

2022 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 327 people by the US Postal Service and 232 people via email in early February 2022. The information below is based on 122 responses and 3,389 custom rates provided by Iowa farmers, custom operators, and farm managers. Twenty percent of the respondents perform custom work, 16% hire work done, 50% indicated doing both, and 14% did not indicate whether they perform or hire custom work.

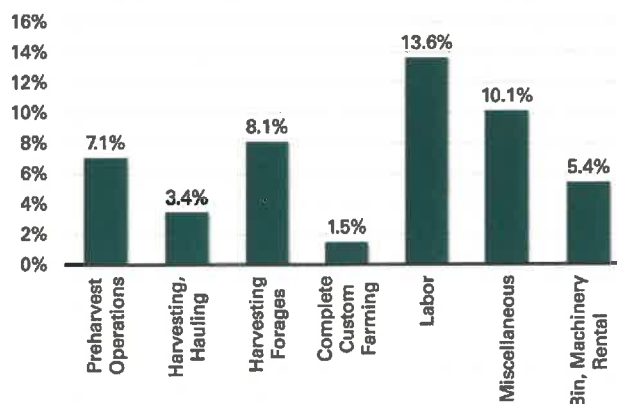
For each type of work, the average rate from the survey, the median, and the range are shown. The average is calculated as the simple average of all responses. The median is the middle number among the ordered responses (from smallest to largest). The reported range excludes the minimum and the maximum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

The reported rates are expected to be charged or paid in 2022, and they include fuel and labor (unless otherwise noted). The average price for diesel fuel (highway-retail including taxes) was assumed to be \$3.33 per gallon (as projected by the US Energy Information Administration in early February 2022). 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.

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.

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, 2021 to 2022



Tillage	Average Charge	Median Charge	Range	Number of Responses
Chopping cornstalks, / acre	\$12.75	\$12.00	\$8.00 - \$18.00	33
Moldboard plowing, / acre	18.50	18.35	14.00 - 22.00	18
Chisel plowing, / acre	18.00	18.00	10.00 - 25.00	26
Disk/chiseling, / acre	20.45	20.50	13.00 - 29.00	32
Vertical tillage, / acre	19.30	19.20	12.00 - 31.00	46
Strip tillage, / acre	21.65	21.00	16.00 - 32.00	21
- extra charge, anhydrous fertilizer, no materials, / acre	7.35	7.00	4.00 - 10.00	6
Subsoiling (8 to 15 inches deep), / acre	22.10	22.50	15.00 - 30.00	27
V-ripping (over 15 inches deep), / acre	22.20	22.00	15.25 - 30.00	20
V-ripping with tandem disk, / acre	23.45	23.50	14.00 - 31.25	43
Disking, tandem, / acre	16.20	16.00	9.00 - 23.00	44
Disking, heavy or offset, / acre	18.60	18.25	13.00 - 25.00	14
Harrowing or dragging, / acre	10.95	10.00	6.00 - 21.00	17
Soil finishing, / acre	15.65	15.95	9.50 - 25.00	40
Field cultivating, / acre	15.90	16.00	8.00 - 25.00	57
Rock picking, / acre	16.75	16.00	10.00 - 25.00	16
Cultivating, conventional, / acre	12.55	13.95	8.00 - 15.00	11
Cultivating, ridge-till, / acre	14.25	14.50	14.00 - 15.00	4
Rotary hoeing, / acre	9.65	9.00	6.00 - 12.00	11
Land rolling, / acre	7.20	7.00	4.00 - 10.00	35

Planting, Drilling, and Seeding	Average Charge	Median Charge	Range	Number of Responses
Planting				
- with fertilizer and insecticide attachments, / acre	\$23.40	\$24.00	\$14.00 - \$35.00	36
- without attachments, / acre	21.00	22.00	12.00 - 31.00	52
- with splitters and attachments, / acre	21.55	22.00	12.50 - 32.00	38
- with high-speed planter, / acre	25.45	25.00	14.00 - 40.00	31
- no-till planter, / acre	23.25	23.00	11.00 - 35.00	48
- no-till planter with splitters, / acre	23.75	23.00	13.00 - 35.00	37
- ridge till planter, / acre	23.70	24.00	18.00 - 26.00	7
Extra charge for seed shut-offs, / acre	2.25	2.00	0.50 - 5.00	49
Extra charge for variable rate seeding, / acre	2.45	2.50	0.50 - 5.00	36
Extra charge for GPS use, if used for analytics, / acre	2.45	2.00	0.50 - 5.00	31
Seed tender, / acre	2.85	2.90	0.25 - 8.00	40
Drilling soybean, / acre	19.05	19.00	13.00 - 26.00	22
Drilling soybean, no-till, / acre	21.35	20.00	13.00 - 30.00	32
Drilling grass seed, / acre	18.90	19.00	10.00 - 29.00	27
Drilling small grain, / acre	17.70	18.25	11.00 - 25.00	22
Seeding grass, broadcast with tractor, / acre	11.20	11.00	7.00 - 15.00	12
Seeding grass, broadcast with ATV, / acre	11.75	12.50	7.00 - 15.00	13
Aerial seeding of cover crop, / acre	12.05	12.00	8.50 - 16.00	17
Drilling cover crop seed, / acre	17.35	17.50	10.00 - 25.00	28

Spraying (materials not included)	Average Charge	Median Charge	Range	Number of Responses
Ground, broadcast, tractor, / acre	\$6.75	\$7.00	\$5.00 - \$10.00	37
Ground, incorporated, tractor, / acre	7.95	7.75	5.00 - 10.15	12
Ground, broadcast, self-propelled, / acre	7.80	8.00	5.00 - 12.00	79
Ground, banded, tractor, / acre	6.80	7.00	5.00 - 7.00	5
Ground, road ditches, / hour	65.40	67.50	20.00 - 100.00	26
Aerial, / acre	9.70	10.00	8.00 - 11.00	23

Fertilizer Application (materials not included)	Average Charge	Median Charge	Range	Number of Responses
Dry bulk - applied, / acre	\$6.15	\$6.00	\$3.00 - \$13.00	40
Liquid - spraying, / acre	6.80	7.00	5.00 - 8.00	22
- side dressing, / acre	11.35	12.25	6.00 - 15.00	22
Anhydrous - injecting, with tool bar, / acre	13.40	13.00	7.50 - 25.00	53
- injecting, without tool bar, / acre	11.95	12.00	7.00 - 15.00	35
Spreading lime, / ton	6.25	6.00	3.00 - 10.00	24

Harvesting, Drying, and Hauling Grain	Average Charge	Median Charge	Range	Number of Responses
Corn combining, / acre	\$36.75	\$37.00	\$22.00 - \$48.00	76
- with chopper head, / acre	40.35	41.00	24.00 - 60.00	45
- added charge for corn reel (downed corn), / acre	6.65	6.00	1.00 - 20.00	27
Soybean combining, / acre	36.05	36.00	22.00 - 48.00	57
- with air reel, / acre	34.10	35.50	24.00 - 42.00	15
- with draper head, / acre	38.75	39.25	22.00 - 56.00	58
Small grain combining, / acre	31.15	31.00	25.00 - 36.00	8
Complete harvesting (combine, grain cart, haul to farm storage)				
- Corn, / acre	55.60	55.00	33.00 - 90.00	45
- Soybean, / acre	52.20	50.00	31.00 - 88.00	44
Added charge for GPS mapping, / acre	2.70	2.75	0.50 - 5.00	33

Harvesting, Drying, and Hauling Grain (continued)	Average Charge	Median Charge	Range	Number of Responses
Picking ear corn (farm use), / acre	\$31.80	\$35.00	\$25.00 - \$35.00	9
Drying corn (includes fuel, electricity, labor)				
- continuous flow dryer, / point per bushel	0.040	0.040	0.030 - 0.050	9
- bin dryer, / point per bushel	0.030	0.025	0.020 - 0.030	5
Handling grain by auger, / bushel	0.060	0.065	0.010 - 0.120	27
Hauling grain				
- grain cart, corn, / acre	6.60	6.40	0.50 - 15.00	59
- grain cart, soybean, / acre	5.40	5.55	0.50 - 12.00	57
- to farm storage, wagon, / bushel	0.065	0.065	0.030 - 0.100	26
- farm storage to market, wagon, / bushel	0.085	0.090	0.050 - 0.120	18
- to market, truck, (5 miles, 1-way trip), / bushel	0.110	0.100	0.050 - 0.200	52
- to market, truck, (25 miles, 1-way trip), / bushel	0.160	0.160	0.080 - 0.300	55
- to market, truck, (100 miles, 1-way trip), / bushel	0.315	0.320	0.130 - 0.500	23

Harvesting Forages	Average Charge	Median Charge	Range	Number of Responses
Hay - mowing, / acre	\$13.35	\$12.00	\$10.00 - \$20.00	19
- conditioning, / acre	13.65	14.00	10.00 - 16.00	9
- mowing/conditioning, / acre	16.20	15.15	12.00 - 25.00	21
- raking, / acre	7.65	8.00	5.00 - 12.00	22
- windrowing, / acre	14.30	15.00	10.00 - 15.25	7
- tedding, / acre	6.80	6.00	5.00 - 10.00	9
Hay baling - small square bales, / bale	0.83	0.75	0.60 - 1.25	13
- large square bales, / bale	12.90	12.75	10.50 - 15.00	4
- large round bales without wrap, / bale	13.15	14.00	10.00 - 15.00	11
- large round bales with wrap, / bale	14.05	14.00	12.00 - 18.00	26
Straw or corn stalk baling				
- large round or square bales without wrap, / bale	12.55	14.00	10.00 - 15.00	7
- large round or square bales with wrap, / bale	14.75	15.00	12.00 - 18.00	20
Moving large round bales to storage, / bale	3.05	3.00	2.00 - 3.15	7
Haul round bales by truck or trailer, / bale, / loaded mile	0.22	0.17	0.01 - 0.44	8
Silage - chopping, / hour, / head row	70.50	70.00	70.00 - 84.38	4
- chopping, / ton	7.00	7.00	6.00 - 8.00	7
Filling silage bags, / foot of bag	9.25	9.00	8.00 - 10.56	7
Earlage or snaplage - chopping, / acre	63.25	63.50	60.00 - 66.00	4

Custom Farming (tillage, planting, pest control, harvesting, and hauling to farm, no drying)	Average Charge	Median Charge	Range	Number of Responses
Corn, / acre	\$138.75	\$130.00	\$75.00 - \$250.00	43
Soybean, / acre	125.65	120.00	70.00 - 250.00	43
Small grain, / acre	90.00	95.00	90.00 - 100.00	4

Farm Labor Wages for Operating Machinery	Average Charge	Median Charge	Range	Number of Responses
Spraying or harvesting, / hour	\$21.90	\$20.00	\$15.00 - \$35.00	59
Other operations, / hour	19.65	18.00	12.50 - 35.00	65

Miscellaneous Services (labor, fuel, and equipment included)	Average Charge	Median Charge	Range	Number of Responses
Removing snow (loader), / hour	\$84.80	\$85.00	\$50.00 - \$125.00	27
Removing snow (blade), / hour / foot of blade	9.60	10.00	7.50 - 11.11	10
Removing snow (blower), / hour / foot of blower	17.75	17.95	15.00 - 20.00	10
Tub grinding hay, / ton	11.40	10.00	10.00 - 12.00	5
Tub grinding hay, / hour	218.75	212.50	200.00 - 225.00	4
Spreading liquid manure, injected, / 1,000 gallon	13.50	14.30	10.00 - 15.00	9
Applying liquid manure with drag line, / 1,000 gallon	12.70	11.50	10.00 - 16.00	10
Loading solid manure, / hour	91.45	85.00	60.00 - 140.00	7
Loading, spreading solid manure, / ton	6.00	5.50	4.00 - 8.00	6
Loading, spreading solid manure, / hour	141.65	148.20	125.00 - 150.00	5
Power washing, / hour	46.10	49.00	35.00 - 50.00	10
Building fence, barbed (no materials), / hour	19.60	18.00	15.00 - 25.00	5
Building fence, barbed (no materials), / rod	10.40	10.00	10.00 - 11.00	5
Building fence, woven/barbed (no materials), / hour	20.00	20.00	15.00 - 25.00	4
Scouting crops, / acre	5.05	5.00	3.00 - 8.00	14
Scouting crops with drone, / acre	4.30	3.00	2.00 - 7.50	7
Soil testing, / sample	3.75	3.50	3.00 - 4.00	4
GPS grid soil testing, / acre	6.50	6.00	3.25 - 10.00	13
Managing stored grain, / bushel	0.05	0.05	0.03 - 0.06	8
Vacuuming grain, / bushel	0.11	0.11	0.05 - 0.16	18
Livestock hauling with trailer, / loaded mile	3.10	3.05	2.50 - 3.75	9
Livestock hauling with semi truck, / loaded mile	4.35	4.00	3.90 - 5.00	7
Digging post holes, / hole	4.00	3.50	3.00 - 5.00	7
Driving steel fence posts, / post	1.30	1.05	1.00 - 2.00	4
Trenching, / foot	1.60	1.50	1.25 - 2.00	7
Tiling, tiling machine (excluding materials), / foot	1.05	1.00	0.75 - 1.50	9
Tiling, tile plow (excluding materials), / foot	0.89	0.95	0.70 - 1.00	10
Backhoeing, / hour	103.80	100.00	75.00 - 150.00	15
Clearing land, / hour	147.10	150.00	125.00 - 173.00	11
Chain sawing, / hour	64.70	67.50	35.00 - 100.00	16
Welding machinery, / hour	65.45	70.00	50.00 - 75.00	11
Mowing CRP or pasture, / acre	24.10	20.00	12.00 - 65.00	39
Controlled burning of grass, CRP, pasture, / acre	30.30	25.00	5.00 - 64.00	19
Mowing fence rows, ditches, / hour	69.90	72.00	25.00 - 100.00	27
Mowing lawns, / hour	43.30	45.00	20.00 - 60.00	19
Chopping brush, / acre	35.50	35.00	25.00 - 45.00	10
Using truck scale, / load weighed	2.35	2.00	1.00 - 3.00	6
Bin Rental	Average Charge	Median Charge	Range	Number of Responses
Storing grain, bin rental, / bushel / month	\$0.030	\$0.030	\$0.015 - \$0.040	18
Storing grain, bin rental, / bushel / year	0.155	0.150	0.100 - 0.250	31

Machine Rental (operator, tractor, and fuel not included)	Average Charge	Median Charge	Range	Number of Responses
Tractor, / horsepower, / hour	\$0.27	\$0.25	\$0.16 - \$0.50	13
Grain drill, / acre	12.85	10.00	10.00 - 20.00	7
No-till soybean drill, / acre	16.75	17.50	15.00 - 20.00	4
Corn head for combine, / acre	9.15	10.00	8.00 - 10.00	9
Soybean head for combine, / acre	9.80	10.00	7.00 - 11.00	7
Grain cart with auger, corn, / acre	6.20	5.50	4.00 - 10.00	8
Grain cart with auger, soybean, / acre	6.50	5.00	5.00 - 10.00	7
Grain truck (semi), / bushel, / round trip	0.10	0.10	0.09 - 0.10	4
Grain auger, / bushel	0.07	0.06	0.06 - 0.09	5
Grain vacuum, / bushel	0.11	0.10	0.08 - 0.15	11
Skid loader, / hour	67.80	65.00	40.00 - 120.00	18
Dry bulk fertilizer applicator, / acre	5.95	5.75	5.00 - 7.00	7
Anhydrous fertilizer applicator, / acre	5.20	5.50	3.60 - 7.00	8
Power washer, / hour	29.50	35.00	17.00 - 35.00	6
Tub grinder, / hour	128.75	125.00	50.00 - 200.00	4

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	\$16.20
2. Percent of custom charge that is for interest, insurance, depreciation, and repairs (to exclude fuel and labor) (use 60% for tillage, 65% for planting and harvesting)	x _____%	x 60%
3. Rental value, for tractor and implement (1 x 2)	= \$ _____/acre	= \$9.72
4. Tractor rental value, if tractor is not provided: _____ HP x \$ _____ per hp-hour rental rate (see above) / _____ acres/hour ^{1/} = Ex: 150 HP x \$.27 (per hp-hour rental rate) / 15 acres/hour = \$2.70	= \$ _____/acre	= \$2.70
5. Implement rental value, without tractor (3 minus 4)	= \$ _____/acre	= \$7.02/acre

^{1/} 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.

More on estimating machinery costs and machinery management can be found on the [Ag Decision Maker website](http://www.extension.iastate.edu/agdm/cdmachinery.html), www.extension.iastate.edu/agdm/cdmachinery.html.

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 2023 Custom Rate Survey mailing list, send mail or email 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.

This institution is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to www.extension.iastate.edu/diversity/ext.

Prepared by
Alejandro Plastina, extension economist
plastina@iastate.edu
Ann Johanns, extension program specialist
Ayah Gleisner, Avery Qualman,
student assistants

Additional machinery management publications are available at:
www.extension.iastate.edu/agdm
store.extension.iastate.edu

