



Budgeting Family Living into Cost of Production

Anastasia Meyer & Glennis McClure
Agriculture Economists



Why Incorporate Family Living Expenses into Cost of Production?

- Fundamental Question

“Can the farm not only sustain itself, but also support the family living on it?”

- Enables farm and ranch families to make informed financial decisions and work toward long term sustainability



Family Living Expenses on the Farm or Ranch

Challenges

- Income is irregular, uncertain, and often infrequent
- Competition between farm and ranch vs home for the use of cash
- Household expenses are small relative to business expenses
- Business items are tax deductible and some of the expenses of farm or ranch living can be included as part of these expenses



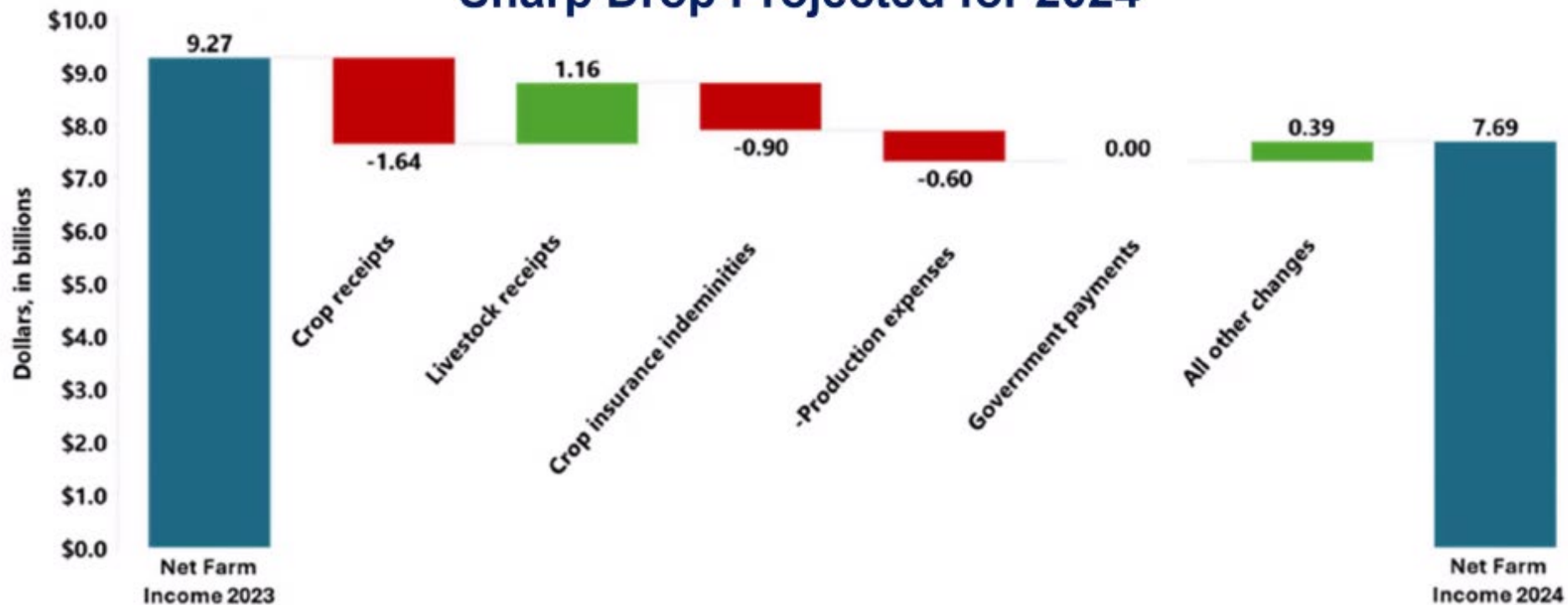
NEBRASKA EXTENSION





Nebraska Net Farm Income

Sharp Drop Projected for 2024



Source: RaFF, October 2024



CENTER FOR AGRICULTURAL PROFITABILITY
Institute of Agriculture and Natural Resources

Nebraska and U.S. Farm Income Update and Outlook (Oct. 31, 2024 Webinar)

<https://cap.unl.edu/webinars>



CENTER FOR AGRICULTURAL PROFITABILITY
Institute of Agriculture and Natural Resources



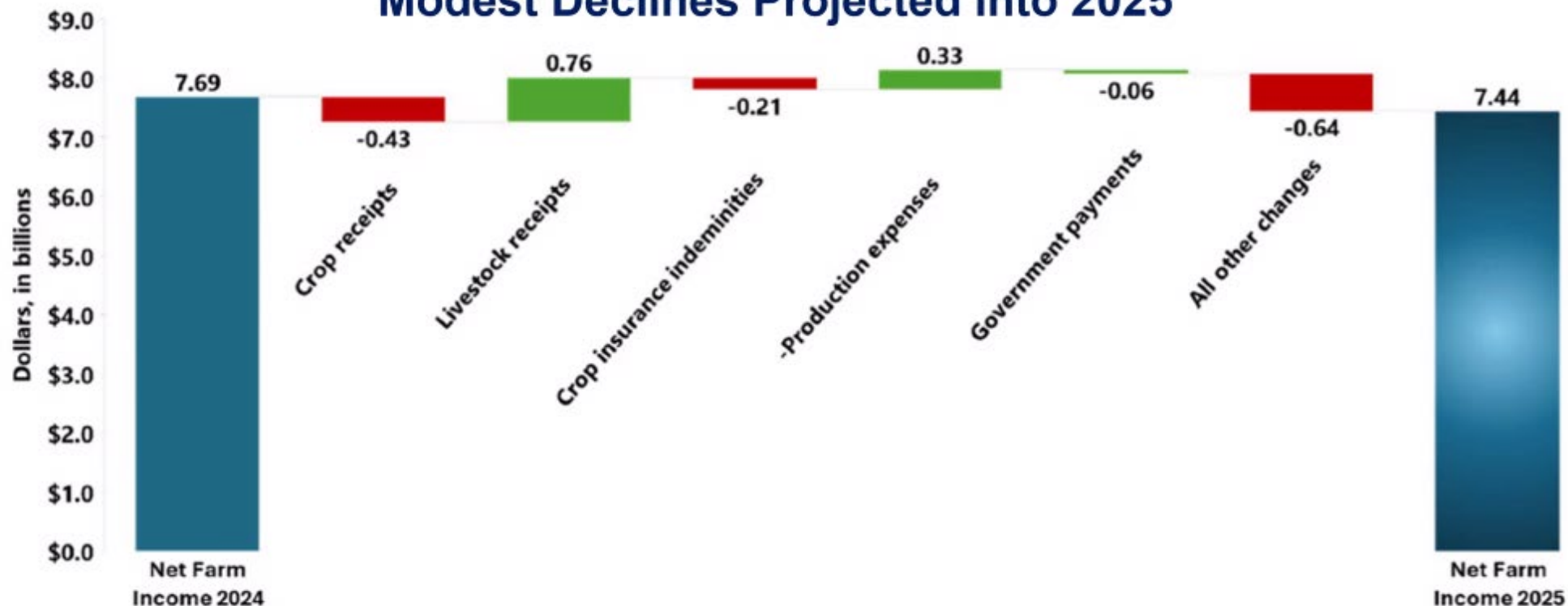
NEBRASKA EXTENSION

cap.unl.edu



Nebraska Net Farm Income

Modest Declines Projected into 2025



Source: RaFF, October 2024



CENTER FOR AGRICULTURAL PROFITABILITY
Institute of Agriculture and Natural Resources

Nebraska and U.S. Farm Income Update and Outlook (Oct. 31, 2024 Webinar)

<https://cap.unl.edu/webinars>



CENTER FOR AGRICULTURAL PROFITABILITY
Institute of Agriculture and Natural Resources



NEBRASKA EXTENSION

cap.unl.edu

How much are you spending a year?



Time to Evaluate

Farm families are basing their family living decisions by considering 4 years of past net income history



(KFMA, 2016)

Assessing Family Living Expenses

- Household Expenses
 - Housing
 - Groceries
 - Utilities
 - Healthcare
 - Education
 - Miscellaneous
- Fixed or Variable Expenses



Assessing Family Living Expenses

Calculating Family Living Expenses

A good way to estimate your family living expenses is to take checking account statements for two months out of the year (say March and September) and divide all of your monthly spending into these categories (separating out any farm-related expenses). Also add in any large expenditures that occur at a specific time in the year (ex: real estate taxes, insurance premiums, etc.) to come up with an estimated yearly amount.

Category	Month 1	Month 2	Estimated Yearly Amount
Food and Meals expense			
Medical care			
Health Insurance			
Cash donations			
Household supplies			
House repairs			
Clothing			
Personal Care			
Child/Dependent Care			
Alimony and Child Support			
Gifts			
Education			
Recreation			
Utilities (household share)			
Personal vehicle operating expenses			
Household real estate taxes			
Disability/Long-term Care Insurance			
Life Insurance Premiums			
Personal Property Insurance			
Miscellaneous			
TOTAL:			

- Pick 2 Months with Average Expenses
 - March
 - October
- Document your expenses for a rough estimate
- Don't forget about Christmas, Birthdays, Online Shopping, Pets



NEBRASKA EXTENSION

cap.unl.edu



CENTER FOR AGRICULTURAL PROFITABILITY

Institute of Agriculture and Natural Resources

2023 FINBIN Cost of Living

	NE	ALL
Number of farms	27	519
Average family size	3.2	2.9
Family Living Expenses		
Food and meals expense	12,908	11,752
Medical care	7,985	5,189
Health insurance	6,152	5,028
Cash donations	7,848	3,217
Household supplies	10,302	8,369
Clothing	2,907	2,149
Personal care	4,549	3,630
Child / Dependent care	417	1,305
Alimony and child support	-	333
Gifts	9,190	3,572
Education	3,385	1,676
Recreation	4,856	6,674
Utilities (household share)	4,021	2,940
Personal vehicle operating exp	6,508	4,080
Household real estate taxes	1,912	751
Dwelling rent	978	345
Household repairs	3,391	3,456
Personal interest	1,519	2,125
Disability / Long term care ins	785	545
Life insurance payments	7,996	4,298
Personal property insurance	665	570
Miscellaneous	17,932	8,149
Total cash family living expense	116,206	80,151
Family living from the farm	444	458
Total family living	116,650	80,609



NEBRASKA EXTENSION

cap.unl.edu



CENTER FOR AGRICULTURAL PROFITABILITY

Institute of Agriculture and Natural Resources



**2023 Data - Kansas
Family Living Summary**

**Kansas Farm Management Association
Annual ProfitLink Summary**

	Age of Oldest Child				Couples	Average
	<= 5	6 - 13	14 - 17	> 17		
Number of Families	13	17	11	34	138	234
Average Family Size	3.8	4.5	4.6	4.1	2.0	2.6
Income						
Misc Taxable Income	126,702	29,247	34,975	82,194	18,462	34,334
Wages	65,145	56,118	28,270	38,545	16,305	25,728
Rent/Royalties	2,320	8,248	23,300	11,901	11,600	11,762
Dividends/Interest	776	3,686	6,678	2,614	8,387	6,130
Gifts/Inheritance	2,604	44,985	3,694	2,933	25,521	19,202
Disability/Social Security					22,948	14,269
Other Non-Taxable Income	5,843	36,561	7,409	38,221	11,245	17,465
Non-Deductible Non-Farm Expense	-1,030	-54,824	-21,104	-54,721	-12,573	-20,542
Deductible Non-Farm Expense	-135,378	-11,876	-18,081	-59,560	-19,775	-30,399
Non-Farm Income (1)	\$66,982	\$112,144	\$65,139	\$62,129	\$82,120	\$77,950
Net Farm Income (2)	\$75,052	\$73,808	\$90,995	\$95,913	\$71,056	\$75,154
Net Income (1) + (2)	\$142,035	\$185,952	\$156,135	\$158,042	\$153,176	\$153,104
Family Living Expenses						
Food Purchased	13,554	15,365	17,158	15,101	10,213	11,615
Household Operation	11,889	11,726	17,017	18,252	8,055	10,205
House Upkeep & Repairs	8,267	4,371	7,416	5,691	5,576	6,067
Furniture - Equipment	925	907	1,277	2,368	1,061	1,217
Personal - Recreation	12,438	18,945	14,572	19,429	15,133	15,524
Education	1,129	2,560	3,090	4,447	218	1,230
Child Care	3,240	1,537	362	372	28	405
Clothing	1,484	1,939	3,528	4,469	1,365	1,952
Gifts	1,426	1,372	2,832	6,327	7,491	6,192
Contributions	2,153	3,186	8,692	3,874	6,859	5,600
Doctor - Other Medical	6,294	4,989	6,527	8,342	6,311	6,216
Health Insurance	10,525	13,270	16,278	18,221	12,881	13,506
Life Insurance	2,329	1,484	2,438	7,568	3,514	3,758
Auto Expense	5,160	4,252	6,943	5,410	2,537	3,517
Utilities - Telephone	3,095	2,943	4,343	3,001	2,696	2,848
Bank Interest	2,194	1,100	766	1,196	634	835
Miscellaneous Expense						
Total Family Living	\$86,100	\$89,947	\$113,240	\$124,069	\$84,572	\$90,688



Incorporating into Overall Cost of Production – Enterprise Budgeting

- Adding monthly and annual family living expenses to the cost of production for each farm enterprise.
- Allocating living expenses proportionally across different farm operations based on their contribution to overall income.
- Adjusting per-unit production costs (e.g., cost per bushel or per head of livestock) to reflect the additional family expenses.



NEBRASKA EXTENSION



Calculating Cost of Production with Family Living Expenses

- Example
 - Family Living \$40,000 per year
 - Annual Production 100,000 bushels of corn
 - $\$40,000 / 100,000 = \0.40 per bushel added to the cost of production.
- This adjusted cost of production figure offers a target to help cover family living needs.



Enterprise Budgeting can help!

- Cash basis Cost of Production – covers all cash costs
- Economic based Cost of Production includes all cash costs plus unpaid labor, depreciation, opportunity cost of investment.
 - Remember in the long run, we want our revenue to cover ALL Economic Costs.
 - In the short run, we may just be able to cover cash costs given low commodity prices and/or low yields.
- Labor in your enterprise budgets can be set to cover what is needed for family living by using “paid” or “unpaid” labor.

Let's Demonstrate using the ABC Enterprise Budgeting tool.
agbudget.unl.edu



NEBRASKA EXTENSION



Why be Profitable? (Positive Net Farm Income)

3 Things to do with Profits

- 1) To Reinvest into our Business /Operation
 - May mean paying down principle
 - Or buying new and replacing old
- 2) To Pay Income Taxes (State and Federal)
- 3) To Make a Living (family living)



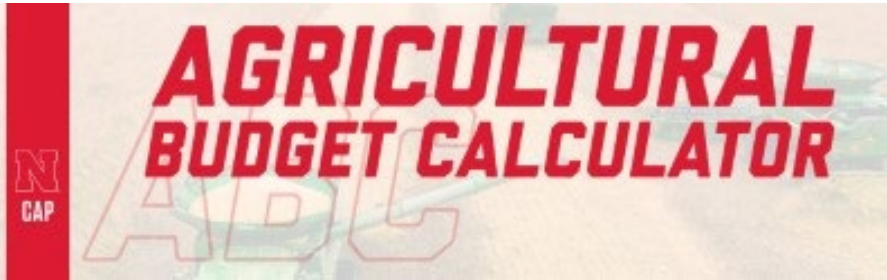
Net Farm Income and Net Worth Change Relationship

Statement of Owner Equity	Change in Net Worth - Farm Example		
Beginning Net Worth (balance sheet)	a.	\$ 450,100	
Net Farm Income (+ -)		\$ 60,746	
Personal Income (+)		\$ 32,000	
Family living expense (-)		\$ (46,000)	
Income taxes / Self-employment taxes accrued (-)		\$ (10,132)	
Change in personal assets (+)			
Change in nonfarm accounts payable (+)		\$ (850)	
Total change in retained earnings	b.	\$ 35,764	
Change in market value of capital assets	d.	\$ 9,475	
Total change in net worth	e.	\$ 45,239	
Ending Net Worth		\$ 495,339	



NEBRASKA EXTENSION





Manage Crop Enterprises

Crops:

Show all crops



Budget Year:

2025 UNL

Options:



Edit Enterprise



Field Operations



View Reports



Delete Enterprise

Enterprise Name

Crop

Options

#033 Corn, Irrigated-Electric Pivot, No Till, after Beans
(Bt, ECB, & RIB) - 2025

Corn



#066 Soybeans, Irrigated-Diesel Pivot, No Till Drilled after
Corn, Enlist E3 Treated - 2025

Soybeans





2025 UNL #033 Corn, Irrigated-Electric Pivot, No Till, after Beans (Bt, ECB, & RIB) - 2025

Total acres: 500

Yield per acre: 275 bushels

Economic Enterprise Budget

Category	amt applied	cost per unit	cost per acre	Enterprise Total
Revenue		Value / bushel	Value / acre	Total
Value of Production		\$3.60/bu	\$990.00	\$495,000.00
► Additional Revenue			\$20.00	\$10,000.00
Total Gross Revenue		\$3.67/bu	\$1,010.00	\$505,000.00
Operating Costs	Amount / acre	Cost / unit	Cost / acre	Total
► Seed			\$143.25	\$71,625.00
► Fertilizer			\$30.90	\$15,450.00
► Pesticide			\$123.16	\$61,579.91
► Custom Services			\$50.25	\$25,125.00
► Labor			\$40.00	\$20,000.00
► Fuel and Energy			\$18.07	\$9,036.19
► Repairs and Maintenance			\$36.38	\$18,187.96
► Other:			\$37.40	\$18,700.00
Interest on Operating Capital			\$17.98	\$8,988.90
Total Operating Costs		\$1.81/bu	\$497.39	\$248,692.96
Net Return Above Total Operating		\$1.86/bu	\$512.61	\$256,307.04
Ownership and Overhead Costs		Cost / bushel	Cost / acre	Total
General Overhead			\$35.00	\$17,500.00
Facility Cash Costs			\$0.00	\$0.00
Vehicle Cash Costs			\$0.00	\$0.00
► Land Rent:			\$325.00	\$162,500.00
► Real Estate Taxes:			\$0.00	\$0.00
Equipment Depreciation			\$69.52	\$34,761.58
Facility Depreciation			\$0.00	\$0.00
Equipment Opportunity Cost			\$18.80	\$9,398.94
Facility Opportunity Cost			\$0.00	\$0.00
Land Opportunity Cost			\$0.00	\$0.00
Total Ownership and Overhead Costs		\$1.63/bu	\$448.32	\$224,160.52
Total Economic Cost		\$3.44/bu	\$945.71	\$472,853.48
Net Return Above Total Costs		\$0.23/bu	\$64.29	\$32,146.52



NEBRASKA EXTENSION

cap.unl.edu



2025 UNL #066 Soybeans, Irrigated-Diesel Pivot, No Till Drilled after Corn, Enlist E3 Treated - 2025
 Total acres: 500 Yield per acre: 78 bushels

Economic Enterprise Budget

Category	amt applied	cost per unit	cost per acre	Enterprise Total
Revenue		Value / bushel	Value / acre	Total
Value of Production		\$9.50/bu	\$741.00	\$370,500.00
▶ Additional Revenue			\$0.00	\$0.00
Total Gross Revenue		\$9.50/bu	\$741.00	\$370,500.00
Operating Costs	Amount / acre	Cost / unit	Cost / acre	Total
▶ Seed			\$62.00	\$31,000.00
▶ Fertilizer			\$0.00	\$0.00
▶ Pesticide			\$109.61	\$54,805.06
▶ Custom Services			\$19.40	\$9,700.00
▶ Labor			\$40.00	\$20,000.00
▶ Fuel and Energy			\$16.69	\$8,345.10
▶ Repairs and Maintenance			\$29.89	\$14,944.80
▶ Other:			\$27.70	\$13,851.85
Interest on Operating Capital			\$11.45	\$5,724.26
Total Operating Costs		\$4.06/bu	\$316.74	\$158,371.07
Net Return Above Total Operating		\$5.44/bu	\$424.26	\$212,128.93
Ownership and Overhead Costs		Cost / bushel	Cost / acre	Total
General Overhead			\$35.00	\$17,500.00
Facility Cash Costs			\$0.00	\$0.00
Vehicle Cash Costs			\$0.00	\$0.00
▶ Land Rent:			\$325.00	\$162,500.00
▶ Real Estate Taxes:			\$0.00	\$0.00
Equipment Depreciation			\$59.53	\$29,764.43
Facility Depreciation			\$0.00	\$0.00
Equipment Opportunity Cost			\$21.86	\$10,930.74
Facility Opportunity Cost			\$0.00	\$0.00
Land Opportunity Cost			\$0.00	\$0.00
Total Ownership and Overhead Costs		\$5.66/bu	\$441.39	\$220,695.17
Total Economic Cost		\$9.72/bu	\$758.13	\$379,066.24
Net Return Above Total Costs		\$-0.22/bu	\$-17.13	\$-8,566.24



NEBRASKA EXTENSION

cap.unl.edu

Whole Farm Report- \$40k labor total

Operating Costs	Avg. / Acre	Total
Seed	\$102.63	\$102,625.00
Fertilizer	\$15.45	\$15,450.00
Additive	\$4.10	\$4,102.43
Pesticide	\$0.00	\$0.00
Insecticide	\$3.09	\$3,093.28
Herbicide	\$90.75	\$90,746.88
Fungicide	\$18.44	\$18,442.38
Custom Services	\$34.83	\$34,825.00
Labor	\$40.00	\$40,000.00
Fuel & Energy	\$17.38	\$17,381.29
Repairs & Maintenance	\$33.13	\$33,132.77
Additional Irrigation Charges	\$1.85	\$1,851.85
Crop Insurance	\$4.00	\$4,000.00
Crop Marketing	\$0.00	\$0.00
Crop Scouting	\$13.00	\$13,000.00
Crop Drying	\$4.13	\$4,125.00
Crop Storage	\$0.00	\$0.00
'Other' Materials	\$9.58	\$9,575.00
Other Expenses	\$0.00	\$0.00
Interest on Operating Capital	\$14.71	\$14,713.16
Total Operating Costs	\$407.06	\$407,064.03



NEBRASKA EXTENSION



Whole Farm Report – With both corn and soybean budgets combined

Total Economic Cost	\$851.92	\$851,919.72
---------------------	----------	--------------

Net Return Above Total Cost	\$23.58	\$23,580.28
-----------------------------	---------	-------------

* Mixed Crops - the selected crop enterprises represent multiple crops that may have varying production units. Therefore, average return or cost per production unit does not display in this report.

Select Report Format

☐

Cash Report Only

☒

Economic Report

Total Cash Cost	\$767.06	\$767,064.03
-----------------	----------	--------------

Net Return Above Total Cash	\$108.44	\$108,435.97
-----------------------------	----------	--------------

* Mixed Crops - the selected crop enterprises represent multiple crops that may have varying production units. Therefore, average return or cost per production unit does not display in this report.

Select Report Format

☒

Cash Report Only

☐

Economic Report



NEBRASKA EXTENSION

cap.unl.edu

Adjusting the Farm Budget and Operations to Accommodate Family Needs

- May reveal that the cost of production exceeds revenue
During periods of low prices or high input costs
- Reduce Non-Essential Expenses
Postponing equipment upgrades or other capital expenditures
- Prioritize Cash Flow Management
 - Time input purchases to spread cash outlay throughout the year
- Diversify Income



Strategies for Reducing Family Living

- What are the variable expenses that can be adjusted?
- Reduce Cost of Living
 - Meal Planning & Entertainment Budgets
 - Energy Savings
 - Insurance Negotiations
- Be Realistic



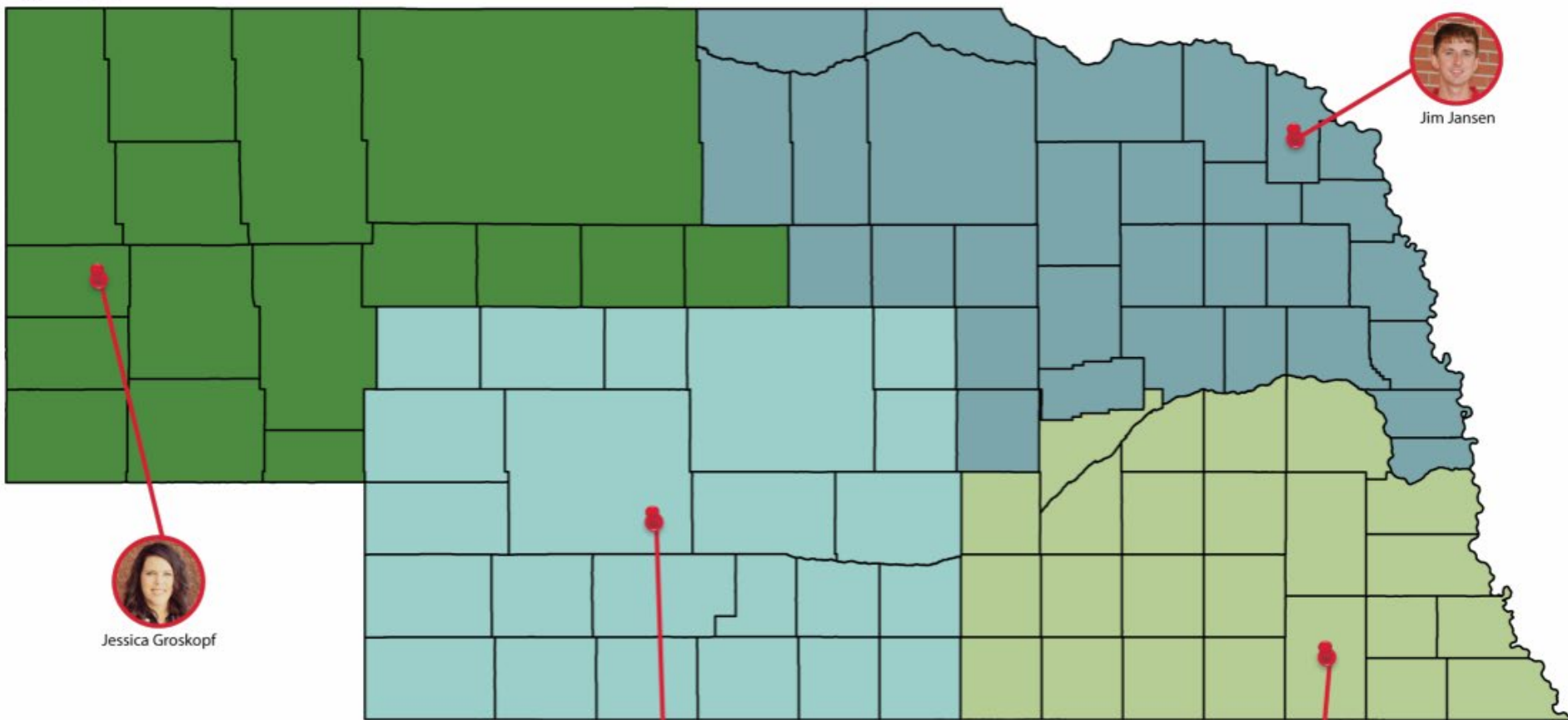
Benefits of Budgeting Family Living into Cost of Production

- **Realistic Net Income Assessments**
Provides projected view of net income, helping to set realistic financial goals and expectations
- **Long-Term Financial Stability**
Families can better prepare for economic challenges, manage debt responsibly, and work toward a sustainable operation
- **Improved Decision Making**
Allows farm families to make informed decisions, including when to invest in expansion, cut costs, or diversify income





AGRICULTURAL PROFITABILITY ACCOUNTABILITY REGIONS



Jim Jansen



Jessica Groskopf



Glennis McClure
Campus



Shannon Sand



Anastasia Meyer



cap.unl.edu



Resources

- <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1963&context=extensionhist>
- <https://extensionpubs.unl.edu/publication/g2072/2011/pdf/view/g2072-2011.pdf>
- <https://www.agmanager.info/analysis-family-living-kansas-farm-families-0>
- <https://cap.unl.edu/finance/net-farm-income-impacts-net-worth-growth>

