

# 2019 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 349 people by the U.S. Postal Service and 183 people via e-mail in early February 2019. The information below is based on 121 responses and 3,716 custom rates provided by Iowa farmers, custom operators, and farm managers. Twenty percent of the respondents perform custom work, 10 percent hire work done, 47 percent indicated doing both, 2 percent indicated doing none, and 21 percent did not indicate whether they perform or hire custom work.

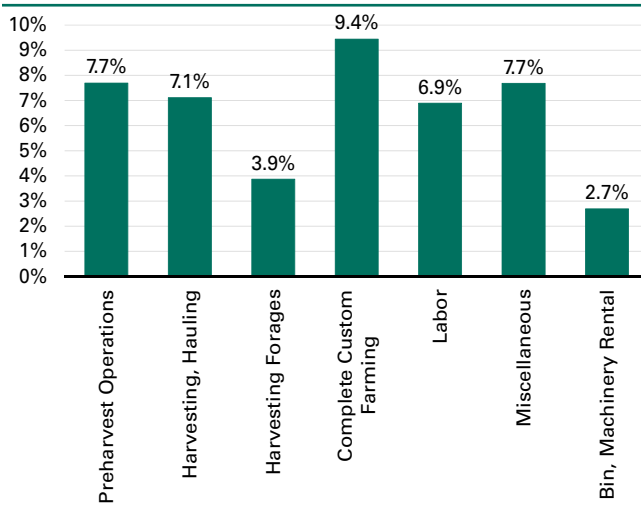
For each type of work, the average rate from the survey, the median, and the range are shown. The average is calculated as the simple average of all responses. The median is the middle number among the ordered responses (from smallest to largest). The reported range excludes the minimum and the maximum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

The reported rates are expected to be charged or paid in 2019, and they include fuel and labor (unless otherwise noted). **The average price for diesel fuel was assumed to be \$2.94 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, 2018 to 2019



Tillage	Average Charge	Median Charge	Range	Number of Responses
Chopping cornstalks, / acre	\$12.40	\$12.00	\$8.00 - \$18.00	38
Moldboard plowing, / acre	20.20	20.00	15.00 - 25.00	19
Chisel plowing, / acre	18.35	18.00	14.00 - 24.00	28
Disk/chiseling, / acre	19.70	19.50	14.25 - 25.00	35
Vertical tillage, / acre	18.55	18.00	12.00 - 26.00	43
Strip tillage, / acre	21.55	20.00	18.00 - 27.00	16
Subsoiling (8 to 15 in. deep), / acre	22.85	22.00	17.00 - 28.50	29
V-ripping (over 15 in. deep), / acre	23.45	23.00	17.00 - 30.00	22
V-ripping with tandem disk, / acre	24.60	23.55	16.00 - 36.00	40
Disking, tandem, / acre	15.40	15.00	10.00 - 22.38	47
Disking, heavy or offset, / acre	20.10	20.00	14.25 - 26.00	19
Harrowing or dragging, / acre	11.50	10.85	7.00 - 17.00	20
Soil finishing, / acre	15.80	15.00	12.00 - 21.00	39
Field cultivating, / acre	16.00	15.00	10.00 - 25.00	55
Rock picking, / acre	18.10	19.00	15.00 - 21.63	14
Cultivating, conventional, / acre	14.95	15.00	10.00 - 20.00	14
Cultivating, ridge-till, / acre	19.25	19.00	15.00 - 24.00	10
Rotary hoeing, / acre	12.05	11.25	9.50 - 16.00	21
Land rolling, / acre	8.00	7.50	5.00 - 12.00	31

Planting, Drilling, and Seeding	Average Charge	Median Charge	Range	Number of Responses
<b>Planting</b>				
- with fertilizer & insecticide attachments, / acre	\$21.80	\$21.00	\$14.00 - \$31.00	48
- without attachments, / acre	20.40	19.50	14.25 - 30.00	54
- with splitters & attachments, / acre	22.30	22.00	15.00 - 32.75	38
- with high-speed planter, / acre	22.45	22.00	15.00 - 28.00	24
- no-till planter, / acre	22.90	22.00	12.60 - 35.00	54
- no-till planter with splitters, / acre	23.85	23.50	16.90 - 32.00	30
- ridge till planter, / acre	23.40	24.00	22.00 - 25.00	10
Extra charge for seed shut-offs, / acre	2.45	2.00	1.00 - 5.00	44
Extra charge for variable rate seeding, / acre	2.65	2.50	1.00 - 5.00	36
Extra charge for GPS use, if used for analytics, / acre	2.85	2.50	2.00 - 5.00	25
Seed tender, / acre	3.30	3.00	1.00 - 6.00	35
Drilling soybeans, / acre	19.10	18.00	15.00 - 25.35	23
Drilling soybeans, no-till, / acre	20.60	20.00	14.00 - 30.00	40
Drilling grass seed, / acre	19.10	18.00	12.50 - 32.00	29
Drilling small grain, / acre	18.35	18.00	13.00 - 24.63	20
Seeding grass, broadcast with tractor, / acre	13.55	14.75	8.00 - 18.00	15
Seeding grass, broadcast with ATV, / acre	15.80	15.00	14.00 - 20.00	10
<b>Spraying (materials not included)</b>				
Ground, broadcast, tractor, / acre	\$7.25	\$7.00	\$5.50 - \$10.70	44
Ground, incorporated, tractor, / acre	12.85	12.00	10.00 - 18.00	16
Ground, broadcast, self propelled, / acre	7.65	7.50	5.00 - 15.00	83
Ground, banded, tractor, / acre	10.80	10.50	8.00 - 13.50	10
Ground, road ditches, / hour	69.00	75.00	20.00 - 100.00	34
Aerial, / acre	10.75	10.00	8.00 - 18.00	22
<b>Fertilizer Application (materials not included)</b>				
Dry bulk - applied, / acre	\$5.80	\$6.00	\$2.50 - \$10.00	41
- strip-till, / acre	16.50	18.00	6.00 - 23.00	17
Liquid - spraying, / acre	7.30	7.00	5.00 - 10.00	28
- strip-till, knifed, / acre	14.20	14.25	10.00 - 19.00	12
- side dressing, / acre	11.35	12.00	8.00 - 15.00	27
Anhydrous - injecting, with tool bar, / acre	12.50	12.50	8.00 - 18.00	59
- injecting, without tool bar, / acre	11.40	11.75	7.00 - 14.00	30
Spreading lime, / ton	6.25	6.00	4.00 - 10.00	22
<b>Harvesting, Drying, and Hauling Grain</b>				
Corn combining, / acre	\$35.95	\$35.00	\$23.00 - \$50.00	88
- with chopper head, / acre	41.35	39.50	30.00 - 60.00	44
Soybean combining, / acre	35.10	35.00	22.00 - 50.00	75
- with air reel, / acre	37.80	36.25	30.00 - 50.00	18
- with draper head, / acre	38.50	39.00	25.00 - 50.00	52
Small grain combining, / acre	31.90	33.00	25.00 - 36.00	8
Complete harvesting (combine, grain cart, haul to farm storage)				
- Corn, / acre	54.10	50.00	39.00 - 90.00	45
- Soybeans, / acre	51.55	50.00	35.00 - 85.00	43
Added charge for GPS mapping, / acre	2.85	3.00	1.00 - 5.00	35
Picking ear corn (seed corn), / acre	35.80	36.00	35.00 - 36.00	5
Picking ear corn (farm use), / acre	32.15	30.00	30.00 - 36.00	8

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	\$0.046	\$0.050	\$0.040 - \$0.050	10
- bin dryer, / point per bushel	0.052	0.050	0.040 - 0.060	6
Handling grain by auger, / bushel	0.064	0.050	0.020 - 0.100	32
Hauling grain				
- grain cart, corn, / acre	6.55	6.10	1.00 - 12.00	56
- grain cart, soybeans, / acre	5.75	5.50	1.00 - 11.55	53
- to farm storage, wagon, / bushel	0.068	0.050	0.025 - 0.120	24
- farm storage to market, wagon, / bushel	0.086	0.100	0.050 - 0.130	20
- to market, truck, (5 miles, 1-way trip), / bu.	0.102	0.100	0.050 - 0.170	57
- to market, truck, (25 miles, 1-way trip), / bu.	0.163	0.150	0.090 - 0.250	56
- to market, truck, (100 miles, 1-way trip), / bu.	0.317	0.300	0.150 - 0.500	36
<b>Harvesting Forages</b>	<b>Average Charge</b>	<b>Median Charge</b>	<b>Range</b>	<b>Number of Responses</b>
Hay - mowing, / acre	\$13.70	\$15.00	\$10.00 - \$15.50	14
- conditioning, / acre	12.60	12.25	12.00 - 14.00	6
- mowing/conditioning, / acre	15.30	15.00	14.00 - 20.00	23
- raking, / acre	7.40	7.40	5.00 - 11.00	18
- windrowing, / acre	15.40	15.00	15.00 - 16.00	8
- tedding, / acre	7.85	8.00	5.50 - 10.00	7
Swathing hay or small grain, / acre	15.80	15.00	15.00 - 16.00	5
Hay baling - small square bales, / bale	0.68	0.75	0.50 - 0.80	17
- large square bales, / bale	10.95	10.00	8.50 - 13.00	10
- large round bales without wrap, / bale	12.35	12.90	9.00 - 15.00	16
- large round bales with wrap, / bale	13.05	13.00	11.00 - 15.00	31
Straw or corn stalk baling				
- large round or square bales w/o wrap, / bale	12.35	12.50	9.00 - 15.00	10
- large round or square bales with wrap, / bale	13.60	13.50	11.00 - 15.00	26
Moving large round bales to storage, / bale	2.65	2.50	2.00 - 3.00	8
Hauling rd bales by truck or trailer, / bale, / loaded mile	0.24	0.25	0.17 - 0.29	6
Silage - chopping, / hour, / head row	54.05	62.50	41.67 - 70.00	5
- chopping, / ton	6.75	6.50	5.50 - 8.00	8
- chopping, haul, fill silo, / hour, / head row	67.90	80.00	43.33 - 81.25	5
Filling silage bags, / foot of bag	11.65	12.25	8.00 - 15.00	8
Haylage - chopping, / ton	8.40	8.00	8.00 - 9.00	5
Earlage or snaplage - chopping, / acre	65.15	66.50	55.00 - 70.00	8
<b>Custom Farming (tillage, planting, pest control, harvesting, and hauling to farm, no drying)</b>	<b>Average Charge</b>	<b>Median Charge</b>	<b>Range</b>	<b>Number of Responses</b>
Corn, / acre	\$132.25	\$130.00	\$80.00 - \$225.00	45
Soybeans, / acre	121.20	117.50	75.00 - 210.25	44
Small grain, / acre	118.35	120.00	100.00 - 140.00	9
<b>Farm Labor Wages for Operating Machinery</b>	<b>Average Charge</b>	<b>Median Charge</b>	<b>Range</b>	<b>Number of Responses</b>
Spraying or harvesting, / hour	\$19.00	\$18.00	\$14.00 - \$30.00	70
Other operations, / hour	17.20	15.50	12.00 - 30.00	80

Miscellaneous Services (labor, fuel, and equipment included)	Average Charge	Median Charge	Range	Number of Responses
Removing snow (loader), / hour	\$77.65	\$82.50	\$50.00 - \$100.00	30
Removing snow (blade), / hour / foot of blade	10.95	12.50	6.25 - 13.89	9
Removing snow (blower), / hour / foot of blower	15.00	14.30	10.00 - 18.75	17
Tub grinding hay, / ton	256.45	260.00	200.00 - 300.00	7
Spreading liquid manure, injected, / 1000 gal.	14.25	14.25	10.00 - 16.00	12
Applying liquid manure w/ drag line, / 1000 gal.	12.05	10.50	10.00 - 16.00	10
Loading solid manure, / hour	80.70	85.00	50.00 - 110.00	7
Loading, spreading solid manure, / ton	5.25	6.00	3.25 - 6.00	5
Loading, spreading solid manure, / hour	108.90	100.00	100.00 - 125.00	9
Power washing, / hour	49.35	50.00	40.00 - 65.00	11
Building fence, barbed (no materials), / hour	16.35	18.00	12.00 - 19.00	6
Building fence, barbed (no materials), / rod	17.30	17.75	12.00 - 22.00	8
Scouting crops, / acre	4.25	4.00	3.00 - 6.00	14
Scouting crops with drone, / acre	3.80	4.00	4.00 - 4.00	5
Soil testing, / sample	5.00	5.00	3.00 - 7.00	10
GPS grid soil testing, / acre	7.00	7.20	4.00 - 10.00	13
Managing stored grain, / bushel	0.06	0.05	0.01 - 0.13	17
Vacuuming grain, / bushel	0.10	0.10	0.04 - 0.20	29
Livestock hauling with trailer, / loaded mile	3.00	3.00	2.00 - 4.00	12
Livestock hauling with semi truck, / loaded mile	3.85	4.00	3.80 - 4.00	9
Bulldozing, / hour, / foot of blade	12.85	13.50	8.00 - 16.67	19
Digging post holes, / hole	4.90	4.40	4.00 - 5.00	6
Trenching, / foot	1.75	1.75	1.50 - 2.00	7
Tiling, tiling machine (excluding materials), / foot	1.10	1.05	0.50 - 1.50	10
Tiling, tile plow (excluding materials), / foot	0.99	0.90	0.50 - 2.00	12
Back hoeing, / hour	95.70	82.50	65.00 - 135.00	18
Clearing land, / hour	162.50	167.50	150.00 - 200.00	8
Chain sawing, / hour	64.05	67.50	50.00 - 80.00	14
Welding machinery, / hour	62.55	65.00	30.00 - 80.00	15
Mowing CRP or pasture, / acre	18.75	19.15	10.00 - 30.00	36
Controlled burning of grass, CRP, pasture, / acre	20.60	16.50	5.00 - 40.00	10
Mowing fence rows, ditches, / hour	71.90	75.00	40.00 - 100.00	32
Mowing lawns, / hour	41.10	50.00	18.50 - 60.00	16
Chopping brush, / acre	39.30	40.00	27.00 - 50.00	7
Using truck scale, / load weighed	5.55	5.00	2.50 - 10.00	8
<b>Bin Rental</b>	<b>Average Charge</b>	<b>Median Charge</b>	<b>Range</b>	<b>Number of Responses</b>
Storing grain, bin rental, / bushel / month	\$0.027	\$0.050	\$0.020 - \$0.050	21
Storing grain, bin rental, / bushel / year	0.159	0.150	0.100 - 0.250	30

Machine Rental (operator, tractor, and fuel not included)	Average Charge	Median Charge	Range	Number of Responses
Tractor, / horsepower, / hour	\$0.21	\$0.20	\$0.19 - \$0.25	9
Grain drill, / acre	9.90	10.00	6.00 - 12.50	12
No-till soybean drill, / acre	12.40	12.00	10.00 - 15.00	10
Corn head for combine, / acre	9.05	10.00	6.00 - 10.50	14
Soybean head for combine, / acre	8.95	10.00	7.00 - 10.00	12
Grain cart with auger, corn, / acre	6.05	5.00	3.50 - 10.00	12
Grain cart with auger, soybeans, / acre	5.40	5.00	2.00 - 8.00	11
Grain truck (semi), / bushel, / round trip	0.10	0.10	0.05 - 0.15	8
Grain auger, / bushel	0.06	0.05	0.01 - 0.10	8
Grain vacuum, / bushel	0.08	0.10	0.04 - 0.14	14
Grain cleaner, / bushel	0.13	0.10	0.10 - 0.15	5
Liquid manure spreader, / hour	72.00	60.00	50.00 - 100.00	5
Solid manure spreader, / hour	57.00	50.00	50.00 - 60.00	5
Skid loader, / hour	66.65	72.50	40.00 - 100.00	14
Dry bulk fertilizer applicator, / acre	5.65	6.00	5.00 - 6.00	7
Liquid fertilizer applicator, / acre	6.70	7.00	5.00 - 8.00	9
Anhydrous fertilizer applicator, / acre	7.75	8.00	5.00 - 12.00	11
Power washer, / hour	41.90	40.00	35.00 - 50.00	8
Generator, / hour	50.00	50.00	50.00 - 50.00	5

**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   | \$15.40       |
| 2. Percent of custom charge that is for interest, insurance, depreciation, and repairs (excludes fuel and labor) (use 60% for tillage, 65% for planting and harvesting) | x _____%        | x 60%         |
| 3. Rental value, including tractor (1 x 2)  | = \$ _____/acre | = \$9.24      |
| 4. Tractor rental value, if tractor is not provided: _____ HP x \$ _____ per hp-hour rental rate (see above) / _____ acres/hour <sup>1/</sup> =                         | - \$ _____/acre | - \$2.08      |
| Ex: 150 HP x \$.21 (per hp-hour rental rate) / 15 acres/hour = \$2.08   |                 |               |
| 5. Implement rental value, without tractor (3 minus 4)  | = \$ _____/acre | = \$7.16/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](http://www.extension.iastate.edu/agdm/crops/pdf/a3-24.pdf), [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 2020 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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