

# 2017 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 334 people by U.S. Postal Service and 107 people via e-mail in early January 2017. A follow up reminder was sent via U.S. Postal Service and e-mail on January 24. The information below is based on a survey of 152 usable responses from Iowa farmers, custom operators, and farm managers. Twenty-one percent of the respondents perform custom work, 13 percent hire work done, 41 percent indicated doing both, 1 percent indicated doing none, and 25 percent did not indicate whether they perform or hire custom work.

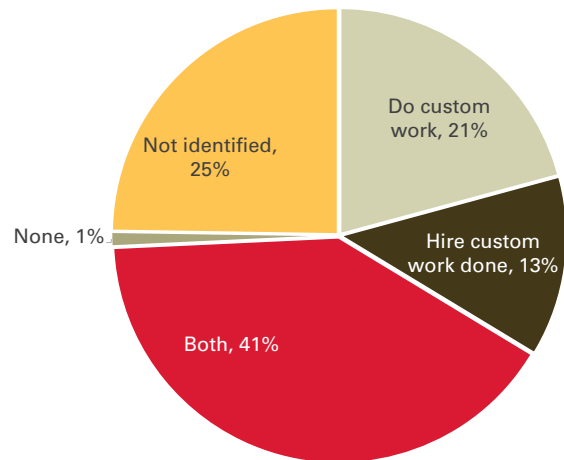
For each operation, the average rate from the survey, the median, and the range are shown. The average is calculated as the simple average of all responses. The median is the middle number among the ordered responses (from smallest to largest). The reported range excludes the minimum and the maximum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

The reported rates are expected to be charged or paid in 2017, including fuel and labor. **The average price for diesel fuel was assumed to be \$2.15 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.**

2017 responses by type (152 total responses)



Tillage	Average Charge	Median Charge	Range	Number of Responses
Chopping cornstalks, / acre	\$11.90	\$12.00	\$5.00 - \$18.00	45
Moldboard plowing, / acre	19.65	20.00	11.00 - 25.00	20
Chisel plowing, / acre	17.45	18.00	12.00 - 23.00	31
Disk/chiseling, / acre	19.15	18.00	13.00 - 25.00	47
Vertical tillage, / acre	17.30	17.00	11.00 - 26.00	47
Subsoiling (8 to 15 in. deep), / acre	21.75	22.00	15.00 - 27.00	33
V-ripping (over 15 in. deep), / acre	22.60	24.00	16.00 - 30.00	23
V-ripping with tandem disk, / acre	23.95	24.00	16.25 - 35.00	43
Disking, tandem, / acre	15.05	15.00	9.50 - 22.00	63
Disking, heavy or offset, / acre	20.40	21.00	13.00 - 27.00	19
Harrowing or dragging, / acre	10.65	10.25	6.00 - 17.00	23
Soil finishing, / acre	14.80	15.00	10.00 - 21.00	53
Field cultivating, / acre	15.15	15.00	9.50 - 24.00	70
Rock picking, / acre	16.95	17.25	11.00 - 20.00	13
Cultivating, conventional, / acre	15.00	15.00	10.00 - 20.00	19
Cultivating, ridge-till, / acre	18.65	20.00	12.00 - 23.00	10
Rotary hoeing, / acre	11.00	11.50	5.00 - 16.00	29
Land rolling, / acre	7.70	7.25	5.00 - 13.00	38

Planting, Drilling, and Seeding	Average Charge	Median Charge	Range	Number of Responses
<b>Planting</b>				
- with fertilizer & insecticide attachments, / acre	\$20.50	\$20.00	\$13.50 - \$30.00	59
- without attachments, / acre	19.40	19.00	13.00 - 28.00	61
- with splitters & attachments, / acre	20.85	20.15	14.00 - 32.00	46
- no-till planter, / acre	21.00	20.00	13.00 - 36.00	70
- no-till planter with splitters, / acre	21.35	20.85	15.00 - 30.00	43
- ridge till planter, / acre	25.25	25.00	18.00 - 30.00	11
Extra charge for seed shut-offs, / acre	2.35	2.50	0.50 - 5.00	47
Extra charge for variable rate seeding, / acre	2.45	2.50	0.50 - 5.00	37
Extra charge for GPS use, / acre	2.40	2.00	0.50 - 6.00	25
Seed tender, / acre	3.75	3.50	1.00 - 6.00	27
Drilling soybeans, / acre	18.50	18.00	12.00 - 26.00	28
Drilling soybeans, no-till, / acre	19.10	18.20	12.00 - 30.00	46
Drilling grass seed, / acre	17.90	16.40	14.00 - 25.00	27
Drilling small grain, / acre	17.45	16.00	13.00 - 23.00	25
Seeding grass, broadcast with tractor, / acre	13.40	13.50	10.00 - 15.30	15
Seeding grass, broadcast with ATV, / acre	16.50	16.50	10.00 - 21.00	16
<b>Spraying (materials not included)</b>				
Ground, broadcast, tractor, / acre	\$7.00	\$6.95	\$5.00 - \$12.00	52
Ground, incorporated, tractor, / acre	11.55	11.25	6.00 - 20.00	14
Ground, broadcast, self propelled, / acre	7.65	7.00	4.50 - 16.25	92
Ground, banded, tractor, / acre	11.20	13.00	7.00 - 13.70	8
Ground, road ditches, / hour	66.85	65.00	40.00 - 90.00	33
Aerial, / acre	11.00	10.60	8.00 - 17.00	25
<b>Fertilizer Application (materials not included)</b>				
Dry bulk - applied, / acre	\$5.40	\$5.00	\$2.00 - \$9.50	53
- strip-till, / acre	17.05	18.00	7.00 - 24.00	19
Liquid - spraying, / acre	7.25	6.50	3.75 - 12.00	27
- strip-till, knifed, / acre	15.90	15.00	10.00 - 22.00	13
- side dressing, / acre	11.50	11.25	6.00 - 18.00	30
Anhydrous - injecting, with tool bar, / acre	12.80	12.00	7.00 - 20.00	59
- injecting, without tool bar, / acre	12.05	12.00	6.50 - 21.00	43
Spreading lime, / ton	6.50	6.70	1.00 - 16.00	14
<b>Harvesting, Drying, and Hauling Grain</b>				
Corn combining, / acre	\$35.05	\$35.00	\$20.00 - \$60.00	105
- with chopper head, / acre	41.35	40.00	29.00 - 63.00	44
Soybean combining, / acre	34.70	34.00	25.00 - 55.00	89
- with air reel, / acre	37.55	36.00	30.00 - 55.00	23
- with draper head, / acre	40.60	39.50	30.00 - 63.00	51
Small grain combining, / acre	34.05	33.50	25.00 - 40.00	10
Complete harvesting (combine, grain cart, haul to farm storage)				
- Corn, / acre	53.70	50.00	32.00 - 90.00	51
- Soybeans, / acre	50.55	50.00	32.00 - 85.00	46
Added charge for GPS mapping, / acre	2.80	2.75	1.00 - 5.00	36
Picking ear corn (seed corn), / acre	38.60	38.00	35.00 - 46.00	5
Picking ear corn (farm use), / acre	32.05	30.00	25.00 - 37.45	11
Drying corn (includes fuel, electricity, labor)				
- continuous flow dryer, / point per bushel	0.049	0.050	0.024 - 0.070	13
- bin dryer, / point per bushel	0.059	0.050	0.030 - 0.080	9
Handling grain by auger, / bushel	0.067	0.050	0.020 - 0.150	41

Harvesting, Drying, and Hauling Grain (cont.)	Average Charge	Median Charge	Range	Number of Responses
Hauling grain				
- grain cart, corn, / acre	\$6.70	\$6.00	\$2.00 - \$15.00	63
- grain cart, soybeans, / acre	5.80	5.75	2.00 - 12.00	59
- to farm storage, wagon, / bushel	0.078	0.100	0.040 - 0.150	28
- farm storage to market, wagon, / bushel	0.091	0.100	0.040 - 0.150	29
- to market, truck, (5 miles, 1-way trip), / bu.	0.101	0.100	0.050 - 0.180	59
- to market, truck, (25 miles, 1-way trip), / bu.	0.170	0.150	0.100 - 0.380	58
- to market, truck, (100 miles, 1-way trip), / bu.	0.354	0.350	0.200 - 0.520	24

### Harvesting Forages

Hay - mowing, / acre	\$14.00	\$14.00	\$11.00 - \$19.50	21
- conditioning, / acre	11.70	11.00	10.00 - 15.00	7
- mowing/conditioning, / acre	14.15	14.50	12.00 - 18.00	30
- raking, / acre	7.25	7.00	4.00 - 11.00	29
- windrowing, / acre	15.45	15.75	10.00 - 20.00	10
- tedding, / acre	8.25	8.50	5.00 - 10.00	12
Swathing hay or small grain, / acre	14.50	15.00	12.00 - 16.00	8
Hay baling - small square bales, / bale	0.69	0.65	0.40 - 1.00	17
- large square bales, / bale	11.15	10.00	8.00 - 17.00	13
- large round bales without wrap, / bale	11.80	12.00	9.00 - 15.00	17
- large round bales with wrap, / bale	12.90	13.00	9.00 - 16.00	43
Straw or corn stalk baling				
- large round or square bales w/o wrap, / bale	12.25	12.00	10.00 - 15.00	8
- large round or square bales with wrap, / bale	13.80	13.00	11.00 - 20.00	29
Picking up with accumulator, / large square bale	3.35	3.60	1.00 - 5.00	7
Moving large round bales to storage, / bale	3.30	3.00	2.00 - 5.00	5
Moving large square bales to storage, / bale	3.00	3.00	2.00 - 4.00	5
Silage - chopping, / ton	7.35	7.75	4.50 - 10.00	8
- chopping, haul, fill silo, / ton	9.65	9.40	6.00 - 15.00	6
Filling silage bags, / foot of bag	11.90	12.50	9.00 - 15.00	7
Haylage - chopping, / ton	9.25	8.00	6.50 - 12.00	9
Earlage or snaplage - chopping, / acre	60.85	65.00	50.00 - 70.00	7

### Custom Farming (tillage, planting, pest control, harvesting, and hauling to farm, no drying)

	Average Charge	Median Charge	Range	Number of Responses
Corn, / acre	\$131.50	\$127.50	\$60.00 - \$220.00	54
Soybeans, / acre	117.25	119.00	55.00 - 205.00	54
Small grain, / acre	101.95	105.00	75.00 - 120.00	10

Farm Labor Wages for Operating Machinery	Average Charge	Median Charge	Range	Number of Responses
Spraying or harvesting, / hour	\$17.15	\$16.00	\$10.00 - \$30.00	62
Other operations, / hour	15.25	15.00	10.00 - 25.00	72

Miscellaneous Services (labor, fuel, and equipment included)	Average Charge	Median Charge	Range	Number of Responses
Removing snow (loader), / hour	\$83.40	\$80.00	\$40.00 - \$110.00	29
Removing snow (blower), / hour / foot of blower	13.25	13.25	6.25 - 18.75	14
Grinding, mixing feed, / ton	11.45	12.00	10.00 - 13.25	5
Tub grinding hay, / hour	232.00	250.00	150.00 - 300.00	7
Spreading liquid manure, injected, / 1000 gal.	14.75	15.00	10.00 - 20.00	19
Applying liquid manure w/ drag line, / 1000 gal.	13.30	13.00	9.00 - 20.00	9
Loading solid manure, / hour	78.90	75.00	50.00 - 110.00	9
Loading, spreading solid manure, / hour	121.10	125.00	75.00 - 150.00	9
Power washing, / hour	46.20	46.00	40.00 - 60.00	10
Building fence, barbed (no materials), / hour	19.00	19.50	15.00 - 21.00	5
Building fence, barbed (no materials), / rod	15.25	17.00	10.00 - 18.75	6
Building fence, woven (no materials), / hour	20.95	21.00	20.00 - 21.85	5
Building fence, woven (no materials), / rod	16.40	19.25	10.00 - 20.00	6
Scouting crops, / acre	5.70	6.00	3.00 - 8.00	12
Scouting crops with drone, / acre	3.15	3.15	0.50 - 7.00	6
Soil testing, / sample	6.95	7.00	2.50 - 12.00	10
GPS grid soil testing, / acre	7.80	8.50	2.95 - 12.00	16
Managing stored grain, / bushel	0.06	0.05	0.01 - 0.10	14
Vacuuming grain, / bushel	0.10	0.10	0.04 - 0.20	26
Livestock hauling with trailer, / loaded mile	3.00	3.00	1.50 - 5.00	13
Livestock hauling with semi truck, / loaded mile	3.90	4.00	3.50 - 4.50	6
Bulldozing, / hour, / foot of blade	14.65	15.00	10.00 - 17.50	10
Digging post holes, / hole	4.05	4.00	3.00 - 4.80	5
Driving steel fence posts, / post	2.65	2.50	1.75 - 4.00	6
Driving wooden fence posts, / post	3.95	4.00	2.25 - 5.00	5
Trenching, / foot	1.45	1.40	1.00 - 2.50	11
Tiling, tiling machine (excluding materials), / foot	1.05	1.00	0.66 - 1.50	15
Tiling, tile plow (excluding materials), / foot	0.79	0.80	0.50 - 1.00	20
Back hoeing, / hour	98.15	90.00	30.00 - 150.00	30
Clearing land, / hour	153.25	150.00	95.00 - 200.00	16
Building ponds, / hour	168.00	157.50	145.00 - 225.00	8
Chain sawing, / hour	63.85	72.30	35.00 - 85.00	11
Welding machinery, / hour	56.50	52.50	40.00 - 90.00	15
Mowing CRP or pasture, / acre	18.35	16.60	10.00 - 32.00	41
Mowing fence rows, ditches, / hour	73.40	70.00	40.00 - 110.00	36
Mowing lawns, / hour	42.55	45.00	20.00 - 65.00	24
Chopping brush, / acre	39.05	41.25	15.00 - 50.00	10
Using truck scale, / load weighed	6.00	5.00	3.00 - 10.00	7

Bin Rental	Average Charge	Median Charge	Range	Number of Responses
Bin dryer, / bushel dried, (no fuel or labor)	\$0.077	\$0.100	\$0.050 - \$0.100	9
Storing grain, bin rental, / bushel / month	0.025	0.000	0.010 - 0.050	22
Storing grain, bin rental, / bushel / year	0.170	0.150	0.100 - 0.360	30

Machine Rental (operator, tractor, and fuel not included)	Average Charge	Median Charge	Range	Number of Responses
Tractor, / horsepower, / hour	\$0.22	\$0.20	\$0.06 - \$0.50	18
Grain drill, / acre	10.85	10.00	6.00 - 20.00	13
No-till soybean drill, / acre	13.35	12.00	6.00 - 25.00	13
Corn head for combine, / acre	9.10	8.00	4.25 - 15.00	15
Soybean head for combine, / acre	9.00	9.00	3.25 - 15.00	11
Grain cart with auger, corn, / acre	6.85	6.50	5.00 - 10.00	7
Grain cart with auger, soybeans, / acre	6.15	5.00	4.00 - 10.00	7
Grain wagon, / bushel	0.09	0.10	0.04 - 0.12	7
Grain truck (semi), / bushel, / round trip	0.13	0.10	0.07 - 0.20	11
Grain auger, / bushel	0.06	0.05	0.02 - 0.10	10
Grain vacuum, / bushel	0.10	0.10	0.04 - 0.16	21
Grain cleaner, / bushel	0.10	0.10	0.08 - 0.12	6
Liquid manure spreader, / hour	41.00	40.00	30.00 - 50.00	5
Solid manure spreader, / hour	46.85	48.00	40.00 - 50.00	6
Skid loader, / hour	67.95	65.00	45.00 - 100.00	15
Dry bulk fertilizer applicator, / acre	5.20	5.00	4.50 - 6.05	6
Liquid fertilizer applicator, / acre	6.50	7.00	3.00 - 8.00	6
Anhydrous fertilizer applicator, / acre	8.00	8.00	3.00 - 12.00	9
Power washer, / hour	37.80	35.00	25.00 - 50.00	9
Generator, / hour	45.00	50.00	24.00 - 55.45	9
Tub grinder, / hour	217.80	249.00	120.00 - 250.00	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   | \$15.05       |
| 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 | = \$9.03      |
| 4. Tractor rental value, if tractor is not provided: _____ HP x \$ _____ per hp-hour rental rate (see above) / _____ acres/hour <sup>1/</sup> =                          | = \$ _____/acre | = \$2.19      |
| Ex: 150 HP x \$.22 (per hp-hour rental rate) / 15 acres/hour = \$2.19  |                 |               |
| 5. Implement rental value, without tractor (3 minus 4)   | = \$ _____/acre | = \$6.84/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](#)

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 **2018 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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