Ag Decision Maker

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.

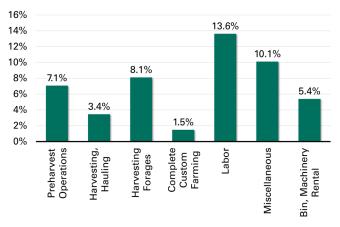
For each type of work, the average rate from the survey, the median, and the range are shown. The average is calculated as the simple average of all responses. The median is the middle number among the ordered responses (from smallest to largest). The reported range excludes the minimum and the maximum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

IOWA STATE UNIVERSITY Extension and Outreach

FM 1698 Revised March 2022

| Planting, Drilling, and Seeding | Average Charge | Median Charge | Range | Number of Responses |
|---|-------------------|------------------|-------------------|------------------------|
| Planting | | | | |
| - with fertilizer and insecticide attachments, / acre | | \$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 |
| | Average | Median | | Number of |
| Spraying (materials not included) | Charge | Charge | Range | 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 |
| | Average | Median | | Number of |
| Fertilizer Application (materials not included) | Charge | Charge | Range | 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 |
| | Average | Median | | Number of |
| Harvesting, Drying, and Hauling Grain | Charge | Charge | Range | 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 fa | | | 20.00 - 00.00 | 0 |
| - Corn, / acre | 55.60 | 55.00 | 33.00 - 90.00 | 45 |
| - Soybean, / acre | 52.20 | 50.00 | 31.00 - 88.00 | 45 |
| Added charge for GPS mapping, / acre | 2.70 | 2.75 | 0.50 - 5.00 | 33 |
| Auteu charge for or o mapping, / acte | 2.70 | 2.75 | 0.00 - 0.00 | 53 |

| 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 | | | |
|---|-------------------|------------------|--------------------|------------------------|--|
| 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 | |
| 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 |

| Bin Kental | Charge | Charge | Kange | Kesponses |
|---|---------|---------|-----------------|-----------|
| Storing grain, bin rental, / bushel / month | \$0.030 | \$0.030 | \$0.015 - \$0.0 | 40 18 |
| Storing grain, bin rental, / bushel / year | 0.155 | 0.150 | 0.100 - 0.2 | 50 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: ndem 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 | | |
| 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) Rental value, for tractor and implement (1 x 2) | x | % /acre | x | 60% \$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 | = \$ | 57.02/acre | | |

^{1/} Typical values for acres covered per hour can be found in AgDM File A3-24 <u>Estimating the Field Capacity of Farm Machines</u>, www.extension.iastate.edu/agdm/crops/pdf/a3-24.pdf.

More on estimating machinery costs and machinery management can be found on the <u>Ag Decision Maker website</u>, 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: <u>www.extension.iastate.edu/agdm</u> <u>store.extension.iastate.edu</u>