

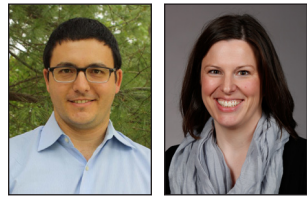


# Ag Decision Maker



A Business Newsletter for Agriculture

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## Custom rates and machinery rental rates shared in the 2017 Iowa farm custom rate survey

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Performing custom work can be an additional source of income for farm operators around the state. For others, custom work is a full-time career. When labor is available, and another party has equipment, renting equipment for a short-term is also a common practice. While only a small portion of Iowa farmland is 100 percent custom farmed, many farm operations rent equipment or hire out for one or two operations on their farm each year.

The 2017 Iowa Farm Custom Rate Survey ([www.extension.iastate.edu/agdm/crops/pdf/a3-10.pdf](http://www.extension.iastate.edu/agdm/crops/pdf/a3-10.pdf)) canvassed 441 farmers, custom operators, and farm managers from the state, putting together a guide for pricing custom machine work. Of those receiving the survey, 152 usable responses were

received from Iowa farmers, custom operators, and farm managers. Twenty-one percent of the respondents perform custom work, 13 percent hire work done, 41 percent indicated doing both, 1 percent indicated doing none, and 25 percent did not indicate whether they perform or hire custom work.

The publication, which can be found online at the Iowa State University Extension and Outreach Store (FM 1698) <https://store.extension.iastate.edu/Product/1792> or on the Ag Decision Maker website as [Information File A3-10](#), provides rates for custom work in the following categories: tillage, planting, drilling, seeding, fertilizer application, harvesting, drying and hauling grain, harvesting forages, complete custom farming, labor, and both bin and machine rental. All rates include fuel, repairs,

depreciation, interest, labor, and all other machinery costs for the tractor and implement unless otherwise noted.

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**Handbook updates**  
 For those of you subscribing to the handbook, the following updates are included.

- Historic County Farmland Values – C2-72** (10 pages)
- Farmland Value Survey (Realtors Land Institute) – C2-75** (2 pages)
- Your Net Worth Statement – C3-20** (8 pages)
- Your Farm Income Statement – C3-25** (8 pages)
- Farm Financial Statements – C3-56** (8 pages)

Please add these files to your handbook and remove the out-of-date material.

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Custom rates and machinery rental rates shared in the 2017 Iowa farm custom rate survey, continued from page 1

The average rate and range for each machine work function were compiled into the survey as usual, as well as the median charge and number of responses for each category. For the survey, the average is calculated as the simple average of all responses. The median is the response that splits all the ordered responses (from smallest to largest) in half.

The survey found there was an 8.5 percent price increase across all surveyed categories. When the categories with the 5 percent highest and lowest change were removed, the average increase in rate became 2.1 percent. Table 1 shows historic rates for a sample of operations from the survey.

“After an overall decline in rates in 2016, the slight rate increases in the 2017 survey are similar to a trend observed from 2012-2015,” said Alejandro Plastina, assistant professor and extension economist with ISU Extension and Outreach. “We appreciate the respondents to the survey, as the information available in the Custom Rate Survey is only possible due to their responses provided each year.”

The reported rates are expected to be charged or paid in 2017, including fuel and labor. The average price for diesel fuel was assumed to be \$2.15 per gallon. The values presented in the survey are intended only as a guide. There are many reasons why the rate charged in a particular situation should be above or below the average. These include the timeliness with which operations are performed, quality and special



Any custom rate should cover the cost of operating the farm machinery as well as the operator’s labor.

features of the machine, operator skill, size and shape of fields, number of acres contracted, and the condition of the crop for harvesting. The availability of custom operators in a given area will also affect rates. Any custom rate should cover the cost of operating the farm machinery as well as the operator’s labor.

The Ag Decision Maker website offers a *Decision Tool* (download Excel file at [www.extension.iastate.edu/agdm/crops/xls/a3-29machcostcalc.xlsx](http://www.extension.iastate.edu/agdm/crops/xls/a3-29machcostcalc.xlsx)) to help custom operators and other farmers estimate their own costs for specific machinery operations. If you are interested in joining the 2018 Custom Rate Survey mailing list, send mail or e-mail address to: Alejandro Plastina, Iowa State University, Department of Economics, 478E Heady Hall, 518 Farm House Lane, Ames, IA 50011-1054, 515-294-6160, [plastina@iastate.edu](mailto:plastina@iastate.edu).

**Table 1. Average farm custom rates reported for Iowa**

Operation	1978	1988	1998	2008	2014	2015	2016	2017
Chisel plowing, per acre	\$6.00	\$8.40	\$9.65	\$13.70	\$16.15	\$16.90	\$16.45	\$17.45
Planting, no attachments, per acre	\$4.40	\$6.80	\$8.85	\$13.20	\$17.85	\$18.50	\$18.55	\$19.40
Spraying, per acre	\$2.40	\$3.50	\$4.00	\$5.60	\$6.90	\$7.40	\$6.80	\$7.00
Combining corn, per acre	\$16.20	\$22.00	\$23.40	\$28.10	\$34.15	\$35.35	\$34.75	\$35.05
Combining soybeans, per acre	\$14.00	\$20.60	\$22.55	\$27.10	\$34.15	\$34.75	\$34.05	\$34.70
Baling square bales, per bale	\$0.21	\$0.29	\$0.36	\$0.48	\$0.65	\$0.72	\$0.66	\$0.69
Custom farming, corn, per acre	\$58.00	\$71.00	\$75.80	\$94.10	\$136.10	\$136.50	\$129.95	\$131.50
Custom farming, soybeans, per acre	\$50.00	\$65.00	\$70.65	\$83.00	\$121.00	\$125.35	\$116.15	\$117.25
Machinery operating wage, per hour	\$3.50	\$5.10	\$7.20	\$11.70	\$13.90	\$14.20	\$15.05	\$15.25

Source: Iowa State University, Iowa Farm Custom Rate Surveys, FM 1698.



## Adding additional work off-the-farm\*

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As farm families consider adjustments to their cost of living for 2017, they may also be considering additional off-the-farm employment. A recent newsletter article, “Why have farm family living expenses been identified as a problem?” ([www.extension.iastate.edu/agdm/articles/egggers/EggFeb17.html](http://www.extension.iastate.edu/agdm/articles/egggers/EggFeb17.html)) provided resources for taking a closer look at living expenses. If a careful analysis of the farm finances determines living expenses to be a concern, the simple answer is to either cut back on expenses or create more income. The decision on what to do next isn’t that simple. If cutting excess expenses isn’t enough, it is important to consider the costs as well as benefits in taking on additional work away from the farm operation.

Some costs such as travel and clothing expenses, childcare, etc. have obvious monetary value. Other costs have a subjective value and vary with each family’s situation. The costs and benefits of the job, such as salary, health insurance, psychological boost, social contacts, and time away from family and farm work need to be analyzed and discussed by those affected before deciding on a second job. In today’s work environment, there may be opportunities for telecommuting or part-time work done through a home office that fits into a farm family’s routine without creating major disruption.

### Job related expense vs. income and benefits

Job related expenses and the income and fringe benefits for each employment opportunity should be considered in a potential multi-income household. Which person has the greater net earning potential due to special skills or past training also must be considered. The balance of physical labor skills of each party and management contribution will be different for each family.

Some expenses such as lunches or household help may be reduced when working only part-time. Other expenses such as travel, special clothing or tools often take a larger proportion of the income from a part-time job. Parents with young children usually have higher work-connected expenses than parents with older children. If work hours can conform to the child’s school day or at a time when the other spouse can do the childcare, working part-time may reduce or eliminate the need for childcare. Another thing to consider are the employee benefits such as paid vacation, health insurance, and pension credits that are not extended to part-time employees.

Access to employer based health insurance coverage may be as important as a salary. Examine multiple health insurance options, including different levels of coverage through private plans, employer plans, and market place plans. Discussing the effects of private health insurance on farm expense categories versus employer provided plans with a tax professional may bring up deductions or cost savings beyond the cost of the plans.

### Worksheet

The accompanying worksheet helps you focus on whether taking a job away from the farm will be worthwhile. It encourages you to gather information and provides a basis for discussion before taking any off-the-farm job. By using it, you will have an estimate of the net gain or loss from an additional off-the-farm job. It can be used to compare the costs and benefits of alternative full-time and part-time job opportunities.

The total economic, social, and psychological changes to the family environment need to be part of the worksheet exercise and discussion.

Adding additional work off-the-farm, continued from page 3

The human conflicts that can result when time is divided among the farm, family, other personal responsibilities, and the job activities need to be discussed with all family members.

Questions to stimulate discussion

The following questions can provide direction for the family’s discussion concerning the costs and benefits of the second job.

- 1. Will the amount of money made or the job itself satisfy the reasons for going to work?
2. Will the amount of money earned meet individual or family expectations? Consider the opportunities that are available including:
• working full or part-time, including opportunities that might allow telecommuting,
• starting a entrepreneurial business from home or another location and,
• short-term “gigs” (https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm) or freelancing.
3. What adjustments will other family members need to make if one person accepts employment in the non-farm labor force? Examples of personal and farm responsibilities are:
• increased household tasks, care of other family members,
• increased farm tasks, especially for seasonal farm needs, and
• more responsibility for religious, educational, social and civic activities.
4. Will the money or other job benefits compensate for the necessary family adjustments?
5. Would additional education or training be beneficial or necessary to obtain employment?
6. Are there long-term benefits that have not been evaluated; for example, increased Social Security benefits, retirement income,

improved insurance protection, improved job skills obtained, or training for independent living? Gained skills may contribute to the farm operation as well (i.e. improved computer skills).

Next steps

Going to work for the first time, adding a second job, or starting over again nearly always provides special personal meaning. As the new worker’s earnings increase, the family unit may begin to show increased financial gains, increasing the family’s sense of security and personal comforts. With some financial pressures lessened, couples may be able to plan their lives more creatively and feel in control of their future.

The 2012 Census of Agriculture (https://www.nass.usda.gov/Statistics\_by\_Subject/Demographics/index.php) reported that 62 percent of farm operators worked at least some days off the farm. That statistic includes the 52 percent of principle operators who consider their primary occupation something other than farming. Off-farm employment is common. An important first step, before making significant changes, is a close look at how additional employment impacts the farm operation and family responsibilities.

Further resources for looking at farm business and family finances, visit the Iowa State University Extension and Outreach Ag Decision Maker Financial page (www.extension.iastate.edu/agdm/wdfinancial.html) or the Human Sciences Family Finance website. (www.extension.iastate.edu/humansciences/family-finances-families). The worksheet on the following pages is also available as AgDM Decision Tool, Computing Benefits from Adding Additional Off-farm Work (www.extension.iastate.edu/agdm/wholefarm/html/c3-51.html).

\* This article is a revision, the original, written by Gary Vogt, former extension farm management specialist, appeared in the October 1999 Ag Decision Maker newsletter.



Adding additional work off-the-farm, continued from page 4

**Worksheet for computing benefits from adding additional off-farm work \***

	Opportunity 1	Opportunity 2
<b>Income:</b>		
Gross pay from second job	\$ _____	\$ _____
Value of employer's contribution to:		
Retirement plan	_____	_____
Health & disability insurance (self, family)	_____	_____
Life insurance	_____	_____
Gifts, bonuses, etc.	_____	_____
Savings on dependent insurance coverage	_____	_____
Other monetary benefits (tips, meals, etc.)	_____	_____
<b>(A) Total gross income from additional work</b>	<b>\$ _____</b>	<b>\$ _____</b>
<b>Expenses (not tax deductible):</b>		
Additional tax on family income (federal, state, local):		
When both parties are employed	\$ _____	\$ _____
Subtract taxes paid when one party employed	_____	_____
Equals additional taxes paid	_____	_____
Additional Social Security Tax paid	_____	_____
Extra cost of convenience food for home consumption	_____	_____
Extra cost of meals eaten away from home	_____	_____
Extra expense for general-clothing, including maintenance	_____	_____
Extra personal care expenses	_____	_____
Transportation to and from work, including parking	_____	_____
Employee clubs, gifts, flowers, etc.	_____	_____
Work-related parties and special meals	_____	_____
Extra expense of hired help:		
Household help	_____	_____
Child & dependent care costs minus any tax credits	_____	_____
House repairs & maintenance you will no longer do	_____	_____
<b>(B) Total Expenses (not tax deductible)</b>	<b>\$ _____</b>	<b>\$ _____</b>
<b>Expenses (tax deductible)</b>		
Specialized work clothing & maintenance	\$ _____	\$ _____
Transportation on the job, not reimbursed	_____	_____
Dues to union, professional, and business organizations	_____	_____
Tools, licenses, and supplies for the job	_____	_____
Professional & business meetings, conferences, etc.	_____	_____
Educational expense of maintaining and increasing skills	_____	_____
Professional and business publications	_____	_____
Other specific expenses of producing income	_____	_____
Contributions to an IRA (from second job)	_____	_____
Extra expense of hired farm help	_____	_____
<b>Total</b>	<b>\$ _____</b>	<b>\$ _____</b>
<i>After tax computation**</i>		
100% less tax rate on additional income times total expenses (if itemize deductions) (e.g. 100% - 15% = 85% x expenses)	%	%
<b>(C) Total Expenses (tax deductible) (multiply total by percent)</b>	<b>\$ _____</b>	<b>\$ _____</b>

Adding additional work off-the-farm, continued from page 5

**Net economic gain from additional employment**

(D) Total gross income (A)	\$	\$
(E) Total expenses related to income production (B + C)		
(F) Net economic gain from additional job (D - E)	\$	\$

**Subjective value (loss or gain) in family activities**

(G) Value of family activities, currently		
(H) Value of family activities, with added work responsibilities		
(I) Possible value loss/gain in family activities (G - H)		

**Net value gain from additional employment**

(J) Net income from additional job (F)	\$	\$
(K) Possible value loss/gain in family activities (I)		

<b>Net family gain or loss from additional employment (J - K)</b>	<b>\$</b>	<b>\$</b>
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*\* This list an example of costs and benefits to consider. Each situation is unique and will have its own points to consider.*

*\*\*Consulting with a tax professional will highlight after tax implications of increased income to an individual or family.*

Updates, continued from page 1

**Internet Updates**

The following Information Files and Decision Tools have been updated on [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm).

**Live Cattle Futures - The Life of a Contract: Comparing Expiration to Weekly Futures Prices – B2-63**  
(4 pages)

**Feeder Cattle Futures - The Life of a Contract: Comparing Expiration to Weekly Futures Prices – B2-64**  
(4 pages)

**Estimated Returns by Farm Lease Arrangement – C2-01** (Decision Tool)

**Historic Farmland Value Survey (Iowa State University) – C2-70** (Decision Tool)

**Computing Benefits from Adding Additional Off-farm Work – C3-51** (Decision Tool)

**Current Profitability**

The following tools have been updated on [www.extension.iastate.edu/agdm/info/outlook.html](http://www.extension.iastate.edu/agdm/info/outlook.html).

**Corn Profitability – A1-85**

**Soybean Profitability – A1-86**

**Iowa Cash Corn and Soybean Prices – A2-11**

**Season Average Price Calculator – A2-15**

**Ethanol Profitability – D1-10**

**Biodiesel Profitability – D1-15**

... and justice for all

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