

2016 Custom Rates for Farm Services in Missouri

The rates reported in this guide are based on a statewide survey conducted by mail in the winter of 2017. Farmers, agribusiness firms, aerial applicators and land improvement contractors responded to questions on the rates they were charging or paying in 2016 for custom services, excluding the cost of materials being applied.

There is no assurance that the average rates reported in this guide will cover *your* costs for performing the service or that you will be able to hire a custom operator in your area for the rates shown. *Calculate your own costs carefully before deciding the rate to charge or pay. Before entering into an agreement, discuss with the other party all the details of the specific job to be performed.*

Custom rates cover the cost of machinery, fuel, labor and, occasionally, a product such as lime or bale wrap. The USDA reports that machinery values and labor costs have increased by about 10 percent since our last custom rate survey in 2012. However, diesel prices have decreased by almost 50 percent. Our University of Missouri custom rate survey responses

indicate that Missouri farmers were paying more for almost every activity in 2016, relative to 2012.

Explanation of the rates in this guide

Rates in this guide reflect each respondent's judgment of a "normal" job. Operators may add charges if they consider a job abnormal, such as in distance from the operator's base location, the amount of product or labor involved, the difficulty of the terrain, or special requirements of the customer or location.

The "Number reporting" and "Range in rates" columns are important. Some items had very few responses or a wide range in rates, so the average rate may not accurately reflect rates in your area. Possible explanations of the wide ranges are the type or size of equipment used, the mix of labor and equipment used, or different income needs of full-time custom operators compared to local farmers supplementing their income.

The "Average rate" column indicates the basis of the charge for all of the rates in that row. The "Mid" rate had an equal number of responses higher and lower.

Tillage operations	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Plowing						
Moldboard plow:	Normal soil	\$21.88 / acre	\$10.00	\$19.00	\$45.00	13
	Heavy soil	28.17 / acre	12.00	25.00	60.00	10
Chisel plow:	Normal soil	17.17 / acre	8.00	15.00	40.00	19
	Heavy soil	21.70 / acre	10.00	18.64	60.00	14
Disk chisel		16.30 / acre	12.00	14.00	30.00	11
Plowing or cutting disk (heavy disk)		14.20 / acre	8.00	15.00	25.00	13
V-rip or subsoil		19.86 / acre	12.00	19.00	40.00	20
Other tillage						
Tandem disk (finishing disk)		\$14.15 / acre	\$8.00	\$14.00	\$25.00	27
Vertical tillage tool		14.96 / acre	7.50	14.00	30.00	17
Harrow only		10.33 / acre	3.00	9.40	20.00	15
One-pass field prep (multiple attachments)		17.34 / acre	7.00	15.00	30.00	10
Mulch finisher		15.32 / acre	8.00	15.00	25.00	10
Field cultivator		13.23 / acre	6.00	13.00	25.00	26
Cultipack		12.07 / acre	7.50	12.50	20.00	11

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Planting operations		Average rate	Range in rates			Number reporting
			Low	Mid	High	
Conventional planting						
Corn or grain sorghum:	Plant only	\$15.16 / acre	\$ 8.00	\$15.00	\$25.00	32
	Plant + apply fertilizer/chemicals	18.49 / acre	12.00	19.00	30.00	10
Soybeans:	Plant 15- or 30-inch rows	16.12 / acre	8.00	15.00	25.00	32
	Drill 7- or 9-inch rows	15.68 / acre	8.00	15.00	30.00	18
Small grains	Drill 7- or 9-inch rows	15.80 / acre	8.00	15.00	30.00	20
Grass or clover	Drill 7- or 9-inch rows	16.84 / acre	7.00	15.00	35.00	13
No-till planting						
Corn or grain sorghum:	Plant only	\$16.12 / acre	\$10.00	\$15.00	\$25.00	38
	Plant + fertilize	19.08 / acre	12.00	16.00	30.00	11
Soybeans:	Plant 15- or 30-inch rows	16.36 / acre	9.00	15.00	25.00	43
	Drill 7- or 9-inch rows	17.20 / acre	10.00	16.50	30.00	16
Small grains	Drill 7- or 9-inch rows	16.74 / acre	10.00	15.00	25.00	23
Grass or clover	Drill 7- or 9-inch rows	17.38 / acre	9.00	15.00	35.00	18

Applying fertilizer and chemicals		Average rate	Range in rates			Number reporting
			Low	Mid	High	
Deliver and spread fertilizer (not including cost of fertilizer)						
Dry fertilizer on cropland:	Single spread	\$5.68 / acre	\$3.95	\$5.50	\$10.00	71
	Double spread	7.91 / acre	4.25	7.50	20.00	53
	Variable rate application	8.11 / acre	4.50	8.00	22.00	47
Dry fertilizer on pasture (topdressing)		6.18 / acre	3.75	5.75	30.00	71
Dry fertilizer + seed broadcast		6.99 / acre	4.50	6.00	30.00	59
Spray liquid fertilizer		6.86 / acre	5.00	6.50	12.50	49
Spray liquid fertilizer + other chemicals		6.83 / acre	5.00	6.50	12.00	47
Inject liquid fertilizer (knifed in)		12.46 / acre	9.00	12.00	17.00	16
Anhydrous ammonia		13.33 / acre	8.00	12.00	28.00	48
Apply chemicals (not including cost of chemicals)						
Spray with truck		\$6.56 / acre	\$4.00	\$6.50	\$10.00	35
Spray with flotation sprayer		6.50 / acre	5.00	6.50	10.00	41
Spray with self-propelled row crop sprayer		6.43 / acre	5.00	6.50	9.00	80
Spray with tractor-mounted or pulled sprayer		7.52 / acre	4.00	7.50	12.00	15
Lime						
Deliver and spread:	Including cost of lime	\$20.00 / ton	\$6.00	\$20.00	\$36.00	33
	Not including cost of lime	10.65 / ton	3.00	9.75	29.00	24
Deliver only:	Including cost of lime	15.73 / ton	9.00	14.00	27.00	16
	Not including cost of lime	7.80 / ton	2.00	7.00	19.00	15
Spread only		6.74 / ton	2.67	6.00	14.00	32
		7.43 / acre	5.00	8.00	10.00	7
Aerial application to fields (by airplane)						
Liquid chemicals, spraying:	Flat rate	\$10.37 / acre	\$6.50	\$10.00	\$15.00	13
	Combination rate	9.97 / acre @3.06 gallon/acre		10.00 @3.00 gallon/acre		9
Dry chemicals, crop dusting		11.75 / acre	10.00	11.75	13.50	4
Spread dry fertilizer		0.14 / pound	0.07	0.15	0.20	8
Seed fields		10.71 / acre	9.00	10.00	14.00	7
		0.15 / pound	0.09	0.15	0.20	5

Harvesting and hauling grain, seed and silage

	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Combining						
Corn	\$30.30 / acre	\$22.00	\$30.00	\$42.50	55	
Soybeans	30.00 / acre	22.00	30.00	40.00	61	
Grain sorghum	28.88 / acre	25.00	28.50	35.00	17	
Small grains	29.31 / acre	22.50	30.00	40.00	29	
Clover or alfalfa seed	48% of crop	40%	50%	50%	5	
Fescue or other grass seeds	49% of crop	40%	50%	50%	8	
Hauling grain or seed						
Field to farm storage with farm vehicle/wagon	\$0.13 / bushel	\$0.05	\$0.10	\$0.30	28	
Bin to market with large grain truck over 20 miles	0.24 / bushel	0.10	0.22	0.60	50	
	3.45 / loaded mile	1.90	3.50	4.50	15	
Making corn or grain sorghum silage						
<i>Insufficient responses from Missouri survey to report results.</i>						
	Iowa: silage chopping	\$7.35 / ton	\$4.50	\$7.75	\$10.00	8
	chop, haul, fill silo	9.65 / ton	6.00	9.40	15.00	6
	Kansas: silage base	7.80 / ton				

Processing grain and seed

	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Grain drying						
Charge for each 1% moisture removed	\$0.073 / bushel	\$0.025	\$0.04	\$0.22	18	
with a shrinkage rate of	1.58% of gross wt	1.0%	1.5%	3.0%	18	
Charge for each 1% moisture removed	\$0.06 / bushel	\$0.03	\$0.06	\$0.10	10	
with no shrinkage rate						
Grinding and mixing grains						
at elevator	\$14.53 / ton	\$5.00	\$15.00	\$20.00	19	
at farm	17.67 / ton	14.00	14.00	25.00	3	
Cleaning and bagging						
Soybeans:	Clean	\$1.22 / bushel	\$0.65	\$1.20	\$1.85	6
	Clean and bag	1.92 / bushel	1.15	2.02	2.50	6
Small grains:	Clean	1.12 / bushel	0.65	1.20	1.40	5
	Clean and bag	1.88 / bushel	1.15	2.00	2.50	5
Clover seed	Clean and bag	13.33 / 100 lb rough wt	10.00	15.00	15.00	3
Bagging only						
Grain or seed, not including cost of bag	\$1.11 / 100 pounds	\$0.35	\$1.00	\$2.00	8	

Harvesting and hauling hay	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Cutting hay with disk cutter or sickle bar	\$11.30 / acre	\$6.00	\$10.00	\$25.00	15	
Cutting and conditioning	13.69 / acre	6.00	13.25	20.00	18	
Raking hay	6.65 / acre	2.50	5.00	20.00	23	
Hay tedding	6.87 / acre	3.00	6.00	20.00	15	
Square bales (small, 50–100 lb)						
Baling only	\$0.83 / square bale	\$ 0.35	\$0.75	\$1.50	23	
Cut, rake and bale	1.66 / square bale	1.00	1.80	2.10	14	
	or 58% of crop	22%	63%	80%	6	
Complete harvest (cut, rake, bale, haul, stack)	\$2.71 / square bale	\$1.50	\$2.75	\$4.00	8	
	or 67% of crop	60%	67%	75%	4	
Haul and stack square bales (field to barn)	\$0.85 / square bale	\$0.15	\$1.00	\$1.25	7	
Haul square bales over 20 miles	4.21 / loaded mile	2.00	3.00	9.00	8	
Round bales						
Baling only:	Small bales (750–1,000 lb)	\$9.33 / round bale	\$8.50	\$9.50	\$10.00	6
	Medium bales (1,000–1,500 lb)	11.67 / round bale	5.00	10.00	25.00	23
	Large bales (1,500+ lb)	12.20 / round bale	8.50	12.00	25.00	23
Cut, rake and bale:	Small bales (750–1,000 lb)	18.90 / round bale	9.00	19.00	25.00	11
		or 49% of crop	30%	50%	66%	5
	Medium bales (1,000–1,500 lb)	\$19.69 / round bale	\$15.00	\$18.50	\$25.00	16
		or 63% of crop	50%	66%	80%	8
	Large bales (1,500+ lb)	\$22.31 / round bale	\$15.00	\$23.00	\$27.50	13
		or 55% of crop	50%	50%	66%	3
Cut, rake, bale and net wrap:	Small bales (750–1,000 lb)	\$18.43 / round bale	\$14.00	\$19.00	\$20.00	7
		or 50% of crop				2
	Medium bales (1,000–1,500 lb)	\$21.48 / round bale	\$16.00	\$20.00	\$35.00	20
		or 60% of crop	50%	60%	67%	9
	Large bales (1,500+ lb)	\$22.83 / round bale	\$12.00	\$25.00	\$30.00	15
		or 58% of crop	50%	50%	67%	6
Bale and net wrap:	Small bales (750–1,000 lb)	\$10.13 / round bale	\$8.50	\$9.50	\$13.00	4
		Medium bales (1,000–1,500 lb)	12.39 / round bale	10.00	12.00	23.00
	Large bales (1,500+ lb)	or 64% of crop	60%		67%	3
		\$12.37 / round bale	\$8.50	\$12.00	\$17.00	15
Wrap bales in plastic, including cost of plastic	7.00 / round bale	2.50	7.00	10.00	8	
Fill plastic tube with bales, including cost of plastic	9.43 / round bale	7.50	8.50	12.00	7	
Move round bales on farm or local, flat rate	3.96 / round bale	1.00	5.00	6.00	13	
Haul round bales over 20 miles	4.08 / loaded mile	2.00	3.75	10.00	20	

Other field work and hauling	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Mow pasture or CRP land	\$15.29 / acre	\$ 8.00	\$15.00	\$30.00	24	
	70.97 / hour	10.00	75.00	150.00	32	
Cut brush (brush hog)	23.92 / acre	8.00	20.00	60.00	13	
	77.05 / hour	15.00	75.00	150.00	39	
Chop stalks	16.41 / acre	8.50	15.00	30.00	11	
	61.20 / hour	10.00	73.50	100.00	10	
Farm jobs with tractor and loader:	50–100 hp	66.00 / hour	30.00	72.50	100.00	20
	Over 100 hp	87.00 / hour	60.00	85.00	135.00	14
Hauling livestock, long distance:						
With gooseneck trailer or farm truck	2.92 / loaded mile	1.75	3.00	5.00	23	
With large livestock truck	3.99 / loaded mile	3.50	4.00	4.50	9	

Fence work	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Inspection and minor repairs	\$27.00 / hour	\$10.00	\$22.50	\$60.00	8	
Fence removal						
By hand and tractor	\$43.50 / hour	\$10.00	\$32.50	\$100.00	10	
With large equipment, no salvage	113.33 / hour	55.00	105.00	190.00	21	
Fence building, easy terrain						
Barbed wire, set posts	\$32.86 / hour	\$10.00	\$20.00	\$75.00	7	
	1,431.17 / quarter mile	900.00	1,161.00	2,640.00	6	
Combination barbed and woven, set posts	53.00 / hour	15.00	40.00	100.00	5	
	1,534.17 / quarter mile	1,000.00	1,412.50	2,800.00	6	
Fence building, rough terrain						
Barbed wire, set posts	\$32.00 / hour	\$10.00	\$20.00	\$75.00	5	
	1,714.57 / quarter mile	1,050.00	1,500.00	3,036.00	7	
Combination barbed and woven wire, set posts	42.50 / hour	15.00	32.50	90.00	4	
	1,902.40 / quarter mile	1,200.00	1,500.00	3,200.00	5	
Dig holes and set posts	56.67 / hour	15.00	60.00	100.00	15	
Drive posts:						
	Metal T-posts	52.92 / hour	10.00	52.50	125.00	12
	Wooden posts	64.29 / hour	20.00	75.00	100.00	7

Small equipment jobs	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
Field work (for small areas such as wildlife plots)						
Plowing	\$78.13 / hour	\$30.00	\$62.50	\$180.00	8	
Tillage or soil preparation	80.45 / hour	30.00	75.00	150.00	11	
Planting rows or drilling	76.82 / hour	30.00	50.00	150.00	11	
Broadcast seeding	15.69 / acre	3.00	10.00	50.00	10	
	62.14 / hour	20.00	60.00	120.00	7	
Spraying	10.19 / acre	5.00	6.50	36.50	17	
	95.00 / hour	10.00	65.00	200.00	7	
Miscellaneous						
Saw and split downed trees into firewood	\$16.80 / hour	\$9.00	\$15.00	\$25.00	5	
	90.00 / cord	70.00	80.00	120.00	3	
Farm jobs with tractor and loader:						
	50-100 hp	66.00 / hour	30.00	72.50	100.00	20
	100+ hp	87.00 / hour	60.00	85.00	135.00	14

Earth moving and heavy equipment jobs

	Average rate	Range in rates			Number reporting	
		Low	Mid	High		
By job performed						
Building terraces:						
Conventional gradient	\$2.62 / linear foot	\$0.90	\$2.70	\$4.50	17	
	3.00 / cubic yard	2.00	2.63	5.00	8	
	139.43 / hour	105.00	140.00	200.00	27	
Parallel, cut and fill to grass outlets	3.01 / linear foot	1.20	3.00	4.50	17	
	3.25 / cubic yard	2.50	3.00	5.00	5	
	140.93 / hour	105.00	140.00	200.00	21	
Parallel, with storage to tile outlets	3.05 / linear foot	1.20	2.90	4.50	20	
	3.15 / cubic yard	2.50	3.00	5.00	7	
	141.98 / hour	105.00	141.25	200.00	20	
Diversion	3.48 / linear foot	1.20	3.33	6.00	8	
	3.09 / cubic yard	2.50	3.00	5.08	10	
	140.60 / hour	105.00	140.00	200.00	24	
Grade and shape waterways	3.33 / linear foot	1.50	4.00	4.50	3	
	2.55 / cubic yard	2.00	2.50	3.00	10	
	139.48 / hour	90.00	140.00	200.00	29	
Ditch construction	2.55 / cubic yard	2.00	2.50	3.00	5	
	133.37 / hour	80.00	132.50	200.00	26	
Building ponds and lakes	2.84 / cubic yard	2.00	3.00	4.25	23	
	137.96 / hour	100.00	140.00	200.00	38	
Land leveling	2.31 / cubic yard	1.98	2.13	3.00	4	
	129.11 / hour	55.00	125.00	210.00	31	
Land clearing:						
Cut brush and trees; pile on site	1,050.00 / acre	350.00	900.00	2,000.00	7	
	134.53 / hour	55.00	140.00	200.00	37	
Remove brush, trees, stumps; pile on site	1,207.14 / acre	500.00	1,050.00	2,500.00	14	
	129.04 / hour	55.00	140.00	200.00	39	
By type of equipment used (including operator labor)						
Bulldozer:	Under 100 hp	\$100.00 / hour	\$65.00	\$100.00	\$130.00	15
	100–150 hp	125.69 / hour	55.00	125.00	160.00	39
	Over 150 hp	152.86 / hour	105.00	150.00	250.00	48
Scraper:	Under 10 cu yd capacity	87.14 / hour	30.00	87.50	150.00	14
	10–15 cu yd capacity	147.50 / hour	85.00	150.00	275.00	26
	Over 15 cu yd capacity	190.67 / hour	120.00	200.00	250.00	15
Motor grader:	Under 100 hp	90.71 / hour	60.00	80.00	125.00	7
	100 hp or larger	147.75 / hour	90.00	140.00	300.00	11
Track-type loader:	Under 100 hp	109.50 / hour	65.00	110.00	150.00	15
	100 hp or larger	131.27 / hour	98.00	125.00	185.00	26
Skid loader		81.83 / hour	50.00	81.00	150.00	64
Track hoe/excavator:	Mini (2–6 tons)	96.75 / hour	55.00	90.00	150.00	34
	Medium and large	138.96 / hour	92.00	140.00	200.00	58
Back hoe		88.76 / hour	60.00	85.00	150.00	44
Tiling machine		1.42 / linear foot	0.75	1.35	2.05	11
		141.67 / hour	100.00	140.00	185.00	3
Trencher		1.39 / linear foot	0.80	1.36	2.50	20
		122.81 / hour	82.50	122.50	165.00	8
Tree shear		90.33 / hour	65.00	85.00	150.00	15