

# **Central Community College**

## **Agricultural Sciences**

### **Coordinating Commission Seven-Year Review 2021**

*Recommended continuation of programs without monitoring:*

Central Community College College Cabinet, April 29, 2021  
Central Community College Board of Governors, **pending**

*Information in this report approved by:*

Central Community College Educational Services, April 22, 2021

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I. **Program: Agricultural Sciences (AGRI)**

II. **College Mission: Central Community College maximizes student and community success.**

III. **College Vision: The Best Choice –**

**for students to achieve their educational goals.**

- quality education
- personal service and individualized attention
- exceptional and passionate faculty and staff
- extraordinary value

**for developing a skilled workforce.**

- employability and/or successful credit transfers
- graduates who advocate for CCC
- business and industry partnerships
- state-of-the-art facilities and technologies

**for advancing communities.**

- educational partnerships
- strong alumni support
- foster economic development
- sustainability leaders

IV. **Program Mission Statement:**

The Agricultural Sciences program will provide students with access to quality instruction utilizing technology and practices that reflect the needs of the agricultural industry.

V. **Program Vision Statement:**

The Agricultural Sciences program will provide a balanced curriculum to prepare students to enter the agriculture industry workforce or to transfer on to further their education upon graduation. This curriculum will include course work focused on current practices and technology, critical thinking, team work, and lifelong learning skills.

The program will cultivate and maintain strong relationships with business and industry for the purposes of graduate placement and curriculum updates in technology and management systems.

Various delivery modes will be used to meet the needs of students allowing them flexibility in reaching their educational goals while maintaining quality and rigor in the program curriculum.

## VI. Program/Discipline Environmental Scan (Program Need):

### A. Industry or college need

Programs - A summary of industry need include EMSI or State data, information from advisory committees

Disciplines – data of college usage and a summary statement

## EMSI Q4 2020 Data Set Report Parameters

### 5 Occupations

11-9013 Farmers, Ranchers, and Other Agricu

19-4011 Agricultural and Food Science Techn

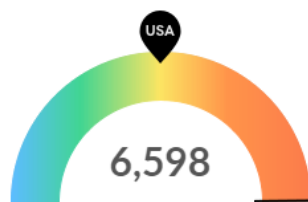
25-9021 Farm and Home Management Educa

45-1011 First-Line Supervisors of Farming, Fi

45-2011 Agricultural Inspectors

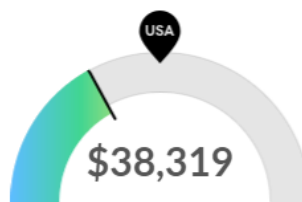
## Executive Summary

### Aggressive Job Posting Demand Over a Deep Supply of Regional Jobs



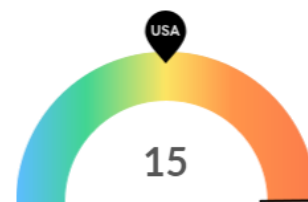
Jobs (2015)

Your area is a hotspot for this kind of job. The national average for an area this size is 724\* employees, while there are 6,598 here.



Compensation

Earnings are low in your area. The national median salary for your occupations is \$44,947, compared to \$38,319 here.



Job Posting Demand

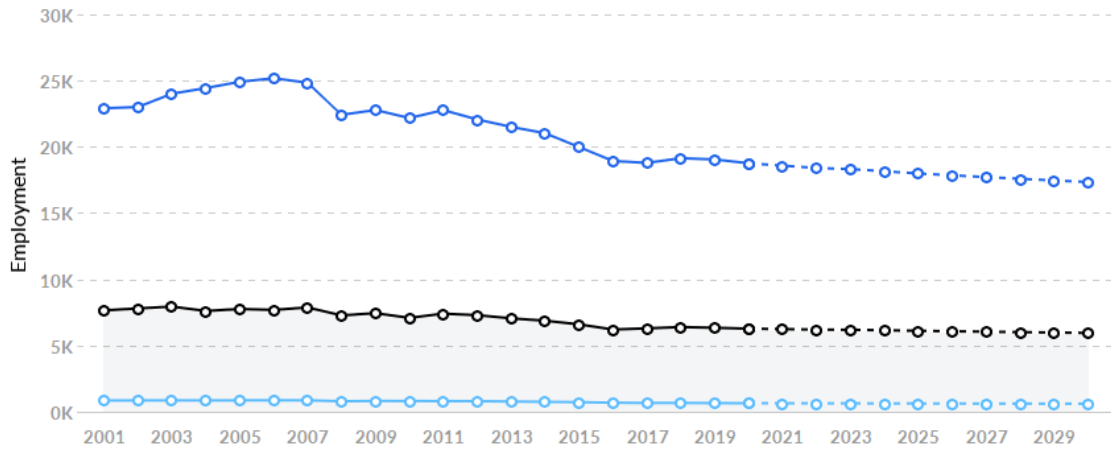
Job posting activity is high in your area. The national average for an area this size is 2\* job postings/mo, while there are 15 here.

\*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

# Jobs

## Regional Employment Is Higher Than the National Average

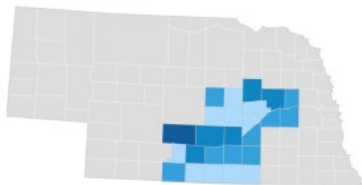
An average area of this size typically has 724\* jobs, while there are 6,598 here. This higher than average supply of jobs may make it easier for workers in this field to find employment in your area.



Region	2015 Jobs	2025 Jobs	Change	% Change
● CCC Service Area	6,598	6,113	-485	-7.4%
● National Average	724	626	-98	-13.6%
● State of Nebraska	19,989	17,991	-1,998	-10.0%

\*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

## Regional Breakdown



County	2015 Jobs
Dawson County, NE	659
Platte County, NE	484
Phelps County, NE	481
Buffalo County, NE	481
Hall County, NE	461

### Most Jobs are Found in the Crop Production Industry Sector

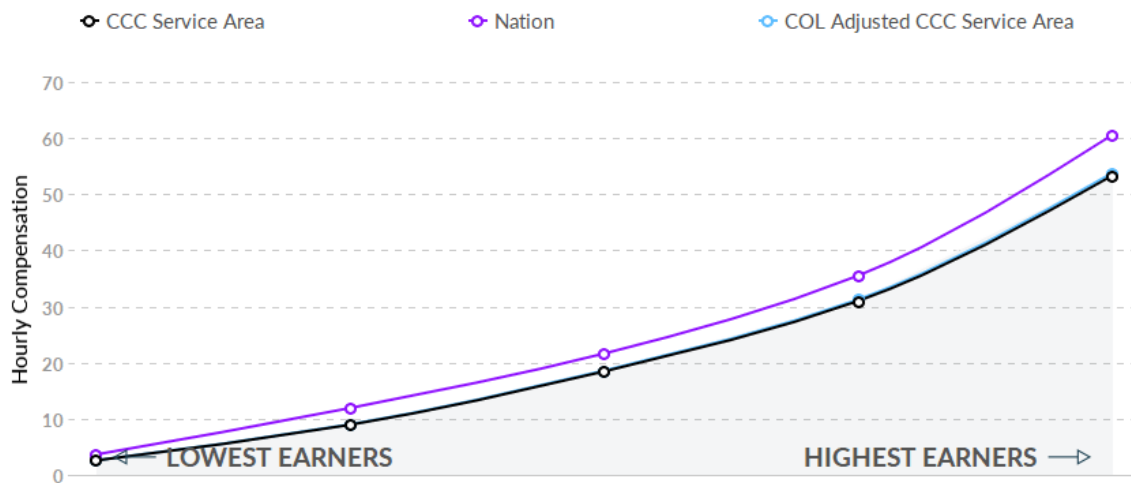


Industry	% of Occupation in Industry (2015)
Crop Production	50.5%
Animal Production	42.8%
Animal Slaughtering and Processing	1.4%
Support Activities for Crop Production	1.1%
Education and Hospitals (State Government)	0.9%
State Government, Excluding Education and Hospitals	0.6%
Other	2.7%

## Compensation

### Regional Compensation Is 15% Lower Than National Compensation

For your occupations, the 2019 median wage in your area is \$18.42/hr, while the national median wage is \$21.61/hr.



## Job Posting Activity



### 776 Unique Job Postings

The number of unique postings for this job from Sep 2016 to Dec 2020.



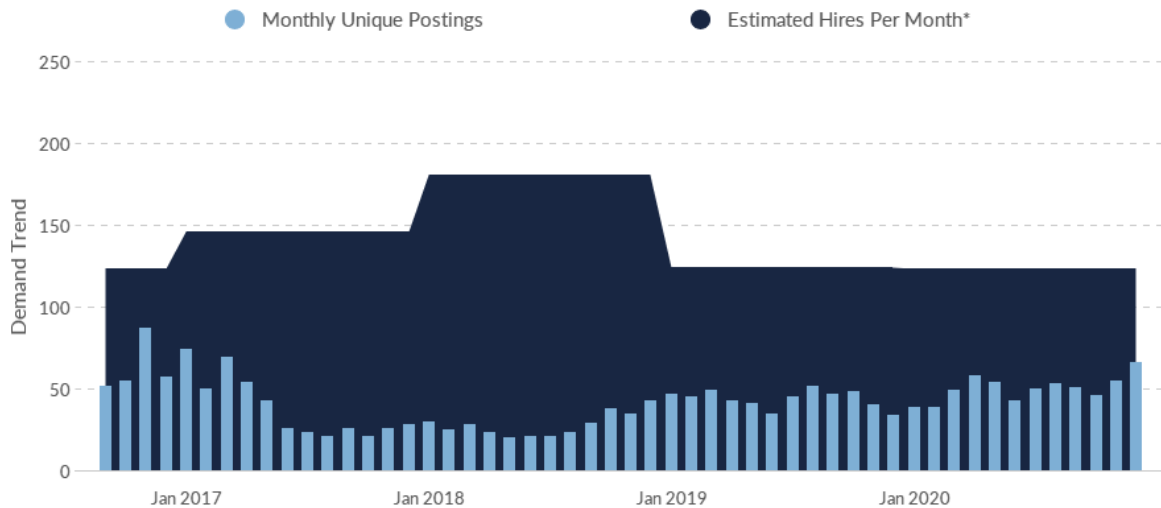
### 103 Employers Competing

All employers in the region who posted for this job from Sep 2016 to Dec 2020.



### 48 Day Median Duration

Posting duration is 22 days longer than what's typical in the region.



Occupation	Avg Monthly Postings (Sep 2016 - Dec 2020)	Avg Monthly Hires (Sep 2016 - Dec 2020)
Agricultural and Food Science Technicians	18	9
First-Line Supervisors of Farming, Fishing, and Forestry Workers	11	32
Farmers, Ranchers, and Other Agricultural Managers	11	87
Agricultural Inspectors	1	10
Farm and Home Management Educators	1	4

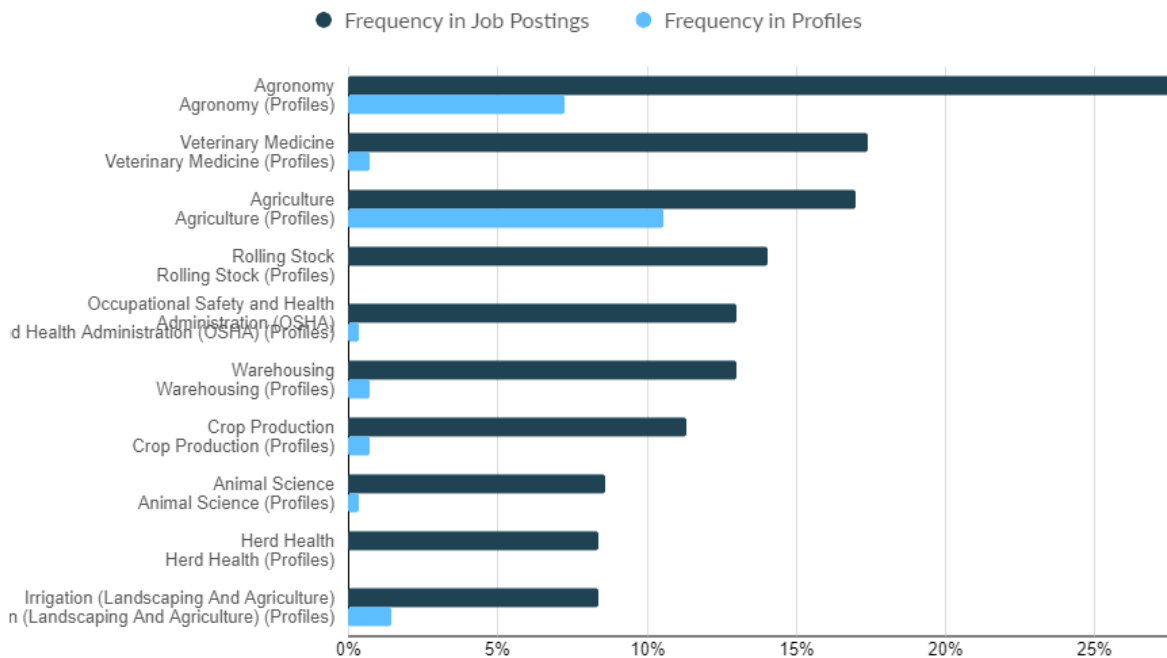
\*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Emsi hires are calculated using a combination of Emsi jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

Top Companies	Unique Postings
Hansen Agri-placement	287
Cooperative Producers, Inc.	97
University of Nebraska	49
Associated Staffing Inc	28
Growing People and Company	23
Bayer Corporation	21
The Maschhoffs LLC	21
Food Safety & Inspection Service	19
CHS Inc.	12
Jaghire Inc.	10

Top Job Titles	Unique Postings
Agronomy Managers	122
Farm Managers	84
Research Technicians	44
Seed Technicians	29
Farm Foremen	21
Herd Managers	20
Sow Farm Managers	19
Food Inspectors	18
Calf Managers	17
Train Attendants	17

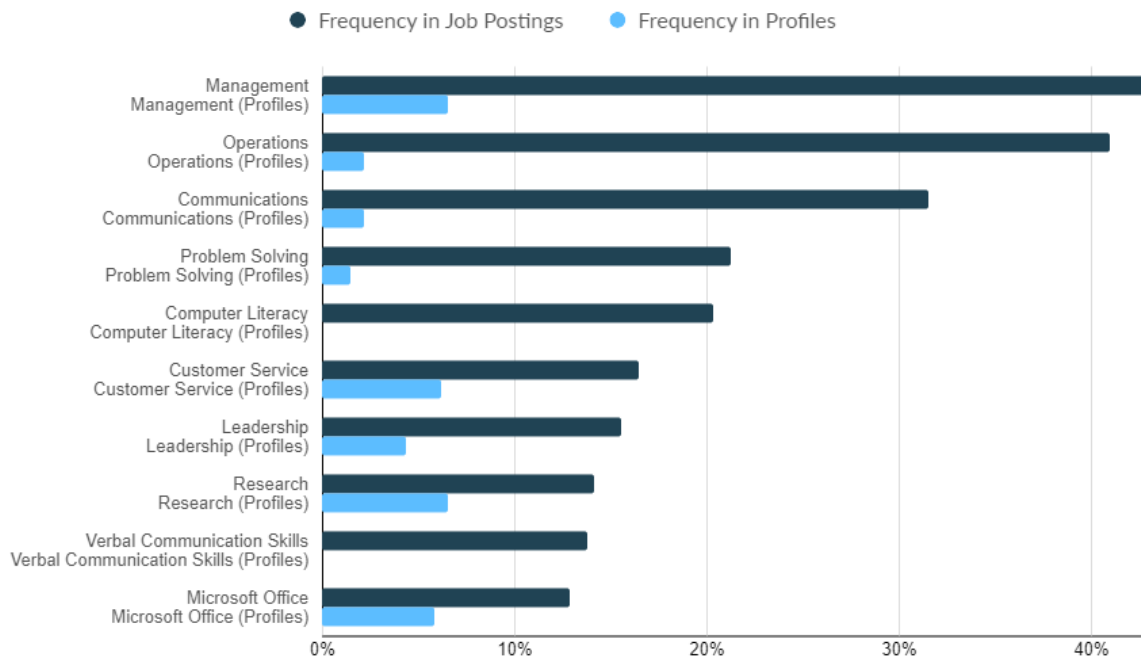
## Top Hard Skills

### Top Hard Skills



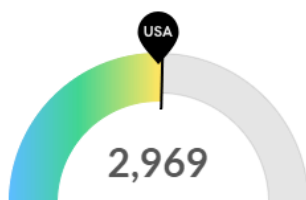
## Top Common Skills

### Top Common Skills



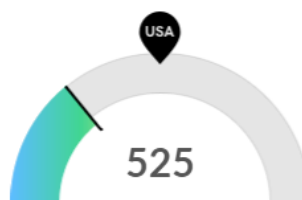
## Demographics

### Retirement Risk Is About Average, While Overall Diversity Is Low



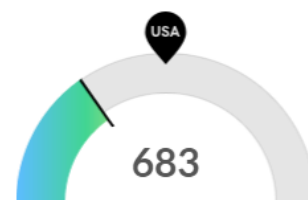
#### Retiring Soon

Retirement risk is about average in your area. The national average for an area this size is 2,898\* employees 55 or older, while there are 2,969 here.



#### Racial Diversity

Racial diversity is low in your area. The national average for an area this size is 1,096\* racially diverse employees, while there are 525 here.



#### Gender Diversity

Gender diversity is low in your area. The national average for an area this size is 1,297\* female employees, while there are 683 here.

\*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

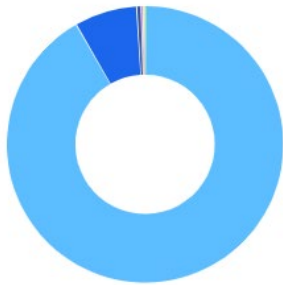


### Occupation Age Breakdown



	% of Jobs	Jobs
14-18	0.4%	25
19-24	6.8%	424
25-34	9.6%	600
35-44	17.7%	1,110
45-54	18.3%	1,148
55-64	27.1%	1,701
65+	20.2%	1,267

### Occupation Race/Ethnicity Breakdown



	% of Jobs	Jobs
White	91.6%	5,750
Hispanic or Latino	7.3%	459
Black or African American	0.5%	33
Two or More Races	0.2%	15
Asian	0.2%	13
American Indian or Alaska Native	0.1%	5
Native Hawaiian or Other Pacific Islander	0.0%	1

### Occupation Gender Breakdown



	% of Jobs	Jobs
Males	89.1%	5,592
Females	10.9%	683

## Graduate Pipeline



### 3 Programs

Of the programs that can train for this job, 3 have produced completions in the last 5 years.



### 226 Completions (2019)

The completions from all regional institutions for all degree types.



### 689 Openings (2019)

The average number of openings for an occupation in the region is 28.

CIP Code	Top Programs	Completions (2019)
01.0101	Agricultural Business and Management, General	179 <div></div>
19.0499	Family and Consumer Economics and Related Services, Other	47 <div></div>

Top Schools	Completions (2019)
Central Community College	162 <div></div>
University of Nebraska at Kearney	64 <div></div>

### 2021 Summary of EMSI Data:

According to the Bureau of Labor Statistics, agriculture related job in this area are expected to drop to about 6,100 jobs in 2025 from 6,500 jobs in 2015. This is still a very strong demand in the area. The compensation gap has widened slightly from 11% below national average in 2018 to 15% below the national average in 2019. The actual wage offered in the area though only dropped \$.32 / hour over that period. Most opportunities are found in the crop production area with 50.5% and the animal production are not far behind at 42.8% of the openings. Based on the number of openings, Dawson and Platte counties are the top two counties in our service area followed closely by Phelps, Buffalo, and Hall. (*Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook*)

### B. Supporting Data

#### a. Awards

Degree/ Credential Awarded	15-16	16-17	17-18	18-19	19-20	5-yr avg
AAS	21	24	20	26	16	21.4
Diploma	17	21	29	30	20	23.4
Certificate	58	56	74	106	80	74.8
Total Awards	96	101	123	162	116	119.6
# of Graduates	36	44	43	57	43	44.6

**2021 Summary of Awards:**

Although down from the five year high in 2018-2019, the number of graduates is steady with the five-year average overall. The number of AAS degrees and diplomas are down and below the five-year averages in those respective areas, but certificates awarded are above the five-year average by 7%. Efforts made by faculty to encourage students to complete all certificates that are available in their area of study is a factor in the increase. Although not addressed in the data, the program has seen a higher percentage of students taking longer than two years to complete the AAS award and that could account for the decrease in that area.

**b. Student Credit Hours Produced per Faculty FTE**

	15-16	16-17	17-18	18-19	19-20	5 yr avg
<b>Student Credit Hours (SCH)</b>	1,929	2,161	2,505	2,125	1,666	2,078
<b>Faculty Full-time Equivalency (FTE)</b>	3.60	4.50	4.78	4.54	4.51	4.39
<b>SCH/Faculty FTE</b>	535.83	480.22	524.06	468.06	369.51	475.54

Source: Program Stats by Alpha and Instructor-Student FTE reports.

**2021 Summary of the Student Credit Hours per Faculty FTE:**

The 2019-2020 represents the only year in the last five years below the five-year average but is the second year in a row that has shown a drop. Even though the AGRI is one of the top seven program in the CCC system as far as this efficiency and is in the top three of programs with four or more instructors, this possible trend of dropping SCH / Faculty FTE should be noted. This could be viewed as justification for more recruiting activities, a realigning of program tracks, and updating of the agriculture program's physical facilities and equipment.

**Summary and Recommendation:**

Based on the strong industry need in our 25 county area, the number of continued awards earned (completers) as well as the growing need for knowledge and experience in new technologies offered through this program, we recommend continuation of the program. Community partners and advisory committee members continue to demonstrate a need for agricultural industry employees who possess critical skills offered and earned here at Central Community College.