Agricultural and Environmental Systems Career Field In-Demand Jobs Data

The Agricultural and Environmental Systems Career Field prepares students for careers in Agribusiness and Production Systems, Animal Science and Management, Bioscience, Horticulture, Natural Resource Management and Power Technology. The list of careers used in the figures below can be found in the Appendix.

Figure 1.

Projected Growth of Agricultural and Environmental Systems Jobs in Ohio (2031)

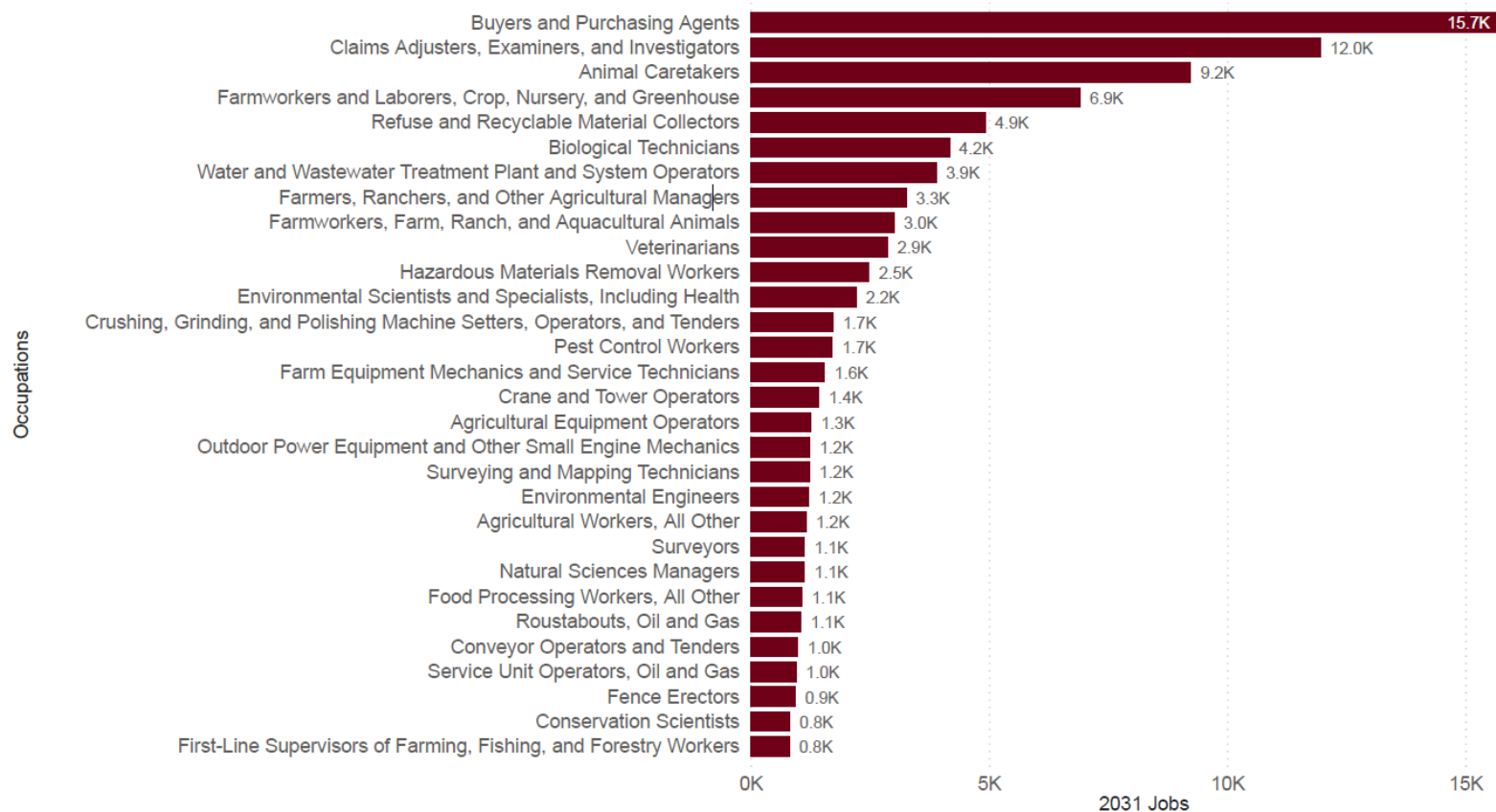| Occupations	2031 Jobs
Buyers and Purchasing Agents	15.7K
Claims Adjusters, Examiners, and Investigators	12.0K
Animal Caretakers	9.2K
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	6.9K
Refuse and Recyclable Material Collectors	4.9K
Biological Technicians	4.2K
Water and Wastewater Treatment Plant and System Operators	3.9K
Farmers, Ranchers, and Other Agricultural Managers	3.3K
Farmworkers, Farm, Ranch, and Aquacultural Animals	3.0K
Veterinarians	2.9K
Hazardous Materials Removal Workers	2.5K
Environmental Scientists and Specialists, Including Health	2.2K
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	1.7K
Pest Control Workers	1.7K
Farm Equipment Mechanics and Service Technicians	1.6K
Crane and Tower Operators	1.4K
Agricultural Equipment Operators	1.3K
Outdoor Power Equipment and Other Small Engine Mechanics	1.2K
Surveying and Mapping Technicians	1.2K
Environmental Engineers	1.2K
Agricultural Workers, All Other	1.2K
Surveyors	1.1K
Natural Sciences Managers	1.1K
Food Processing Workers, All Other	1.1K
Roustabouts, Oil and Gas	1.1K
Conveyor Operators and Tenders	1.0K
Service Unit Operators, Oil and Gas	1.0K
Fence Erectors	0.9K
Conservation Scientists	0.8K
First-Line Supervisors of Farming, Fishing, and Forestry Workers	0.8K

Figure 1 shows the highest in-demand occupations projected for 2031 in the Agricultural and Environmental Systems career field, with buyers and purchasing agents topping the list with over 15,000 jobs in Ohio.

Figure 2.

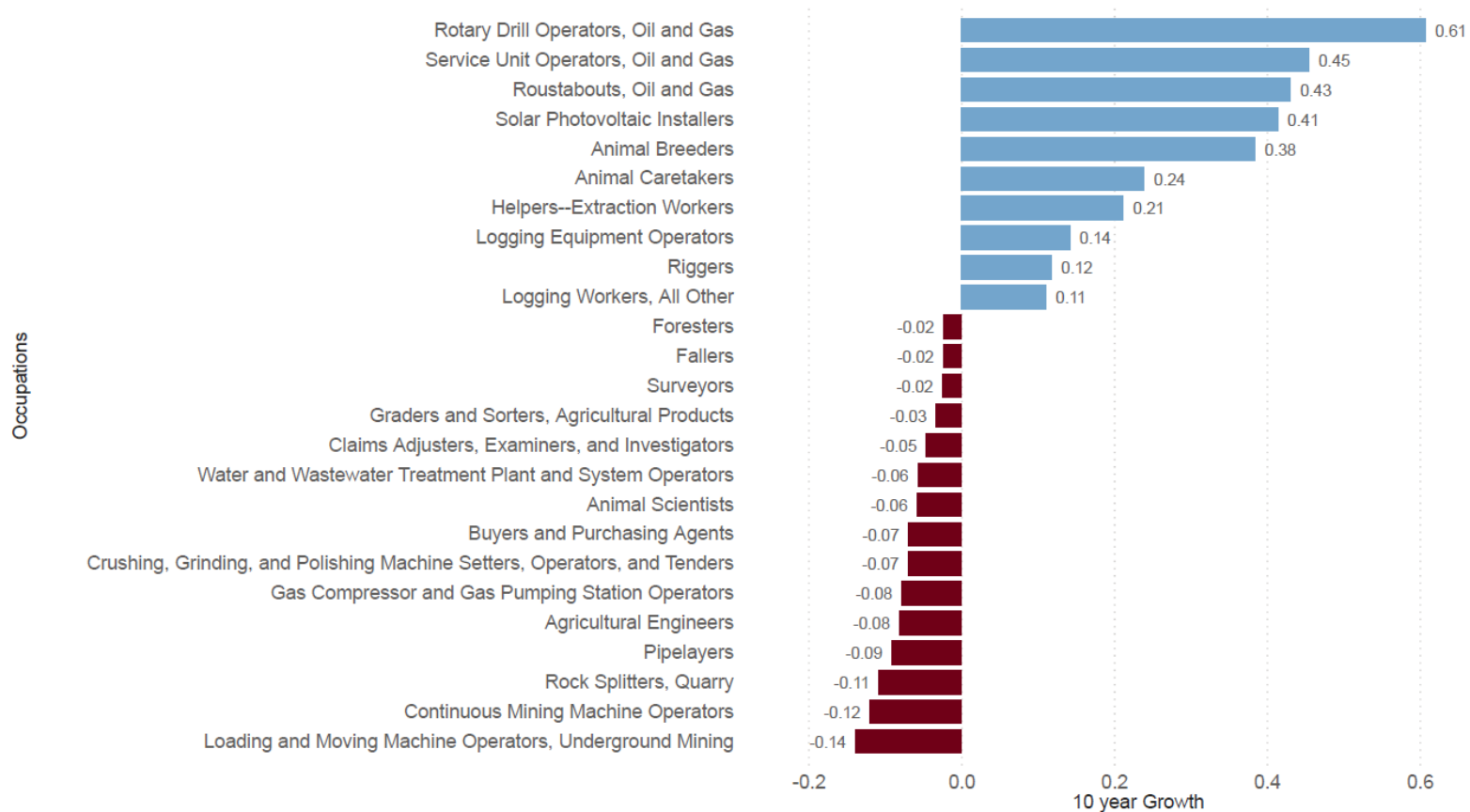## Projected Growth of Agricultural and Environmental Systems Jobs in Ohio (2021-2031)

Occupation	10 year Growth
Rotary Drill Operators, Oil and Gas	0.61
Service Unit Operators, Oil and Gas	0.45
Roustabouts, Oil and Gas	0.43
Solar Photovoltaic Installers	0.41
Animal Breeders	0.38
Animal Caretakers	0.24
Helpers--Extraction Workers	0.21
Logging Equipment Operators	0.14
Riggers	0.12
Logging Workers, All Other	0.11
Foresters	-0.02
Fallers	-0.02
Surveyors	-0.02
Graders and Sorters, Agricultural Products	-0.03
Claims Adjusters, Examiners, and Investigators	-0.05
Water and Wastewater Treatment Plant and System Operators	-0.06
Animal Scientists	-0.06
Buyers and Purchasing Agents	-0.07
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	-0.07
Gas Compressor and Gas Pumping Station Operators	-0.08
Agricultural Engineers	-0.08
Pipelayers	-0.09
Rock Splitters, Quarry	-0.11
Continuous Mining Machine Operators	-0.12
Loading and Moving Machine Operators, Underground Mining	-0.14

Figure 2 demonstrates the projected growth over the next ten years as a percentage. The blue represents positive growth, with the highest projected growth of 61% in rotary drill operators, oil and gas. The red represents negative growth or a decrease in the number of jobs, with the greatest expected decrease in loading and moving machine operators, underground mining.

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Figure 3.

Top Companies for Agricultural and Environmental Systems Jobs in Ohio

Company	Number of Job Postings
Asplundh Tree Expert Co	358
ServiceMaster	316
The Davey Tree Expert Company	296
GPAC	277
Aerotek	238
Nationwide Children's Hospital	231
PetCo	227
Cleveland Clinic	224
Utilities Service	217
The Ohio State University	189
IQVIA	183
Anthem	179
PAREXEL	175
Banfield Pet Hospital	164
University of Cincinnati	164
TruGreen	146
Progressive Insurance	137
Marathon Staffing	136
Robert Half	131
State of Ohio	130
Bartlett	118
Medpace	117
VCA Animal Hospitals	115
Randstad	103
Wright Tree Service	97
Nelson Tree Service, LLC - 465	96
MedVet	79
Pet Supplies Plus	77
Nationwide	73
Case Western Reserve University	72

Figure 3 shows the top companies hiring in the agricultural and environmental systems career field over a one-year period (October 2020-October 2021). There was a total of 11,896 agricultural and environmental systems job postings during this time period, with the highest number from Asplundh Tree Expert Company at 358.

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Figure 4.

Demand and Supply of Agricultural and Environmental Systems Jobs in Ohio
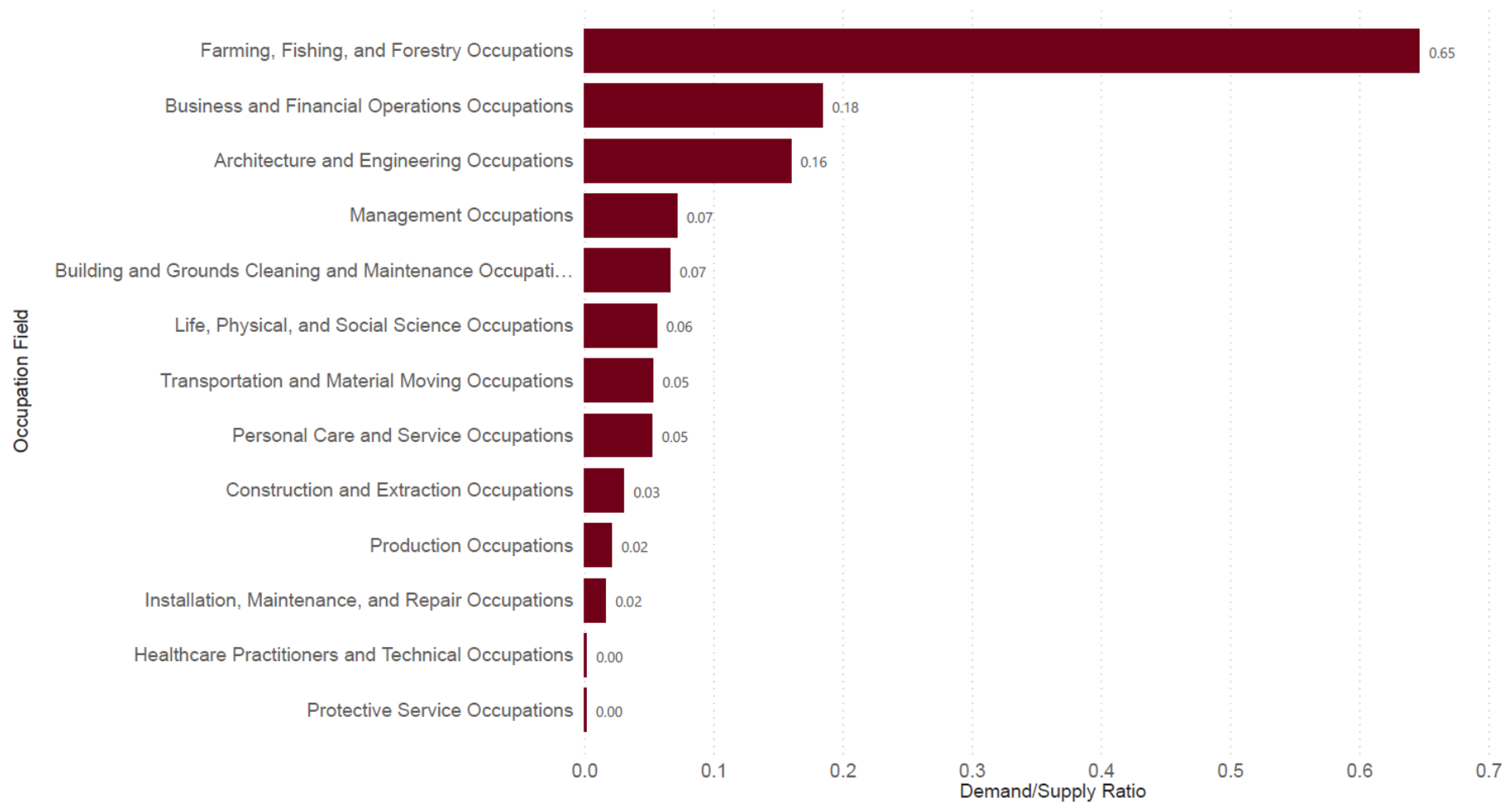
Figure 4 shows the demand and supply ratio for different areas in the career field. The ratio is calculated using the formula, job openings divided by the sum of graduates and those unemployed in the field [Ratio= Openings/(Graduates+Unemployed)]. A ratio of one or greater demonstrates a potential undersupply and less than one shows a sufficient supply. All areas of the agricultural and environmental systems career field are in sufficient supply; therefore, Ohio does not expect a labor shortage in this career field in coming years.

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Figure 5.

Demand for Hard Skills for Agricultural and Environmental Systems Jobs in Ohio
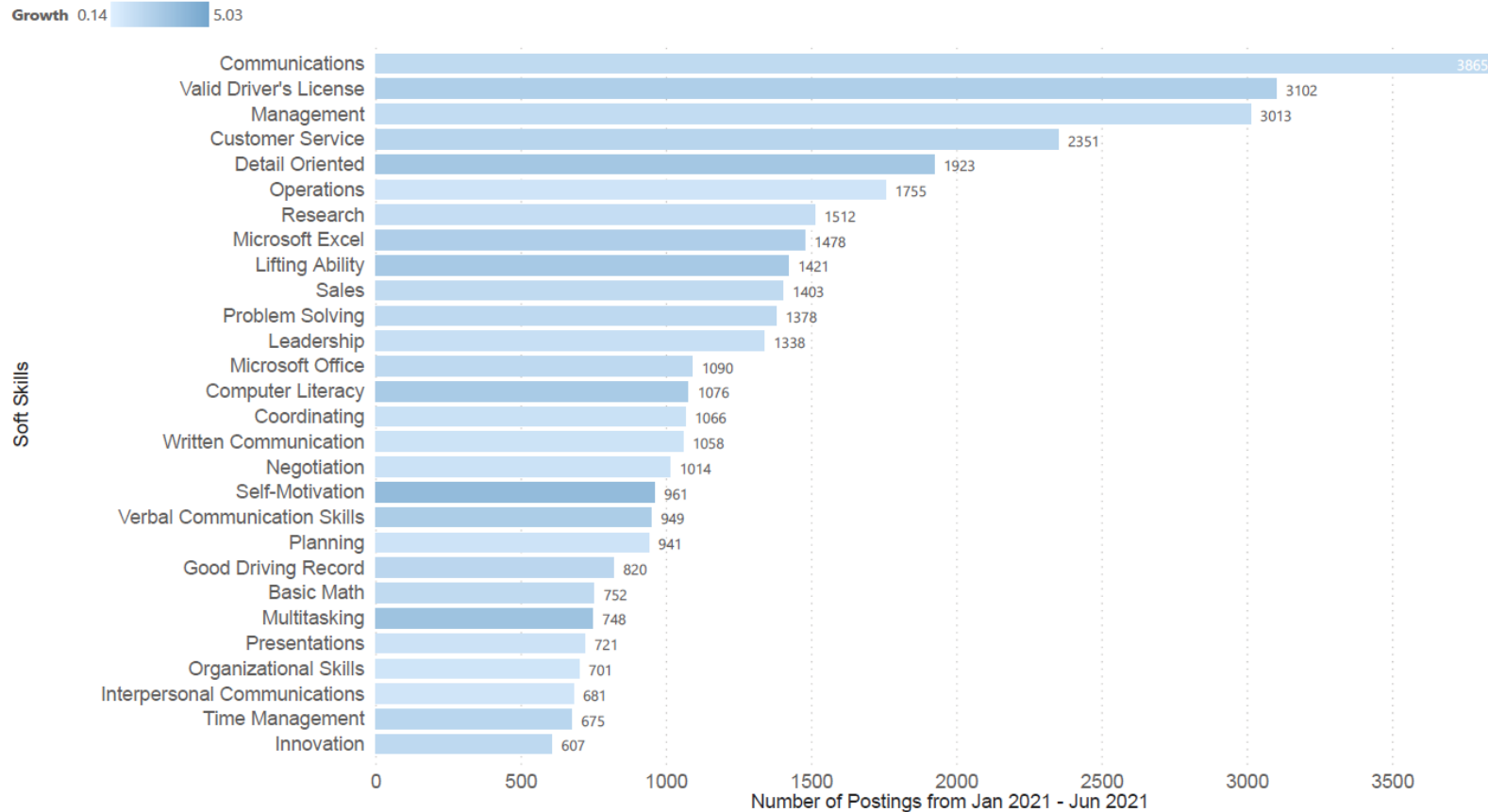
Growth 0.40 ▭ 12.68
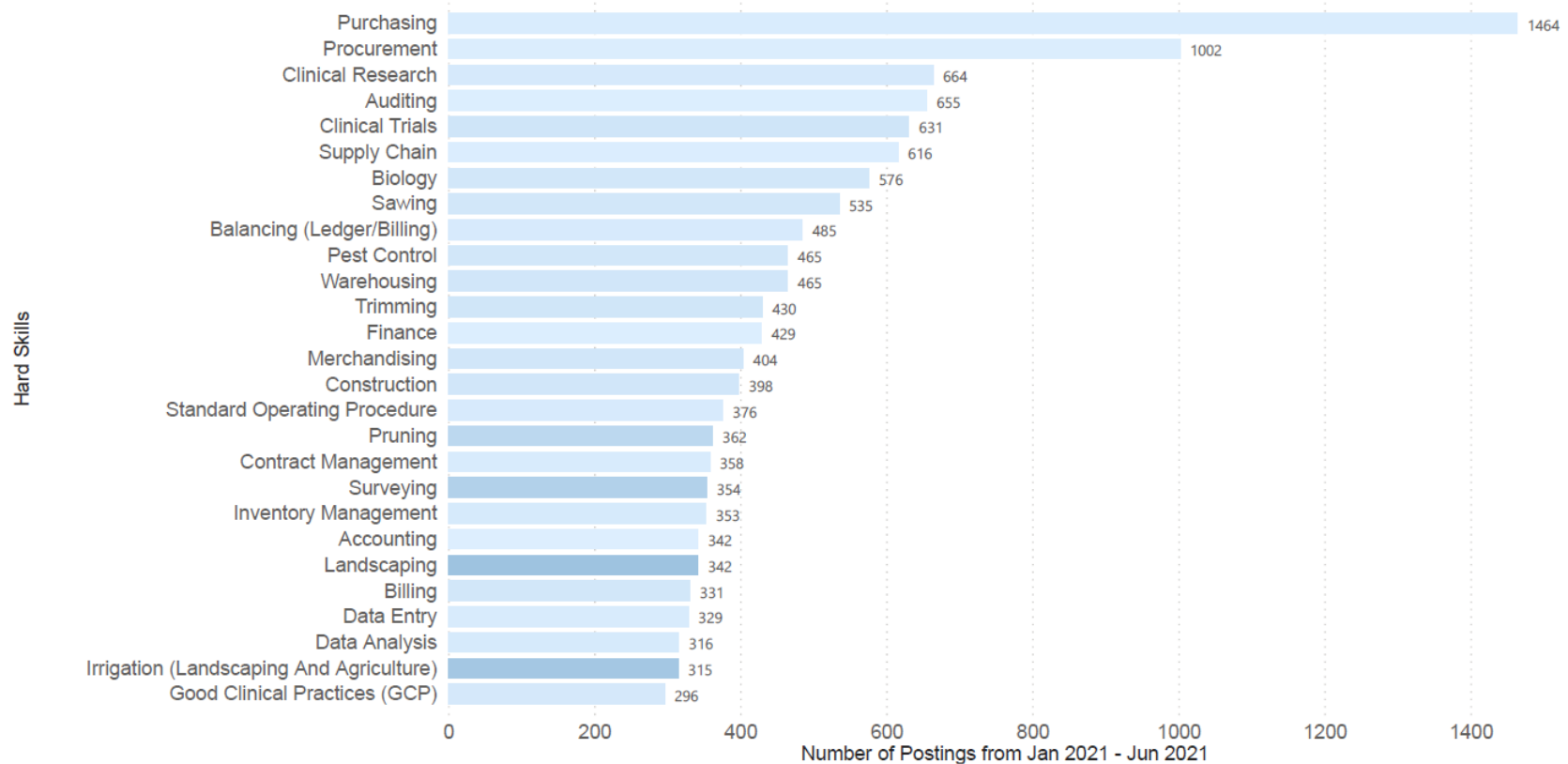
Figure 5 shows the top 27 in-demand hard skills employers are looking for in agricultural and environmental systems jobs, with the top skill being purchasing. Additionally, the darker blue demonstrates skills that have seen a greater increase in demand from 2017 to 2021. The greatest increase in demand is in landscaping at 7.77%.

Figure 6.

Demand for Soft Skills in Agricultural and Environmental Systems Jobs in Ohio

Figure 6 shows the top 28 in-demand soft skills employers are looking for in agricultural and environmental systems jobs. The top skill is communications, which appeared in almost 4,000 job postings between January 2021 and June 2021. Additionally, the darker blue demonstrates skills that have seen a greater increase in demand from 2017 to 2021. The greatest increase in demand is in self-motivation and multitasking at 3.48% and 3.07%, respectively.

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Appendix.

Standard Occupation Classification (SOC)	Title
11-9013.00	Farmers, Ranchers, and Other Agricultural Managers
11-9121.00	Natural Sciences Managers
13-1028	Buyers and Purchasing Agents
13-1031	Claims Adjusters, Examiners, and Investigators
17-1022	Surveyors
17-2021	Agricultural Engineers
17-2081	Environmental Engineers
17-3025	Environmental Engineering Technologists and Technicians
17-3031	Surveying and Mapping Technicians
19-1011	Animal Scientists
19-1012	Food Scientists and Technologists
19-1013	Soil and Plant Scientists
19-1023	Zoologists and Wildlife Biologists
19-1029	Biological Scientists, All Other
19-1031	Conservation Scientists
19-1032	Foresters
19-2041	Environmental Scientists and Specialists, Including Health
19-3091	Anthropologists and Archeologists
19-4011	Agricultural and Food Science Technicians
19-4021	Biological Technicians
19-4045	Geological and Hydrologic Technicians
19-4071	Forest and Conservation Technicians
29-1131	Veterinarians
33-2022	Forest Fire Inspectors and Prevention Specialists
37-2021	Pest Control Workers
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation
37-3013	Tree Trimmers and Pruners
37-3019	Grounds Maintenance Workers, All Other
39-2021	Animal Caretakers
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers
45-2021	Animal Breeders

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45-2041	Graders and Sorters, Agricultural Products
45-2091	Agricultural Equipment Operators
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals
45-2099	Agricultural Workers, All Other
45-4011	Forest and Conservation Workers
45-4021	Fallers
45-4022	Logging Equipment Operators
45-4023	Log Graders and Scalers
45-4029	Logging Workers, All Other
47-2151	Pipelayers
47-2231	Solar Photovoltaic Installers
47-4031	Fence Erectors
47-4041	Hazardous Materials Removal Workers
47-5012	Rotary Drill Operators, Oil and Gas
47-5013	Service Unit Operators, Oil and Gas
47-5022	Excavating and Loading Machine and Dragline Operators, Surface Mining
47-5041	Continuous Mining Machine Operators
47-5044	Loading and Moving Machine Operators, Underground Mining
47-5051	Rock Splitters, Quarry
47-5071	Roustabouts, Oil and Gas
47-5081	Helpers--Extraction Workers
47-5097	Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters
47-5098	Underground Mining Machine Operators and Extraction Workers, All Other
49-3041	Farm Equipment Mechanics and Service Technicians
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics
49-9096	Riggers
51-3099	Food Processing Workers, All Other
51-8031	Water and Wastewater Treatment Plant and System Operators
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders
53-7011	Conveyor Operators and Tenders
53-7021	Crane and Tower Operators
53-7031	Dredge Operators
53-7071	Gas Compressor and Gas Pumping Station Operators

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| 53-7081 | Refuse and Recyclable Material Collectors |

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