

Using Flexible Cash Leases to Manage Risk and Increase Profitability in 2023

Jim Jansen
Agricultural Economist
jjansen4@unl.edu
402-261-7572



CENTER FOR AGRICULTURAL PROFITABILITY

1

DISCLAIMER

- Land values and rental rates shown and discussed in this presentation are excerpts from the UNL Nebraska Farm Real Estate Market Survey.
- Information provided in this presentation are averages from these surveys. Actual land values and rental rates may vary depending upon the quality of the parcel and local market forces for an area.



CENTER FOR AGRICULTURAL PROFITABILITY

2

Nebraska Farm Real Estate Survey

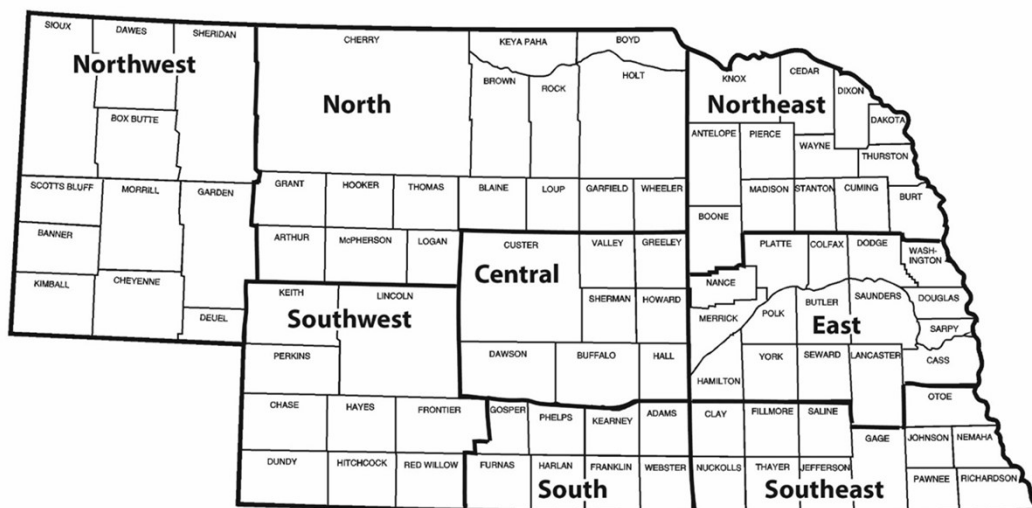
- Annual survey conducted since 1978 of Nebraska agricultural appraisers, professional farm managers, and bankers engaged in the land industry.
- Preliminary results for land values and rental rates published the second week of March.
- Full report published in June.
- Nebraska Farm Real Estate website full access to these resources:
<http://cap.unl.edu/realestate>



CENTER FOR AGRICULTURAL PROFITABILITY

3

Nebraska Agricultural Statistics Districts



CENTER FOR AGRICULTURAL PROFITABILITY

4

Nebraska Land Values

Land Averages and Annual Percent Changes

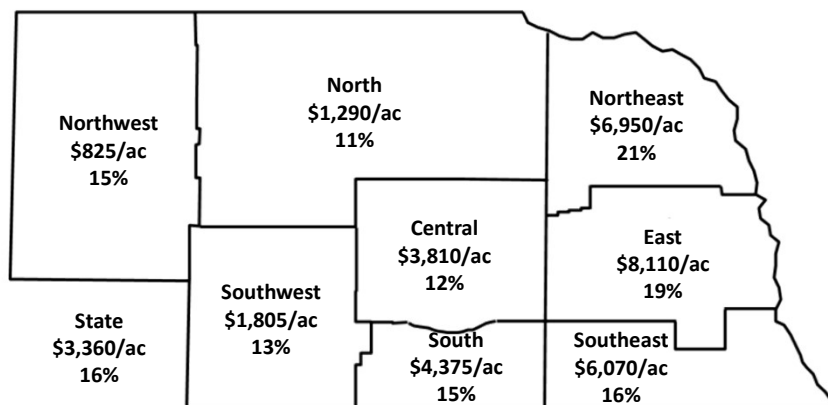


CENTER FOR AGRICULTURAL PROFITABILITY

5

Nebraska Agricultural Average

All Land Value – Feb. 1, 2022

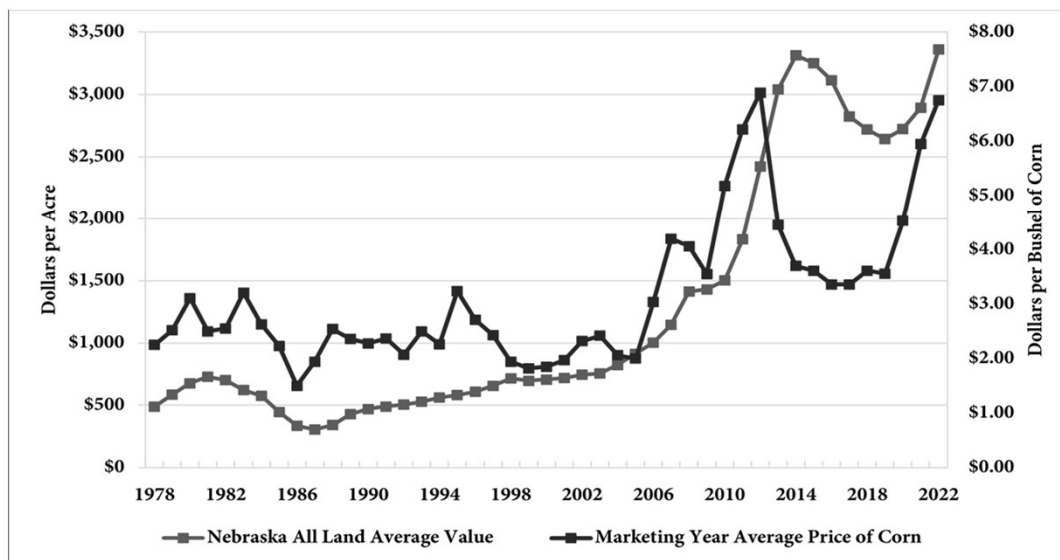


CENTER FOR AGRICULTURAL PROFITABILITY

Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.

6

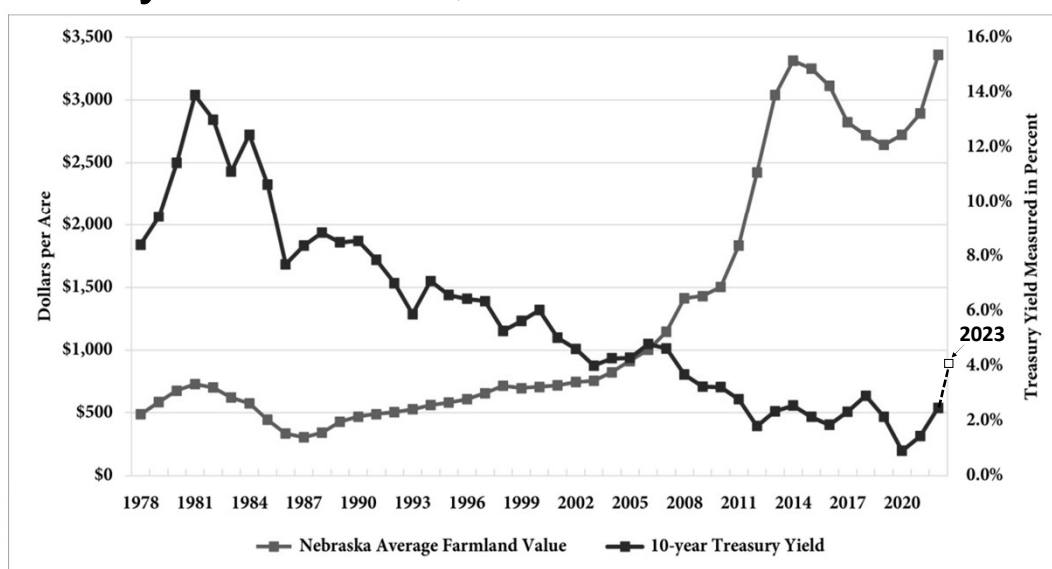
Nebraska Average Land Value and Corn Price, 1978-2022



CENTER FOR AGRICULTURAL PROFITABILITY

7

Nebraska Avg. Land Value & 10-year Treasury Bond Rate, 1978-2022



CENTER FOR AGRICULTURAL PROFITABILITY

8

Refundable Nebraska Income Tax Credit for Property Taxes Paid to Schools

Source: Office of the NE Governor -

<https://governor.nebraska.gov/>

- For tax year 2022, the property tax credit rebate on taxes paid to K-12 public schools will grow from 25% to 30%. Nebraska property taxpayers will also be eligible for a new 30% rebate on property taxes paid to community colleges.
- Tax Commissioner Tony Fulton reminded Nebraskans of the need to claim their refundable income tax credit on property taxes. These credits can be claimed retroactively going back three years.
- For information on how to claim the refundable income tax credit, go to revenue.nebraska.gov/about/nebraska-property-tax-credit.

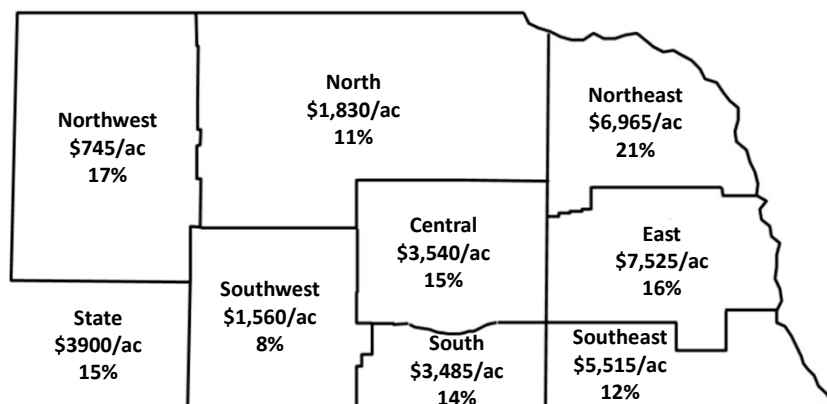
For information purposes only. Seek guidance from a tax professional or the Department of Revenue for specific questions on the tax credit.



CENTER FOR AGRICULTURAL PROFITABILITY

9

Dryland Cropland (No Irrigation Potential) Average Value – Feb. 1, 2022

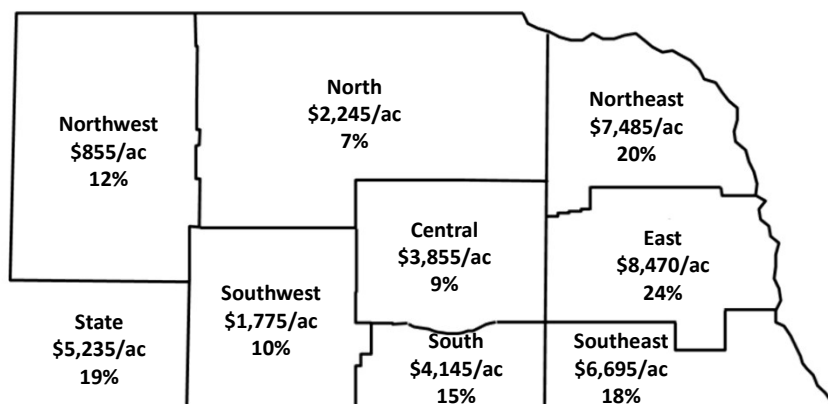


CENTER FOR AGRICULTURAL PROFITABILITY

Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.

10

Dryland Cropland (Irrigation Potential) Average Value – Feb. 1, 2022

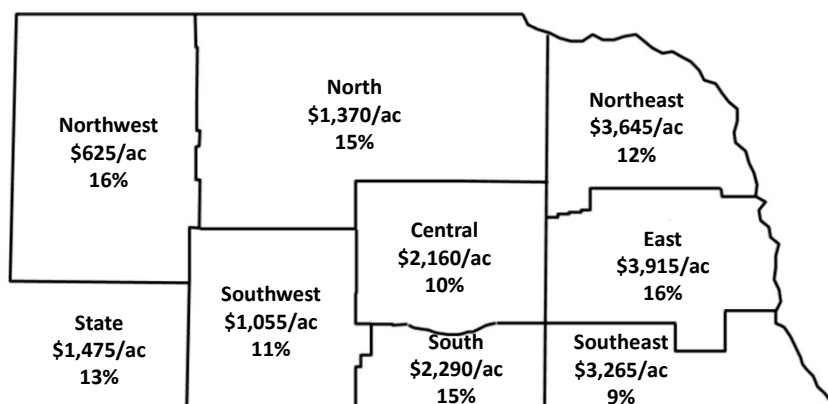


CENTER FOR AGRICULTURAL PROFITABILITY

Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.

11

Grazing Land (Tillable) Average Value – Feb. 1, 2022

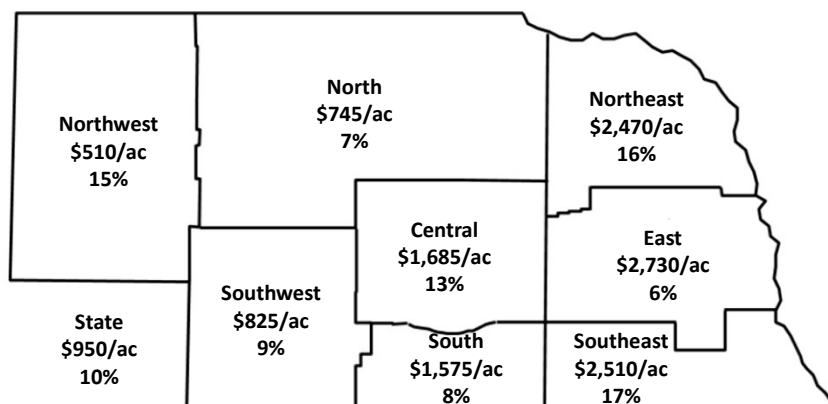


CENTER FOR AGRICULTURAL PROFITABILITY

Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.

12

Grazing Land (Nontillable) Average Value – Feb. 1, 2022

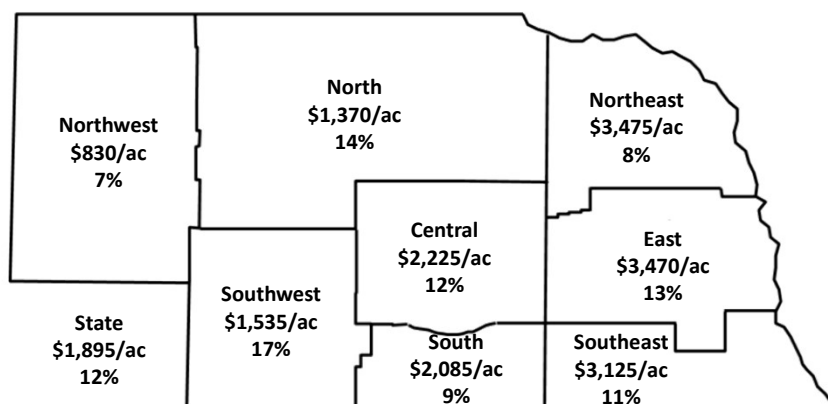


CENTER FOR AGRICULTURAL PROFITABILITY

Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.

13

Hayland Average Value – Feb. 1, 2022

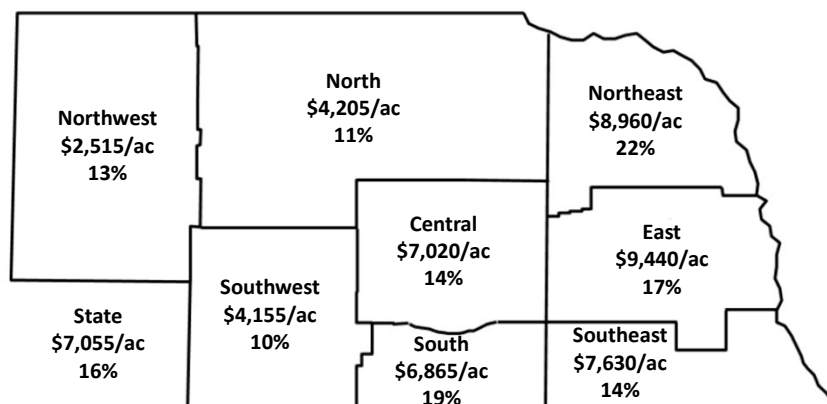


CENTER FOR AGRICULTURAL PROFITABILITY

Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.

14

Gravity Irrigated Cropland Average Value – Feb. 1, 2022



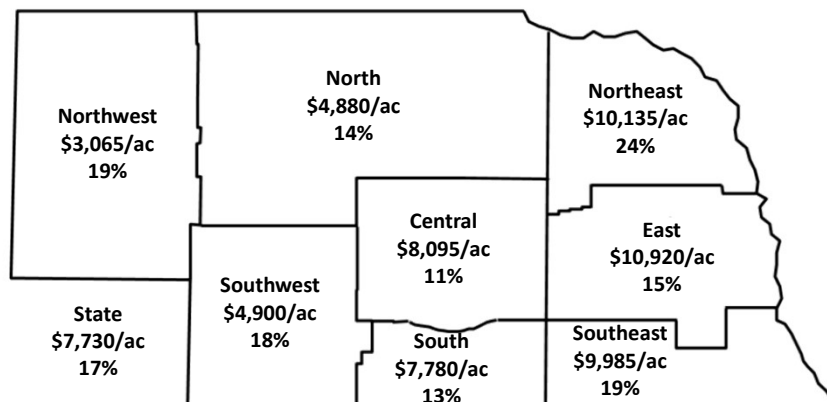
Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

15

Center Pivot Irrigated Cropland Average Value – Feb. 1, 2022



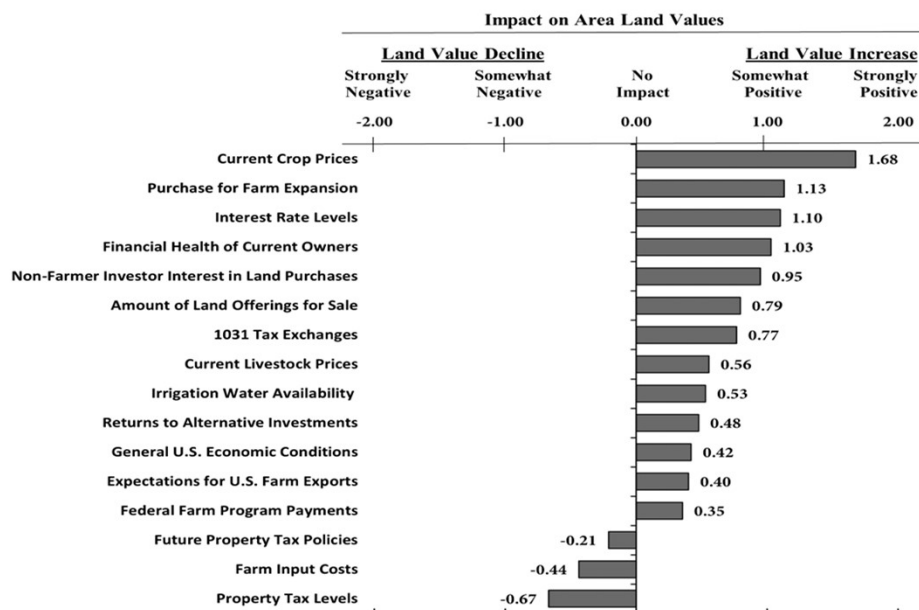
Source: UNL Nebraska Farm Real Estate Market Surveys, 2021 and 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

16

Rating of Factors Influencing Agricultural Land Values in 2022

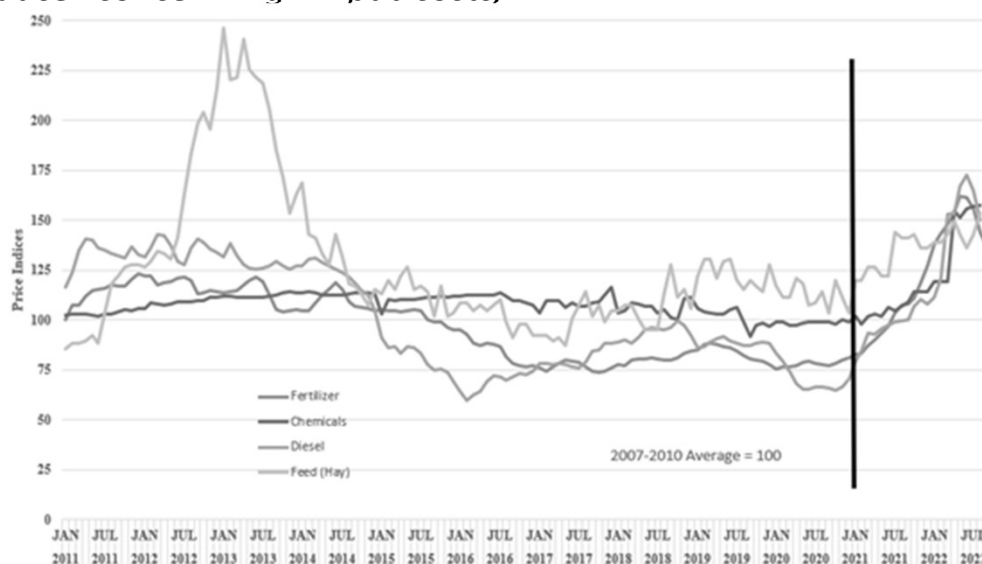


Source: Nebraska Farm Real Estate Market Development Survey, 2022.

17

Top Producer Concern—High Input Costs

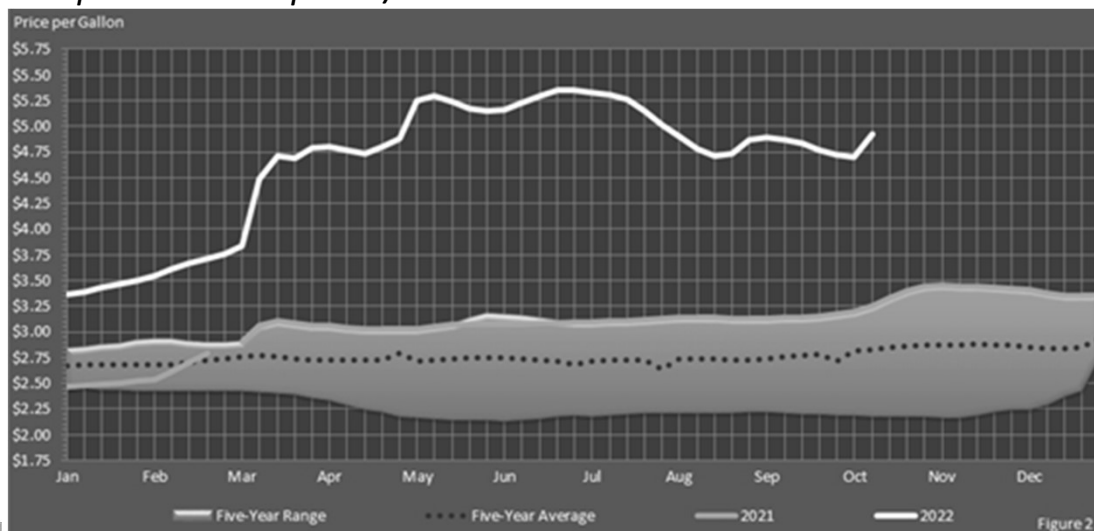
Source: NE Farm Bureau: <https://www.nefb.org/10/31/2022/top-producer-concern-high-input-costs/>



18

High Input Costs—Part II: Diesel Prices

Article: NE Farm Bureau: <https://www.nefb.org/10/31/2022/high-input-costs-part-ii-diesel-prices/>

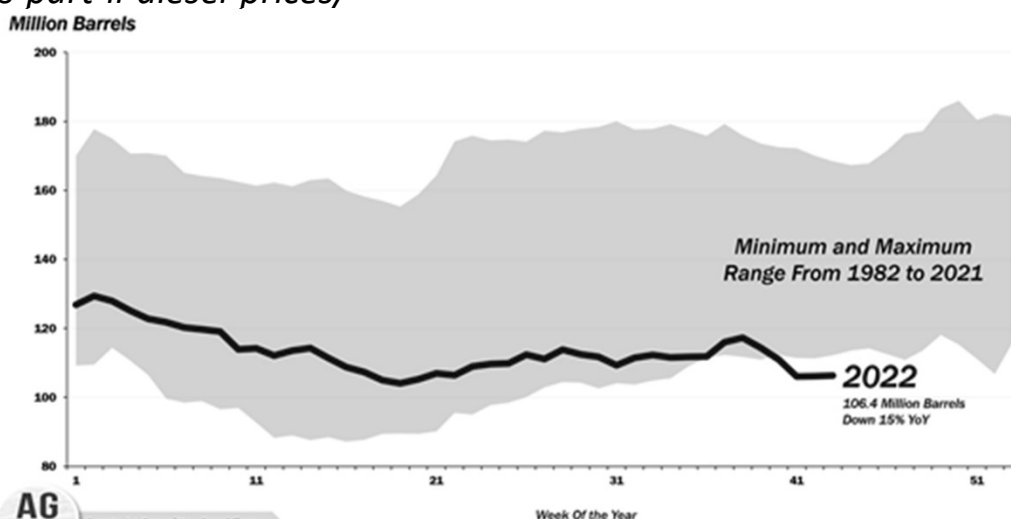


Source: Nebraska Department of Environment and Energy.

19

High Input Costs—Part II: Diesel Prices

Article: NE Farm Bureau: <https://www.nefb.org/10/31/2022/high-input-costs-part-ii-diesel-prices/>



Source: Ag Committee Senate GOP.

20

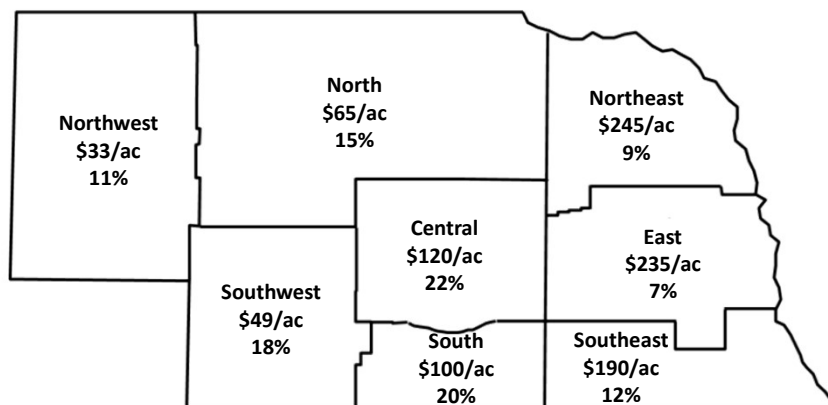
Nebraska Cash Rental Rates Dryland Cropland Rental Rates



CENTER FOR AGRICULTURAL PROFITABILITY

21

Dryland Cropland Average Rental Rates – 2022 Season

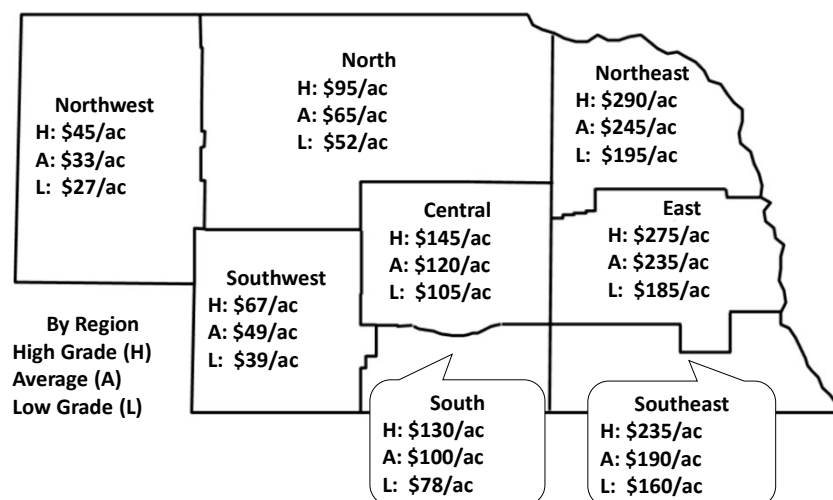


CENTER FOR AGRICULTURAL PROFITABILITY

Source: Nebraska Farm Real Estate Market Development Survey, 2022.

22

Dryland Cropland Rental Rate Ranges – 2022 Season



CENTER FOR AGRICULTURAL PROFITABILITY

Source: Nebraska Farm Real Estate Market Development Survey, 2022.

23

USDA-National Agricultural Statistics Service Cash Rent Survey

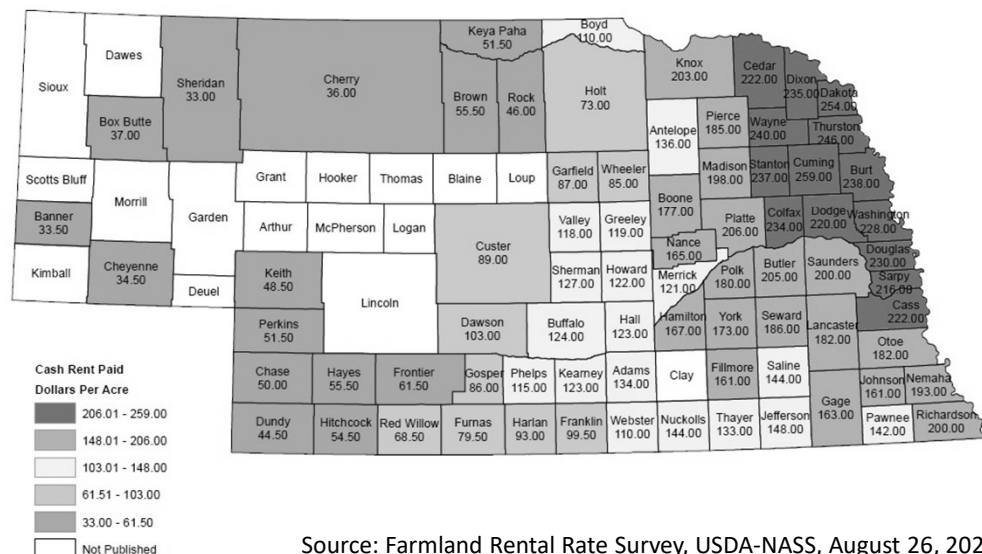
- Biennial survey conducted by the USDA-National Agricultural Statistics Service (NASS) of farmers and ranchers
- Survey starts in late-winter and conducted through mid-summer of odd-numbered years (some even-number years as well)
- Analysis published around the second week of September
- Nebraska county estimates in addition to other resources may be found at:
www.nass.usda.gov/Statistics_by_State/Nebraska/Publications/County_Estimates/



CENTER FOR AGRICULTURAL PROFITABILITY

24

Dryland Cropland Rental Rates – 2022 Season



Source: Farmland Rental Rate Survey, USDA-NASS, August 26, 2022

25

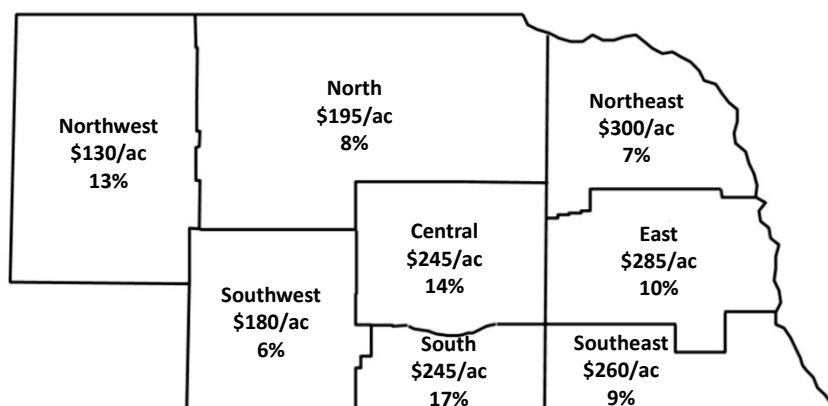
Nebraska Cash Rental Rates Irrigated Cropland Rental Rates



CENTER FOR AGRICULTURAL PROFITABILITY

26

Gravity Irrigated Cropland Average Rental Rates – 2022 Season



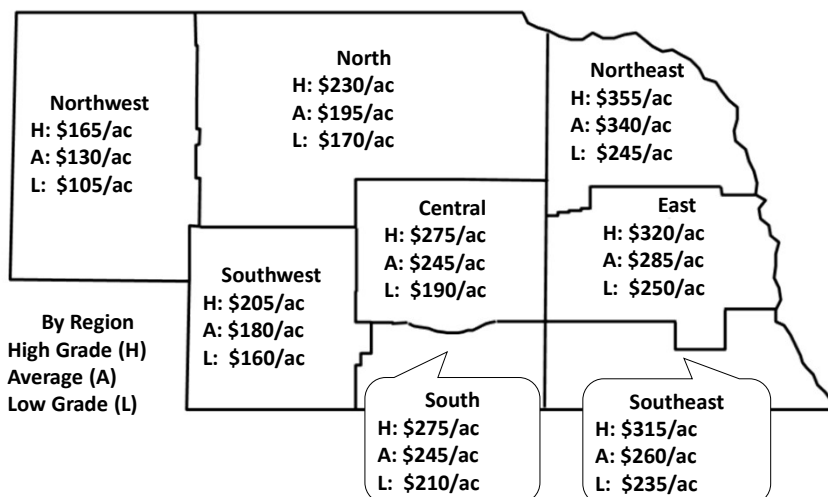
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

27

Gravity Irrigated Cropland Rental Rate Ranges – 2022 Season



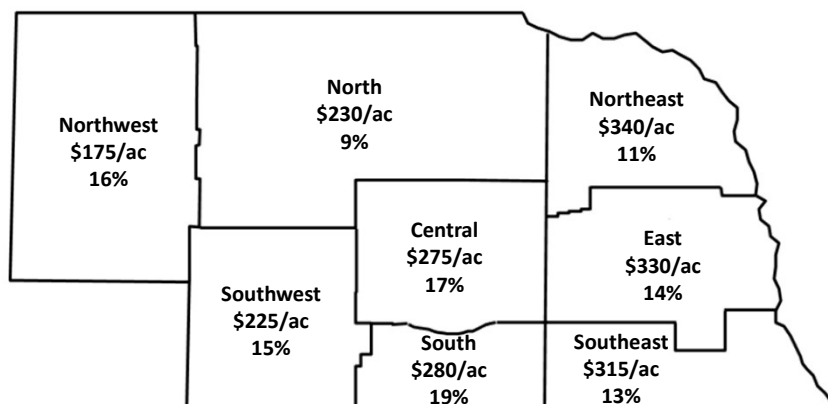
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

28

Center Pivot Irrigated Cropland Average Rental Rates – 2022 Season



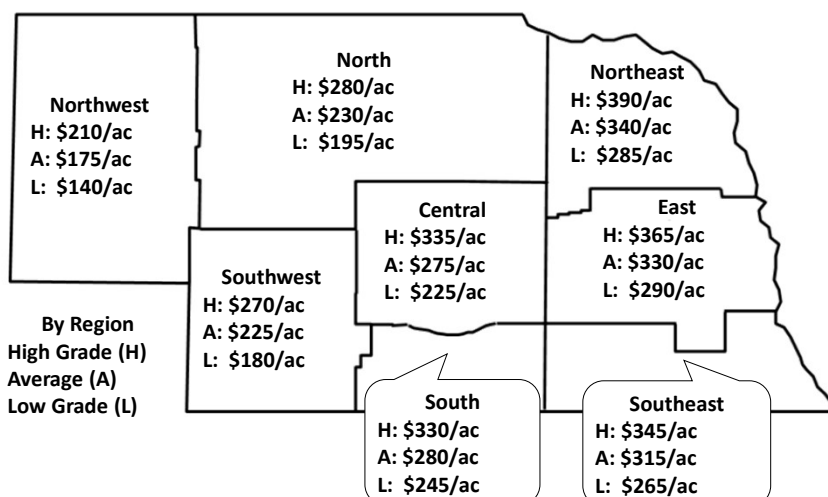
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

29

Center Pivot Irrigated Cropland Rental Rate Ranges – 2022 Season



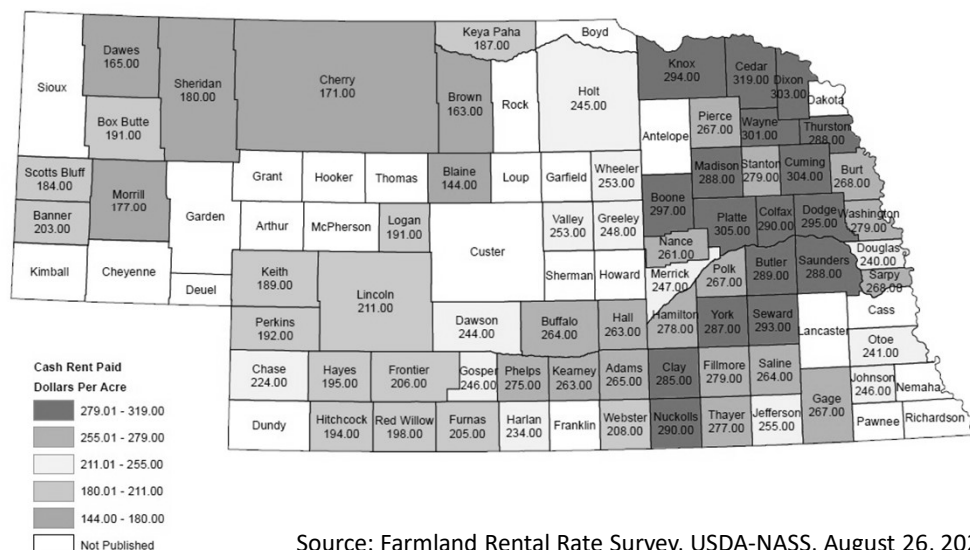
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

30

Irrigated Cropland Rental Rates – 2022 Season



Source: Farmland Rental Rate Survey, USDA-NASS, August 26, 2022

31

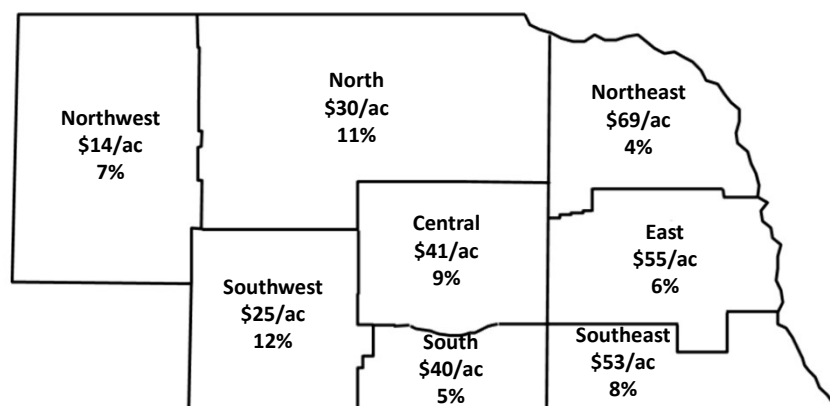
Nebraska Cash Rental Rates Pasture and Cow-Calf Pairs Rental Rates



CENTER FOR AGRICULTURAL PROFITABILITY

32

Pasture per Acre Average Rental Rates – 2022 Season



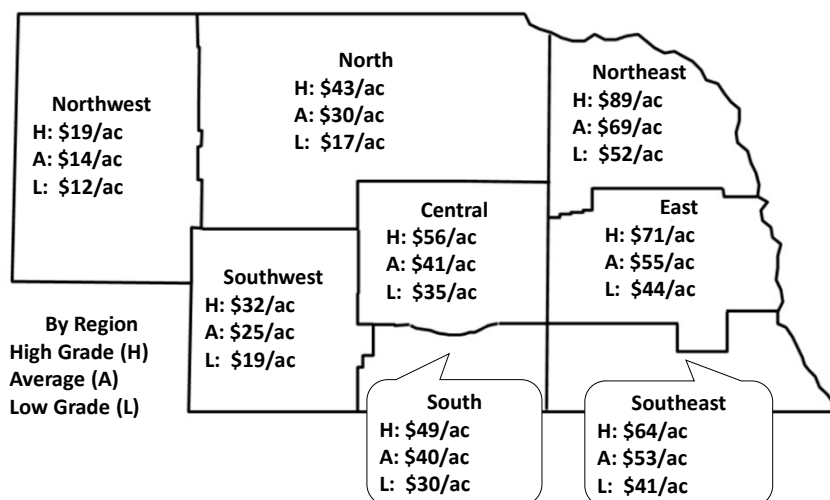
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

33

Pasture per Acre Rental Rate Ranges – 2022 Season



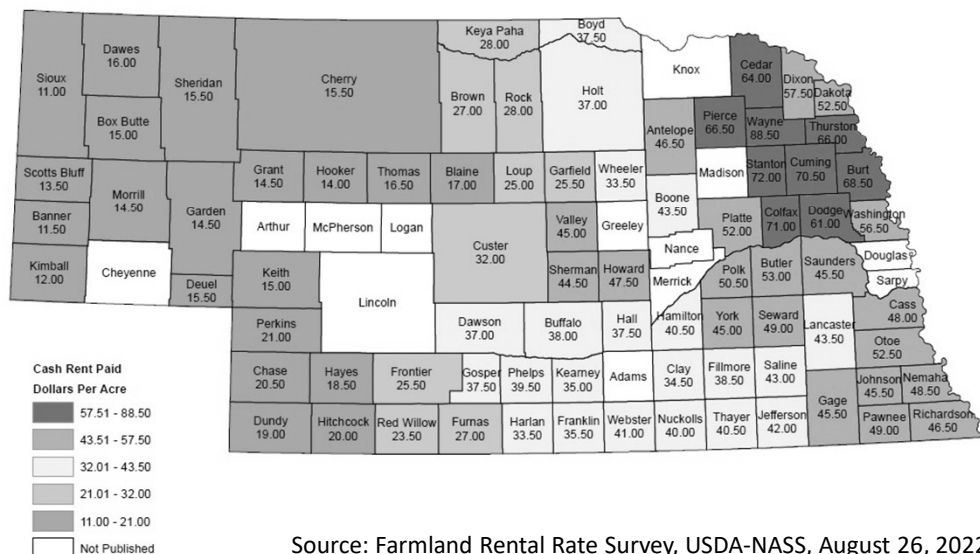
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

34

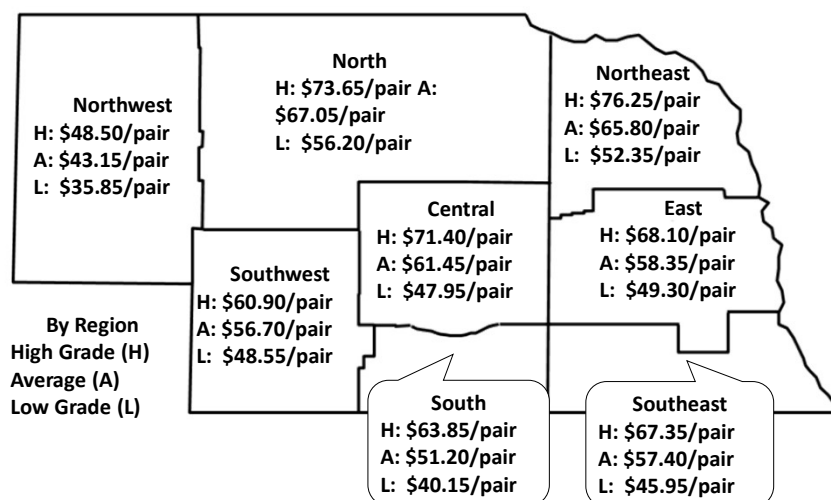
Pasture per Acre Rental Rates – 2022 Season



CENTER FOR AGRICULTURAL PROFITABILITY

35

Cow-Calf Pairs Rental Rate Ranges – 2022 Monthly

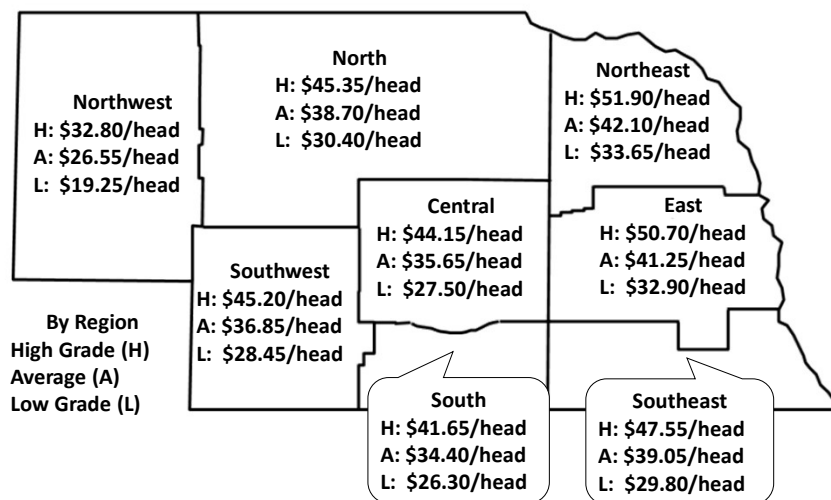


CENTER FOR AGRICULTURAL PROFITABILITY

Source: Nebraska Farm Real Estate Market Development Survey, 2022.

36

Stocker (500-600 lb.) Rental Rate Ranges – 2022 Monthly



CENTER FOR AGRICULTURAL PROFITABILITY

Source: Nebraska Farm Real Estate Market Development Survey, 2022.

37

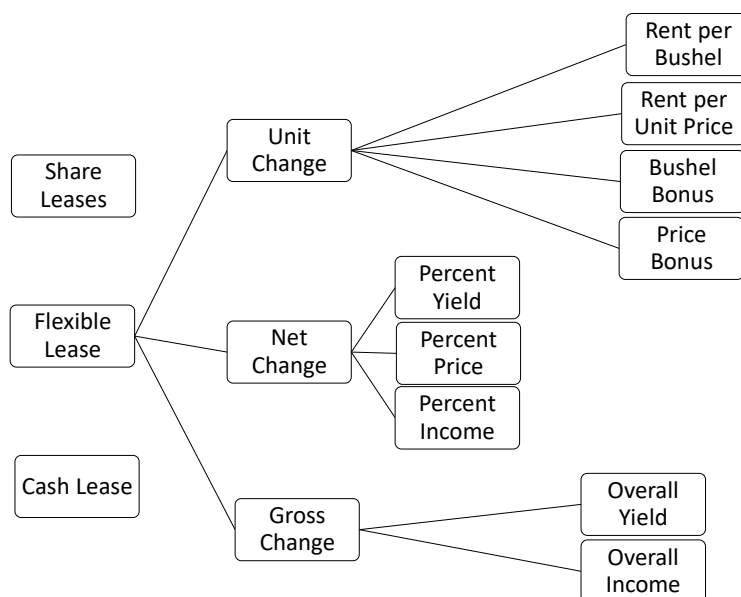
Agricultural Flex Lease Arrangements Alternative Farmland Leases for 2023



CENTER FOR AGRICULTURAL PROFITABILITY

38

Agricultural Land Lease Arrangements



CENTER FOR AGRICULTURAL PROFITABILITY

39

Establishing the Base Rental Rate

- Methods for estimating the base rental rate:
 - Adjusting survey data
 - Cash equivalent from crop share
 - Return on investment
- *What I am willing and able to accept and tenant is willing and able to pay?*
 - Tenant: What is the maximum I can pay?
 - Landlord: What is the minimum I am willing to accept?



CENTER FOR AGRICULTURAL PROFITABILITY

40

How will the flex lease be Adjusted?

- Compare expected farm performance against actual crop yield, price, or revenue
 - If performance is better than expected, more rent is paid
 - If performance is less than expected, less rent is paid



CENTER FOR AGRICULTURAL PROFITABILITY

41

Limiting Risk Exposure

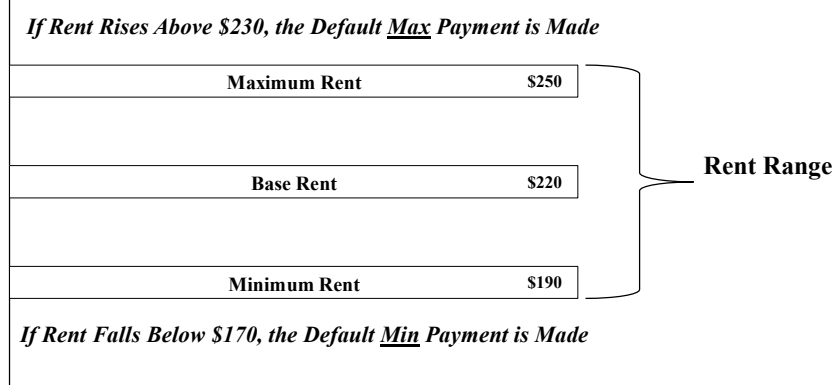
- Set upper and lower limits for your contract
- Do not expose yourself to unlimited upside and downside risk
- How do you do that?



CENTER FOR AGRICULTURAL PROFITABILITY

42

Establishing the Ceiling and Floor



CENTER FOR AGRICULTURAL PROFITABILITY

43

USDA Farm Bill Requirements

- USDA-Farm Service Agency regulations on farm program payments mandates that a cash lease include:
 - Any specific guarantee of price or division of crop within reason for the region
 - If an alternative lease guarantees a minimum payment of \$300 per acre, is this requirement met?
 - What about if the guarantee is only \$50 per acre?



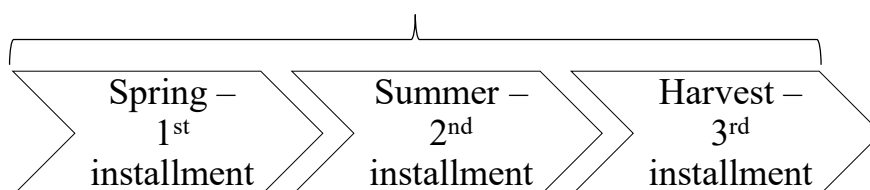
CENTER FOR AGRICULTURAL PROFITABILITY

44

When is the payment made?

- As the tenant and landowner, you need to decide on when payment is made
- Final yield unknown until after harvest
- Decide on when a minimum is due

**Minimum Payment Due – one time or
split it up over the season?**



CENTER FOR AGRICULTURAL PROFITABILITY

45

Adjusting the Base Cash Rent Flexible Cash Lease Arrangements



CENTER FOR AGRICULTURAL PROFITABILITY

46

Variable Rent by Yield Adjustment

| Farm Base Rent | |
|--|-----------|
| Rental Rate | \$220/ac. |
| 5-yr Farm APH | 150 bu. |
| Percent Change in Yield | |
| Actual Production | 135 bu. |
| Difference (135 bu. - 150 bu.) | -15 bu. |
| Percent Change $\frac{[135 \text{ bu.} - 150 \text{ bu.}]}{[150 \text{ bu.}]} \times 100$ | -10.0 % |
| Final Rent | |
| Rental Rate | \$220/ac. |
| Percent Decrease in Rent (\$220 x -10.0%) | -\$22/ac. |
| Final Rent | \$198/ac. |
| In this example a farmer produced 90% of the APH, meaning the landowner will receive 90% of the negotiated base rental rate. | |



CENTER FOR AGRICULTURAL PROFITABILITY

47

Variable Rent by Yield Adjustment

| Farm Base Rent | |
|--|-----------|
| Rental Rate | \$220/ac. |
| 5-yr Farm APH | 150 bu. |
| Percent Change in Yield | |
| Actual Production | 165 bu. |
| Difference (165 bu. - 150 bu.) | 15 bu. |
| Percent Change $\frac{[165 \text{ bu.} - 150 \text{ bu.}]}{[150 \text{ bu.}]} \times 100$ | 10.0 % |
| Final Rent | |
| Rental Rate | \$220/ac. |
| Percent Increase in Rent (\$220 x 10.0%) | \$22/ac. |
| Final Rent | \$242/ac. |
| In this example a farmer produced 110% of the APH, meaning the landowner will receive 110% of the negotiated base rental rate. | |



CENTER FOR AGRICULTURAL PROFITABILITY

48

Variable Rent by Crop Price

| Farm Base Rent | |
|---|------------|
| Rental Rate | \$220/ac. |
| 5-yr Farm APH | 150 bu. |
| Planting Time Price Guarantee | \$5.90/bu. |
| Harvesting-Time Price Increase | |
| Actual Harvest Time Price Guarantee | \$6.35/bu. |
| Difference (\$6.35/bu. - \$5.90/bu.) | \$0.45/bu. |
| Percent Change $\frac{[\$6.35/\text{bu.} - \$5.90/\text{bu.}]}{[\$5.90/\text{bu.}]} \times 100$ | 7.6 % |
| Final Rent | |
| Rental Rate | \$220/ac. |
| Percent Increase in Rent (\$220 x 7.6%) | \$17/ac. |
| Final Rent | \$237/ac. |

| Farm Base Rent | |
|---|-------------|
| Rental Rate | \$220/ac. |
| 5-yr Farm APH | 150 bu. |
| Planting Time Price Guarantee | \$5.90/bu. |
| Harvesting-Time Price Decrease | |
| Actual Harvest Time Price Guarantee | \$5.45/bu. |
| Difference (\$5.45/bu. - \$5.90/bu.) | -\$0.45/bu. |
| Percent Change $\frac{[\$5.45/\text{bu.} - \$5.90/\text{bu.}]}{[\$5.90/\text{bu.}]} \times 100$ | -7.6 % |
| Final Rent | |
| Rental Rate | \$220/ac. |
| Percent Decrease in Rent (\$220 x -7.6%) | -\$17/ac. |
| Final Rent | \$203/ac. |



CENTER FOR AGRICULTURAL PROFITABILITY

49

Variable Rent by Crop Revenue

| Farm Base Rent | |
|--|------------|
| Rental Rate | \$220/ac. |
| Expected Yield | 150 bu. |
| Expected Farm Price | \$5.90/bu. |
| Expected Farm Income* | \$885/ac. |
| Harvesting-Time Price Increase | |
| Actual Yield | 140 bu. |
| Actual On-Farm Price | \$6.65/bu. |
| Actual Farm Income* | \$931/ac. |
| Difference (\$931/ac. - \$885/ac.) | \$46/ac. |
| Percent Change $\frac{[\$931/\text{ac.} - \$885/\text{ac.}]}{[\$885/\text{ac.}]} \times 100$ | 5.2 % |
| Final Rent | |
| Rental Rate | \$220/ac. |
| Percent Increase in Rent (\$220 x 5.2%) | \$11/ac. |
| Final Rent | \$231/ac. |

| Farm Base Rent | |
|--|------------|
| Rental Rate | \$220/ac. |
| Expected Yield | 150 bu. |
| Expected Farm Price | \$5.90/bu. |
| Expected Farm Income* | \$885/ac. |
| Harvesting-Time Price Decrease | |
| Actual Yield | 165 bu. |
| Actual On-Farm Price | \$5.35/bu. |
| Actual Farm Income* | \$883/ac. |
| Difference (\$883/ac. - \$885/ac.) | -\$2/ac. |
| Percent Change $\frac{[\$883/\text{ac.} - \$885/\text{ac.}]}{[\$885/\text{ac.}]} \times 100$ | -0.3 % |
| Final Rent | |
| Rental Rate | \$220/ac. |
| Percent Decrease in Rent (\$220 x -0.3%) | -\$1/ac. |
| Final Rent | \$219/ac. |



CENTER FOR AGRICULTURAL PROFITABILITY

*Expected and actual farm income do not include any safety net payments or crop insurance indemnity.

50

Agricultural Land Leases

Trends in Lease Arrangements for 2022-2023



CENTER FOR AGRICULTURAL PROFITABILITY

51

Estimating Cash Rental Rates by Adjusting Survey Data

- Land rental rate survey data:
 - Evaluate available cash rental survey data to establish a baseline in the landlord and tenant negotiation process.
- Average yields:

| County | Value | Farm | Value |
|--------------------|-------------|------------------------|---------------------|
| County Rental Rate | \$190/ac. | County Rent/Bushel | \$1.42/bu. |
| Corn Yield | 134 bu./ac. | APH Yield | x 119 bu./ac. |
| County Rent/Bushel | \$1.42/bu. | Farm Level Rent | \$168.73/ac. |



CENTER FOR AGRICULTURAL PROFITABILITY

52

Cash Equivalent From Crop Share

- Rent paid to landlord by tenant based off owner's share of net returns per acre.
- Example 50/50 split:

| Value | Corn - March 2023 | Corn - July 2023 | Corn - Nov. 2023 |
|---|----------------------|----------------------|----------------------|
| Yield (50% share) | 70 bu./ac. | 70 bu./ac. | 70 bu./ac. |
| Price/bushel | <u>x \$6.65/bu.</u> | <u>x \$6.30/bu.</u> | <u>x \$6.15/bu.</u> |
| Income | \$465.50/ac. | \$441.00/ac. | \$430.50/ac. |
| Owner Expenses* | <u>-\$215.00/ac.</u> | <u>-\$215.00/ac.</u> | <u>-\$215.00/ac.</u> |
| Net Return to Owner (Effective Rent) | \$250.50/ac. | \$226.00/ac. | \$215.50/ac. |



CENTER FOR AGRICULTURAL PROFITABILITY

53

Cash Equivalent From Hay Share

- Rent paid to landlord by tenant based off owner's share of net returns per acre.
- Example 33/67 & 50/50 split:

| Value | 33:67 Hayland Share | 50:50 Hayland Share |
|---|---------------------|---------------------|
| Yield (share) | 0.83 ton/ac. | 1.25 tons/ac. |
| Price/ton | <u>x \$120/ton</u> | <u>x \$120/ton</u> |
| Income | \$99/ac. | \$150/ac. |
| Owner Expenses* | <u>-\$0/ac.</u> | <u>-\$25.00/ac.</u> |
| Net Return to Owner (Effective Rent) | \$99.00/ac. | \$125.00/ac. |

*In this example, the owner does not pay any expenses for the 33/67 hay share. Also, the owner pays \$25 per acre in fertilizer expense for the 50/50 hay share.



CENTER FOR AGRICULTURAL PROFITABILITY

54

Return on Investment

- Multiply the estimated current market value by the expected rate of return to determine the rental rate per acre.

| Farm | Dryland Cropland | Irrigated Cropland |
|-----------------------------|------------------------|------------------------|
| Land Value | \$6,500/ac. | \$9,950/ac. |
| Rate of Return | <u>x 2.8-3.2%</u> | <u>x 3.1-3.5%</u> |
| Rental Rate per Acre | \$182-\$208/ac. | \$308-\$348/ac. |

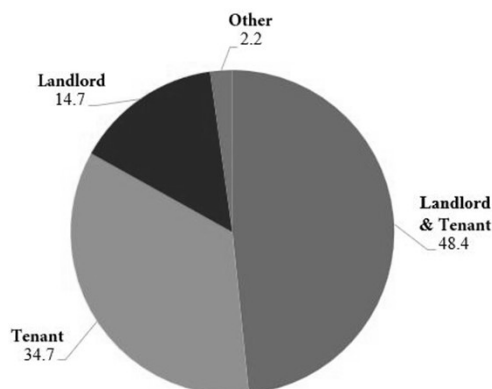
*Estimated net rates of return by land type are available in Table 5 of the Nebraska Farm Real Estate Market Highlights Report 2021-2022.



CENTER FOR AGRICULTURAL PROFITABILITY

55

Entity Responsible for Maintaining Irrigation System as Part of Cash Lease in Nebraska



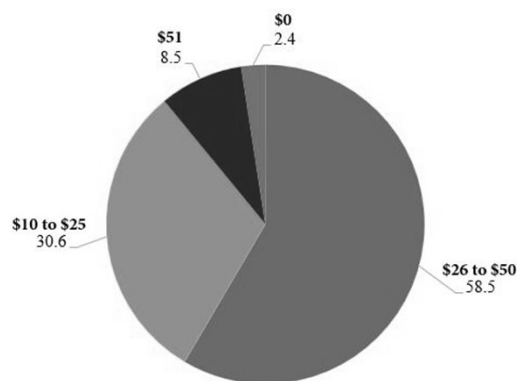
Source: Nebraska Farm Real Estate Market Development Survey, 2018.



CENTER FOR AGRICULTURAL PROFITABILITY

56

Discount on Cash Rent per Acre When Tenant Owns Pivot for Irrigation System in Nebraska



Source: Nebraska Farm Real Estate Market Development Survey, 2018.



CENTER FOR AGRICULTURAL PROFITABILITY

57

Discount on Cash Rent per Acre When Tenant Owns Power Unit for Irrigation System in Nebraska

| Power Unit | Discount per Acre | | | |
|------------------------------------|-------------------|------------|--------------|-------|
| | \$0 | \$1 to \$9 | \$10 to \$20 | \$20+ |
| ----- Percent of Respondents ----- | | | | |
| System Type | | | | |
| Diesel Engine | 23 | 34 | 35 | 8 |
| Propane or Natural Gas Engine | 23 | 43 | 31 | 3 |
| Electric Motor | 20 | 42 | 26 | 12 |

Source: Nebraska Farm Real Estate Market Development Survey, 2018.



CENTER FOR AGRICULTURAL PROFITABILITY

58

Reported Cropland Lease Changes to Account for Higher Input Expenses in 2022

| Adjustment to Transaction Method | Response Rate |
|----------------------------------|---------------------|
| | ----- Percent ----- |
| Switch to Crop Share | 8 |
| Switch to Flex Lease | 23 |
| Switch to Cash Rent | 14 |
| No Change | 52 |
| Other | 3 |

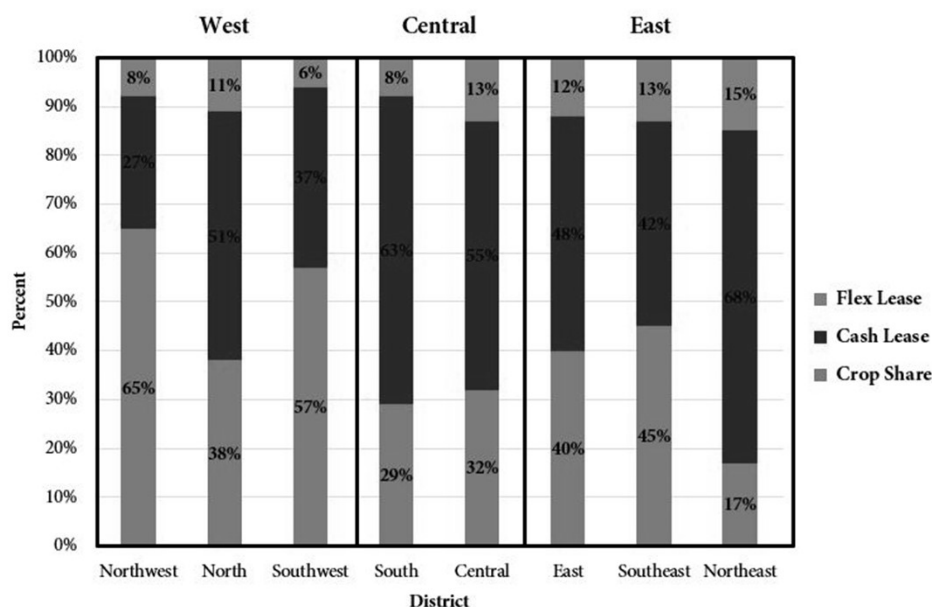


CENTER FOR AGRICULTURAL PROFITABILITY

Source: Nebraska Farm Real Estate Market Development Survey, 2022.

59

Land Lease Rental Arrangements by Agricultural Statistics District in Nebraska for 2022

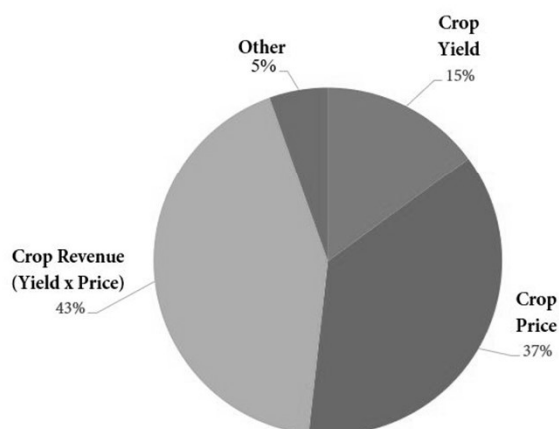


CENTER FOR AGRICULTURAL PROFITABILITY

Source: Nebraska Farm Real Estate Market Development Survey, 2022.

60

Reported Factors for Flexing Cash Lease Payments



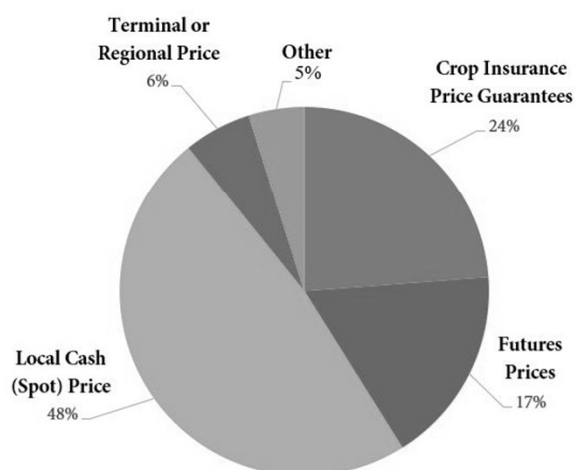
Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

61

Reported Crop Price for Flexing Cash Leases



Source: Nebraska Farm Real Estate Market Development Survey, 2022.



CENTER FOR AGRICULTURAL PROFITABILITY

62

Fillable PDF Leases – AgLease101.org

The screenshot displays the AgLease101.org website. At the top, there is a navigation bar with links for Home, Document Library, and About Ag Lease 101. The main header features the text "Ag Lease 101". Below this, the website is divided into two main sections: "Lease Publications" and "Lease Forms".

Lease Publications:

- Fixed and Flexible Cash Rental Arrangements for Your Farm (NCFMEC-01)
- Crop Share Rental Arrangements For Your Farm (NCFMEC-02)
- Pasture Rental Arrangements For Your Farm (NCFMEC-03)
- Rental Agreements For Farm Buildings and Livestock Facilities (NCFMEC-04)
- Purchasing and Leasing Farm Equipment (NCFMEC-05)
- Beef Cow Rental Arrangements For Your Farm (NCFMEC-06)
- Farm Building Rental Rate Survey (NCFMEC-07)

Lease Forms:

- Cash Farm Lease (NCFMEC-01A)
- Crop Share Farm Lease Cash Farm Lease (NCFMEC-02A)
- Pasture Lease (NCFMEC-03A)
- Farm Building or Livestock Facility Lease (NCFMEC-04A)
- Farm Machinery Lease for Non-commercial Transactions (NCFMEC-05A)
- Livestock Rental Lease (NCFMEC-06A)

Callouts on the image include "Lease Publications" pointing to the left column, "Fillable PDF Forms" pointing to the right column, and "Click Document Library" pointing to the navigation bar.

N
CENTER FOR AGRICULTURAL PROFITABILITY

63

Upcoming Webinar: *Ag Land Mgt. Quarterly* May 15, 2023 at 12:00 PM CDT

- **Topics**
 - Trends in Nebraska cash rental rates
 - Trends in Nebraska cash rental rates for 2023
 - Financial implications for changing commodity prices and adjusting cash rents
 - Proper communication and decision making for agricultural land
 - Improving communication between landlords, tenants, and family members
 - Short- and long-term decision making for agricultural land
 - Ask an Expert
 - Review of submitted questions and from meeting participants
 - Upcoming land management workshops and publications

64

Questions?

Jim Jansen
Agricultural Economist
jjansen4@unl.edu
402-261-7572



CENTER FOR AGRICULTURAL PROFITABILITY