

# 2016 Iowa Farm Custom Rate Survey

Many Iowa farmers hire custom machine work in their farm business, or perform custom work for others. Some farmers rent machinery or perform other services. The information below is based on a survey of 182 Iowa farmers, custom operators, and farm managers. Eighteen percent of the respondents perform custom work, 14 percent hire work done, 43 percent indicated doing both, 3 percent indicated doing none, and 22 percent did not indicate whether they perform or hire custom work.

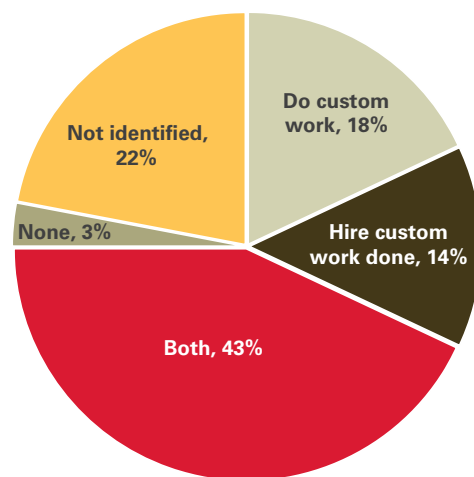
For each operation, the average rate from the survey, the median, the range, and the responses are shown. The average is calculated as the simple average of all responses. The median is the response that splits all the ordered responses (from smallest to largest) in half. The reported range consists of the second-lowest value and the second-highest value in the sample.

The values in the table below are rates expected to be charged or paid, including fuel and labor. The average price for diesel fuel was assumed to be \$2.00 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 on other items.

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

**Total Number of Responses = 182**



| Tillage                               | Average Charge | Median Charge | Range            | Number of Responses |
|---------------------------------------|----------------|---------------|------------------|---------------------|
| Chopping cornstalks, / acre           | \$11.85        | \$11.90       | \$7.00 - \$19.00 | 53                  |
| Moldboard plowing, / acre             | 18.80          | 19.00         | 12.00 - 25.00    | 27                  |
| Chisel plowing, / acre                | 16.45          | 16.00         | 12.00 - 22.75    | 44                  |
| Disk/chiseling, / acre                | 17.80          | 16.75         | 10.00 - 25.00    | 54                  |
| Vertical tillage, / acre              | 16.05          | 16.70         | 8.00 - 21.00     | 58                  |
| Subsoiling (8 to 15 in. deep), / acre | 20.35          | 20.00         | 15.00 - 27.50    | 44                  |
| V-ripping (over 15 in. deep), / acre  | 20.15          | 20.00         | 12.00 - 30.00    | 36                  |
| V-ripping with tandem disk, / acre    | 23.15          | 23.25         | 14.00 - 35.00    | 62                  |
| Disking, tandem, / acre               | 14.25          | 14.80         | 8.00 - 20.35     | 76                  |
| Disking, heavy or offset, / acre      | 18.45          | 18.00         | 13.00 - 25.50    | 31                  |
| Harrowing or dragging, / acre         | 8.95           | 9.00          | 5.00 - 13.00     | 23                  |
| Soil finishing, / acre                | 14.00          | 14.00         | 10.00 - 18.00    | 59                  |
| Field cultivating, / acre             | 14.05          | 14.10         | 8.00 - 21.00     | 87                  |
| Rock picking, / acre                  | 14.90          | 15.00         | 10.00 - 20.00    | 20                  |
| Cultivating, conventional, / acre     | 13.50          | 14.50         | 8.00 - 20.00     | 31                  |
| Cultivating, ridge-till, / acre       | 16.45          | 16.40         | 11.50 - 22.75    | 14                  |
| Rotary hoeing, / acre                 | 10.65          | 11.00         | 5.00 - 15.00     | 37                  |
| Land rolling, / acre                  | 7.45           | 7.00          | 5.00 - 12.00     | 54                  |

| Planting, Drilling, and Seeding                     | Average Charge | Median Charge | Range             | Number of Responses |
|---|----------------|---------------|-------------------|---------------------|
| <b>Planting</b>                                     |                |               |                   |                     |
| - with fertilizer & insecticide attachments, / acre | \$19.90        | \$20.00       | \$12.00 - \$30.00 | 75                  |
| - without attachments, / acre                       | 18.55          | 18.00         | 12.00 - 28.00     | 78                  |
| - with splitters & attachments, / acre              | 20.70          | 21.00         | 12.00 - 32.00     | 46                  |
| - no-till planter, / acre                           | 20.15          | 20.00         | 12.00 - 33.50     | 78                  |
| - no-till planter with splitters, / acre            | 20.85          | 21.00         | 15.00 - 30.00     | 49                  |
| - ridge till planter, / acre                        | 22.40          | 22.00         | 17.00 - 29.00     | 14                  |
| Extra charge for seed shut-offs, / acre             | 2.30           | 2.50          | 0.00 - 5.00       | 64                  |
| Extra charge for variable rate seeding, / acre      | 2.70           | 3.00          | 0.00 - 5.00       | 51                  |
| Seed tender, / acre                                 | 3.15           | 3.50          | 0.00 - 6.00       | 46                  |
| Drilling soybeans, / acre                           | 16.40          | 15.50         | 12.00 - 23.00     | 35                  |
| Drilling soybeans, no-till, / acre                  | 18.40          | 18.25         | 13.00 - 28.00     | 54                  |
| Drilling grass seed, / acre                         | 16.40          | 16.00         | 10.00 - 25.00     | 43                  |
| Drilling small grain, / acre                        | 16.10          | 16.00         | 10.00 - 22.00     | 31                  |
| Seeding grass, broadcast with tractor, / acre       | 12.25          | 12.00         | 8.00 - 15.00      | 20                  |
| Seeding grass, broadcast with ATV, / acre           | 14.70          | 14.90         | 8.00 - 20.00      | 18                  |

### Spraying (materials not included)

|   |        |        |                  |     |
|---|--------|--------|------------------|-----|
| Ground, broadcast, tractor, / acre        | \$6.80 | \$6.50 | \$5.00 - \$10.10 | 60  |
| Ground, incorporated, tractor, / acre     | 11.80  | 11.15  | 6.50 - 20.00     | 21  |
| Ground, broadcast, self propelled, / acre | 7.35   | 7.00   | 5.00 - 15.00     | 111 |
| Ground, banded, tractor, / acre           | 10.95  | 11.00  | 8.00 - 13.65     | 12  |
| Ground, road ditches, / hour              | 63.70  | 65.00  | 20.00 - 90.00    | 38  |
| Aerial, / acre                            | 10.60  | 10.00  | 7.00 - 15.00     | 40  |

### Fertilizer Application (materials not included)

|  |        |        |                 |    |
|--|--------|--------|-----------------|----|
| Dry bulk - applied, / acre                   | \$4.90 | \$5.00 | \$2.00 - \$8.00 | 57 |
| - strip-till, / acre                         | 17.15  | 17.00  | 7.00 - 25.00    | 21 |
| Liquid - spraying, / acre                    | 6.65   | 6.50   | 4.00 - 11.00    | 35 |
| - strip-till, knifed, / acre                 | 15.10  | 15.00  | 12.00 - 21.00   | 13 |
| - side dressing, / acre                      | 11.15  | 12.00  | 6.00 - 15.00    | 33 |
| Anhydrous - injecting, with tool bar, / acre | 12.25  | 12.00  | 7.00 - 20.00    | 82 |
| - injecting, without tool bar, / acre        | 11.10  | 11.00  | 7.00 - 18.00    | 48 |
| Spreading lime, / ton                        | 6.35   | 6.50   | 3.00 - 11.30    | 31 |

| Harvesting, Drying, and Hauling Grain                           | Average Charge | Median Charge | Range             | Number of Responses |
|---|----------------|---------------|-------------------|---------------------|
| Corn combining, / acre  | \$34.75        | \$35.00       | \$23.00 - \$55.00 | 121                 |
| - with chopper head, / acre                                     | 40.10          | 39.50         | 26.00 - 57.00     | 64                  |
| Soybean combining, / acre                                       | 34.05          | 34.00         | 25.00 - 52.00     | 108                 |
| - with air reel, / acre   | 35.55          | 34.50         | 28.00 - 50.00     | 28                  |
| - with draper head, / acre                                      | 38.10          | 38.35         | 29.00 - 50.00     | 63                  |
| Small grain combining, / acre                                   | 31.55          | 30.00         | 25.00 - 40.00     | 18                  |
| Complete harvesting (combine, grain cart, haul to farm storage) |                |               |                   |                     |
| - Corn, / acre  | 49.70          | 50.00         | 30.00 - 85.00     | 62                  |
| - Soybeans, / acre  | 46.40          | 47.00         | 30.00 - 70.00     | 60                  |
| Added charge for GPS mapping, / acre                            | 2.45           | 2.50          | 0.00 - 5.00       | 49                  |
| Picking ear corn (seed corn), / acre                            | 36.85          | 37.00         | 34.00 - 39.00     | 7                   |
| Picking ear corn (farm use), / acre                             | 29.95          | 29.50         | 25.00 - 35.00     | 12                  |
| Drying corn (includes fuel, electricity, labor)                 |                |               |                   |                     |
| - continuous flow dryer, / point per bushel                     | 0.047          | 0.050         | 0.018 - 0.070     | 23                  |
| - bin dryer, / point per bushel                                 | 0.054          | 0.054         | 0.040 - 0.070     | 10                  |
| Handling grain by auger, / bushel                               | 0.061          | 0.060         | 0.010 - 0.100     | 56                  |

| Harvesting, Drying, and Hauling Grain (cont.)   | Average Charge | Median Charge | Range              | Number of Responses |
|---|----------------|---------------|--------------------|---------------------|
| <b>Hauling grain</b>  |                |               |                    |                     |
| - grain cart, corn, / acre  | \$6.45         | \$6.25        | \$2.00 - \$11.00   | 69                  |
| - grain cart, soybeans, / acre  | 5.70           | 6.00          | 2.00 - 10.00       | 68                  |
| - to farm storage, wagon, / bushel  | 0.071          | 0.070         | 0.020 - 0.140      | 40                  |
| - farm storage to market, wagon, / bushel   | 0.087          | 0.080         | 0.050 - 0.150      | 33                  |
| - to market, truck, (5 miles, 1-way trip), / bu.  | 0.099          | 0.100         | 0.050 - 0.180      | 71                  |
| - to market, truck, (25 miles, 1-way trip), / bu.   | 0.163          | 0.150         | 0.100 - 0.300      | 63                  |
| - to market, truck, (100 miles, 1-way trip), / bu.  | 0.325          | 0.327         | 0.120 - 0.510      | 30                  |
| <b>Harvesting Forages</b>   |                |               |                    |                     |
| Hay - mowing, / acre  | \$12.30        | \$12.00       | \$6.00 - \$18.00   | 32                  |
| - conditioning, / acre  | 11.70          | 11.00         | 10.00 - 14.00      | 15                  |
| - mowing/conditioning, / acre   | 14.00          | 14.00         | 8.00 - 21.00       | 36                  |
| - raking, / acre  | 6.55           | 6.65          | 3.00 - 10.00       | 38                  |
| - windrowing, / acre  | 14.20          | 14.05         | 11.00 - 17.00      | 14                  |
| - tedding, / acre   | 7.20           | 7.00          | 5.00 - 10.00       | 19                  |
| Swathing hay or small grain, / acre   | 13.20          | 13.50         | 12.00 - 13.75      | 7                   |
| Hay baling - small square bales, / bale   | 0.66           | 0.70          | 0.35 - 1.00        | 28                  |
| - large square bales, / bale  | 9.75           | 10.00         | 8.00 - 12.00       | 17                  |
| - large round bales without wrap, / bale  | 10.70          | 10.50         | 8.00 - 14.00       | 21                  |
| - large round bales with wrap, / bale   | 12.35          | 12.50         | 9.00 - 16.00       | 51                  |
| <b>Straw or corn stalk baling</b>   |                |               |                    |                     |
| - large round or square bales w/o wrap, / bale  | 12.05          | 12.00         | 10.00 - 14.00      | 17                  |
| - large round or square bales with wrap, / bale   | 13.70          | 13.50         | 11.00 - 16.00      | 38                  |
| Picking up with accumulator, / large square bale  | 3.30           | 3.00          | 3.00 - 4.00        | 7                   |
| Moving large round bales to storage, / bale   | 2.85           | 2.90          | 1.75 - 4.00        | 14                  |
| Moving large square bales to storage, / bale  | 3.05           | 3.00          | 2.50 - 3.15        | 9                   |
| Hauling rd bales by truck or trailer, / bale, / loaded mile   | 0.09           | 0.03          | 0.01 - 0.19        | 10                  |
| <b>Silage - chopping, / hour, / head row</b>  |                |               |                    |                     |
| - chopping, / ton   | 44.60          | 28.75         | 13.33 - 100.00     | 8                   |
| - chopping, haul, fill silo, / hour, / head row   | 7.10           | 7.00          | 5.00 - 10.00       | 10                  |
| - chopping, haul, fill silo, / ton  | 67.15          | 30.00         | 16.67 - 133.33     | 5                   |
| - chopping, haul, fill silo, / ton  | 8.45           | 8.50          | 7.50 - 9.25        | 9                   |
| Filling silage bags, / foot of bag  | 11.00          | 11.00         | 9.00 - 13.00       | 7                   |
| Haylage - chopping, / ton   | 9.10           | 9.00          | 7.50 - 11.25       | 9                   |
| Earlage or snaplage - chopping, / acre  | 54.50          | 55.00         | 42.00 - 65.00      | 11                  |
| <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  | \$129.95       | \$130.00      | \$70.00 - \$190.50 | 59                  |
| Soybeans, / acre  | 116.15         | 115.00        | 60.00 - 170.00     | 57                  |
| Small grain, / acre   | 93.55          | 92.50         | 80.00 - 110.00     | 12                  |
| <b>Farm Labor Wages for Operating Machinery</b>   |                |               |                    |                     |
|   | Average Charge | Median Charge | Range              | Number of Responses |
| Spraying or harvesting, / hour  | \$16.60        | \$16.00       | \$11.00 - \$25.00  | 81                  |
| Other operations, / hour  | 15.05          | 15.00         | 10.00 - 20.00      | 85                  |

| Miscellaneous Services<br>(labor, fuel, and equipment included) | Average<br>Charge         | Median<br>Charge         | Range              | Number of<br>Responses         |
|---|---------------------------|--------------------------|--------------------|--------------------------------|
| Removing snow (loader), / hour                                  | \$78.10                   | \$75.00                  | \$35.00 - \$110.00 | 43                             |
| Removing snow (blade), / hour / foot of blade                   | 5.35                      | 5.85                     | 0.88 - 9.38        | 14                             |
| Removing snow (blower), / hour / foot of blower                 | 10.30                     | 12.50                    | 1.38 - 17.00       | 21                             |
| Grinding, mixing feed, / ton                                    | 10.60                     | 10.50                    | 9.75 - 11.50       | 8                              |
| Tub grinding hay, / hour  | 208.85                    | 200.00                   | 180.00 - 250.00    | 11                             |
| Spreading liquid manure, injected, / 1000 gal.                  | 13.30                     | 13.50                    | 10.00 - 17.00      | 22                             |
| Applying liquid manure w/ drag line, / 1000 gal.                | 12.65                     | 11.65                    | 9.50 - 17.00       | 14                             |
| Loading solid manure, / hour                                    | 77.60                     | 75.00                    | 60.00 - 110.00     | 13                             |
| Loading, spreading solid manure, / hour                         | 120.25                    | 120.00                   | 100.00 - 150.00    | 13                             |
| Power washing, / hour   | 43.25                     | 42.00                    | 35.00 - 50.00      | 19                             |
| Building fence, barbed (no materials), / hour                   | 15.60                     | 15.00                    | 14.80 - 18.00      | 7                              |
| Building fence, barbed (no materials), / rod                    | 15.00                     | 14.50                    | 11.00 - 18.00      | 10                             |
| Building fence, woven (no materials), / hour                    | 17.45                     | 16.50                    | 15.00 - 20.00      | 7                              |
| Building fence, woven (no materials), / rod                     | 15.35                     | 14.75                    | 11.00 - 20.00      | 8                              |
| Scouting crops, / acre  | 4.25                      | 4.00                     | 2.00 - 7.45        | 26                             |
| Scouting crops with drone, / acre                               | 2.60                      | 2.25                     | 1.00 - 4.00        | 6                              |
| Soil testing, / sample  | 5.60                      | 6.00                     | 2.50 - 7.00        | 12                             |
| GPS grid soil testing, / acre                                   | 7.20                      | 7.00                     | 4.00 - 10.00       | 22                             |
| Managing stored grain, / bushel                                 | 0.06                      | 0.05                     | 0.01 - 0.10        | 19                             |
| Vacuuming grain, / bushel                                       | 0.09                      | 0.08                     | 0.02 - 0.15        | 33                             |
| Shearing sheep, / head  | 3.70                      | 3.50                     | 3.00 - 4.00        | 9                              |
| Livestock hauling with trailer, / loaded mile                   | 2.90                      | 2.95                     | 2.00 - 4.00        | 13                             |
| Livestock hauling w/ straight truck, / loaded mile              | 3.35                      | 3.45                     | 2.75 - 4.00        | 8                              |
| Livestock hauling with semi truck, / loaded mile                | 3.75                      | 3.80                     | 3.50 - 4.00        | 12                             |
| Bulldozing, / hour, / foot of blade                             | 12.45                     | 12.15                    | 7.08 - 18.00       | 20                             |
| Digging post holes, / hole                                      | 3.70                      | 3.55                     | 3.00 - 5.00        | 10                             |
| Driving steel fence posts, / post                               | 2.60                      | 2.50                     | 2.00 - 4.00        | 11                             |
| Driving wooden fence posts, / post                              | 3.85                      | 4.00                     | 3.00 - 5.00        | 11                             |
| Building terraces, grassed back, / foot                         | 3.15                      | 3.15                     | 2.75 - 3.50        | 12                             |
| Building terraces, narrow base, / foot                          | 2.55                      | 2.50                     | 2.00 - 3.00        | 9                              |
| Trenching, / foot   | 1.40                      | 1.45                     | 0.75 - 2.00        | 16                             |
| Tiling, tiling machine (excluding materials), / foot            | 1.10                      | 1.15                     | 0.50 - 2.00        | 22                             |
| Tiling, tile plow (excluding materials), / foot                 | 0.72                      | 0.75                     | 0.30 - 1.05        | 24                             |
| Back hoeing, / hour   | 94.45                     | 95.40                    | 50.00 - 150.00     | 32                             |
| Clearing land, / hour   | 133.70                    | 138.65                   | 95.00 - 175.00     | 16                             |
| Building ponds, / hour  | 147.05                    | 145.00                   | 133.10 - 175.00    | 14                             |
| Chain sawing, / hour  | 57.85                     | 60.00                    | 25.00 - 75.00      | 19                             |
| Welding machinery, / hour                                       | 52.15                     | 50.00                    | 30.00 - 75.00      | 26                             |
| Mowing CRP or pasture, / acre                                   | 17.45                     | 16.00                    | 12.00 - 25.00      | 42                             |
| Mowing fence rows, ditches, / hour                              | 68.75                     | 70.00                    | 25.00 - 100.00     | 42                             |
| Mowing lawns, / hour  | 38.55                     | 40.00                    | 18.00 - 60.00      | 31                             |
| Chopping brush, / acre  | 33.95                     | 31.00                    | 25.00 - 50.00      | 16                             |
| Using truck scale, / load weighed                               | 5.60                      | 4.75                     | 2.00 - 10.00       | 14                             |
| <b>Bin Rental</b>   | <b>Average<br/>Charge</b> | <b>Median<br/>Charge</b> | <b>Range</b>       | <b>Number of<br/>Responses</b> |
| Bin dryer, / bushel dried, (no fuel or labor)                   | \$0.074                   | \$0.069                  | \$0.040 - \$0.150  | 12                             |
| Storing grain, bin rental, / bushel / month                     | 0.024                     | 0.020                    | 0.015 - 0.040      | 20                             |
| Storing grain, bin rental, / bushel / year                      | 0.159                     | 0.150                    | 0.090 - 0.300      | 36                             |

| Machine Rental<br>(operator, tractor, and fuel not included) | Average Charge | Median Charge | Range           | Number of Responses |
|--|----------------|---------------|-----------------|---------------------|
| Tractor, / horsepower, / hour                                | \$0.22         | \$0.20        | \$0.10 - \$0.33 | 22                  |
| Grain drill, / acre  | 10.50          | 10.00         | 8.00 - 15.00    | 12                  |
| No-till soybean drill, / acre                                | 12.30          | 12.00         | 9.00 - 18.00    | 13                  |
| Corn head for combine, / acre                                | 9.85           | 9.05          | 5.00 - 15.00    | 17                  |
| Soybean head for combine, / acre                             | 9.40           | 10.00         | 6.00 - 13.25    | 16                  |
| Grain cart with auger, corn, / acre                          | 6.70           | 6.50          | 4.50 - 10.00    | 15                  |
| Grain cart with auger, soybeans, / acre                      | 6.00           | 5.60          | 4.00 - 8.20     | 14                  |
| Grain wagon, / bushel  | 0.08           | 0.08          | 0.04 - 0.12     | 11                  |
| Grain truck (semi), / bushel, / round trip                   | 0.12           | 0.11          | 0.07 - 0.19     | 13                  |
| Grain auger, / bushel  | 0.06           | 0.06          | 0.05 - 0.08     | 10                  |
| Grain vacuum, / bushel                                       | 0.08           | 0.08          | 0.02 - 0.12     | 19                  |
| Grain cleaner, / bushel                                      | 0.08           | 0.08          | 0.07 - 0.08     | 7                   |
| Liquid manure spreader, / hour                               | 38.65          | 40.00         | 30.00 - 45.00   | 7                   |
| Solid manure spreader, / hour                                | 45.35          | 42.90         | 35.00 - 50.00   | 8                   |
| Skid loader, / hour  | 57.70          | 55.05         | 20.00 - 85.00   | 20                  |
| Dry bulk fertilizer applicator, / acre                       | 3.70           | 3.75          | 2.00 - 5.00     | 14                  |
| Liquid fertilizer applicator, / acre                         | 4.95           | 5.20          | 3.50 - 6.00     | 8                   |
| Anhydrous fertilizer applicator, / acre                      | 4.80           | 5.00          | 2.00 - 8.00     | 19                  |
| Power washer, / hour   | 41.65          | 42.55         | 30.00 - 50.00   | 10                  |
| Generator, / hour  | 44.35          | 45.25         | 38.75 - 50.00   | 9                   |
| Tub grinder, / hour  | 199.20         | 200.00        | 150.00 - 220.00 | 9                   |

### 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     | \$14.25       |
| 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   | = \$8.55      |
| 4. Tractor rental value, if tractor is not provided: _____ HP x \$ _____ per hp-hour rental rate (see above) / _____ acres/hour <sup>1/</sup> =                          | = - \$ _____/acre | = - \$2.18    |
| Ex: 150 HP x \$ .22 (per hp-hour rental rate) / 15 acres/hour = \$2.18   |                   |               |
| 5. Implement rental value, without tractor (3 minus 4)   | = \$ _____/acre   | = \$6.37/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](#)

### ... and justice for all

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Prepared by

Alejandro Plastina, extension economist  
plastina@iastate.edu  
Ann Johans, extension program specialist  
Joni Erwin, student assistant

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