

# 2018 Iowa Farm Custom Rate Survey

Many Iowa farmers hire some custom machine work in their farm business or perform custom work for others. Others rent machinery or perform other services. The Iowa Farm Custom Rate Survey was mailed to 323 people by the U.S. Postal Service and 133 people via e-mail in early February 2018. The information below is based on 124 responses and 4,043 custom rates provided by Iowa farmers, custom operators, and farm managers. Thirteen percent of the respondents perform custom work, 23 percent hire work done, 42 percent indicated doing both, three percent indicated doing none, and 19 percent did not indicate whether they perform or hire custom work.

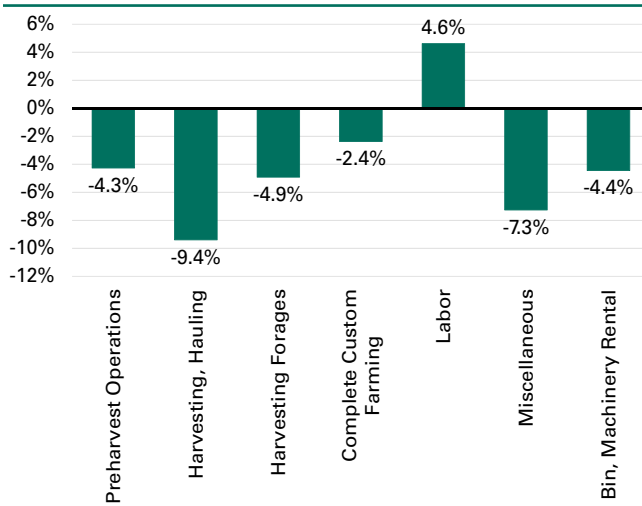
For each type of work, the average rate from the survey, the median, and the range are shown. The average is calculated as the simple average of all responses. The median is the middle number among the ordered responses (from smallest to largest). The reported range excludes the minimum and the maximum values to avoid reporting extreme values.

The reported rates are expected to be charged or paid in 2018, and they include fuel and labor (unless otherwise noted). **The average price for diesel fuel was assumed to be \$2.95 per gallon.** This rate schedule is intended only as a guide. Actual custom rates may vary according to availability of machinery in a given area, timeliness, operator skill, field size and shape, crop conditions, and the performance characteristics of the machine being used.

Rental rates for some machinery items are shown in the last section of this report, along with a worksheet for estimating rental rates for other items.

**Note: All rates include fuel, repairs, depreciation, interest, labor, and all other machinery costs for the tractor and implement, unless otherwise noted.**

Percentage change by category, 2017 to 2018



Tillage	Average Charge	Median Charge	Range	Number of Responses
Chopping cornstalks, / acre	\$11.25	\$11.50	\$6.00 - \$18.00	45
Moldboard plowing, / acre	18.45	19.50	11.25 - 25.00	23
Chisel plowing, / acre	17.60	17.25	14.00 - 23.00	30
Disk/chiseling, / acre	18.50	18.50	12.00 - 25.00	42
Vertical tillage, / acre	17.30	17.00	10.00 - 26.00	45
Strip tillage, / acre	19.20	18.00	15.00 - 26.00	17
Subsoiling (8 to 15 in. deep), / acre	20.30	21.00	14.00 - 27.00	37
V-ripping (over 15 in. deep), / acre	22.10	22.00	15.00 - 30.00	27
V-ripping with tandem disk, / acre	23.05	23.00	15.00 - 35.00	48
Disking, tandem, / acre	14.70	15.00	7.50 - 22.00	59
Disking, heavy or offset, / acre	18.35	17.75	14.50 - 25.50	22
Harrowing or dragging, / acre	9.65	9.00	6.00 - 17.00	27
Soil finishing, / acre	14.90	14.75	10.00 - 21.00	52
Field cultivating, / acre	14.70	14.90	8.00 - 24.00	62
Rock picking, / acre	15.65	15.00	10.00 - 20.00	15
Cultivating, conventional, / acre	13.50	14.00	8.50 - 18.00	21
Cultivating, ridge-till, / acre	17.55	16.00	12.00 - 24.00	12
Rotary hoeing, / acre	10.60	10.25	5.00 - 16.00	28
Land rolling, / acre	7.50	7.00	4.00 - 12.00	37

Planting, Drilling, and Seeding	Average Charge	Median Charge	Range	Number of Responses
<b>Planting</b>				
- with fertilizer & insecticide attachments, / acre	\$21.55	\$20.50	\$15.00 - \$30.00	49
- without attachments, / acre	19.15	19.00	13.25 - 28.00	69
- with splitters & attachments, / acre	21.25	20.00	15.00 - 32.00	44
- with high-speed planter, / acre	20.20	20.00	14.00 - 28.00	21
- no-till planter, / acre	21.65	21.00	15.00 - 32.00	52
- no-till planter with splitters, / acre	22.00	22.00	15.00 - 32.00	38
- ridge till planter, / acre	22.55	23.00	18.00 - 25.00	9
Extra charge for seed shut-offs, / acre	2.35	2.00	0.50 - 5.00	54
Extra charge for variable rate seeding, / acre	2.65	2.50	0.50 - 5.00	48
Extra charge for GPS use, / acre	2.35	2.00	0.50 - 5.00	34
Seed tender, / acre	2.85	3.00	0.00 - 6.00	37
Drilling soybeans, / acre	17.40	17.00	12.50 - 25.00	30
Drilling soybeans, no-till, / acre	19.30	19.65	12.00 - 30.00	46
Drilling grass seed, / acre	17.95	18.00	12.00 - 25.00	37
Drilling small grain, / acre	16.90	17.00	12.00 - 22.00	26
Seeding grass, broadcast with tractor, / acre	12.50	12.00	8.00 - 18.00	18
Seeding grass, broadcast with ATV, / acre	13.45	14.00	8.00 - 20.00	17
<b>Spraying (materials not included)</b>				
Ground, broadcast, tractor, / acre	\$6.60	\$6.50	\$5.00 - \$12.00	50
Ground, incorporated, tractor, / acre	11.00	11.00	5.75 - 18.00	22
Ground, broadcast, self propelled, / acre	7.45	7.00	5.00 - 15.00	81
Ground, banded, tractor, / acre	10.10	10.00	7.00 - 13.00	15
Ground, road ditches, / hour	63.60	66.00	30.00 - 100.00	38
Aerial, / acre	10.25	10.00	5.50 - 18.00	33
<b>Fertilizer Application (materials not included)</b>				
Dry bulk - applied, / acre	\$5.45	\$5.00	\$2.00 - \$10.00	46
- strip-till, / acre	15.55	16.50	7.00 - 21.00	22
Liquid - spraying, / acre	6.90	7.00	3.75 - 10.00	34
- strip-till, knifed, / acre	14.15	14.75	12.00 - 16.00	12
- side dressing, / acre	10.45	11.00	6.50 - 15.00	33
Anhydrous - injecting, with tool bar, / acre	12.60	12.00	7.00 - 19.00	61
- injecting, without tool bar, / acre	11.50	12.00	6.00 - 16.00	43
Spreading lime, / ton	6.45	6.25	3.00 - 11.00	28
<b>Harvesting, Drying, and Hauling Grain</b>				
Corn combining, / acre	\$34.80	\$35.00	\$20.00 - \$50.00	84
- with chopper head, / acre	38.80	40.00	22.00 - 60.00	53
Soybean combining, / acre	34.00	34.00	20.00 - 50.00	69
- with air reel, / acre	35.35	35.00	26.00 - 47.00	30
- with draper head, / acre	38.65	38.00	26.00 - 59.00	56
Small grain combining, / acre	32.30	32.00	25.00 - 40.00	16
Complete harvesting (combine, grain cart, haul to farm storage)				
- Corn, / acre	50.95	50.00	32.00 - 90.00	56
- Soybeans, / acre	48.90	48.50	30.00 - 85.00	52
Added charge for GPS mapping, / acre	2.35	2.50	0.50 - 5.00	41
Picking ear corn (seed corn), / acre	36.00	36.00	35.00 - 36.00	5
Picking ear corn (farm use), / acre	30.00	30.00	30.00 - 30.00	7

Harvesting, Drying, and Hauling Grain (cont.)	Average Charge	Median Charge	Range	Number of Responses
Drying corn (includes fuel, electricity, labor)				
- continuous flow dryer, / point per bushel	\$0.041	\$0.050	\$0.025 - \$0.050	16
- bin dryer, / point per bushel	0.045	0.050	0.030 - 0.060	10
Handling grain by auger, / bushel	0.056	0.050	0.010 - 0.120	42
Hauling grain				
- grain cart, corn, / acre	6.20	6.00	2.00 - 12.00	58
- grain cart, soybeans, / acre	5.35	5.50	2.00 - 11.00	55
- to farm storage, wagon, / bushel	0.064	0.050	0.030 - 0.110	36
- farm storage to market, wagon, / bushel	0.076	0.100	0.040 - 0.120	33
- to market, truck, (5 miles, 1-way trip), / bu.	0.093	0.100	0.040 - 0.150	62
- to market, truck, (25 miles, 1-way trip), / bu.	0.154	0.150	0.080 - 0.250	56
- to market, truck, (100 miles, 1-way trip), / bu.	0.313	0.300	0.200 - 0.450	27
<b>Harvesting Forages</b>				
Hay - mowing, / acre	\$11.95	\$12.00	\$8.00 - \$15.00	18
- conditioning, / acre	11.40	10.00	10.00 - 12.00	5
- mowing/conditioning, / acre	14.65	14.40	12.00 - 20.00	24
- raking, / acre	7.15	7.00	5.00 - 11.00	26
- windrowing, / acre	14.15	15.00	12.00 - 15.00	7
- tedding, / acre	8.70	8.75	6.00 - 10.00	10
Hay baling - small square bales, / bale	0.67	0.70	0.40 - 1.00	16
- large square bales, / bale	10.15	9.50	8.00 - 11.00	8
- large round bales without wrap, / bale	11.30	10.50	8.00 - 15.00	12
- large round bales with wrap, / bale	12.65	12.50	11.00 - 15.00	30
Straw or corn stalk baling				
- large round or square bales w/o wrap, / bale	11.20	11.00	9.00 - 13.00	10
- large round or square bales with wrap, / bale	13.10	13.00	11.00 - 15.00	24
Moving large round bales to storage, / bale	2.80	3.00	2.00 - 3.00	6
Silage - chopping, / hour, / head row	52.65	45.85	41.67 - 53.33	6
- chopping, / ton	7.05	7.50	5.40 - 8.50	7
- chopping, haul, fill silo, / ton	8.90	9.00	7.00 - 10.00	7
Filling silage bags, / foot of bag	11.00	9.50	8.00 - 15.00	5
Haylage - chopping, / ton	8.90	8.50	7.00 - 9.00	5
Earlage or snaplage - chopping, / acre	60.90	60.00	52.00 - 70.00	8
<b>Custom Farming (tillage, planting, pest control, harvesting, and hauling to farm, no drying)</b>				
	Average Charge	Median Charge	Range	Number of Responses
Corn, / acre	\$128.80	\$120.00	\$70.00 - \$220.00	45
Soybeans, / acre	117.10	112.50	70.00 - 210.00	44
Small grain, / acre	96.90	97.50	80.00 - 115.00	8
<b>Farm Labor Wages for Operating Machinery</b>				
	Average Charge	Median Charge	Range	Number of Responses
Spraying or harvesting, / hour	\$17.55	\$16.00	\$11.25 - \$30.00	61
Other operations, / hour	16.30	15.00	10.00 - 25.00	65

Miscellaneous Services (labor, fuel, and equipment included)	Average Charge	Median Charge	Range	Number of Responses
Removing snow (loader), / hour	\$78.25	\$80.00	\$45.00 - \$100.00	31
Removing snow (blade), / hour / foot of blade	9.40	10.00	5.83 - 12.14	7
Removing snow (blower), / hour / foot of blower	11.90	13.35	7.50 - 15.00	11
Spreading liquid manure, injected, / 1000 gal.	12.35	10.00	10.00 - 16.00	9
Applying liquid manure w/ drag line, / 1000 gal.	11.15	11.50	10.00 - 13.00	6
Loading, spreading solid manure, / hour	107.25	120.00	100.00 - 125.00	7
Power washing, / hour	46.25	50.00	40.00 - 50.00	8
Building fence, barbed (no materials), / hour	19.00	20.00	15.00 - 22.00	7
Building fence, barbed (no materials), / rod	13.80	15.00	10.00 - 16.00	5
Building fence, woven/barbed (no materials), / hr	18.35	20.00	15.00 - 20.00	7
Scouting crops, / acre	4.25	4.90	2.00 - 5.00	12
Soil testing, / sample	5.45	5.00	3.00 - 8.50	11
GPS grid soil testing, / acre	7.10	7.00	5.00 - 10.00	9
Managing stored grain, / bushel	0.06	0.05	0.01 - 0.10	15
Vacuuming grain, / bushel	0.09	0.10	0.04 - 0.16	37
Livestock hauling with trailer, / loaded mile	2.95	3.00	2.50 - 3.50	7
Livestock hauling with semi truck, / loaded mile	3.85	3.75	3.60 - 4.00	5
Bulldozing, / hour, / foot of blade	13.10	14.30	7.92 - 16.00	12
Digging post holes, / hole	3.55	3.00	3.00 - 4.80	5
Driving steel fence posts, / post	2.70	3.00	2.00 - 3.00	5
Trenching, / foot	1.80	1.50	1.50 - 2.50	5
Tiling, tiling machine (excluding materials), / foot	0.95	1.00	0.50 - 1.50	18
Tiling, tile plow (excluding materials), / foot	0.69	0.70	0.40 - 1.00	18
Back hoeing, / hour	98.60	95.00	75.00 - 145.00	18
Clearing land, / hour	147.10	150.00	100.00 - 200.00	12
Building ponds, / hour	161.45	150.00	150.00 - 175.00	7
Chain sawing, / hour	61.25	62.50	20.00 - 90.00	16
Welding machinery, / hour	59.00	57.50	40.00 - 80.00	10
Mowing CRP or pasture, / acre	17.90	18.00	10.00 - 30.00	46
Mowing fence rows, ditches, / hour	67.95	72.00	25.00 - 110.00	44
Mowing lawns, / hour	38.60	40.00	15.00 - 60.00	23
Chopping brush, / acre	33.95	35.00	15.00 - 50.00	16
Using truck scale, / load weighed	4.85	5.00	2.00 - 5.00	6

Bin Rental	Average Charge	Median Charge	Range	Number of Responses
Bin dryer, / bushel dried, (no fuel or labor)	\$0.056	\$0.050	\$0.010 - \$0.100	7
Storing grain, bin rental, / bushel / month	0.025	0.020	0.008 - 0.050	25
Storing grain, bin rental, / bushel / year	0.158	0.150	0.100 - 0.220	37

Machine Rental (operator, tractor, and fuel not included)	Average Charge	Median Charge	Range	Number of Responses
Tractor, / horsepower, / hour	\$0.20	\$0.20	\$0.10 - \$0.27	11
Grain drill, / acre	10.05	10.00	8.00 - 12.00	9
No-till soybean drill, / acre	12.80	12.00	10.00 - 16.70	11
Corn head for combine, / acre	9.25	8.00	7.00 - 12.00	13
Soybean head for combine, / acre	9.35	10.00	8.00 - 10.00	7
Grain cart with auger, corn, / acre	7.25	6.65	6.00 - 10.00	8
Grain cart with auger, soybeans, / acre	6.70	6.00	6.00 - 8.00	8
Grain wagon, / bushel	0.09	0.10	0.06 - 0.12	8
Grain truck (semi), / bushel, / round trip	0.12	0.10	0.08 - 0.15	11
Grain auger, / bushel	0.06	0.05	0.02 - 0.10	10
Grain vacuum, / bushel	0.08	0.10	0.04 - 0.15	16
Grain cleaner, / bushel	0.11	0.10	0.08 - 0.12	5
Skid loader, / hour	64.65	60.00	45.00 - 90.00	15
Dry bulk fertilizer applicator, / acre	4.15	4.00	2.00 - 6.00	11
Liquid fertilizer applicator, / acre	5.75	5.50	4.00 - 8.00	11
Anhydrous fertilizer applicator, / acre	7.55	7.00	4.50 - 12.00	9
Power washer, / hour	40.00	35.00	30.00 - 50.00	6
Generator, / hour	45.75	48.00	40.00 - 50.00	8

### Estimating a Machinery Rental Rate for Items Not Surveyed

Example:  
Tandem Disk

The following worksheet can be used to estimate a rental value for equipment items not shown above.

- |  |                 |               |
|--|-----------------|---------------|
| 1. Custom charge (includes labor, fuel, tractor)   | \$/acre         | \$14.70       |
| 2. Percent of custom charge that is for interest, insurance, depreciation, and repairs (excluding fuel and labor) (use 60% for tillage, 65% for planting and harvesting) | x _____%        | x 60%         |
| 3. Rental value, including tractor (1 x 2)   | = \$ _____/acre | = \$8.82      |
| 4. Tractor rental value, if tractor is not provided: _____ HP x \$ _____ per hp-hour rental rate (see above) / _____ acres/hour <sup>1/</sup> =                          | - \$ _____/acre | - \$1.97      |
| Ex: 150 HP x \$.20 (per hp-hour rental rate) / 15 acres/hour = \$1.97  |                 |               |
| 5. Implement rental value, without tractor (3 minus 4)   | = \$ _____/acre | = \$6.85/acre |

<sup>1/</sup> Typical values for acres covered per hour can be found in AgDM File A3-24, *Estimating the Field Capacity of Farm Machines*, [www.extension.iastate.edu/agdm/crops/pdf/a3-24.pdf](http://www.extension.iastate.edu/agdm/crops/pdf/a3-24.pdf)

*The information available in the Custom Rate Survey is only possible due to the responses provided each year. If you are interested in joining the 2019 Custom Rate Survey mailing list, send mail or e-mail address to: Alejandro Plastina, Iowa State University, Department of Economics, 478 E Heady Hall, 518 Farm House Lane, Ames, IA 50011-1054, 515-294-6160, [plastina@iastate.edu](mailto:plastina@iastate.edu).*

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