6,152 during this same period of time.

Source: SAIPE, BEA- Local Area Personal Income and Employment

Quality of Life

Health Outcomes

	Life Expectancy
Buckeye Hills Region	76.95
Ohio	77.0

| County	Athens, OH	Hocking, OH	Meigs, OH	Monroe, OH	Morgan, OH	Noble, OH	Perry, OH	Washington OH
Life Expectancy	77.4	76.7	74.1	78.7	77.4	81.4	76.6	76.3

Note: Life Expectancy indicates the average number of years a person can expect to live. The 2019 County Health Rankings used data from 2015-2017 for this measure.

County	Athens, OH	Hocking, OH	Meigs, OH	Monroe, OH	Morgan, OH	Noble, OH	Perry, OH	Washington, OH
Poor or Fair Health	22%	19%	20%	19%	20%	15%	18%	18%

Note: Poor or Fair Health data are from the year 2016

Life expectancy in Buckeye Hills Region varies from the maximum of more than 81 years in Noble County to 74 years in Meigs County. Noble County also has the lowest proportion of population in poor or fair health.

Quality of Life

Life Expectancy by Census Tracts
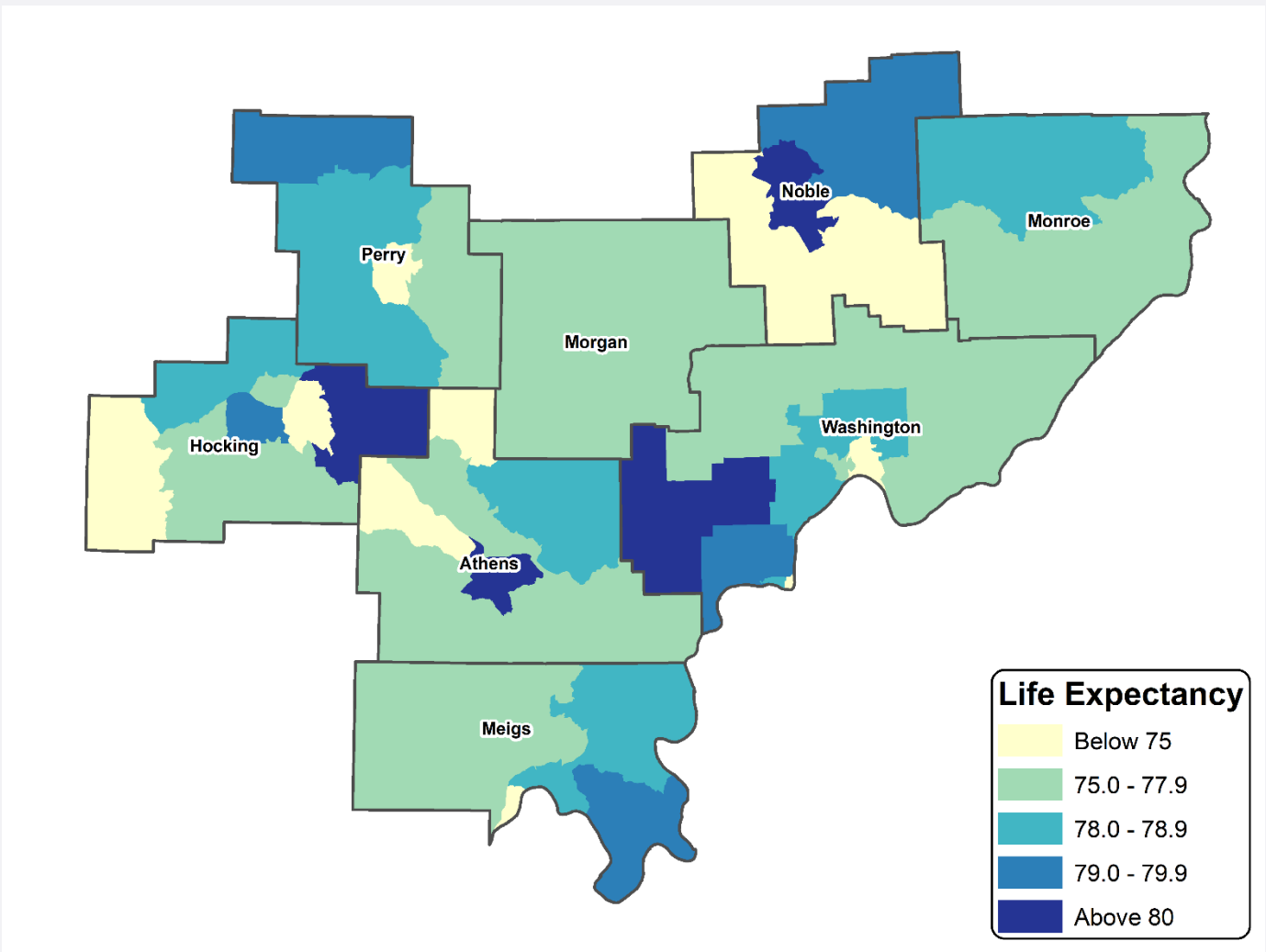
Life expectancy at the census tract level in Buckeye Hills Region varies from the maximum of 84.2 years in Hocking County to 71.2 years in Washington County.

Life Expectancy
- Below 75
- 75.0 - 77.9
- 78.0 - 78.9
- 79.0 - 79.9
- Above 80

Section 03

Economic Development

Economic Development

Company Stages

Stage 3
0.9%

Stage 4
0.1%

Stage 2
17.9%

Stage 0
17.1%
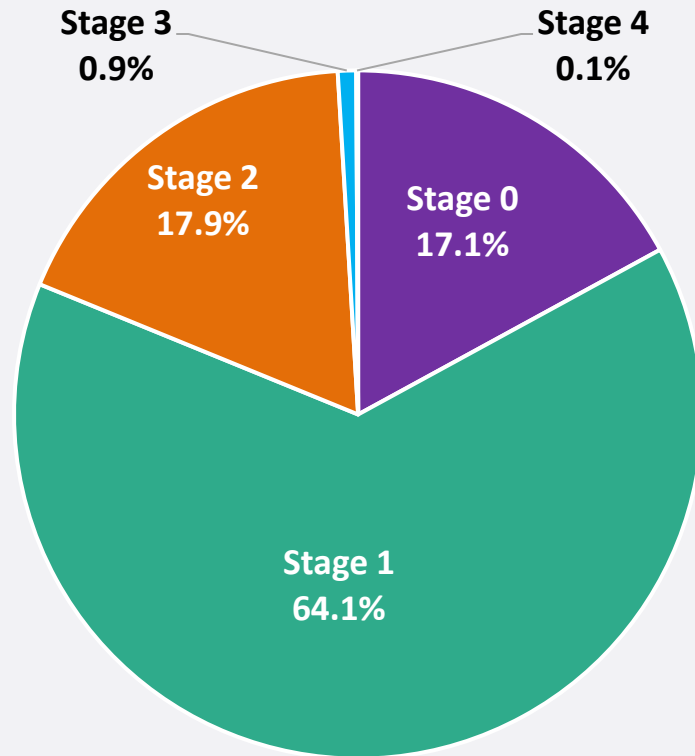
Stage 1
64.1%

Establishment Distribution by Stages
Buckeye Hills Region, 2018

An establishment is a physical business location. Branches, standalones and headquarters are all considered types of establishments.

Definition of Company Stages	
Stage 0	Self-employed
Stage 1	2-9 employees
Stage 2	10-99 employees
Stage 3	100-499 employees
Stage 4	500+ employees

Economic Development

Number of Establishments, Jobs, Sales by Stage/Employment Category in the County

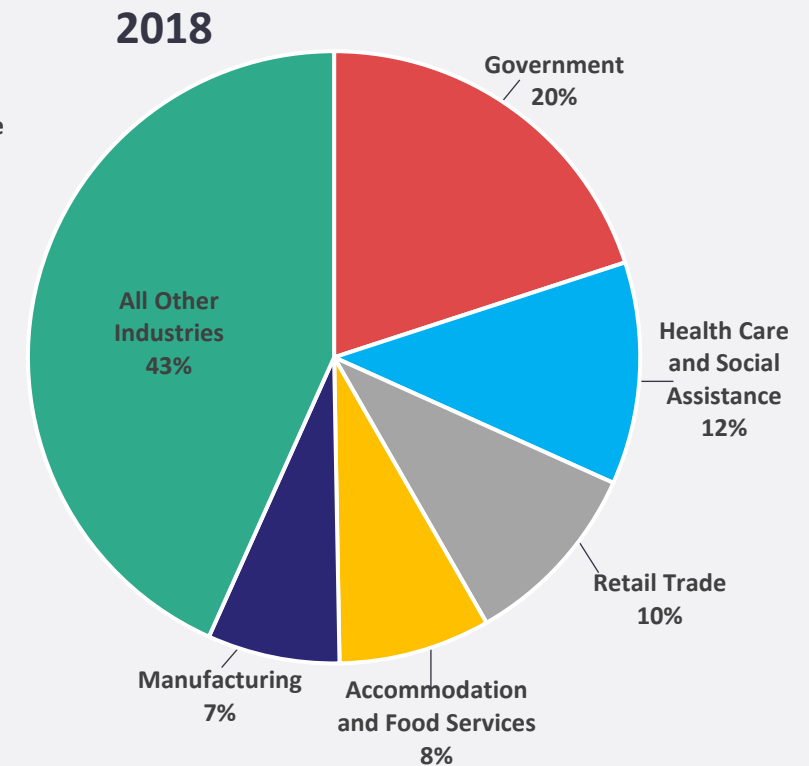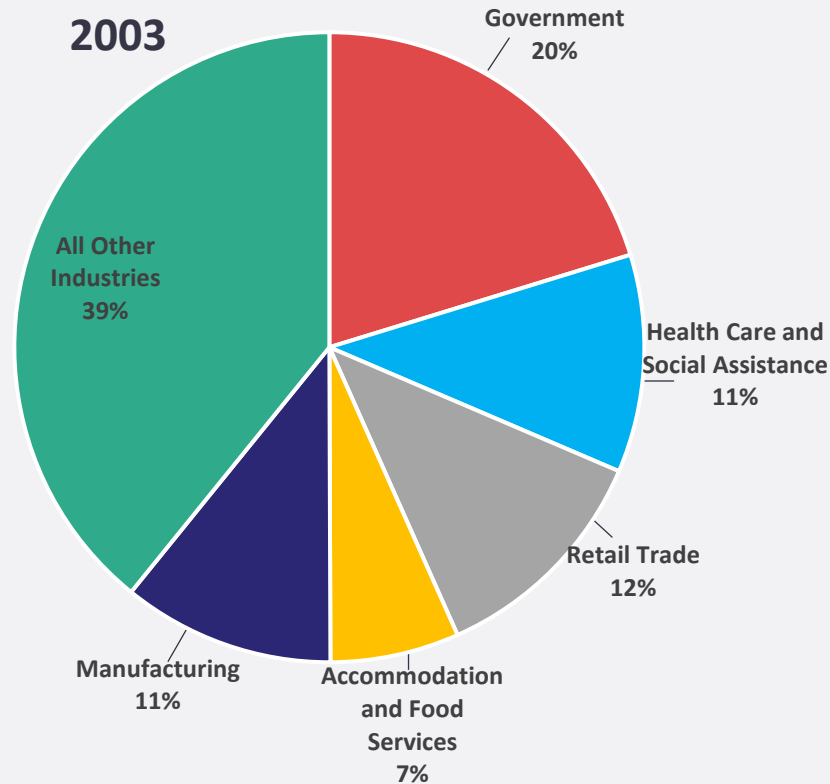| Stage	Establishments 2018	% Change (2013-2018)	Jobs* 2018	% Change (2013-2018)	Sales 2018 ($ 2018, Million)	% Change (2013-2018, $ 2018)
Stage 0	1,763	14.4%	1,763	14.4%	225.3	-13.2%
Stage 1	6,631	8.6%	25,362	11.5%	3,709.3	-25.3%
Stage 2	1,848	7.5%	43,958	8.5%	6,823.9	1.8%
Stage 3	89	8.5%	16,321	9.6%	2,123.0	-14.0%
Stage 4	9	-66.7%	16,890	-59.3%	95.0	-58.8%
Total	**10,340**	**9.2%**	**104,294**	**-13.9%**	**12,976.5**	**-11.3%**

Note: The change in jobs from 2010 to 2018 might not match with the components of change in jobs because of residuals.

Economic Development

Top Five Industries

More than half of all jobs are tied to one of the top five industries in the Buckeye Hills Region.

Government is the largest sector providing nearly 21,500 jobs and more than $77,000 in average annual earnings. Manufacturing remains in the top five employers despite losing 3,700 jobs from 2003 to 2018, providing $72,000 in average annual earnings. Health care and social assistance, retail and accommodation and food services complete the top five industries.

2003

- Government 20%
- Health Care and Social Assistance 11%
- Retail Trade 12%
- Accommodation and Food Services 7%
- Manufacturing 11%
- All Other Industries 39%

2018

- Government 20%
- Health Care and Social Assistance 12%
- Retail Trade 10%
- Accommodation and Food Services 8%
- Manufacturing 7%
- All Other Industries 43%

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Economic Development

Top Five Industries Jobs Trend (2001-2018)

Legend: Government · Health Care and Social Assistance · Retail Trade · Accommodation and Food Services · Manufacturing

Data Snapshot // Buckeye Hills Region

Source: EMSI– 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Economic Development
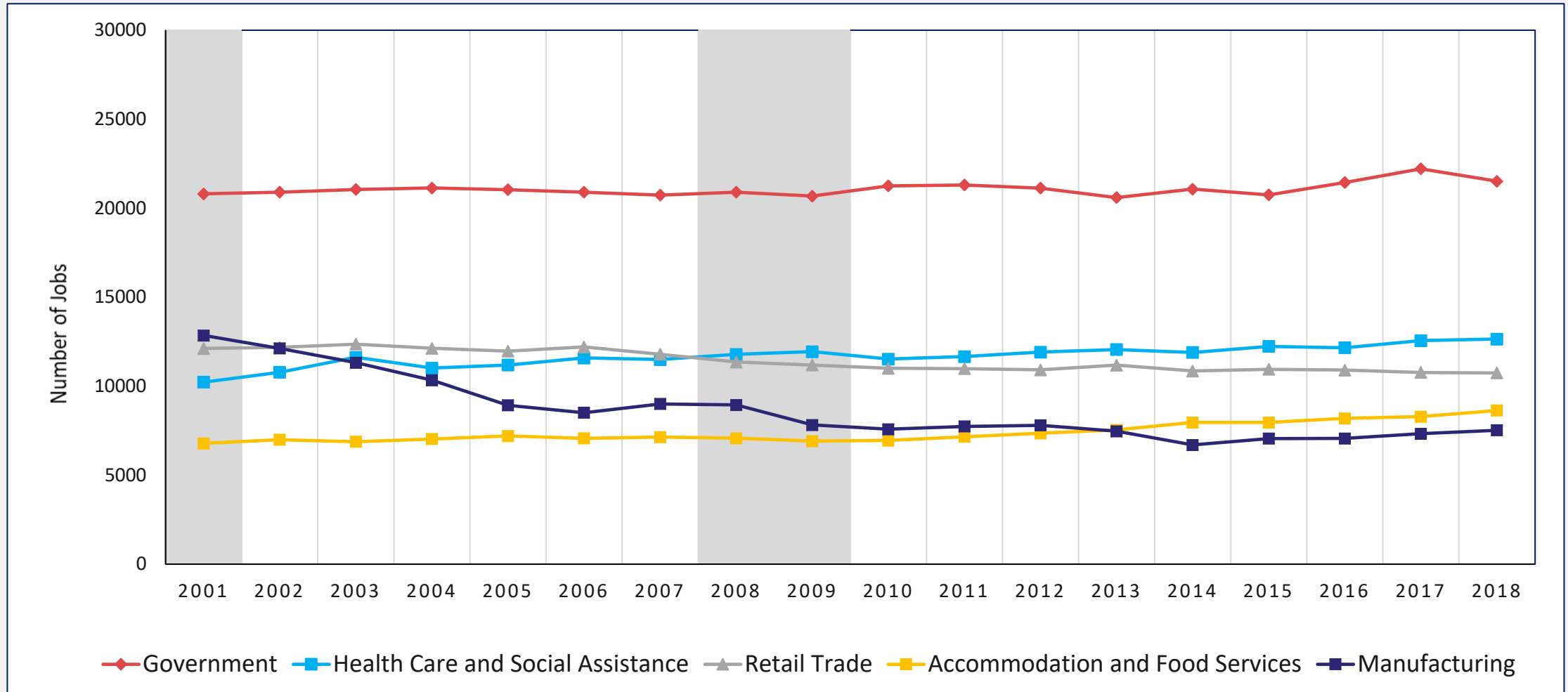
Industry distribution and change

Industries with the largest gains and losses in employment numbers between 2003 & 2018

Mining, Quarrying, and Oil, and Gas Extraction

+2,809

Accommodation and Food Services

+1,753

Employment Increase

The largest percentage gains in employment occurred in

Management of Companies and Enterprises (+442%)

Mining, Quarrying, and Oil and Gas Extraction (+92%)

The largest percentage losses in employment occurred in

Manufacturing (-34%)

Construction (-15%)

Employment Decrease

Manufacturing

-3,793

Retail Trade

-1,619

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Economic Development

Industry Distribution and Change

NAICS Code	Description	Jobs 2003	Jobs 2018	Change (2003-2018)	% Change (2003-2018)	Average Total Earnings 2018
11	Agriculture, Forestry, Fishing and Hunting	5,293	5,500	207	4%	$20,744
21	Mining, Quarrying, and Oil and Gas Extraction	3,059	5,868	2,809	92%	$32,798
22	Utilities	541	589	48	9%	$107,660
23	Construction	7,515	6,385	-1,130	-15%	$49,591
31	Manufacturing	11,316	7,523	-3,793	-34%	$71,914
42	Wholesale Trade	1,749	2,356	607	35%	$52,861
44	Retail Trade	12,361	10,742	-1,619	-13%	$28,039
48	Transportation and Warehousing	2,340	2,735	395	17%	$49,777
51	Information	829	761	-68	-8%	$49,892
52	Finance and Insurance	3,271	3,460	189	6%	$47,550
53	Real Estate and Rental and Leasing	2,079	3,565	1,486	71%	$22,824
54	Professional, Scientific, and Technical Services	3,077	3,294	217	7%	$44,118
55	Management of Companies and Enterprises	144	781	637	442%	$58,309
56	Administrative and Support and Waste Management and Remediation Services	3,007	3,263	256	9%	$29,837
61	Educational Services	1,360	1,850	490	36%	$27,105
62	Health Care and Social Assistance	11,619	12,645	1,026	9%	$51,467
71	Arts, Entertainment, and Recreation	1,211	1,274	63	5%	$14,673
72	Accommodation and Food Services	6,877	8,630	1,753	25%	$16,883
81	Other Services (except Public Administration)	5,221	4,927	-294	-6%	$20,853
90	Government	21,053	21,516	463	2%	$72,307
		103,934	107,670	3,736	4%	$45,375

Economic Development

Industry Distribution and Change

NAICS Code	Description	QCEW 2003 Jobs	QCEW 2018 Jobs	QCEW Jobs % Change (2003-2018)	Total Jobs 2003	Total Jobs 2018	Total Jobs % Change (2003-2018)	QCEW Average Total Earnings 2018
11	Agriculture, Forestry, Fishing and Hunting	353	187	-47%	5,293	5,500	4%	$27,802
21	Mining, Quarrying, and Oil and Gas Extraction	1,049	1,213	16%	3,059	5,868	92%	$86,317
22	Utilities	524	456	-13%	541	589	9%	$124,459
23	Construction	4,330	3,364	-22%	7,515	6,385	-15%	$63,924
31	Manufacturing	11,009	6,903	-37%	11,316	7,523	-34%	$75,168
42	Wholesale Trade	1,495	2,078	39%	1,749	2,356	35%	$54,846
44	Retail Trade	9,390	8,471	-10%	12,361	10,742	-13%	$30,212
48	Transportation and Warehousing	1,125	1,687	50%	2,340	2,735	17%	$61,114
51	Information	634	528	-17%	829	761	-8%	$58,397
52	Finance and Insurance	2,409	1,890	-22%	3,271	3,460	6%	$61,042
53	Real Estate and Rental and Leasing	669	785	17%	2,079	3,565	71%	$35,376
54	Professional, Scientific, and Technical Services	1,572	1,589	1%	3,077	3,294	7%	$57,594
55	Management of Companies and Enterprises	143	752	426%	144	781	442%	$59,778
56	Administrative and Support and Waste Management and Remediation Services	1,745	1,956	12%	3,007	3,263	9%	$38,200
61	Educational Services	623	782	26%	1,360	1,850	36%	$45,546
62	Health Care and Social Assistance	9,773	11,244	15%	11,619	12,645	9%	$53,441
71	Arts, Entertainment, and Recreation	394	275	-30%	1,211	1,274	5%	$19,003
72	Accommodation and Food Services	6,314	7,941	26%	6,877	8,630	25%	$16,288
81	Other Services (except Public Administration)	1,969	1,704	-13%	5,221	4,927	-6%	$28,491
90	Government	18,328	17,814	-3%	21,053	21,516	2%	$84,933
		73,859	71,625	-3%	103,934	107,670	4%	$57,125

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Economic Development

Non-employer Statistics

Buckeye Hills Region	2010	2017
Number of Establishments	14,987	12,876
Receipts or $ Sales (thousands, $2017)	557,980	498,581
Receipts per Establishments (thousands, $2017)	37.23	38.72

Non-employer statistics indicates entrepreneurship and ventures in the region. Compared to 2010, establishments without any paid employees but paying federal income taxes decreased by 2,111 establishments. Corresponding declines in sales in real value and sales per establishment are observed from 2010 to 2017.

Source: Census NES 2010, NOEMP2017

Economic Development

Agricultural Statistics

Buckeye Hills Region	2012 ($ 2017)	2017	% Change (2012-2017)
Number of Farms	5,890	5,888	-0.003%
Land in Farms (Acres)	935,151	949,802	1.57%
Total Farm Production Expenses	243,436,357	241,370,000	-0.85%
Market Value of Products Sold	306,950,360	278,977,000	-9.11%

Source: Agricultural Census 2012 & 2017 (County Profile)

Economic Development

Top Five Crops & Livestock Acreage, 2017

Crops	Acres
Soybeans for beans	168,863
Forage (hay/haylage), all	137,635
Corn for grain	107,351
Wheat for grain, all	19,179
Corn for silage or green chop	4,954

Livestock	Number
Cattle and calves	91,113
Hogs and pigs	69,029
Layers	23,335
Sheep and lambs	13,281
Horses and ponies	6,039

Source: Agricultural Census 2017 (County Profile)

Workforce Development

Section 04

Educational Attainment

Workforce Development
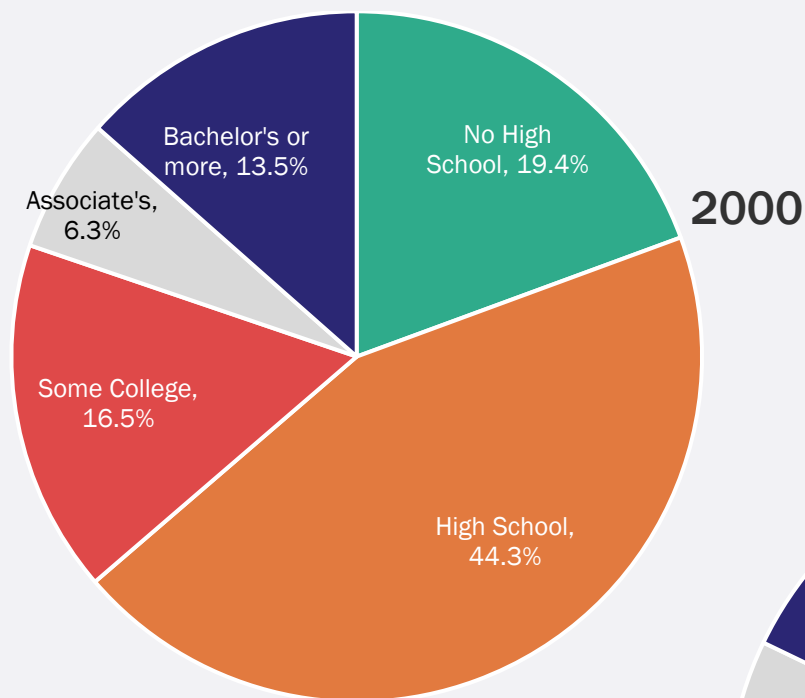
Buckeye Hills Region's share of adults (25 years and older) with bachelor's or higher degree increased by 4.4 percentage points from 2000 to 2018.

The adults with associate's degree grew by 3.5 percentage points (6,881 more individuals), while adults with some college degree increased by 1.5 percentage points (4,751 more individuals) from 2000 to 2018.
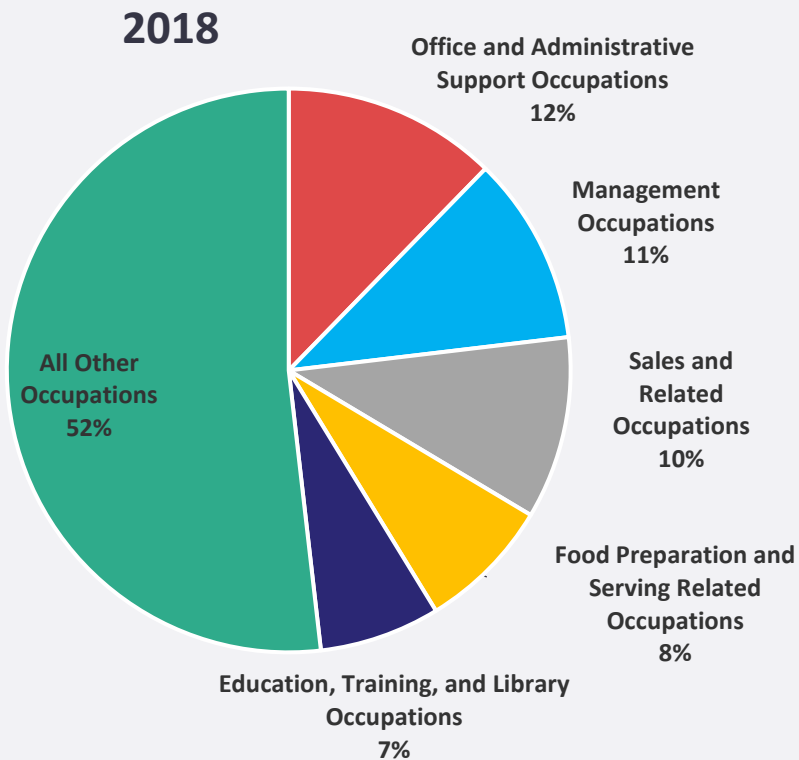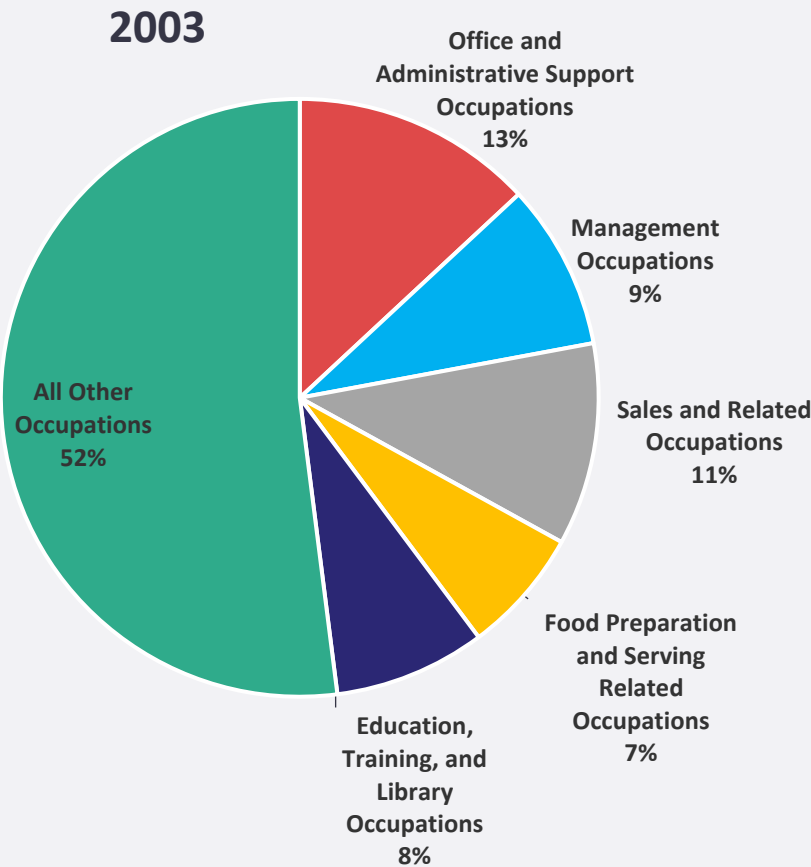
Despite impressive improvements in educational attainment, more than half of the adult population (54.2%) had a high education or less in 2018.

2000

- No High School, 19.4%
- High School, 44.3%
- Some College, 16.5%
- Associate's, 6.3%
- Bachelor's or more, 13.5%

2018

- No High school 11.8%
- High school 42.4%
- Some college 18.1%
- Associate's degree 9.8%
- Bachelor's or more 17.9%

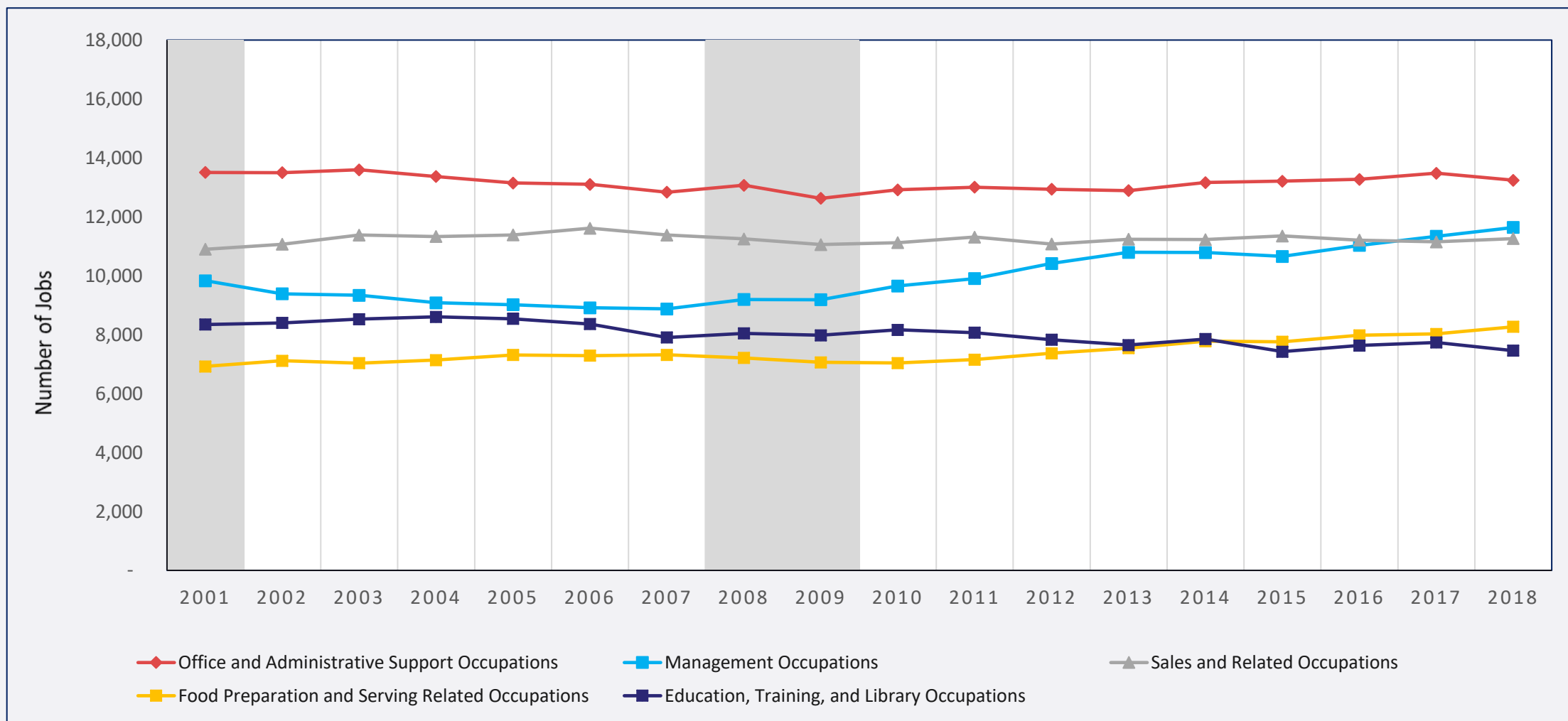Source: 2000 Decennial Census , Census 5-year ACS 2018
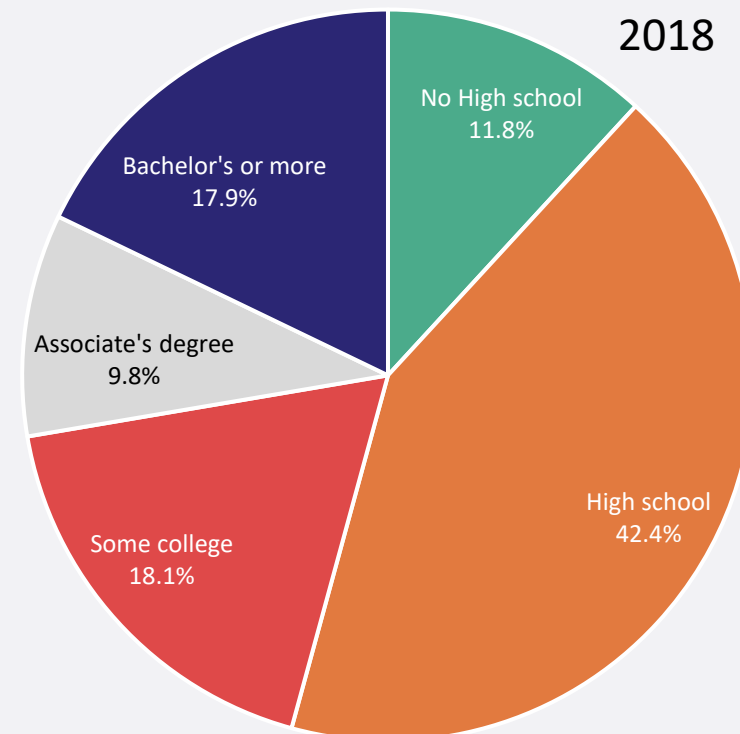
Top Five Occupations

Office and administrative support is the largest occupation group, providing 13,200 jobs median hourly wages of $15. Management is the second highest occupation group providing a decent median wage of $20 per hour.

Sales and food preparation and serving occupations are third and fourth ranked providing lower median wages of $12 and $9, respectively. Education, training and library occupations providing hourly wages of $23 complete the top five occupation groups.
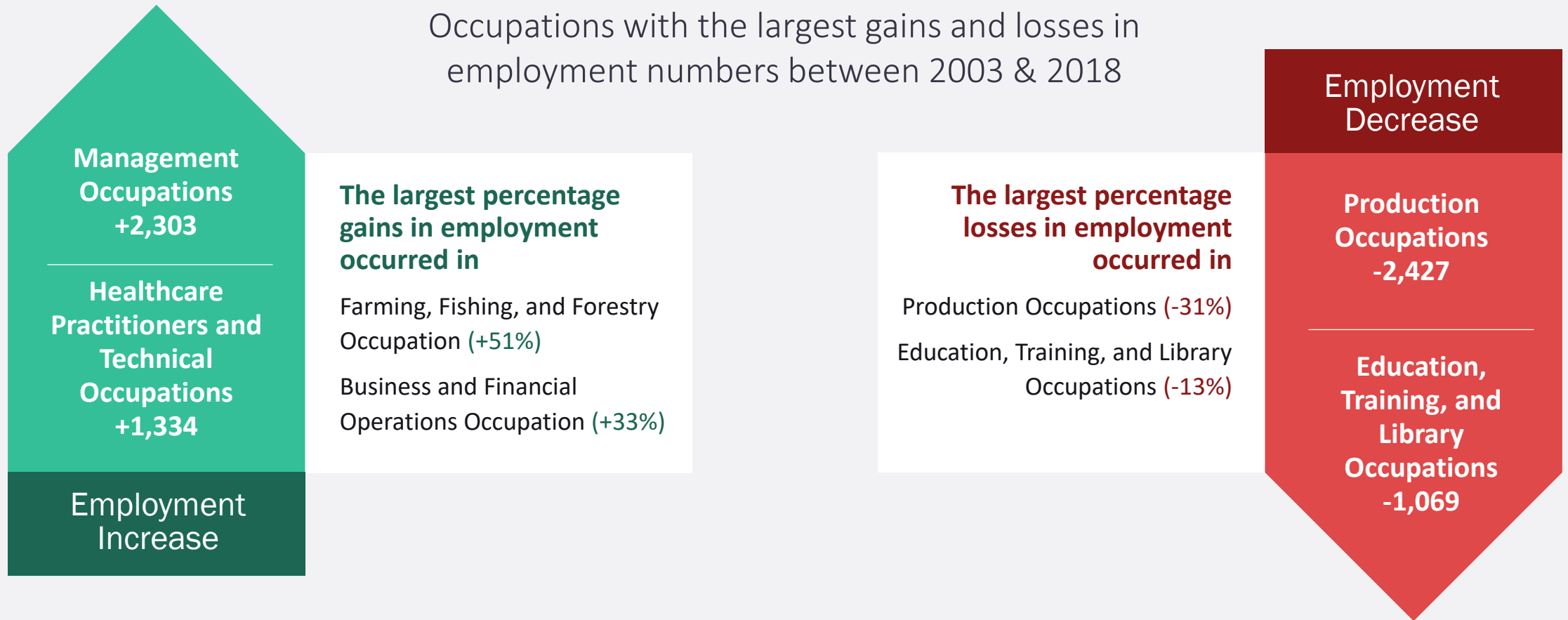
2003

- Office and Administrative Support Occupations 13%
- Management Occupations 9%
- Sales and Related Occupations 11%
- Food Preparation and Serving Related Occupations 7%
- Education, Training, and Library Occupations 8%
- All Other Occupations 52%

2018

- Office and Administrative Support Occupations 12%
- Management Occupations 11%
- Sales and Related Occupations 10%
- Food Preparation and Serving Related Occupations 8%
- Education, Training, and Library Occupations 7%
- All Other Occupations 52%

Workforce Development

Occupation distribution and change

Legend:
- Office and Administrative Support Occupations
- Management Occupations
- Sales and Related Occupations
- Food Preparation and Serving Related Occupations
- Education, Training, and Library Occupations

Data Snapshot // Buckeye Hills Region

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Workforce Development

Occupation distribution and change

Occupations with the largest gains and losses in employment numbers between 2003 & 2018

Management Occupations +2,303

Healthcare Practitioners and Technical Occupations +1,334

Employment Increase

The largest percentage gains in employment occurred in

Farming, Fishing, and Forestry Occupation (+51%)

Business and Financial Operations Occupation (+33%)

The largest percentage losses in employment occurred in

Production Occupations (-31%)

Education, Training, and Library Occupations (-13%)

Employment Decrease

Production Occupations -2,427

Education, Training, and Library Occupations -1,069

Data Snapshot // Buckeye Hills Region

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Data

Economy - Occupation Distribution and Change

SOC	Description	Jobs 2003	Jobs 2018	Change (2003-2018)	% Change (2003-2018)	Median Hourly Earnings 2018 (Total Jobs)
11	Management Occupations	9,339	11,642	2,303	25%	$19.89
13	Business and Financial Operations Occupations	2,961	3,943	982	33%	$27.04
15	Computer and Mathematical Occupations	883	1,071	188	21%	$29.51
17	Architecture and Engineering Occupations	1,294	1,223	-71	-5%	$32.74
19	Life, Physical, and Social Science Occupations	836	890	54	6%	$29.05
21	Community and Social Service Occupations	1,723	2,025	302	18%	$19.06
23	Legal Occupations	448	543	95	21%	$28.80
25	Education, Training, and Library Occupations	8,526	7,457	-1,069	-13%	$23.04
27	Arts, Design, Entertainment, Sports, and Media Occupations	2,140	2,475	335	16%	$15.05
29	Healthcare Practitioners and Technical Occupations	4,486	5,820	1,334	30%	$27.00
31	Healthcare Support Occupations	3,198	3,785	587	18%	$12.09
33	Protective Service Occupations	1,757	1,883	126	7%	$20.82
35	Food Preparation and Serving Related Occupations	7,034	8,268	1,234	18%	$9.38
37	Building and Grounds Cleaning and Maintenance Occupations	3,778	3,925	147	4%	$11.87
39	Personal Care and Service Occupations	3,506	3,795	289	8%	$10.10
41	Sales and Related Occupations	11,381	11,264	-117	-1%	$12.38
43	Office and Administrative Support Occupations	13,597	13,241	-356	-3%	$15.07
45	Farming, Fishing, and Forestry Occupations	642	967	325	51%	$11.54
47	Construction and Extraction Occupations	7,209	6,321	-888	-12%	$18.74
49	Installation, Maintenance, and Repair Occupations	3,994	4,057	63	2%	$18.84
51	Production Occupations	7,880	5,453	-2,427	-31%	$17.09
53	Transportation and Material Moving Occupations	6,924	7,126	202	3%	$15.15
55	Military-only occupations	318	323	5	2%	$23.07
All		103,934	107,670	3,736	4%	

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Data

Economy - Occupation Distribution and Change

SOC	Description	QCEW 2003 Jobs	QCEW 2018 Jobs	QCEW Jobs % Change (2003-2018)	Total Jobs 2003	Total Jobs 2018	Total Jobs % Change (2003-2018)	Median Hourly Earnings 2018 (QCEW Jobs)
11	Management Occupations	2,636	2,791	6%	9,339	11,642	25%	$39.51
13	Business and Financial Operations Occupations	1,845	2,103	14%	2,961	3,943	33%	$27.26
15	Computer and Mathematical Occupations	568	712	25%	883	1,071	21%	$31.96
17	Architecture and Engineering Occupations	1,036	970	-6%	1,294	1,223	-5%	$33.59
19	Life, Physical, and Social Science Occupations	519	601	16%	836	890	6%	$28.31
21	Community and Social Service Occupations	1,205	1,533	27%	1,723	2,025	18%	$19.57
23	Legal Occupations	268	287	7%	448	543	21%	$28.43
25	Education, Training, and Library Occupations	7,930	6,700	-16%	8,526	7,457	-13%	$23.82
27	Arts, Design, Entertainment, Sports, and Media Occupations	580	555	-4%	2,140	2,475	16%	$16.63
29	Healthcare Practitioners and Technical Occupations	4,079	5,340	31%	4,486	5,820	30%	$26.98
31	Healthcare Support Occupations	2,783	3,421	23%	3,198	3,785	18%	$12.03
33	Protective Service Occupations	1,592	1,671	5%	1,757	1,883	7%	$21.02
35	Food Preparation and Serving Related Occupations	6,728	7,886	17%	7,034	8,268	18%	$9.36
37	Building and Grounds Cleaning and Maintenance Occupations	2,508	2,308	-8%	3,778	3,925	4%	$12.04
39	Personal Care and Service Occupations	1,277	1,700	33%	3,506	3,795	8%	$10.12
41	Sales and Related Occupations	6,898	6,370	-8%	11,381	11,264	-1%	$11.48
43	Office and Administrative Support Occupations	11,291	10,199	-10%	13,597	13,241	-3%	$15.04
45	Farming, Fishing, and Forestry Occupations	307	220	-28%	642	967	51%	$12.18
47	Construction and Extraction Occupations	4,322	3,545	-18%	7,209	6,321	-12%	$20.83
49	Installation, Maintenance, and Repair Occupations	3,021	3,008	0%	3,994	4,057	2%	$19.73
51	Production Occupations	7,292	4,806	-34%	7,880	5,453	-31%	$17.49
53	Transportation and Material Moving Occupations	5,173	4,897	-5%	6,924	7,126	3%	$15.09
55	Military occupations	0	0	0%	318	323	2%	$0.00
All	Total	73,859	71,625	-3%	103,934	107,670	4%	

Data Snapshot // Buckeye Hills Region

Source: EMSI – 2019.3 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Labor Market

Labor Force and Unemployment

	2010	2018
Labor Force	117,921	109,208
Unemployment Rate	12.2%	5.9%
Labor Force Participation Rate*	67.8%	65.0%

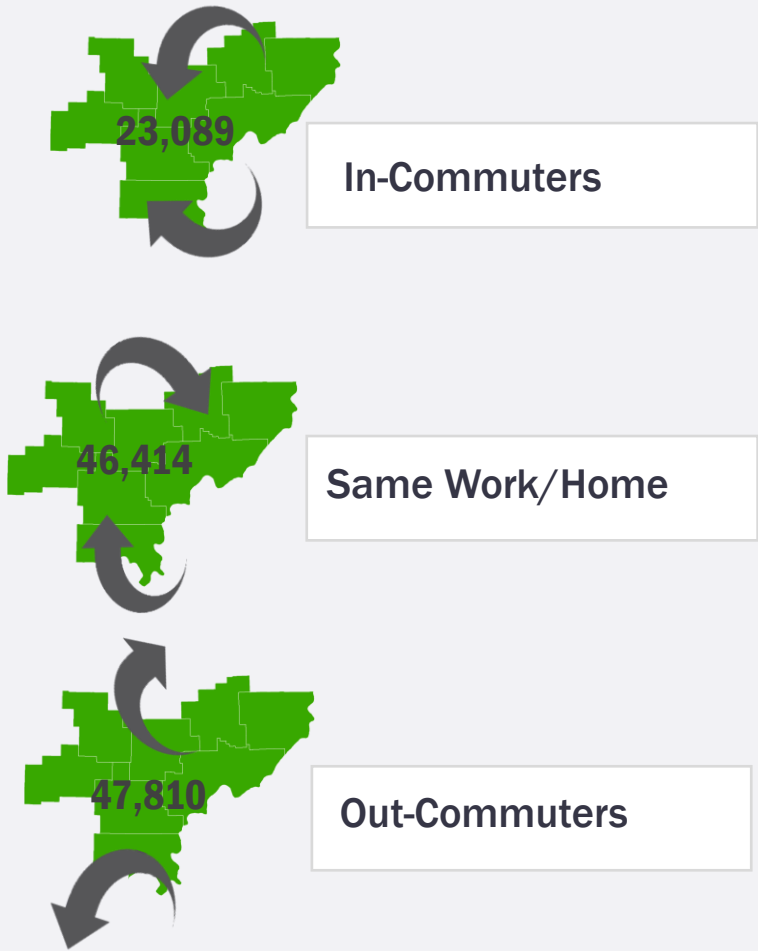*Note: Labor Force Participation age range 16 to 64 years

The number of individuals in the labor force in Buckeye Hills Region decreased by 8,713 workers from 2010 to 2018.

Unemployment rate dropped by 6.3 percentage points in 8-year period. In 2018, Buckeye Hills had 5.9 percent unemployment rate compared to 5 percent unemployment in Ohio.

Labor participation rate declined by 2.8 percentage points; a trend observed after the Great Recession of 2007 to 2009.

Labor Market

Journey to Work

23,089

In-Commuters

46,414

Same Work/Home

47,810

Out-Commuters

Buckeye Hills Region has more workers commuting out than commuting into the region for work.

Net commuting is negative in the Buckeye Hills Region with a deficit of 24,721 commuters. About 49.3 percent of the region's residents both live and work in the Buckeye Hills Region. For every 100 residents, there are 74 jobs in the Buckeye Hills Region, which suggests the region is not serving as a job center.

	2017 Count	Proportion
Living in Buckeye Hills Region	**69,503**	**100.0%**
• Both living and employed in the region	46,414	66.8%
• Living in the region but employed outside	23,089	33.2%
Employed in Buckeye Hills Region	**94,224**	**100.0%**
• Both employed and living in the region	46,414	49.3%
• Employed in the region but living outside	47,810	50.7%

Source: On The Map

Labor Market

Commuteshed & Laborshed in 2017

47,810

75% commuteshed region
80% commuteshed region
85% commuteshed region

23,089

75% laborshed region
80% laborshed region
85% laborshed region

Data Snapshot // Buckeye Hills Region

Source: On The Map
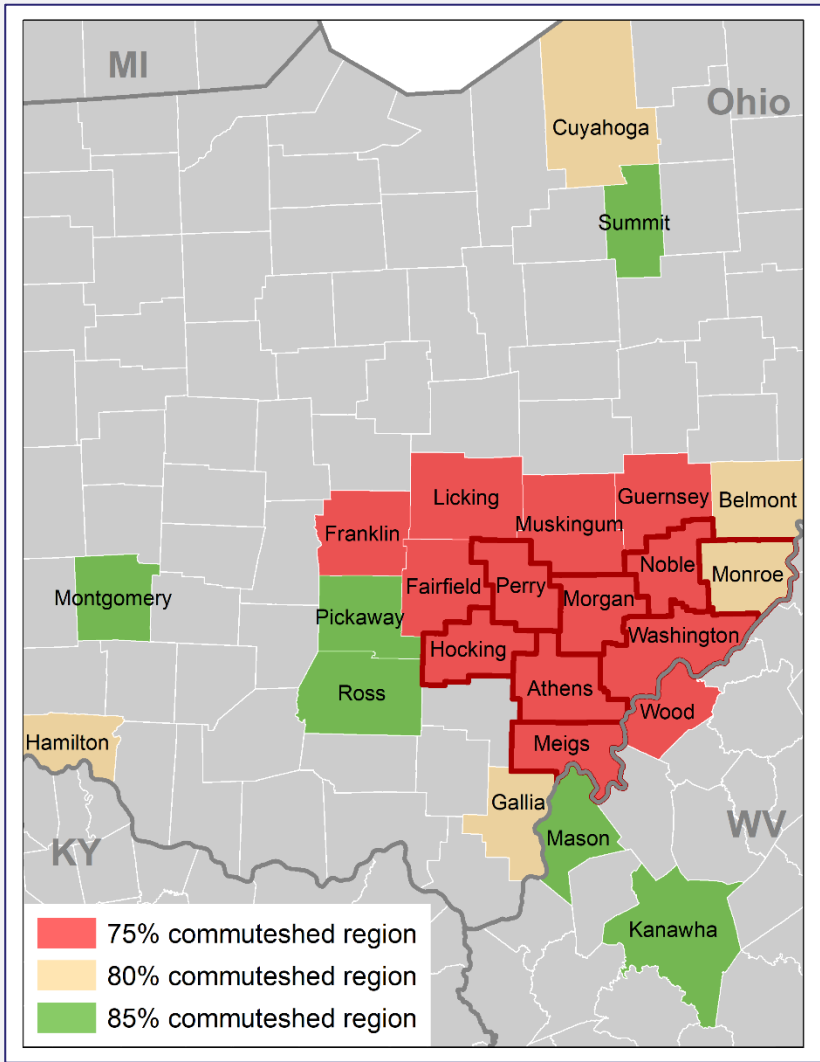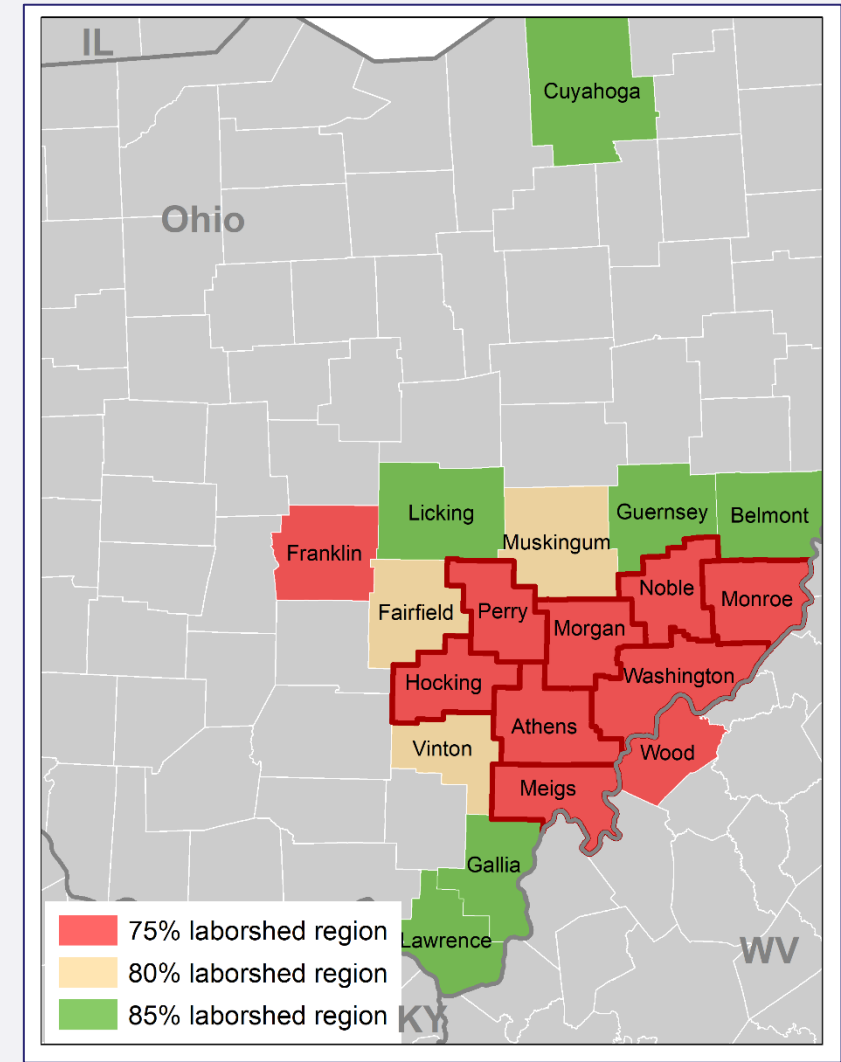
Commuteshed in 2017

Seventy-five percent of employed Buckeye Hills residents commute to Washington, Athens, Franklin (Columbus), Wood, Fairfield, Hocking, Perry, Muskingum, Meigs and Licking counties. Increasing the commuter shed threshold to 80 percent results in the inclusion of Morgan, Noble and Guernsey counties in Ohio. At the 85 percent threshold, Monroe, Belmont, Gallia, Cuyahoga (Cleveland), and Hamilton (Cincinnati) counties in Ohio are included.

Collectively, these 18 counties represent roughly 85 percent of the commuteshed for the Buckeye Hills Region. The key counties are highlighted below.

A region's commuteshed is the geographic area to which its resident work force travels to work.

	Commuters	Proportion
Washington County, OH	16,121	17.1%
Athens County, OH	14,231	15.1%
Franklin County, OH	6,908	7.3%
Wood County, OH	5,524	5.9%
Fairfield County, OH	4,877	5.2%

Laborshed in 2017

Seventy-five percent of the region's workers live in Buckeye Hills counties, Washington, Athens, Hocking, Wood, Perry, Meigs, Morgan, Noble and Monroe counties of Ohio and Franklin County (Columbus). Muskingum, Fairfield and Vinton counties are included in the labor shed when the threshold is extended to 80 percent.

Adjacent Licking, Gallia, Belmont, Cuyahoga (Cleveland), Lawrence and Guernsey counties of Ohio are part of the 85 percent labor shed.

A region's laborshed is the geographic area from which it draws employees.

Combined, these 19 counties represent 85 percent of the Buckeye Hills Region's laborshed. The key counties are listed below.

	Commuters	Proportion
Washington County, OH	14,314	20.6%
Athens County, OH	12,664	18.2%
Hocking County, OH	4,403	6.3%
Wood County, OH	4,209	6.1%
Perry County, OH	4,051	5.8%
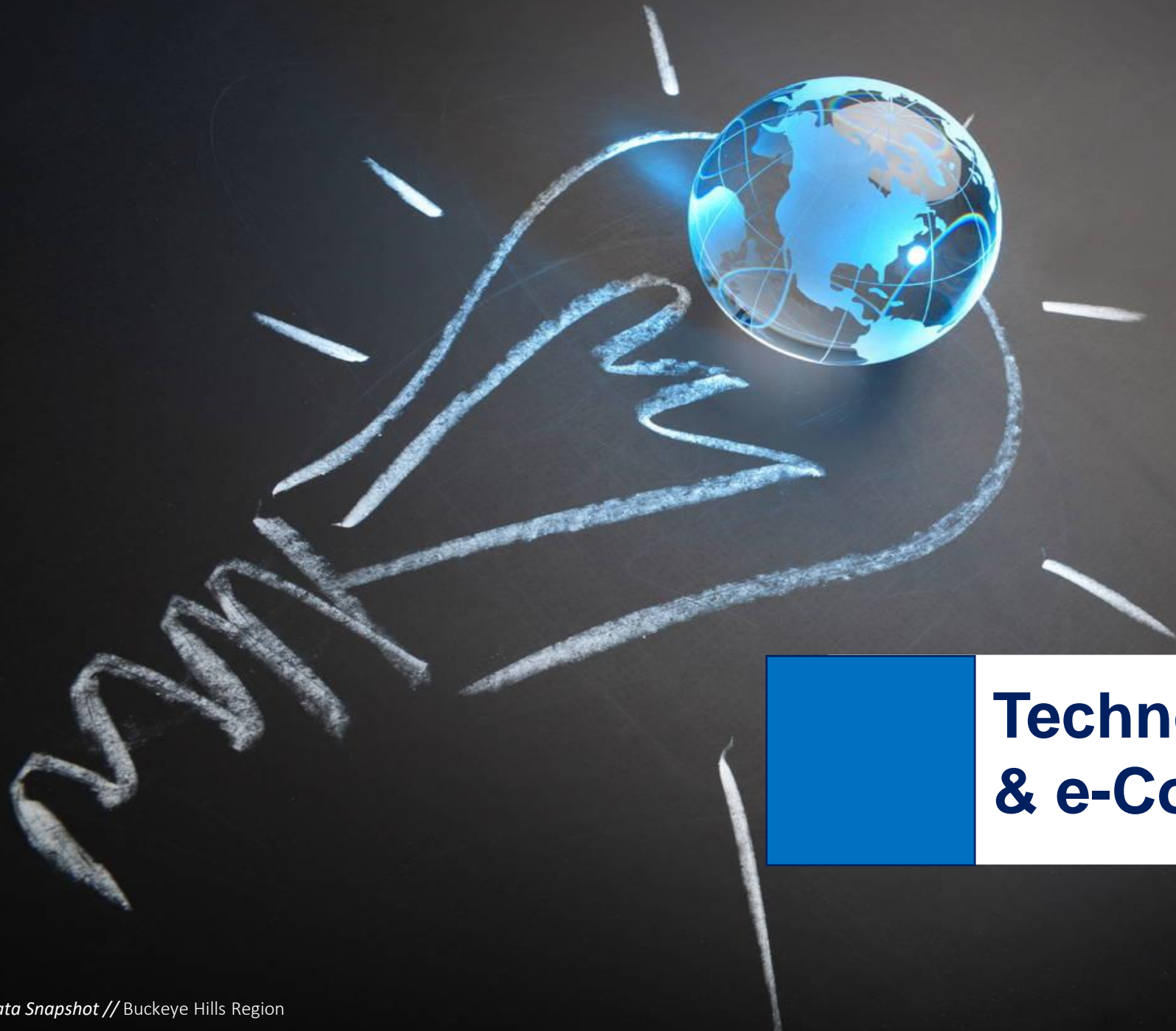
Section 04

**Technological Innovation
& e-Connectivity**

Innovation

Patents

**Patents per 10,000 Jobs
2009-2015**

Buckeye Hills
2.38

Rest of Ohio
5.04
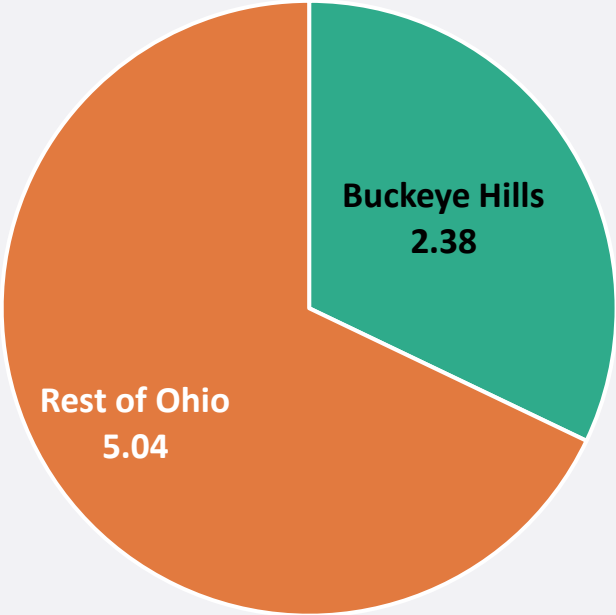
Patenting trends are important to assess the level of innovation in a region. Commercializing this innovation can lead to long-term growth for regional economies.

Buckeye Hills Region (Patents per 10,000 Jobs)

Year	Value
2009	1.47
2010	2.44
2011	2.02
2012	1.71
2013	2.35
2014	2.98
2015	3.71
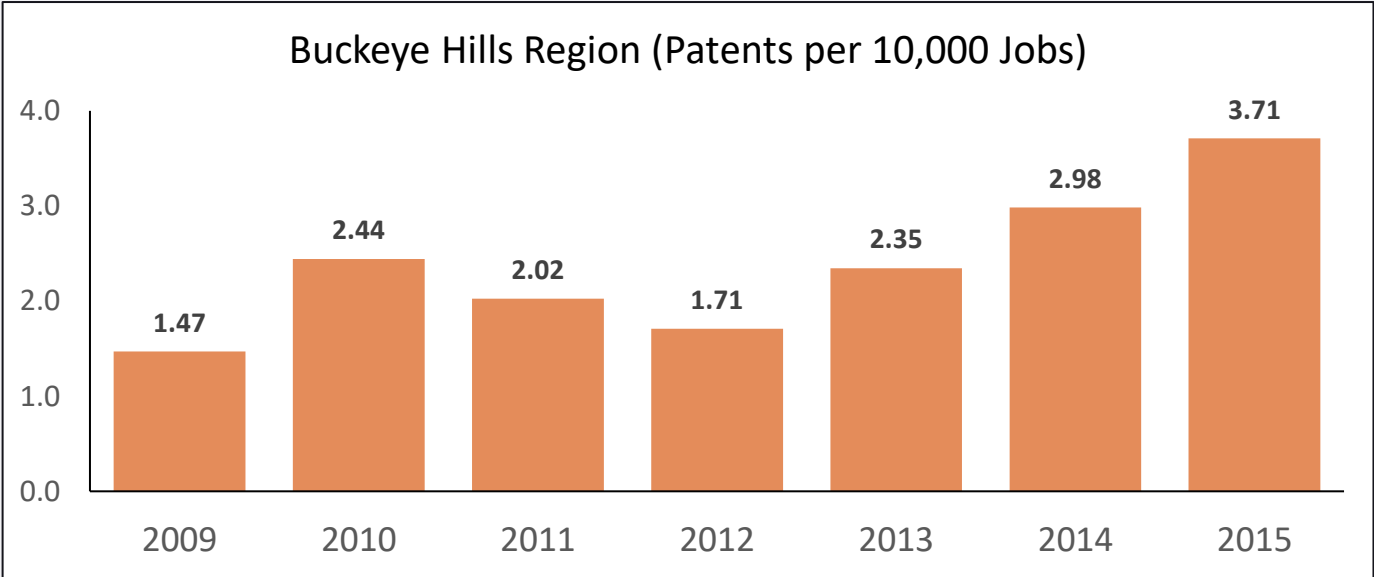
*Note: Excluding Morgan County, Ohio. Patent origin is determined by the residence of the first-named inventor. Since a number of workers commute into the region for work purposes, the number of patents produced in the Buckeye Hills Region could be higher.

Data Snapshot // Buckeye Hills Region

E-connectivity

Computing Devices and Connectivity

2018	Number of Households	Percent (%)
Has one or more types of computing devices	80,449	81.53%
No computer	18,229	18.47%
With an internet subscription	70,253	71.19%
Without an internet subscription	28,425	28.81%

Note: Total number of households: 98,678

Over 81 percent of households in Buckeye Hills Region had access to at least one computing device in 2018. In comparison, 18 percent households did not have access to any type of computing device.

Nearly 3 out of 10 (28.81%) of the households did not have an internet subscription in 2018 in Buckeye Hills Region. The un-subscription rate for Buckeye Hills Region is higher than the statewide average rate of 19.8 % in 2018.

Broadband

The Digital Divide Index or DDI ranges in value from 0 to 100, where 100 indicates the highest digital divide. It is composed of two scores, also ranging from 0 to 100: the infrastructure/adoption (INFA) score and the socioeconomic (SE) score.

The INFA score groups five variables related to broadband infrastructure and adoption:

1. percentage of total 2010 population without access to fixed broadband of at least 25 Mbps download and 3 Mbps upload

2. households with no internet access (not subscribing)

3. households without a computing device

4. average maximum advertised download speeds; and

5. average maximum advertised upload speeds.

The SE score groups four variables known to impact technology adoption:

1. percent population ages 65 and over

2. percent population 25 and over with less than high school

3. individual poverty rate; and

4. percent of noninstitutionalized civilian population with a disability.
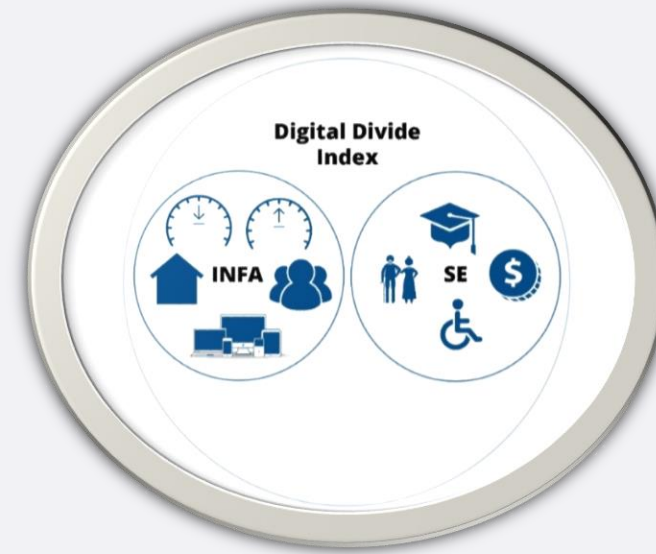
In other words, these variable indirectly measure adoption since they are potential predictors of lagging technology adoption. These two scores are combined to calculate the overall DDI score. If a particular county or census tract has a higher INFA score versus a SE score, efforts should be made to improve broadband infrastructure. If on the other hand, a particular geography has a higher SE score versus an INFA score, efforts should be made to increase digital literacy and exposure to the technology's benefits.

E-connectivity

Digital Divide Profile

Buckeye Hills Region	Digital Divide Index	Infrastructure Score	Socioeconomic Score
Athens County	55.555	37.015	66.904
Hocking County	62.793	50.343	66.724
Meigs County	85.619	62.212	97.707
Monroe County	100.000	93.634	92.182
Morgan County	84.590	62.704	95.237
Noble County	93.862	84.296	90.280
Perry County	69.713	56.424	73.520
Washington County	69.088	52.065	76.893

Source: DDI, PCRD

Notes

LAUS (Local Area Unemployment Statistics):

LAUS is a U.S. Bureau of Labor Statistics (BLS) program that provides monthly and annual labor force, employment and unemployment data by place of residence at various geographic levels. LAUS utilizes statistical models to estimate data values based on household surveys and employer reports. These estimates are updated annually. Annual county-level LAUS estimates do not include seasonal adjustments.

LEHD (Longitudinal Employer-Household Dynamics):

LEHD is a partnership between U.S. Census Bureau and State Department of Workforce Development (DWD) to provide labor market and journey to work data at various geographic levels. LEHD uses Unemployment Insurance earnings data and Quarterly Census of Employment and Wages from DWDs and census administrative records related to individuals and businesses.

SAIPE (Small Area Income and Poverty Estimates):

SAIPE is a U.S. Census Bureau program that provides annual data estimates of income and poverty statistics at various geographic levels. The estimates are used in the administration of federal and state assistance programs. SAIPE utilizes statistical models to estimate data from sample surveys, census enumerations, and administrative records.

EMSI (Economic Modeling Specialists International):

The jobs, earnings and labor market data for Industries and occupations are obtained from EMSI. It provides unsuppressed data at North American Industry Classification System (NAICS) 6-digit and Standard Occupation Classification (SOC) at 5-digit level for every county in the U.S.

OTM (On the Map):

OTM, a product of LEHD program, is used in the county snapshot report to develop commuting patterns for a geography from two perspectives: place of residence and place of work. At the highly detailed level of census blocks, some of the data are synthetic to maintain confidentiality of the worker. However, for larger regions mapped at the county level, the commuter shed and labor shed data are fairly reasonable.

OTM includes jobs for a worker employed in the reference as well as previous quarter. Hence, job counts are based on two consecutive quarters (six months) measured at the "beginning of a quarter." OTM data can differ from commuting patterns developed from state annual income tax returns, which asks a question about "county of residence" and "county of work" on January 1 of the tax-year. OTM can also differ from American Community Survey data, which is based on a sample survey of the resident population.

YourEconomy.org (YE):

YE, an online tool by the Business Dynamics Research Consortium at the University of Wisconsin – Extension, provides data on the employment, sales, and number of establishments at numerous geographic levels in the United States.

A major data source for YE is the Infogroup Historical Database and additional Infogroup data files on establishments. This means that each entry is a different physical location, and company-level information must be created by adding the separate establishment components.

Report Contributors

This report was prepared by the Purdue Center for Regional Development in partnership with CEDIK at the University of Kentucky. The report was updated by the Purdue Center for Regional Development on May 2020.

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Source of front cover map: PCRD

Back cover Schowe House photography is by PCRD staff.