

Ross County economic and background assessment

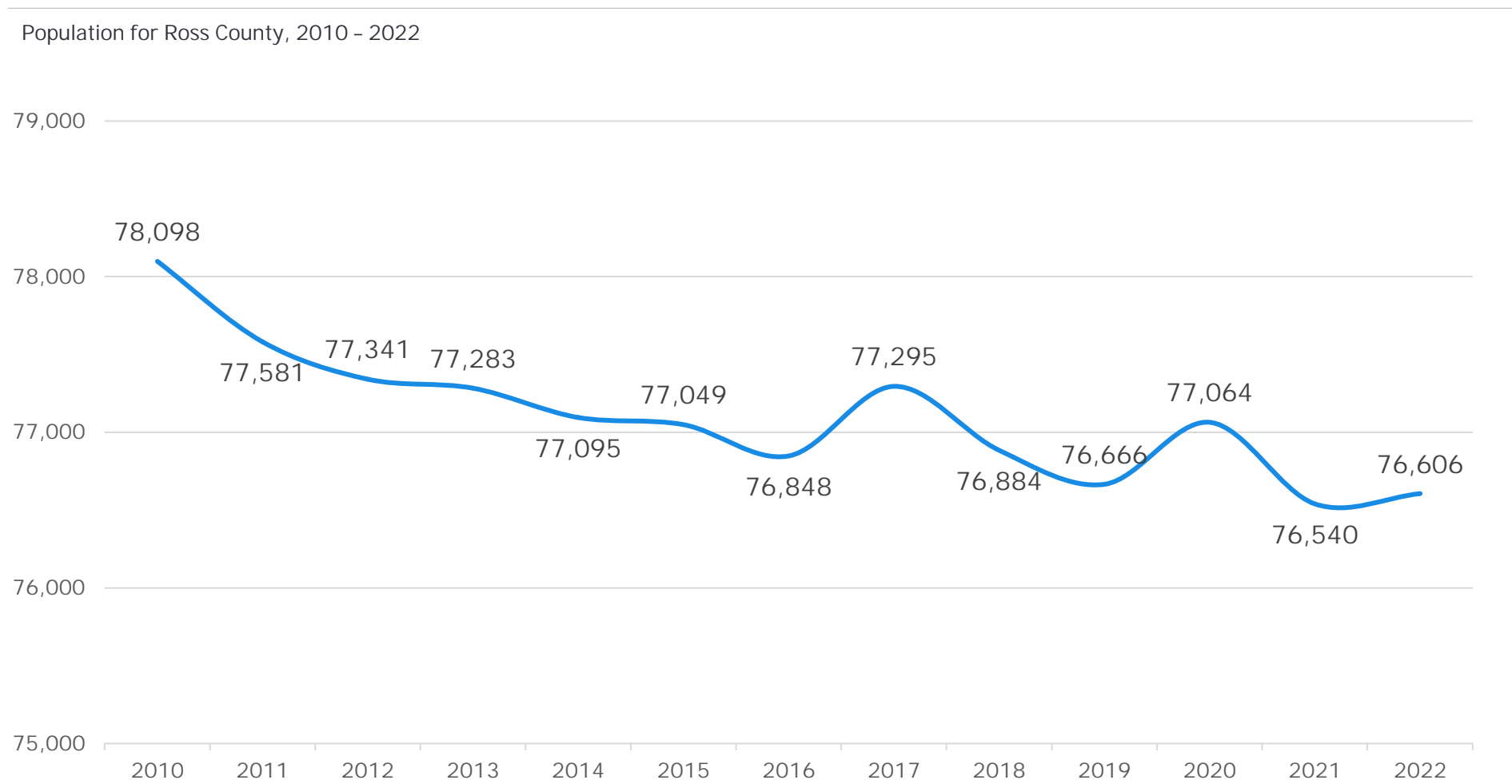
Prepared for: South Central Ohio
Workforce Partnership

July, 2023



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Population

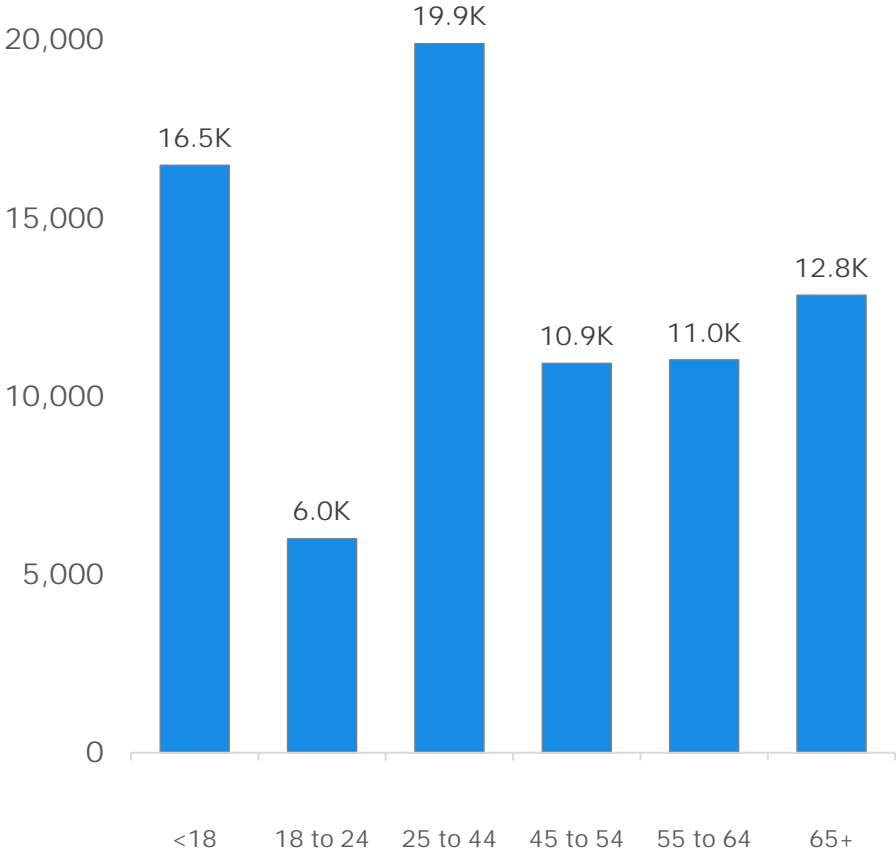


Source: US Census Bureau

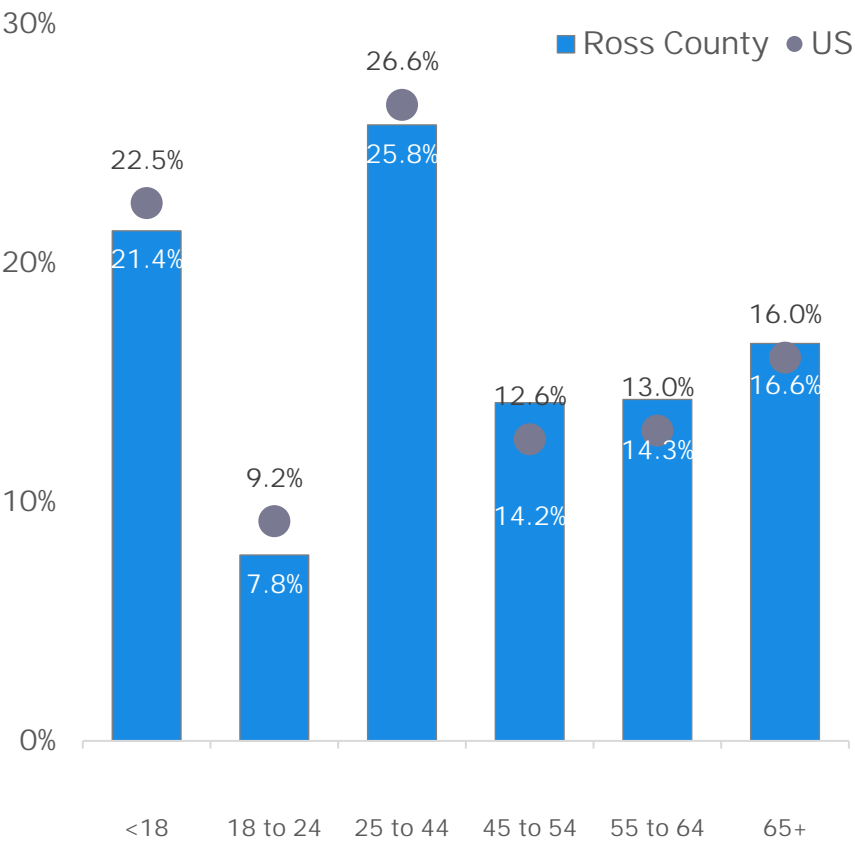


Population by age

Population by age cohort, 2021



Share of population by age cohort, 2021

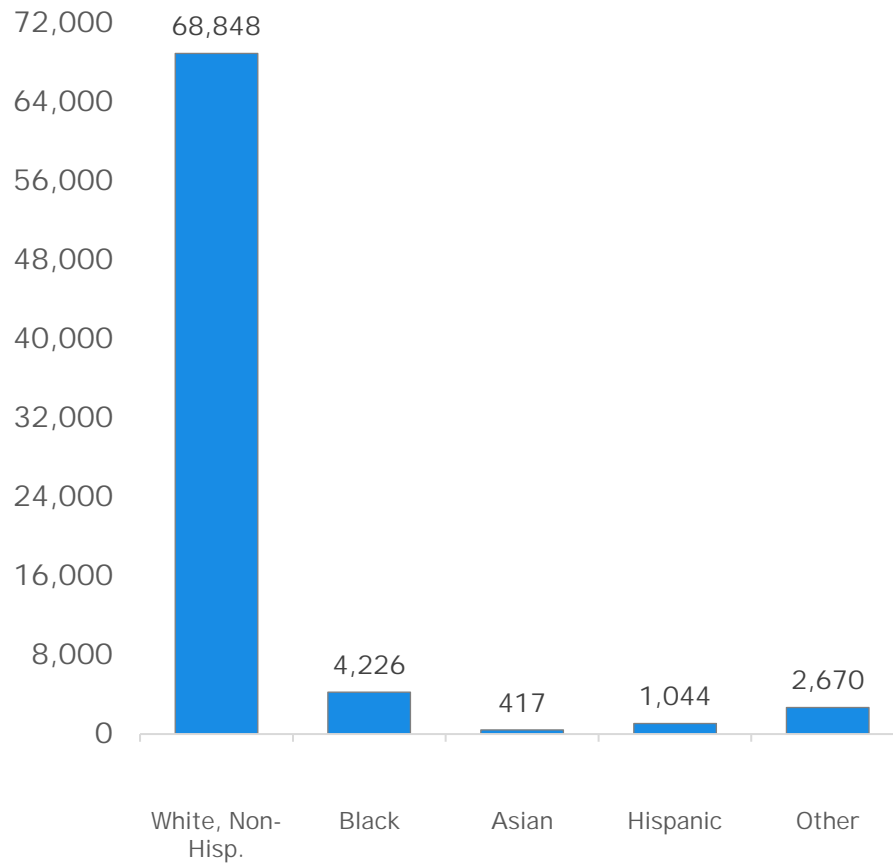


Source: US Census Bureau

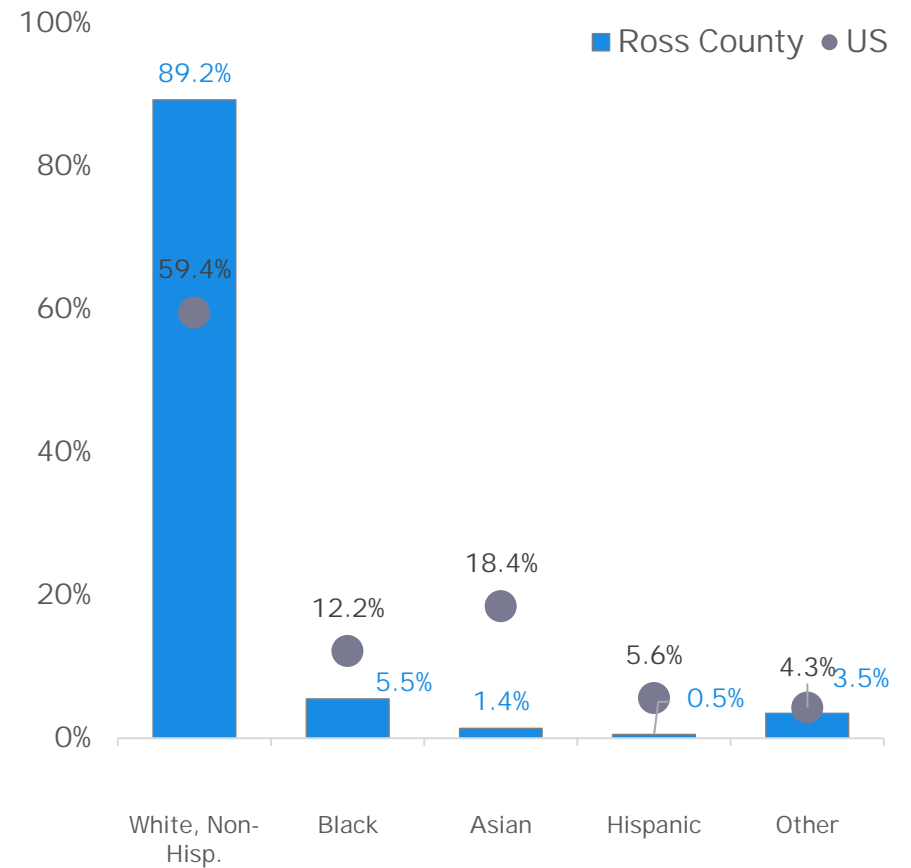


Population by race

Population by race cohort, 2021

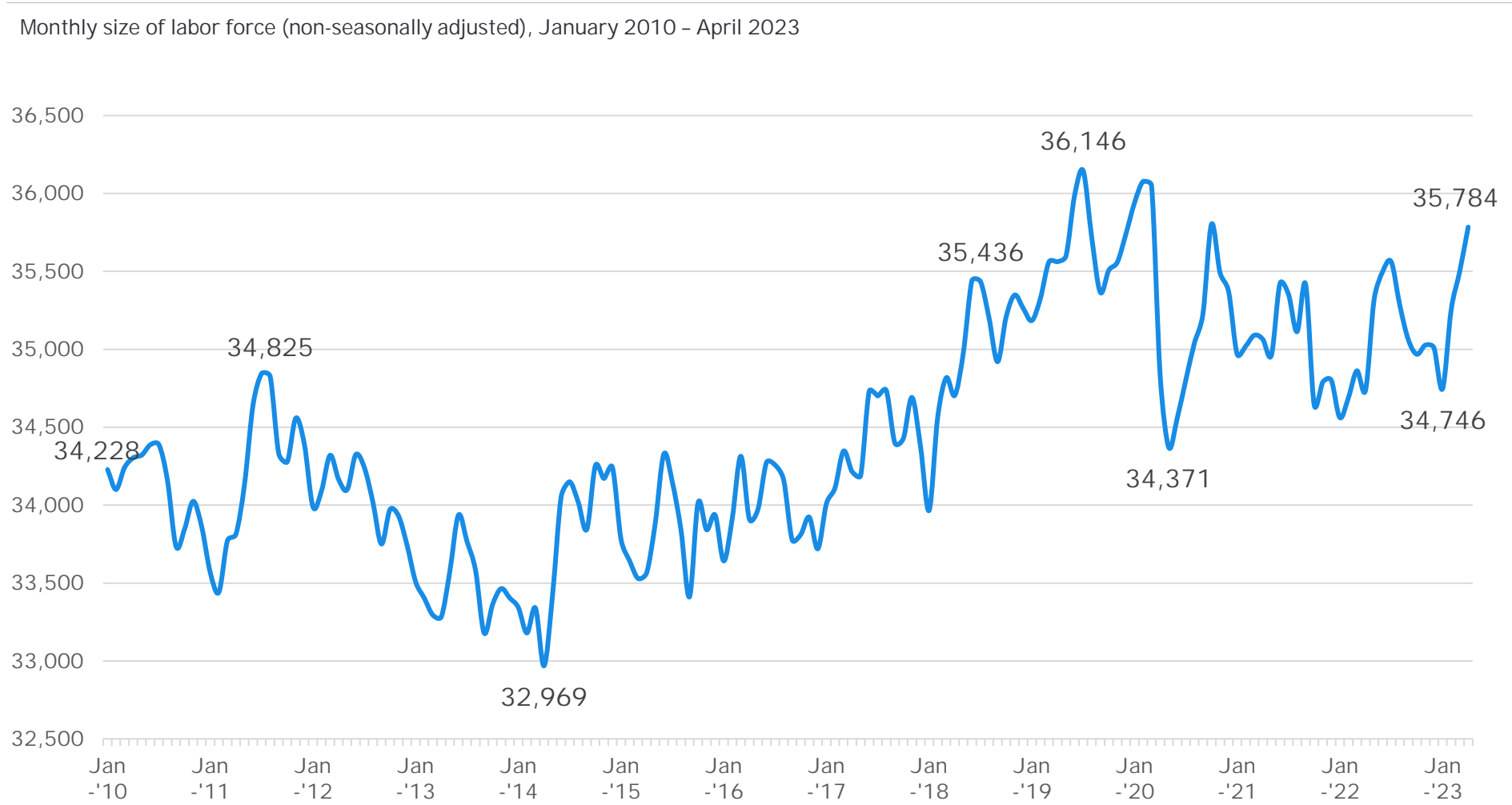


Share of population by race cohort, 2021



Source: US Census Bureau

Labor force

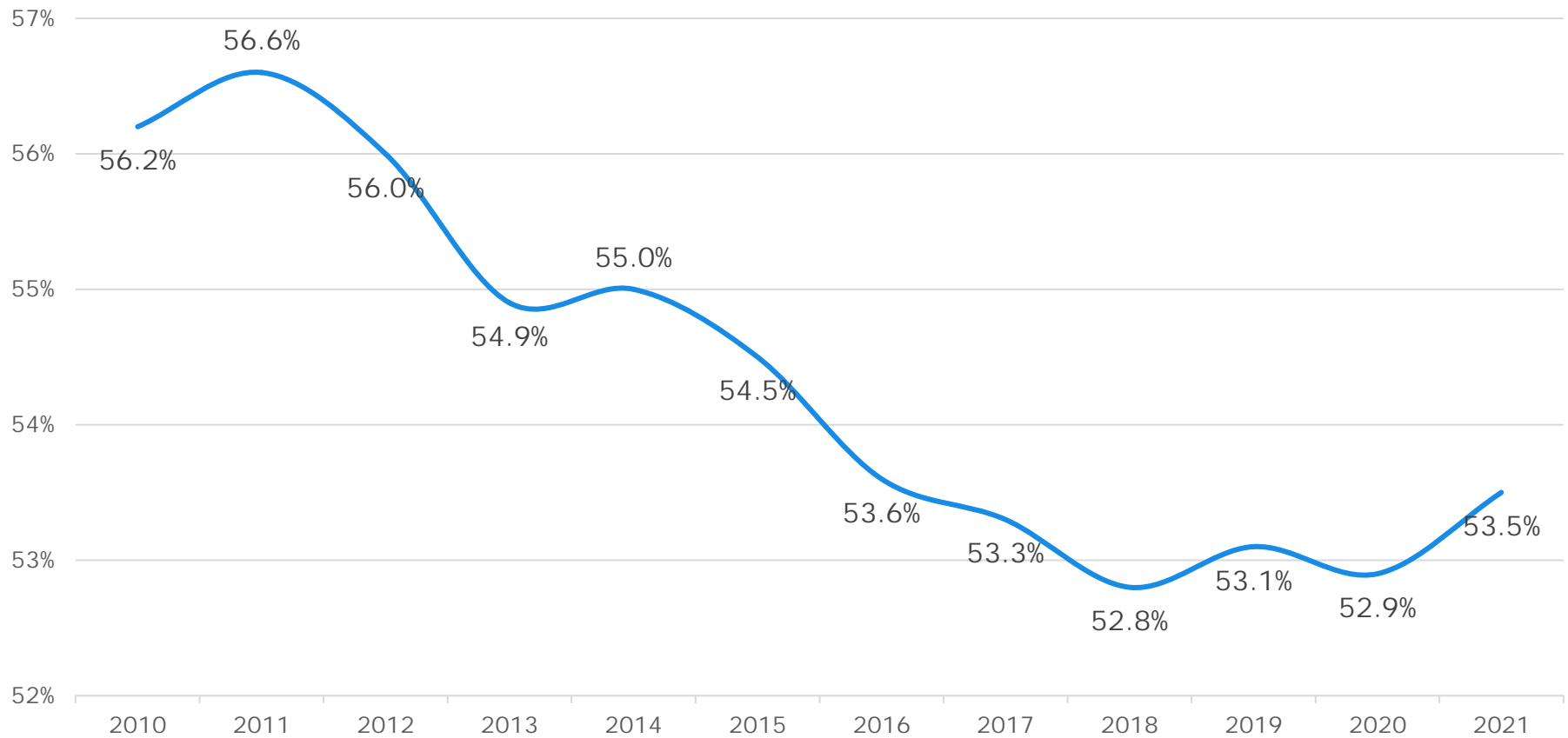


Source: US Bureau of Labor Statistics



Labor force

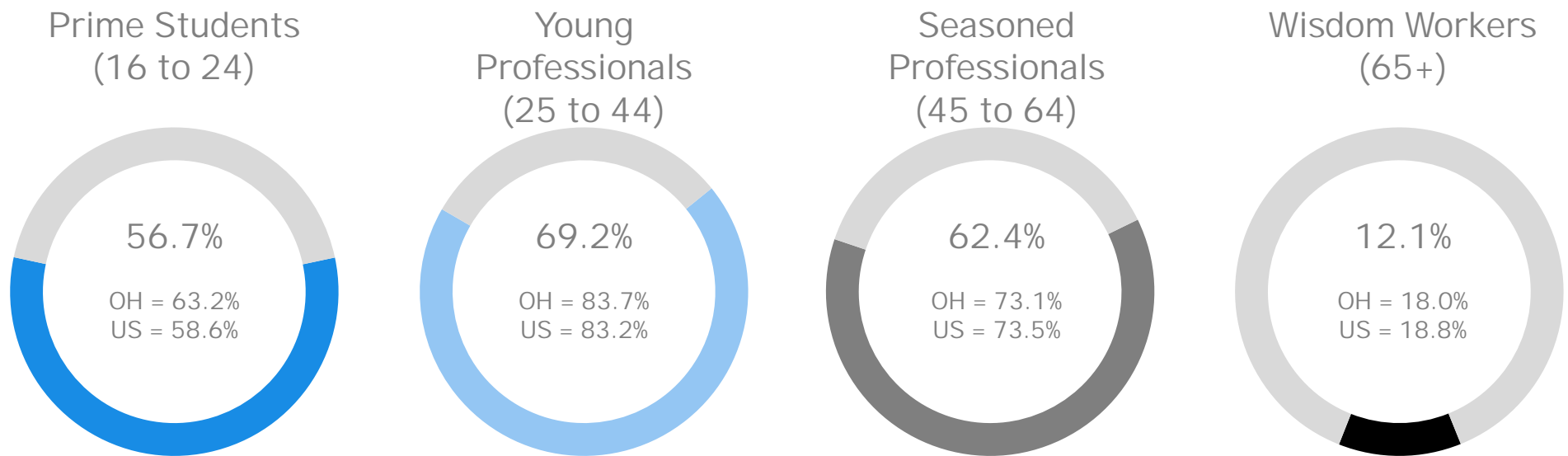
Labor force participation rate, 2010 - 2021



Source: US Census Bureau

Labor force

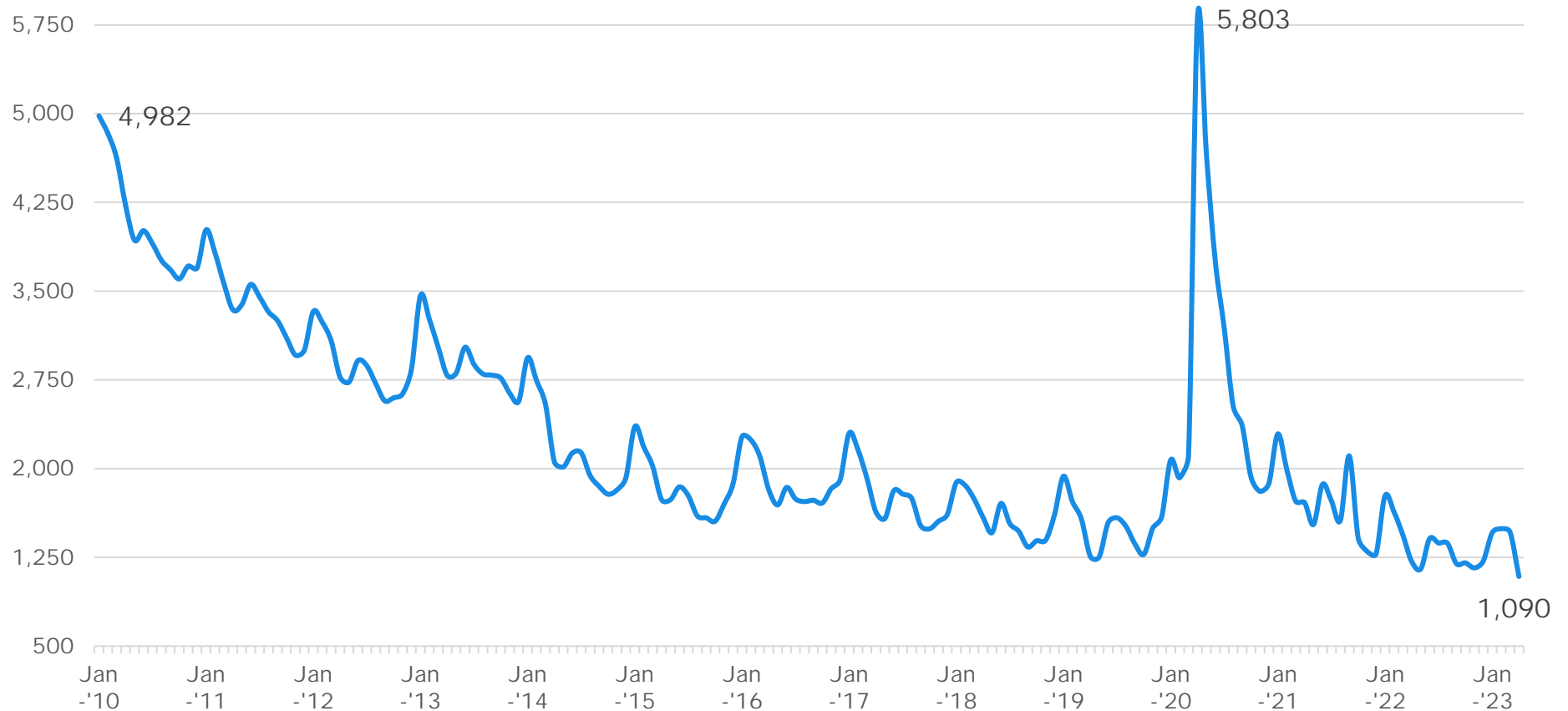
Labor force participation rate by age cohort (among residents 16 years and older) in Ross County, 2021



Source: US Census Bureau

Unemployment

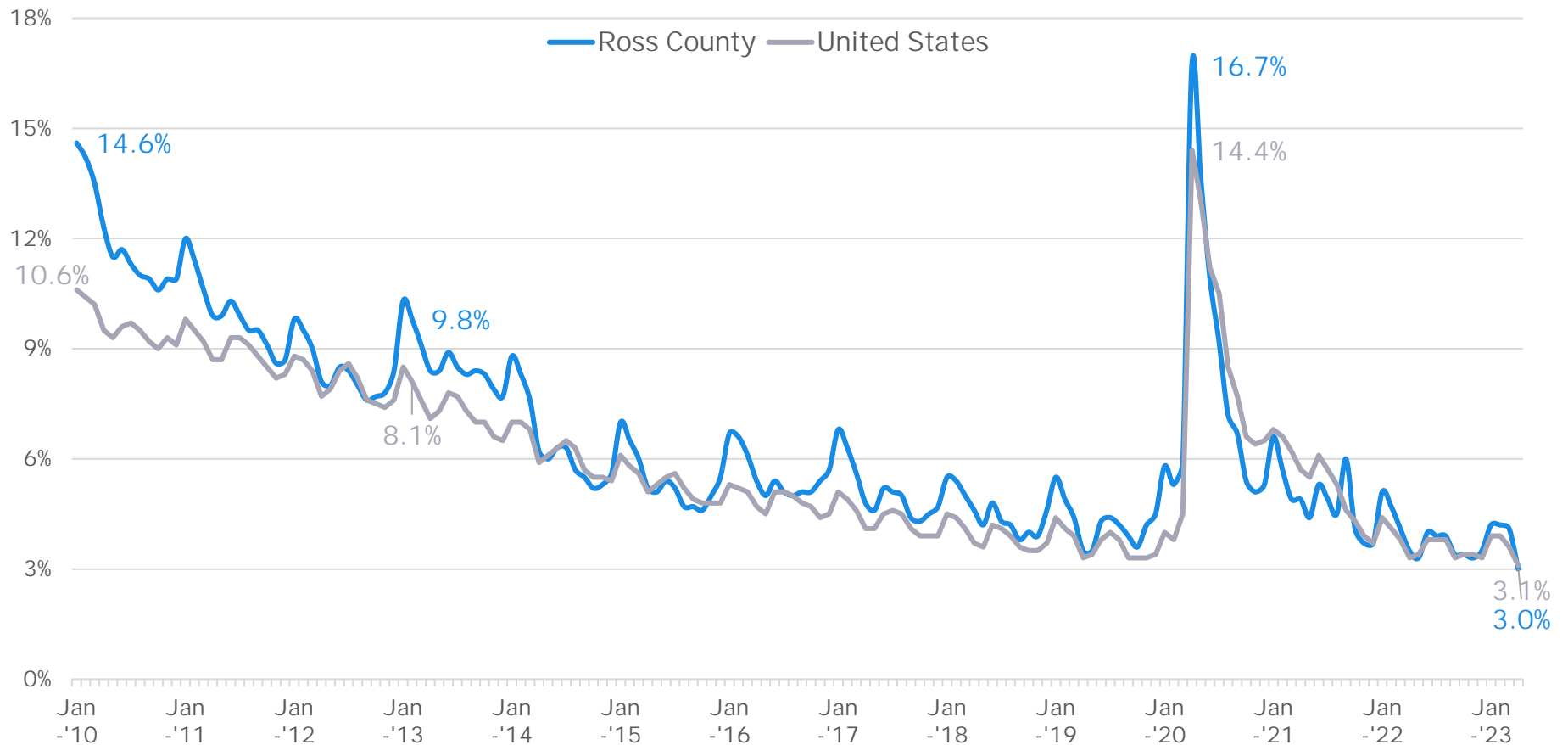
Monthly size of unemployed population (non-seasonally adjusted), January 2010 – April 2023



Source: US Bureau of Labor Statistics

Unemployment rate

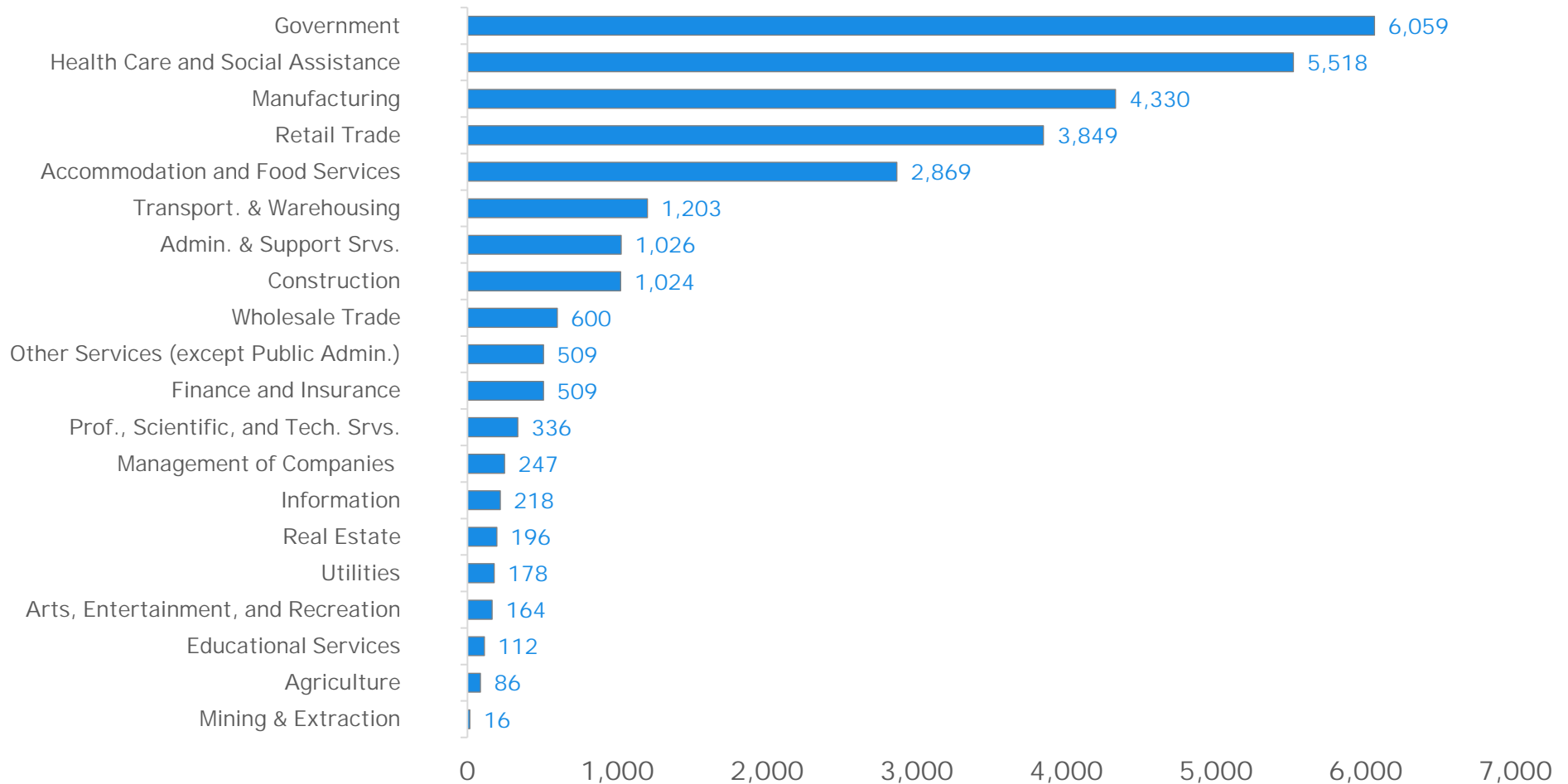
Monthly unemployment rate (non-seasonally adjusted), January 2010 – April 2023



Source: US Bureau of Labor Statistics

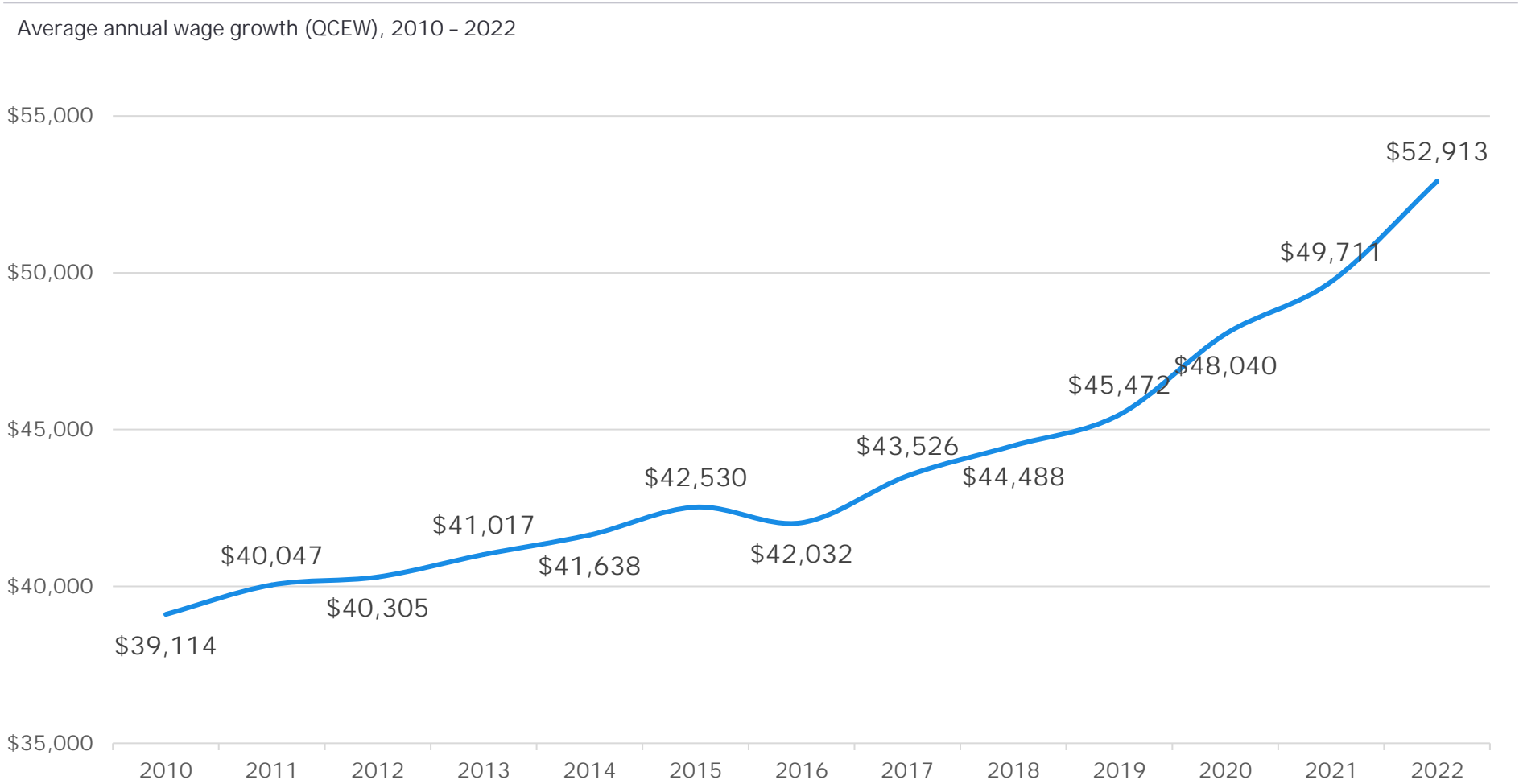
Employment by industry

Employment by industry (2-Digit NAICS, QCEW), 2022



Source: Lightcast

Average wage growth

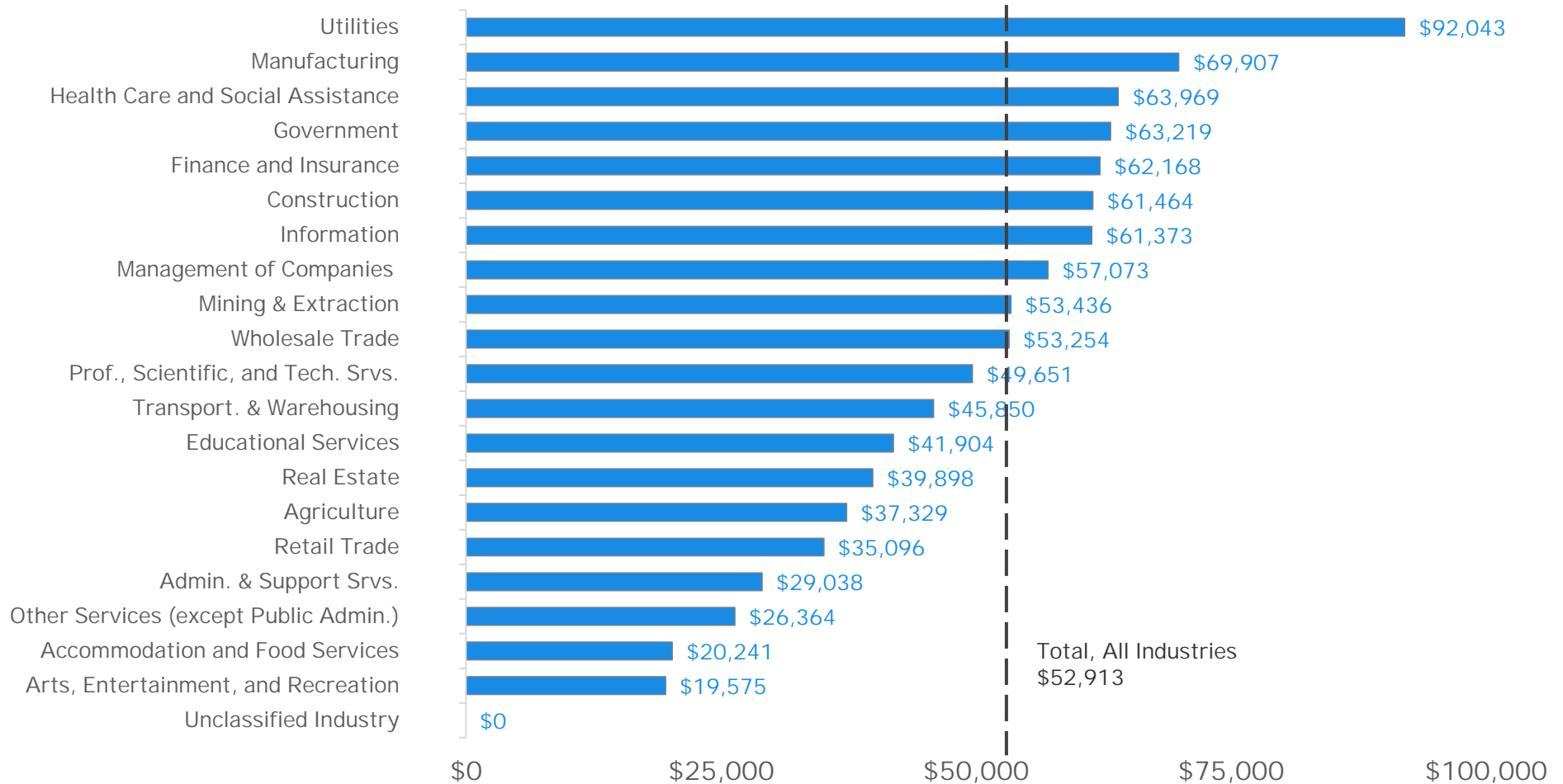


Source: Lightcast



Wage by industry

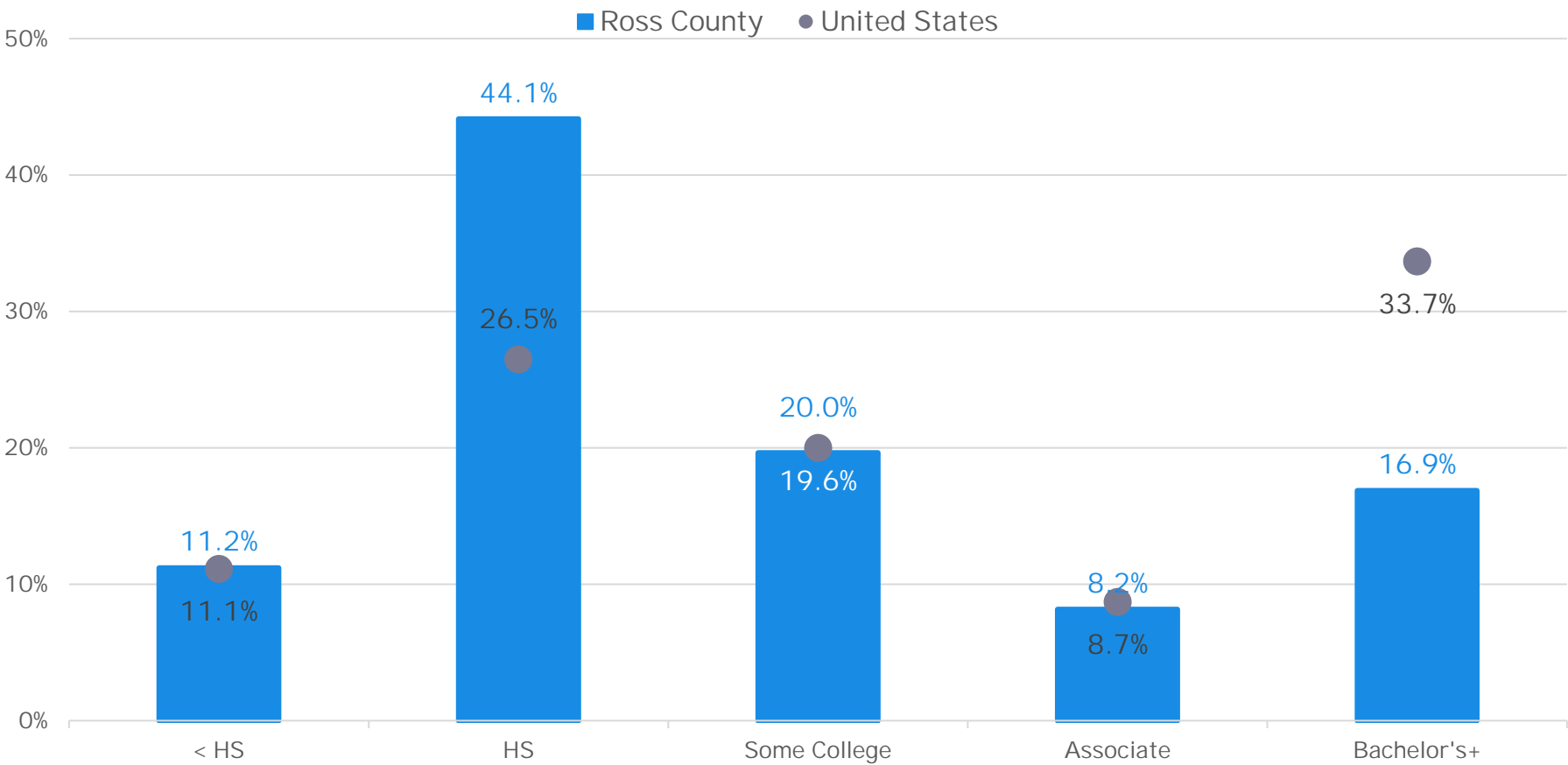
Wage by industry (2-Digit NAICS, QCEW), 2022



Source: Lightcast

Educational attainment

Educational attainment, 2021

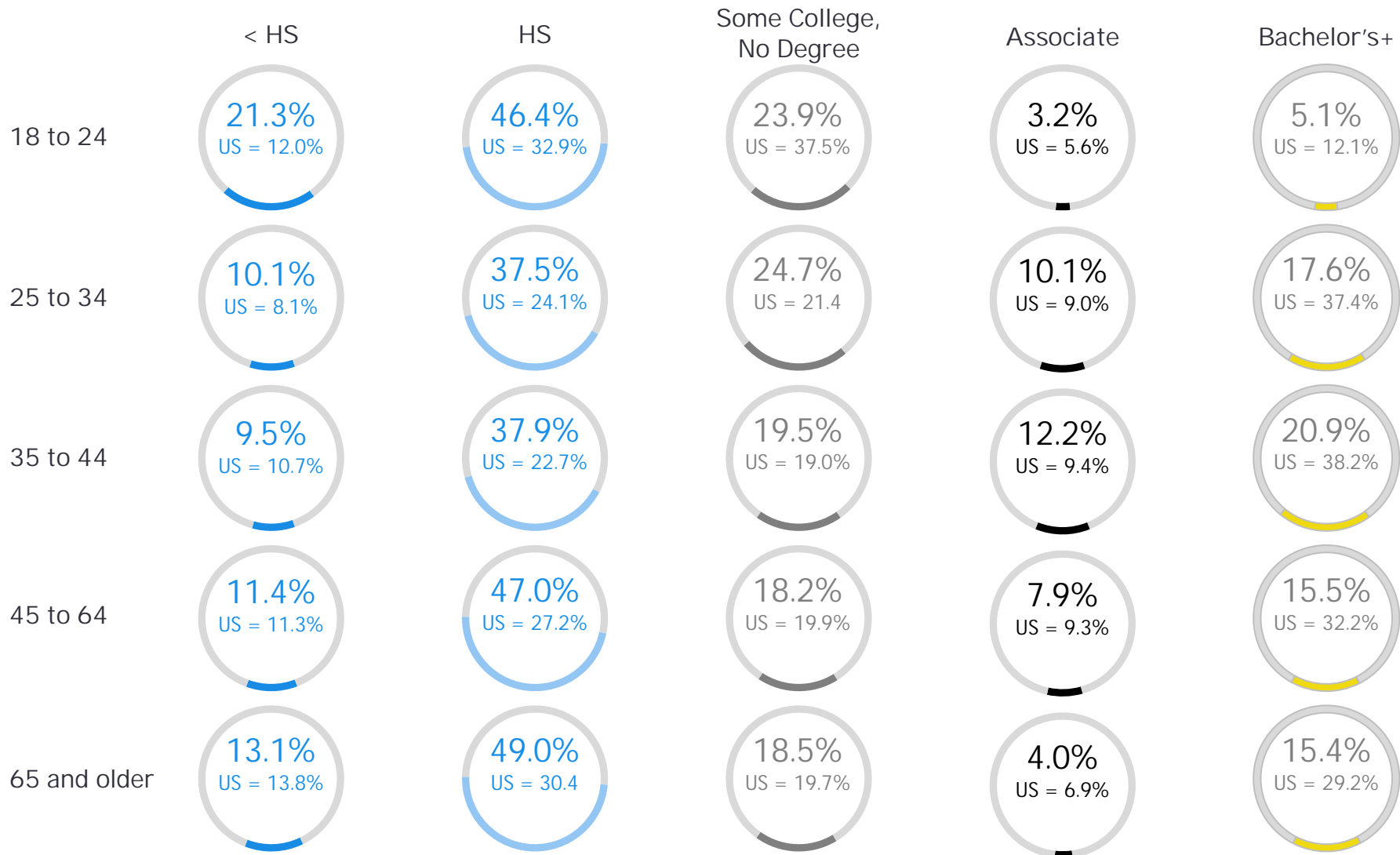


Source: US Census Bureau



Educational attainment by age

Educational attainment by age (among residents ages 18 years of age and older), 2021



Industry composition

Between 2017 and 2022, more than two thirds of industry clusters with a presence in Ross County experienced an increase in jobs. Consumer Products saw the greatest percentage growth among clusters, though from a low baseline, while Distribution & Logistics saw the largest net gain numerically in jobs, adding more than 425 during the five-year period. With a location quotient of 14.4, Automotive was the most concentrated cluster in 2022.

Ross County's industry cluster performance, 2017 - 2022

Cluster	Employment (2022)	Employment growth (2017-2022)	Location quotient (2022)	Cluster	Employment (2022)	Employment growth (2017-2022)	Location quotient (2022)
Healthcare	4,920	6.7%	1.5	Transportation	41	39.6%	0.2
Automotive	2,923	11.6%	14.4	Electronics	31	100%*	0.1
Distribution & Logistics	1,151	59.0%	1.4	Government, Excl. Ed & Health	4,088	-7.2%	1.8
Consumer Products	165	941.4%	1.1	Industrial Products	607	-52.3%	1.4
Back Office	1,212	8.6%	0.6	Retail	3,859	-4.6%	1.2
Construction Svcs.	1,046	41.0%	0.7	Mining & Logging	48	-2.2%	1.1
Wholesale Trade	639	26.8%	0.5	Hospitality	2,869	-5.1%	1.0
Financial Svcs.	639	18.5%	0.4	Education	2,100	-4.1%	0.8
Non-Profits & Social Svcs.	565	8.2%	0.6	Energy	145	-11.3%	0.6
Personal Services	444	3.5%	0.6	Telecom Services	79	-57.6%	0.6
Professional Services	297	7.5%	0.3	Entertainment	162	-7.9%	0.3
Industrial Machinery	276	509.3%	0.9	Aerospace	--	--	--
Agribusiness & Food	235	138.9%	0.4	Apparel & Textiles	--	--	--
Metalworking	151	26.2%	0.4	Furniture Mfg.	--	--	--
Creative Content	140	35.7%	0.3	Research	--	--	--
Biomedical R&D/Mfg	46	100%*	0.3	Shipbuilding	--	--	--
Software / Info. Tech.	41	100%*	0.1	Total	29,050	3.2%	1.0

Strong & Advancing

Weak but Advancing

Strong but Declining

Weak & Declining

Source: Lightcast

*Employment was zero in 2017

Occupational composition

Between 2017 and 2022 slightly more than half of the occupational clusters in Ross County experienced growth. Logistics, Medical, and Business clusters posted the largest increase in net new jobs among clusters. Production, Business, Medical, Logistics, and Financial clusters saw the largest net decrease in jobs during the same period. Production occupations are the most concentrated in Ross County with a location quotient of 2.0 in 2022.

Ross County's occupational cluster performance, 2017 - 2022

Cluster	Employment (2022)	Employment growth (2017-2022)	Location quotient (2022)	Cluster	Employment (2022)	Employment growth (2017-2022)	Location quotient (2022)
Medical	4,468	6.1%	1.4	Hospitality	3,938	-9.9%	1.1
Production	3,309	19.8%	2.0	Personal Services	2,648	-1.9%	1.0
Logistics	2,888	9.6%	1.0	Social Service	1,698	-3.2%	1.2
Back Office	3,312	1.0%	0.8	Education	1,685	-0.3%	1.0
Construction	933	4.8%	0.8	Mechanics	1,238	-7.0%	1.1
Business	840	44.5%	0.6	Plant Operators	98	-22.2%	1.2
Financial	533	29.7%	0.6	Engineering	498	-10.0%	0.8
Computer	383	10.0%	0.3	Agriculture	85	-32.1%	0.4
Legal	126	12.3%	0.5	Math	24	-19.6%	0.4
Design	111	34.6%	0.6	Political	23	-21.6%	0.9
Sales & Marketing	93	42.3%	0.4	Geology	20	-28.6%	0.5
Communications	70	36.3%	0.5	Architecture	12	-25.0%	0.3
Performance	65	33.1%	0.6	Total	29,050	3.2%	1.0

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Weak & Declining

Source: Lightcast

Occupational composition of resident workers

Resident workers are individuals that live in the region but may work outside of the region. These occupational clusters reflect the types of jobs your residents work in, whether in or outside the region. In 2022, the top five occupational cluster in terms of total resident workers were Medical, Hospitality, Back Office, Logistics, and Production. With a 1.9 location quotient, Production occupations were the most concentrated cluster in 2022. Production, Logistics, Business, Medical, Business, and Financial saw the largest net gains in resident workers between 2017 and 2022.

Ross County's occupational cluster performance for resident workers

Cluster	Resident workers (2022)	Resident worker growth (2017-2022)	Location quotient (2022)	Cluster	Resident workers (2022)	Resident worker growth (2017-2022)	Location quotient (2022)
Medical	4,010	3.2%	1.3	Education	1,666	-1.7%	1.0
Logistics	3,283	9.8%	1.1	Social Service	1,565	-1.8%	1.1
Production	3,216	12.9%	1.9	Mechanics	1,165	-6.0%	1.0
Construction	1,102	2.5%	0.9	Plant Operators	108	-11.3%	1.4
Business	910	43.3%	0.7	Back Office	3,302	-2.4%	0.8
Computer	474	6.9%	0.4	Engineering	513	-11.1%	0.9
Financial	472	13.8%	0.5	Communications	57	-9.9%	0.4
Agriculture	130	9.5%	0.6	Performance	47	-16.9%	0.4
Sales & Marketing	116	26.2%	0.5	Geology	24	-25.0%	0.6
Design	115	20.9%	0.6	Math	24	-23.2%	0.4
Legal	112	7.6%	0.5	Political	19	-21.2%	0.8
Hospitality	3,800	-12.2%	1.1	Architecture	12	-25.0%	0.3
Personal Services	2,600	-5.8%	1.0	Total	28,725	1.3%	1.0

Strong & Advancing

Weak but Advancing

Strong but Declining

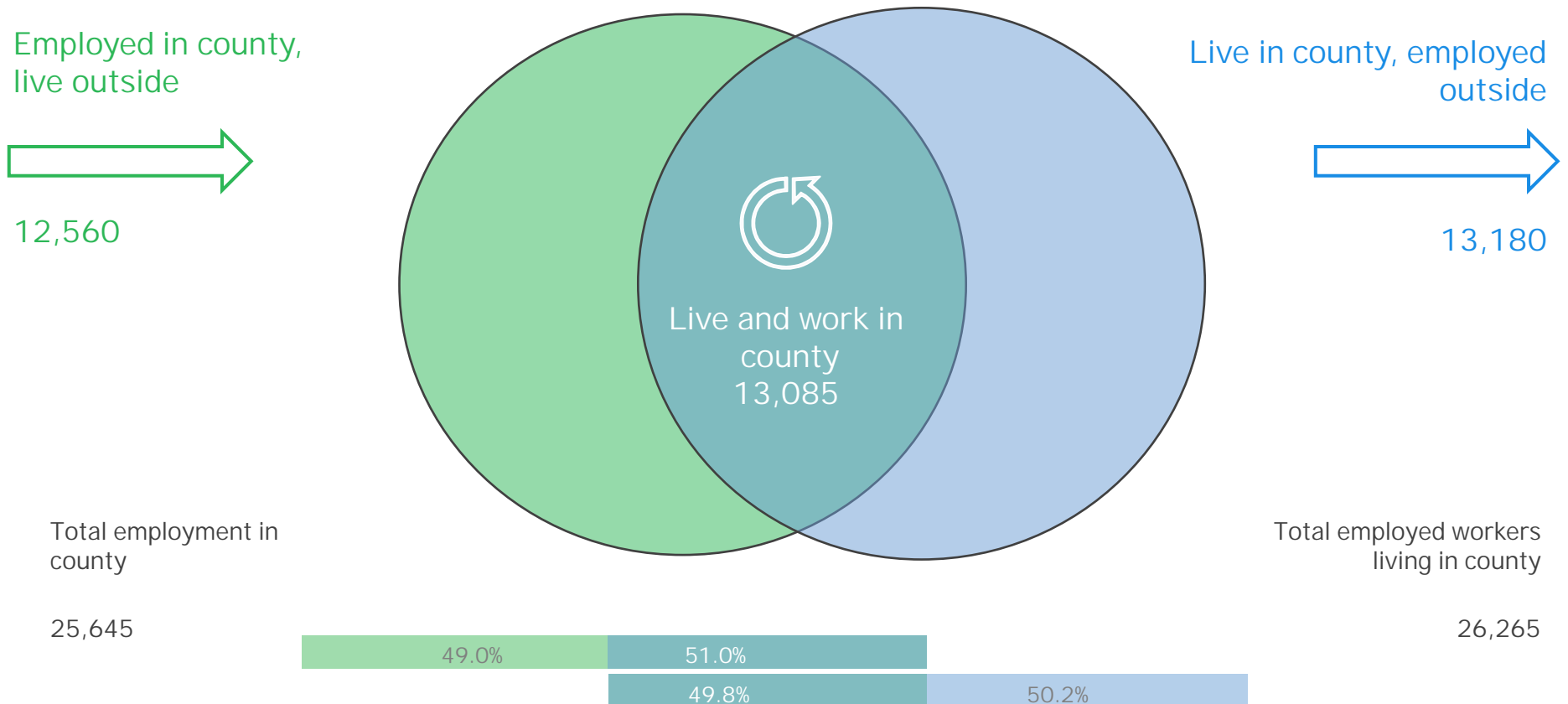
Weak & Declining

Source: Lightcast

Inflow/outflow analysis

Ross County both imports and exports talent, with flows close to even in 2020 and a net out-commute of 620 that is the lowest among Area 20 counties. Of the 26,265 employed individuals residing in the county, approximately 50% are employed outside of the county. At the same time, approximately 49% of workers employed in the county live elsewhere outside of the county.

Ross County workforce inflow/outflow dynamics, 2020

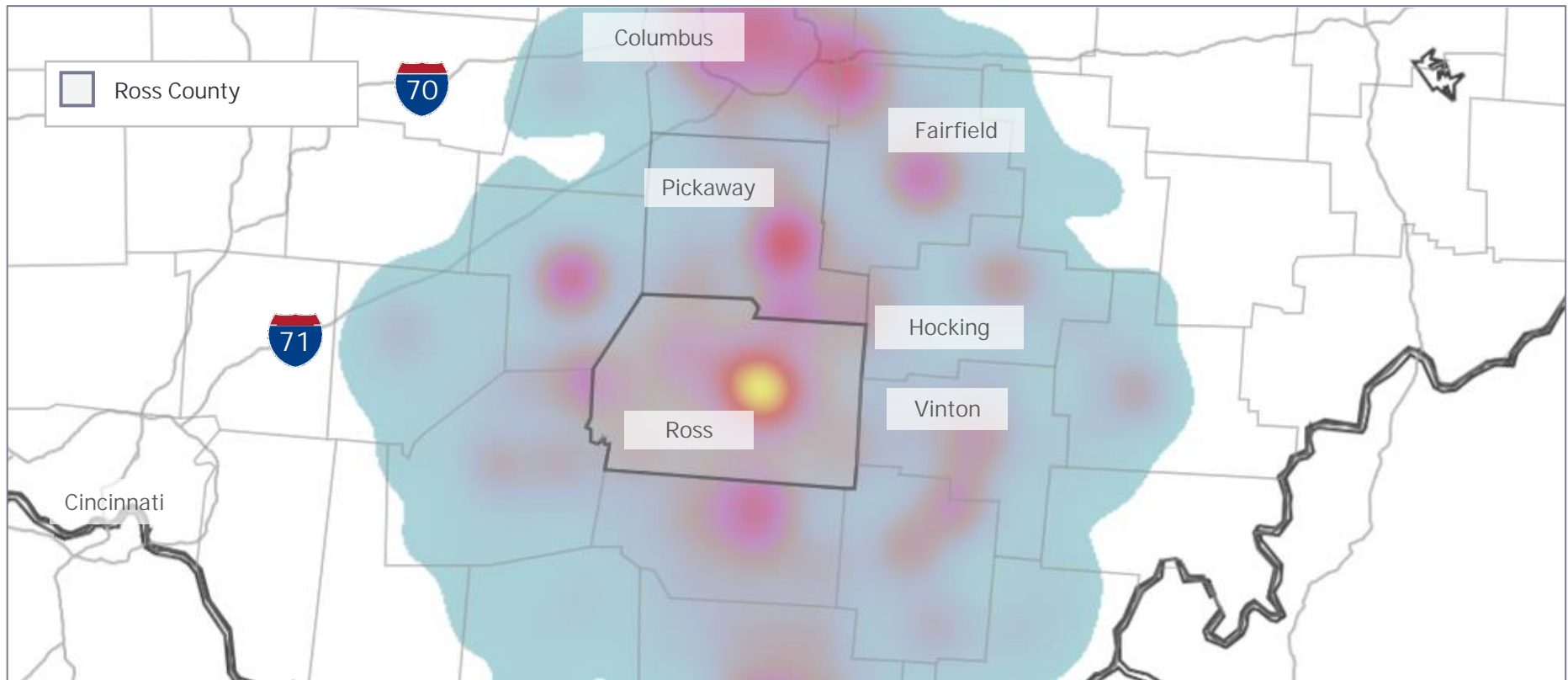


Source: US Census Bureau

Ross County worker origin

The map below shows the origins of workers for the Ross County. The area shown below accounts for approximately 82% of the labor shed for the county and reflects approximately 21,130 workers.

Ross County worker origin, 2020

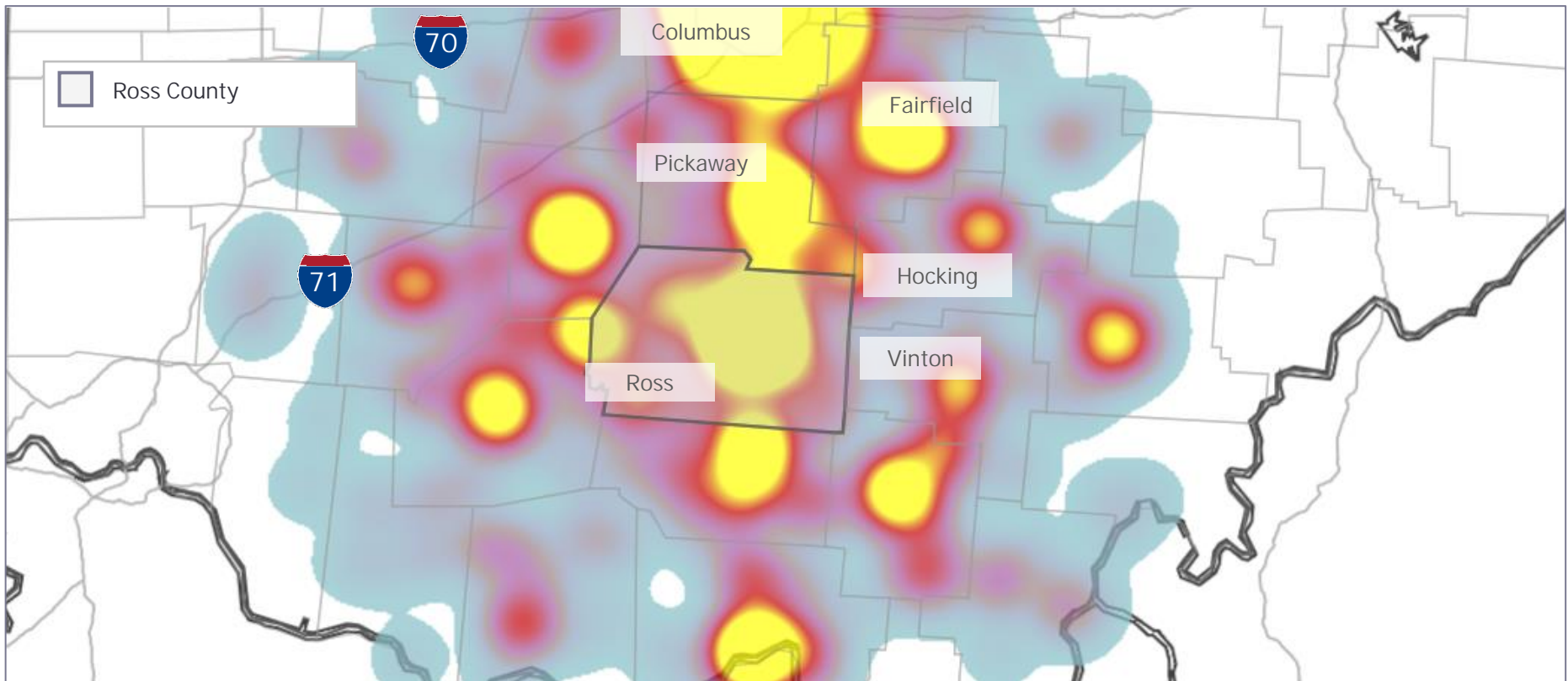


Source: US Census Bureau

Ross County's resident worker destinations

The map below shows the work destinations of resident workers in Ross County. The area shown below accounts for nearly 20,800 resident workers, or approximately 79% of the county's resident workforce. Highway 23 acts as a main artery for resident workers commuting out of the county for work.

Ross County's resident worker destinations, 2020

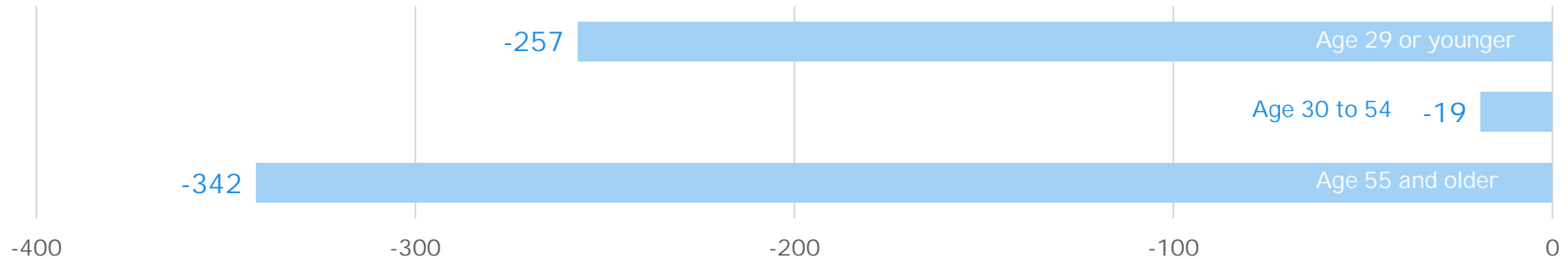


Source: US Census Bureau

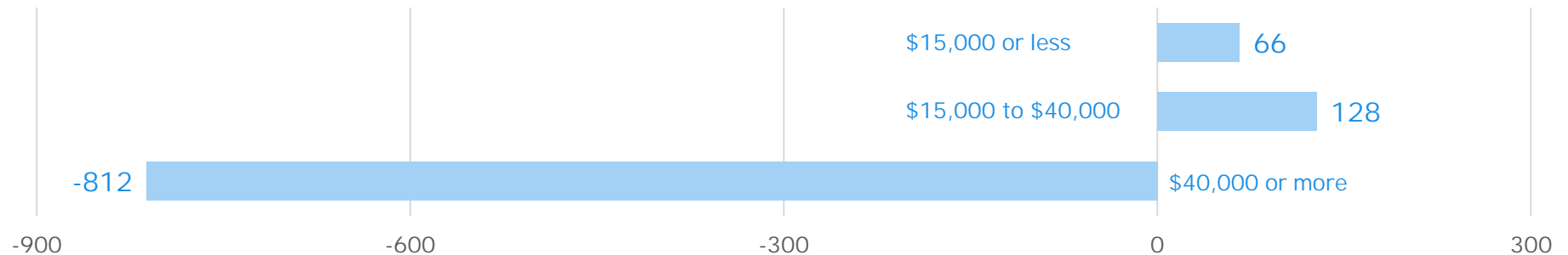
Inflow/outflow of workers by age and earnings

Ross County exported talent at every age bracket in 2020. Prime working age residents, ages 30 to 54, commuted out in much smaller numbers compared to the other age cohorts. Workers earning \$40,000 or more commuted out of the county while those workers earning less than \$40,000 annually were imported into Ross County in 2020.

Net inflow/outflow of workers into Ross County by age, 2020



Net inflow/outflow of workers into Ross County by earnings, 2020

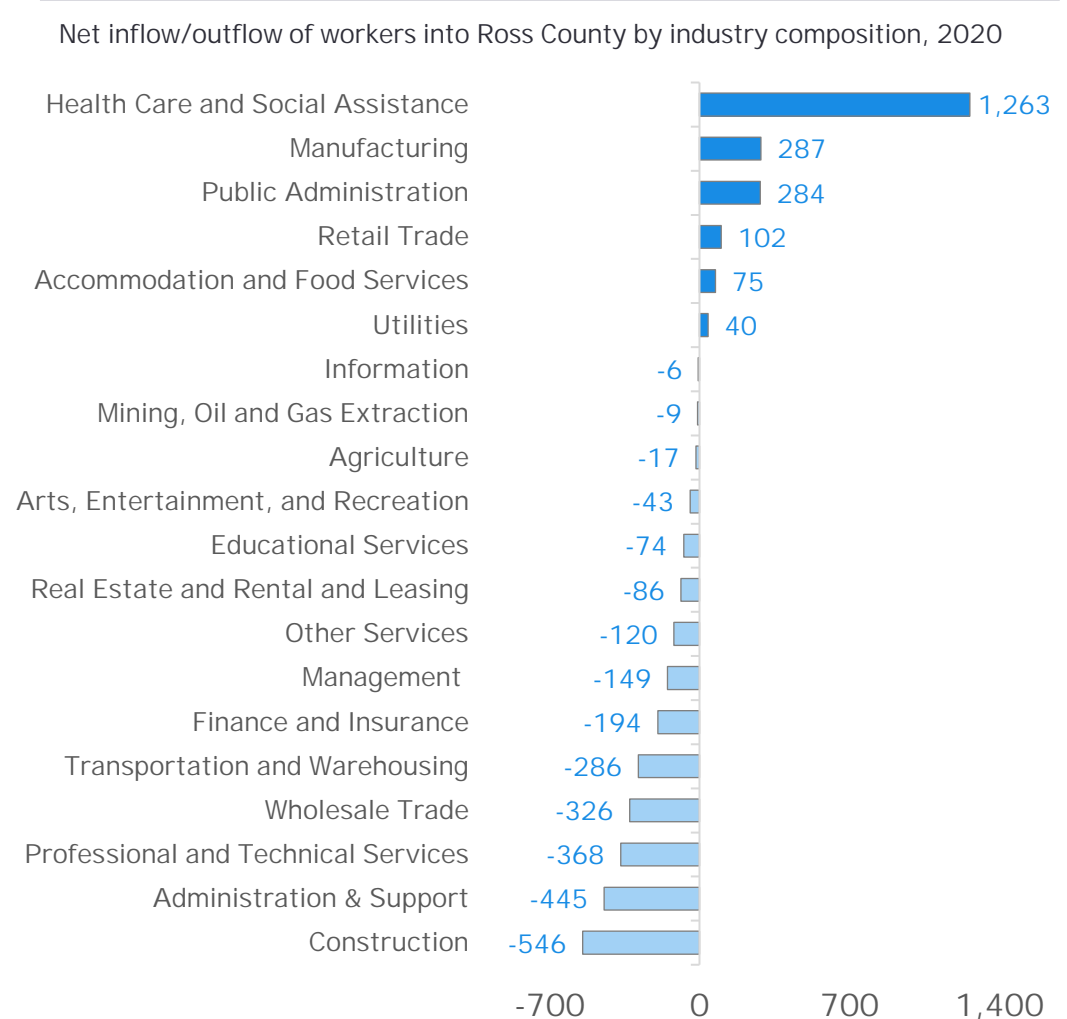


Source: US Census Bureau

Net inflow of workers by industry

Ross County is a net exporter of talent across most industries. There are just six industries in which employment within the county exceeds the number of resident workers. These industries include Health Care and Social Assistance, Manufacturing, Public Administration, Retail, Accommodation & Food Services, and Utilities.

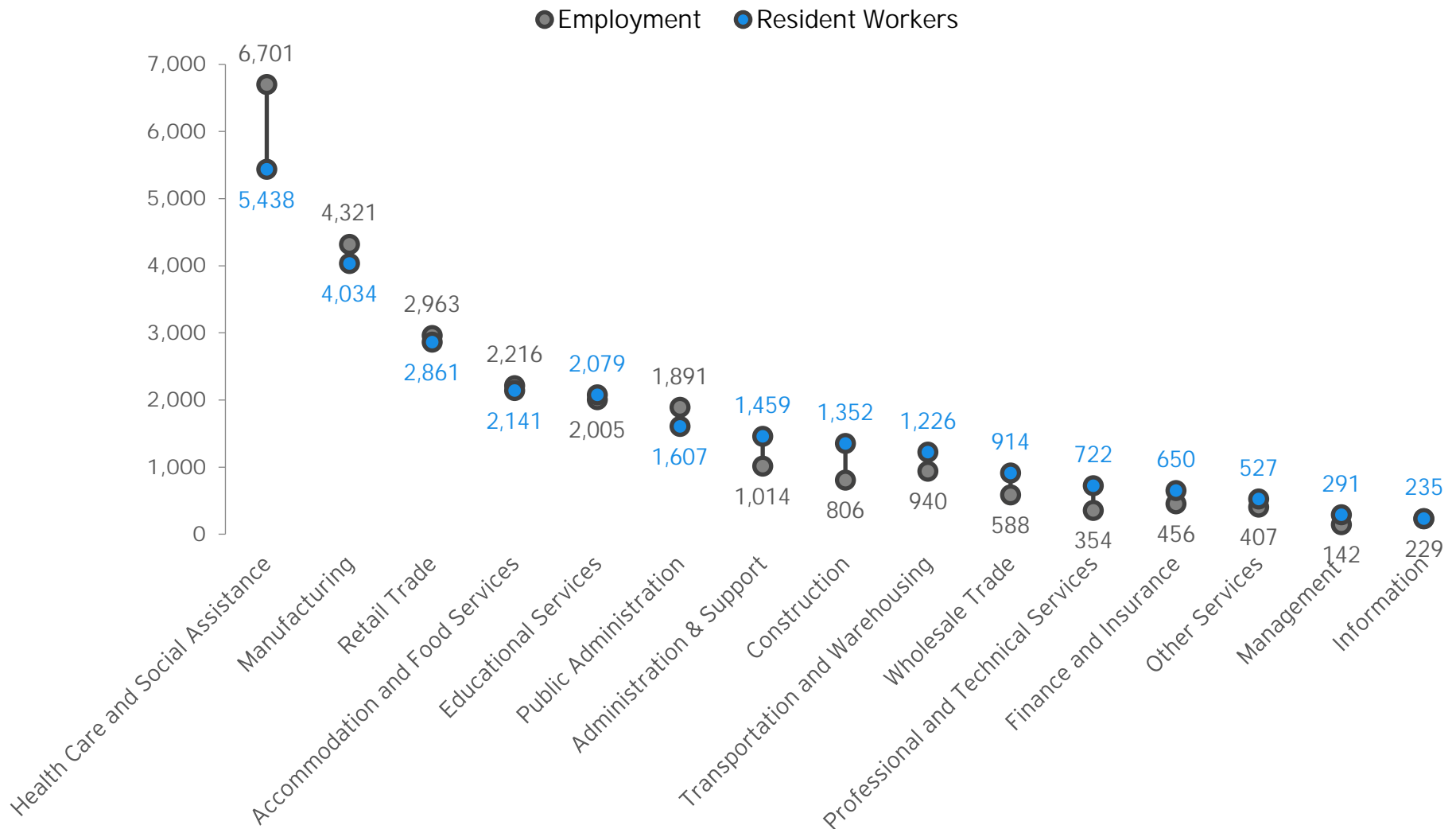
In all other sectors, the number of Ross County resident workers exceeds jobs. For example, Ross County is home to approximately 550 more workers employed in Construction compared to the total number of industry jobs located within in the county. Other major industries in which the county is an exporter of talent include Administration & Support, Professional and Technical Services, Wholesale Trade, and Transportation & Warehousing.



Source: US Census Bureau

Industry composition by worker origin

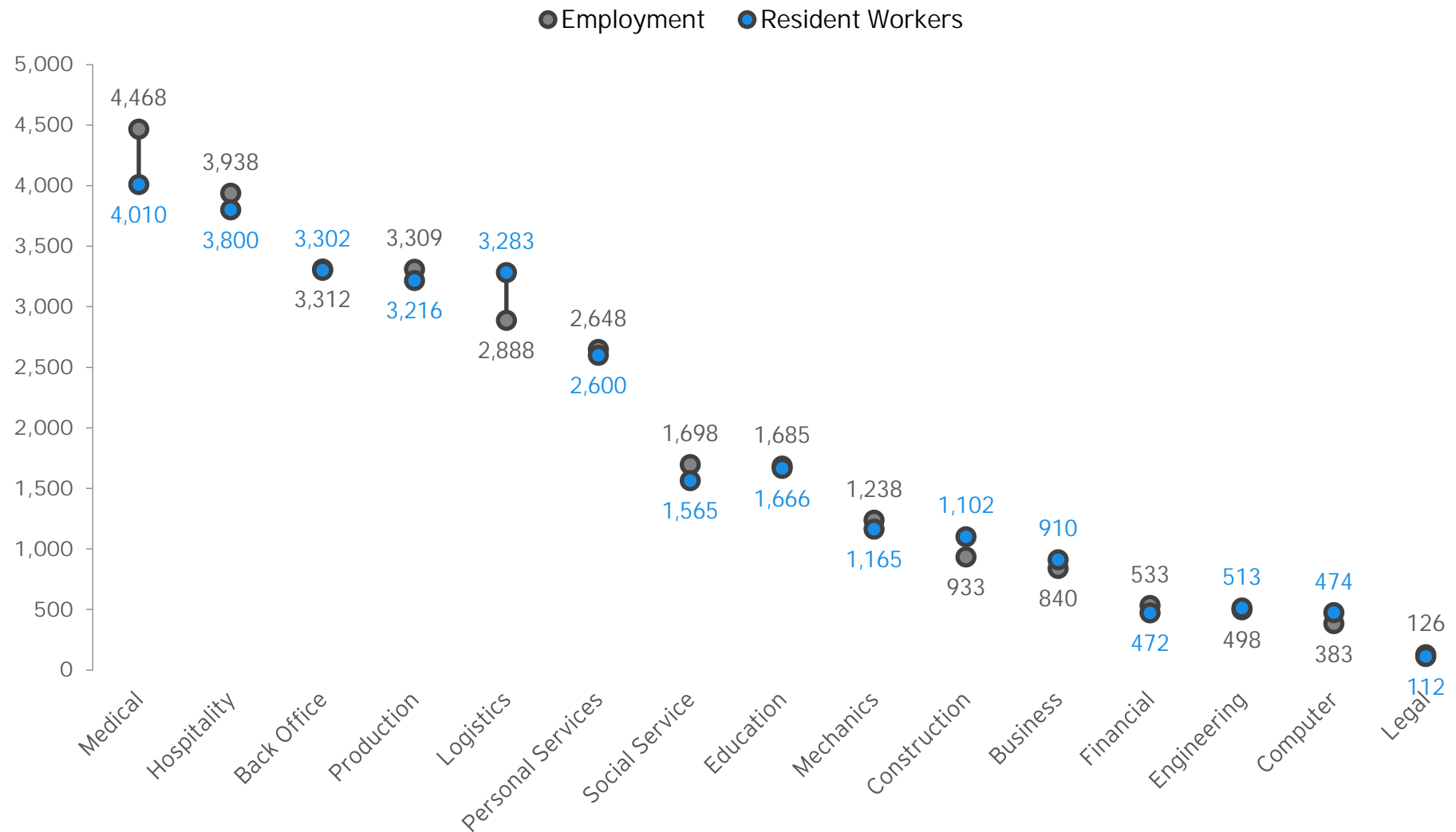
Ross County's employment versus resident workers for top 15 industry clusters, 2020



Source: US Census Bureau

Occupation composition by worker origin

Ross County's employment versus resident workers for top 15 occupational clusters, 2022



Source: Lightcast

Forecasted growth in industry composition

In the table below, we examine possible employment forecasts for industry clusters in Ross County. The top five clusters forecasted to add the most net new jobs over the next ten years are Automotive, Distribution & Logistics, Construction Services, Hospitality, and Healthcare. Overall, the county is forecasted to add approximately 1,415 jobs over the next decade, growing by nearly 5%.

Ross County's industry cluster forecasted growth

Cluster	Employment (2022)	Forecasted Employment (2024)	Forecasted Employment (2032)	Cluster	Employment (2022)	Forecasted Employment (2024)	Forecasted Employment (2032)
Aerospace	--	--	--	Healthcare	4,920	4,989	5,128
Agribusiness & Food	235	272	323	Hospitality	2,869	2,951	3,080
Apparel & Textiles	--	--	--	Industrial Machinery	276	353	482
Automotive	2,923	3,095	3,208	Industrial Products	607	514	353
Back Office	1,212	1,255	1,269	Metalworking	151	154	175
Biomedical R&D/Mfg	46	60	85	Mining & Logging	48	49	50
Construction Svcs.	1,046	1,130	1,257	Non-Profits & Social Service	565	605	707
Consumer Products	165	208	285	Personal Services	444	449	460
Creative Content	140	175	241	Professional Services	297	303	310
Distribution & Logistics	1,151	1,246	1,363	Research	--	--	--
Education	2,100	2,097	2,090	Retail	3,859	3,864	3,781
Electronics	31	41	60	Shipbuilding	--	--	--
Energy	145	143	131	Software / Info. Tech.	41	51	69
Entertainment	162	173	192	Telecom Services	79	56	16
Financial Svcs.	639	666	705	Transportation	41	44	51
Furniture Mfg.	--	--	--	Wholesale Trade	639	684	776
Government	4,088	3,969	3,723	Total	29,050	29,724	30,465

Source: Lightcast

Forecasted growth in occupational composition

In the table below, we examine possible employment forecasts for occupational clusters at the county level. Logistics, Hospitality, Production, Medical, and Business are forecasted to experience the largest net new jobs created in Ross County over the next decade. Social Service and Plant Operators clusters are forecasted to experience declines over the next ten years.

Ross County's occupational cluster forecasted growth

Cluster	Employment (2022)	Forecasted Employment (2024)	Forecasted Employment (2032)	Cluster	Employment (2022)	Forecasted Employment (2024)	Forecasted Employment (2032)
Agriculture	85	86	90	Legal	126	126	129
Architecture	12	12	12	Logistics	2,888	3,009	3,151
Back Office	3,312	3,351	3,336	Math	24	24	32
Business	840	884	967	Mechanics	1,238	1,271	1,302
Communications	70	75	95	Medical	4,468	4,517	4,637
Computer	383	393	417	Performance	65	74	94
Construction	933	980	1,054	Personal Services	2,648	2,672	2,652
Design	111	115	143	Plant Operators	98	96	91
Education	1,685	1,694	1,695	Political	23	22	22
Engineering	498	519	541	Production	3,309	3,437	3,533
Financial	533	552	581	Sales & Marketing	93	98	100
Geology	20	20	20	Social Service	1,698	1,695	1,676
Hospitality	3,938	4,032	4,175	Total	29,050	29,724	30,465

Source: Lightcast

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