

Kansas Custom Rates 2020



Kansas Department of Agriculture
and
Kansas State University Land Use
Survey Program

KANSAS STATE
Agricultural Economics



2020

RATES PAID BY KANSAS FARMERS FOR CUSTOM WORK

KANSAS STATE
Agricultural Economics



Kansas Department of Agriculture
In Cooperation with
Kansas State University Land Use Survey Program

KANSAS CROP REPORTING DISTRICTS

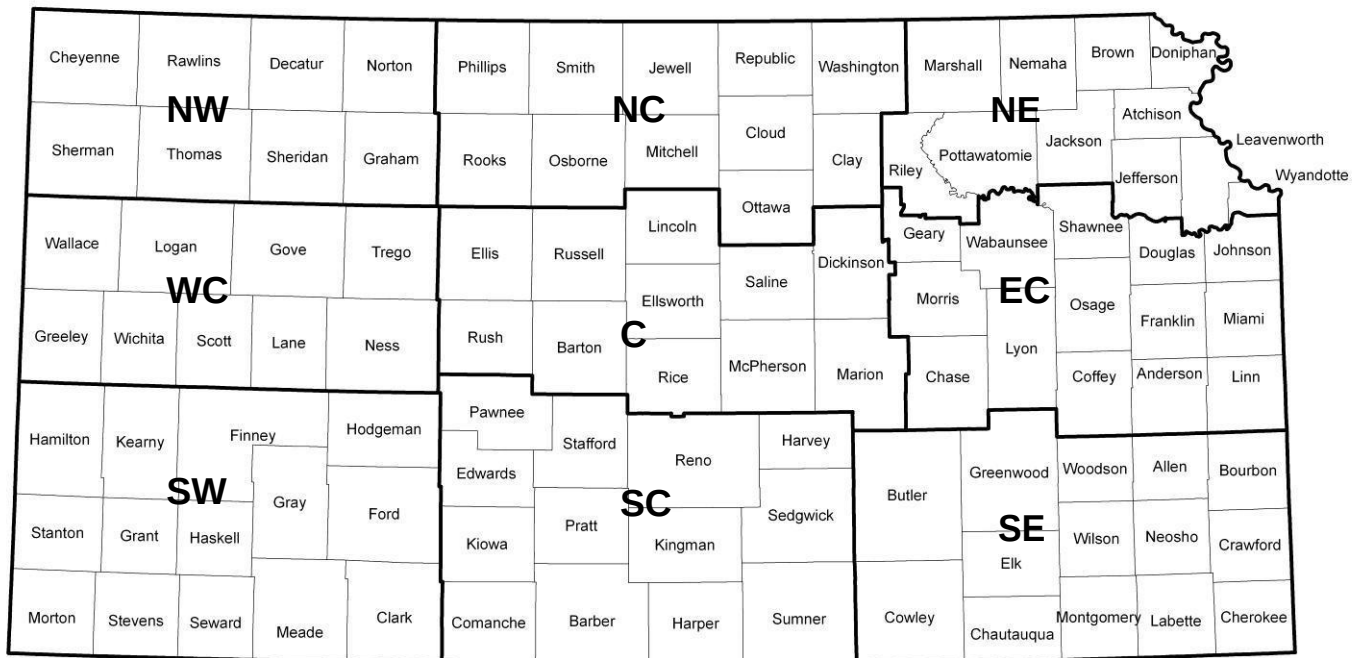


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INTRODUCTION

With the rising cost of machinery and the uncertainty of local workers, custom agricultural work has become a staple for today's farm. This publication reports the average rates for Kansas agricultural custom work in the time period of 2019-2020. Since 2016, the survey has been conducted by the Land Use Survey Program (LUSP)¹ in the Department of Agricultural Economics at Kansas State University in conjunction with the Kansas Department of Agriculture (KDA). In 2018 and 2020, the survey was available online for Kansas custom operators across the state to complete. Previous versions of this survey and report were written and conducted by the National Agricultural Statistics Service-Kansas office (NASS).

KDA and the LUSP extend a special thanks to Kansas farmers, ranchers, custom operators, co-ops, and elevators for their responses to the 2020 Kansas Custom Rates Survey. We have received many comments about the Custom Rates report from the agricultural community. We appreciate this feedback and encourage readers to continue sharing their ideas and suggestions regarding this survey.

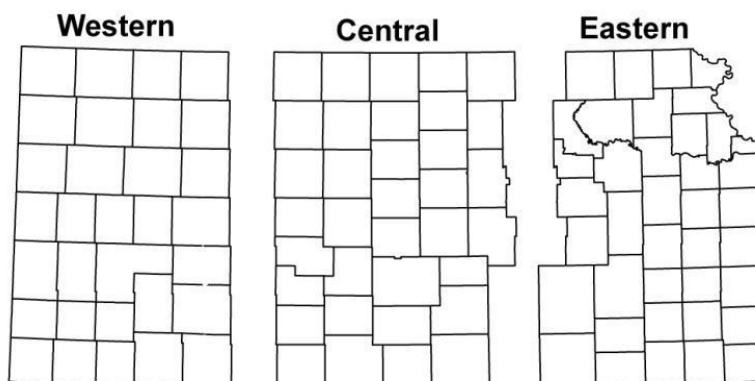
The data in this report provide additional information to Kansas farmers, ranchers, and custom service businesses. The prices reported here should not be regarded as official or established rates. The average figures in this report give equal weight to all responses received.

The prices in this report include charges for machinery, power, fuel, and the operator. These prices do not include the costs of chemicals, seeds, and other materials, unless otherwise specified. The one exception is hay baling materials. Exchange work between farmers is not considered custom work for the purposes of this report.

There are large variations in the rates charged for specific jobs. For many items, the state averages may not be typical of any particular locale. There are many reasons for price differences. Some farmers may charge lower prices to neighbors, relatives, or close friends. Soil conditions and field sizes are also significant factors. The number of responses may also lead to variation in the rates.

This report contains historical tables and graphs that show the results of previous surveys. Some responses are included in more than one district because custom work was performed in multiple districts. For the purpose of this report, Kansas is classified into three regions: western region, central region, and eastern region, as shown below.

For questions regarding this report, please contact Leah Tsoodle at K-State at 785-532-1517 or ltsoodle@ksu.edu or Peter Oppelt at KDA at 785-564-6726 or peter.oppelt@ks.gov.



¹The Land Use Survey Program (LUSP) was formerly known and referenced in previous publications as the Land Use Survey Center (LUSC).

GRAIN HARVESTING

WHEAT: Two methods are commonly used to charge for harvesting grain: a flat rate charge and a base rate with extra charge for high yield. Custom harvesters charged an average base rate of \$23.01 per acre for harvesting wheat in 2020, \$0.35 higher than 2018. In 2020, harvesters charged an average of \$0.224 extra per bushel of wheat for yields greater than 27 bushels per acre. The base rate bushels increased in 2020 for wheat harvesting compared to that reported in 2018. The average flat rate in 2020 for harvesting wheat was \$24.96 per acre, a decrease of \$0.26 from \$25.22 per acre in 2018.

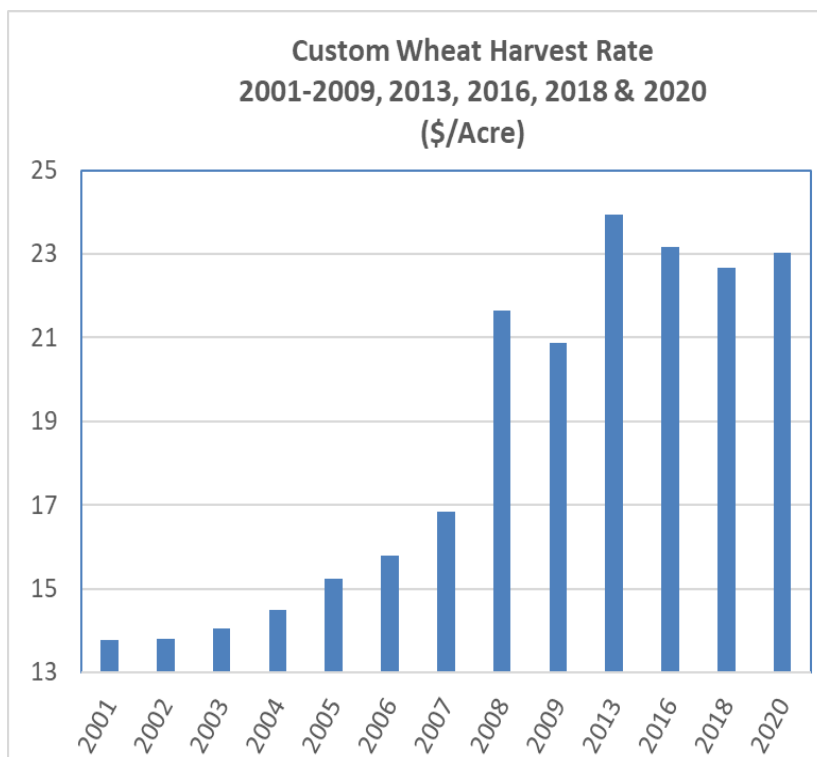
Custom Rates for Wheat Harvest, 2020, by District

District	Base Rate with Extra Charge for High Yield (if any)						Flat Rate Charge		
	Base Rate (\$/Acre)			Extra Charge for High Yield			Dollar Per Acre		
	No. of Reports	Range	Average	No. of Reports	Average (\$/Bushel)	Above Bushels	No. of Reports	Range	Average
NW	23	20-25	22.91	23	0.228	23	12	18-41	27.83
WC	55	15-26	22.26	54	0.219	27	6	15-25	20.58
SW	20	18-25	22.75	19	0.227	34	18	18-30	23.56
NC	9	21-30	25.33	7	0.190	27	7	25-35	28.71
C	19	20-30	23.02	16	0.224	29	21	15-30	22.05
SC	27	20-25	23.86	23	0.237	24	17	20-35	26.65
NE	-	-	-	-	-	-	1/		
EC	1/			-	-	-	9	22-30	25.78
SE	3	22-28	24.00	3	0.247	30	3	22-38	30.00
State	157	15-30	23.01	145	0.224	27	94	15-41	24.96

^{1/} Insufficient number of reports.

**Custom Wheat Harvest
Historical Rates**

Year	Dollars Per Acre	Extra Charge for High Yield	
		Dollar per Bushel	Above Bushels
1995	13.02	0.122	20
1996	13.32	0.124	20
1997	13.33	0.126	21
1998	13.32	0.126	21
1999	13.29	0.126	21
2000	13.68	0.128	21
2001	13.77	0.131	20
2002	13.80	0.131	22
2003	14.04	0.136	23
2004	14.48	0.136	21
2005	15.24	0.144	21
2006	15.78	0.149	21
2007	16.85	0.160	21
2008	21.65	0.211	21
2009	20.86	0.200	22
2013	23.93	0.227	23
2016	23.17	0.226	21
2018	22.66	0.227	24
2020	23.01	0.224	27



Note: Rates before 2016 are from surveys conducted by NASS.

GRAIN HARVESTING (Continued)

GRAIN SORGHUM: Custom harvesters charged an average of \$23.68 per acre for harvesting grain sorghum in 2020, \$0.13 higher than 2018. Frequently, harvesters include an additional charge per bushel to customers with high yields. In 2020 the extra charge averaged \$0.22 per bushel of grain sorghum for yields greater than 44 bushels per acre. The 2020 flat rate charge per acre was \$26.19, up \$0.09 from 2018.

Custom Rates for Grain Sorghum Harvest, 2020, by District

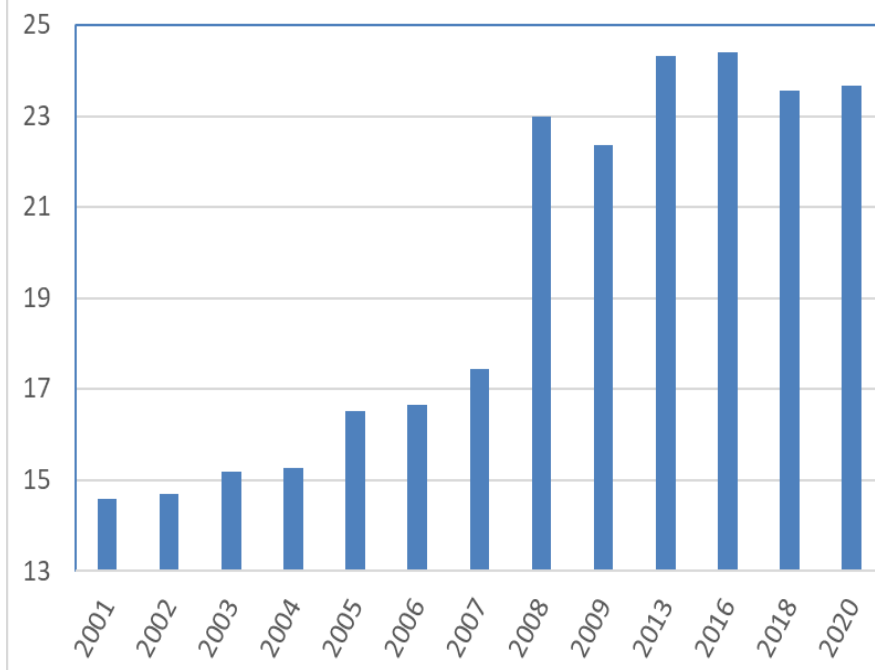
District	Base Rate with Extra Charge for High Yield (if any)						Flat Rate Charge		
	Base Rate (\$/Acre)			Extra Charge for High Yield			Dollar Per Acre		
	No. of Reports	Range	Average	No. of Reports	Average (\$/Bushel)	Above Bushels	No. of Reports	Range	Average
NW	8	20-25	22.63	8	0.224	41	1	26-26	26.00
WC	31	19-30	23.13	30	0.219	46	8	19-35	25.00
SW	8	20-24	23.13	7	0.230	46	11	18-35	25.73
NC	8	21-30	26.63	6	0.187	46	8	24-33	27.25
C	16	21-30	23.69	13	0.222	45	16	15-45	24.63
SC	6	23-25	24.17	5	0.242	32	7	20-35	30.29
NE	-	-	-	-	-	-	1	26-26	26.00
EC	^{1/}			^{1/}			4	25-30	28.25
SE	-	-	-	-	-	-	2	22-25	23.50
State	78	19-30	23.68	69	0.220	44	58	15-45	26.19

^{1/} Insufficient number of reports.

Custom Grain Sorghum Harvest Historical Rates

Year	Dollars Per Acre	Extra Charge for High Yield	
		Dollar per Bushel	Above Bushels
1995	14.27	0.119	36
1996	14.21	0.123	36
1997	14.35	0.125	37
1998	14.42	0.124	37
1999	14.45	0.127	36
2000	14.64	0.126	34
2001	14.58	0.129	35
2002	14.68	0.130	35
2003	15.19	0.137	35
2004	15.27	0.135	36
2005	16.51	0.146	37
2006	16.64	0.148	36
2007	17.45	0.159	36
2008	22.99	0.216	36
2009	22.37	0.204	35
2013	24.33	0.230	35
2016	24.39	0.229	41
2018	23.55	0.226	48
2020	23.68	0.220	44

**Custom Grain Sorghum Harvest Rate
2001-2009, 2013, 2016, 2018, &2020
(\$/Acre)**



Note: Rates before 2016 are from surveys conducted by NASS.

GRAIN HARVESTING (Continued)

CORN: Custom harvesters charged an average of \$26.61 per acre for harvesting corn in 2020, a decrease of \$2.79 from 2018. The decrease brought the cost closer to the 2016 harvest price. The average additional charge to customers with high corn yields was \$0.216 per bushel for yields greater than 61 bushels per acre. The high yield threshold was lower than the 2018 threshold. The average 2020 flat rate charge was \$0.35 per bushel or \$32.28 per acre.

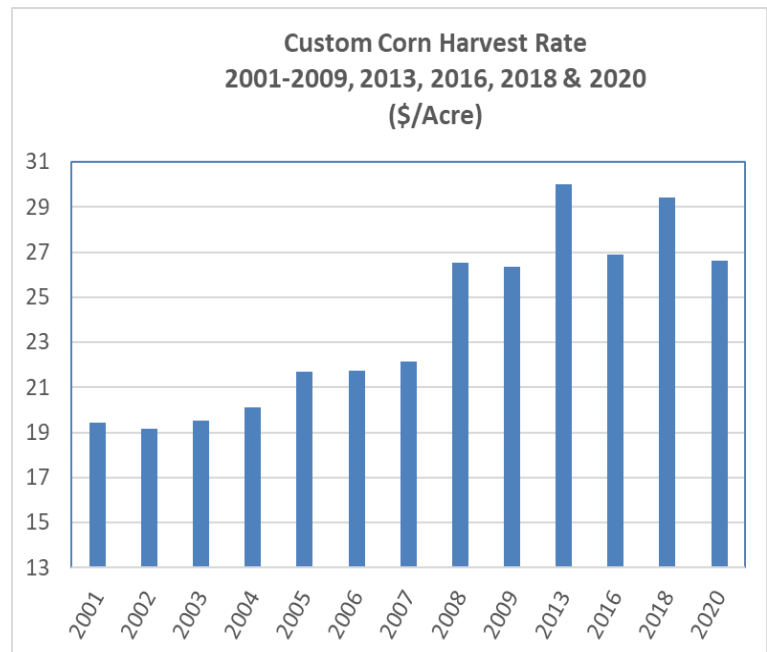
Custom Rates for Corn Harvest, 2020, by District

District	Base Rate with Extra Charge for High Yield (if any)						Flat Rate Charge					
	Base Rate (\$/Acre)			Extra Charge for High Yield			Dollar Per Acre			Dollar Per Bushel		
	No. of Reports	Range	Average	No. of Reports	Average (\$/Bushel)	Above Bushels	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	17	21-37	25.65	16	0.224	52	3	21-30	27.00	9	0.40-0.50	0.441
WC	26	15-37	23.65	25	0.220	60	14	23-46	32.29	20	0.10-0.50	0.330
SW	^{1/}			^{1/}			5	22-46	35.40	14	0.10-0.40	0.302
NC	9	24-35	30.00	7	0.193	66	6	28-50	33.50	^{1/}		
C	10	21-32	27.22	7	0.221	60	12	20-42	32.00	4	0.20-0.40	0.265
SC	6	21-37	30.56	5	0.220	70	4	20-30	26.25	12	0.26-0.55	0.406
NE	^{1/}			^{1/}	0.100	120	8	32-42	35.44	-	-	-
EC	^{1/}			-	-	-	8	26-36	30.63	^{1/}		
SE	^{1/}			^{1/}			3	25-40	35.00	-	-	-
State	75	15-37	26.61	64	0.216	61	63	20-50	32.28	61	0.10-0.55	0.351

^{1/} Insufficient number of reports -----

Custom Corn Harvest Historical Rates

Year	Dollars Per Acre	Extra Charge for High Yield		Flat Rate Charge
		Dollar per Bushel	Above Bushels	
1995	17.79	0.124	62	0.21
1996	18.77	0.126	63	0.23
1997	18.72	0.123	66	0.23
1998	18.96	0.127	59	0.23
1999	19.28	0.120	70	0.24
2000	19.23	0.147	66	0.23
2001	19.43	0.119	48	0.23
2002	19.15	0.148	87	0.24
2003	19.50	0.143	69	0.24
2004	20.09	0.143	76	0.24
2005	21.68	0.142	76	0.26
2006	21.75	0.150	74	0.27
2007	22.14	0.164	71	0.29
2008	26.51	0.203	68	0.32
2009	26.35	0.192	73	0.29
2013	30.02	0.217	71	0.36
2016	26.89	0.240	80	0.35
2018	29.40	0.217	77	0.32
2020	26.61	0.216	61	0.35



Note: Rates before 2016 are from surveys conducted by NASS.

GRAIN HARVESTING (Continued)

SOYBEANS: Custom harvesters charged an average of \$27.34 per acre for harvesting soybeans in 2020, up \$1.78 from 2018. The average additional charge per bushel to customers with yields in excess of 31 bushels per acre in 2020 was 24.3 cents per bushel. The average flat rate was \$30.01 per acre, down \$0.21 from 2018.

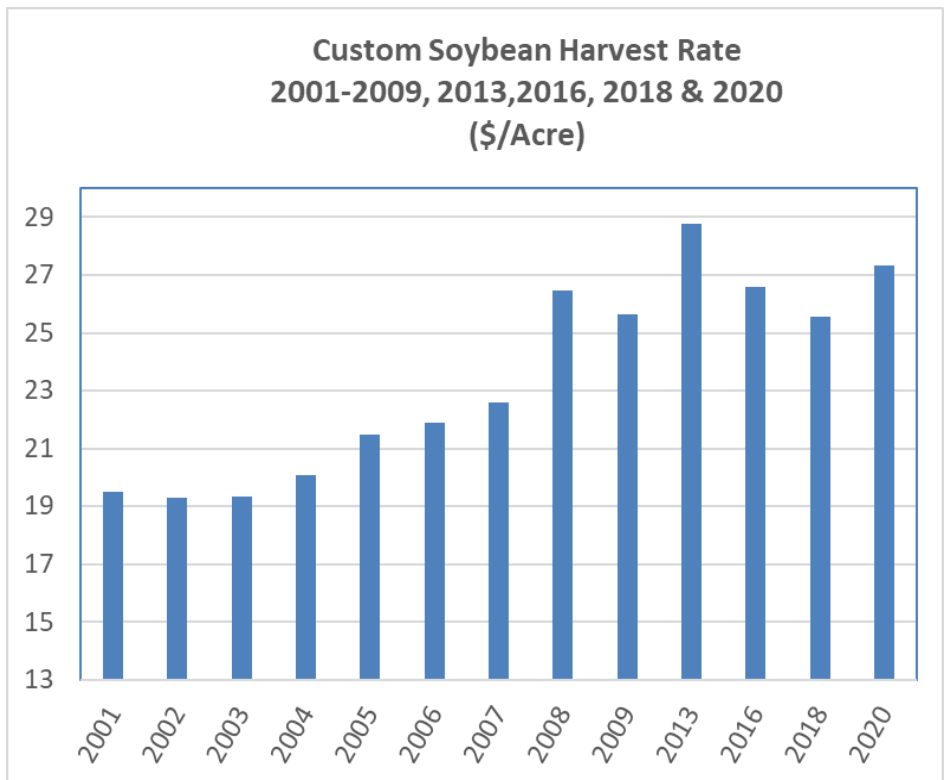
Custom Rates for Soybean Harvest, 2020, by District

District	Base Rate with Extra Charge for High Yield (if any)						Flat Rate Charge		
	Base Rate (\$/Acre)			Extra Charge for High Yield			Dollar Per Acre		
	No. of Reports	Range	Average	No. of Reports	Average (\$/Bushel)	Above Bushels	No. of Reports	Range	Average
NW	3	20-31	26.00	3	0.230	45	-	-	-
WC	4	23-31	25.50	4	0.283	30	-	-	-
SW	^{1/}			^{1/}			5	30-30	30.00
NC	7	21-27	25.14	5	0.226	26	6	25-32	27.83
C	15	22-32	26.79	12	0.260	29	21	16-40	26.33
SC	11	22-32	28.40	10	0.247	29	15	20-50	35.60
NE	^{1/}			^{1/}			13	25-40	32.00
EC	^{1/}			-	-	-	13	25-35	28.00
SE	^{1/}			^{1/}			7	25-42	31.00
State	45	20-36	27.34	37	0.243	31	80	16-50	30.01

^{1/} Insufficient number of reports.

Custom Soybean Harvest Historical Rates

Year	Dollars Per Acre	Extra Charge for High Yield	
		Dollar per Bushel	Above Bushels
1995	17.65	0.122	25
1996	18.54	0.127	24
1997	18.68	0.124	26
1998	18.85	0.128	27
1999	18.69	0.130	25
2000	19.15	0.125	25
2001	19.48	0.127	24
2002	19.29	0.134	28
2003	19.35	0.133	26
2004	20.06	0.135	26
2005	21.48	0.143	26
2006	21.88	0.172	27
2007	22.61	0.158	28
2008	26.47	0.206	26
2009	25.66	0.198	27
2013	28.78	0.232	27
2016	26.58	0.233	28
2018	25.56	0.233	29
2020	27.34	0.243	31



Note: Rates before 2016 are from surveys conducted by NASS.

GRAIN HARVESTING (Continued)

SUNFLOWER & COTTON: Custom harvesters charged an average of \$42.50 per acre for harvesting sunflowers in 2020, up \$5.95 from 2018. Too few responses to base rate with extra charge for high yields were reported to be able to publish this year. The average price charged for harvesting cotton was \$0.122 per lint pound in 2020.

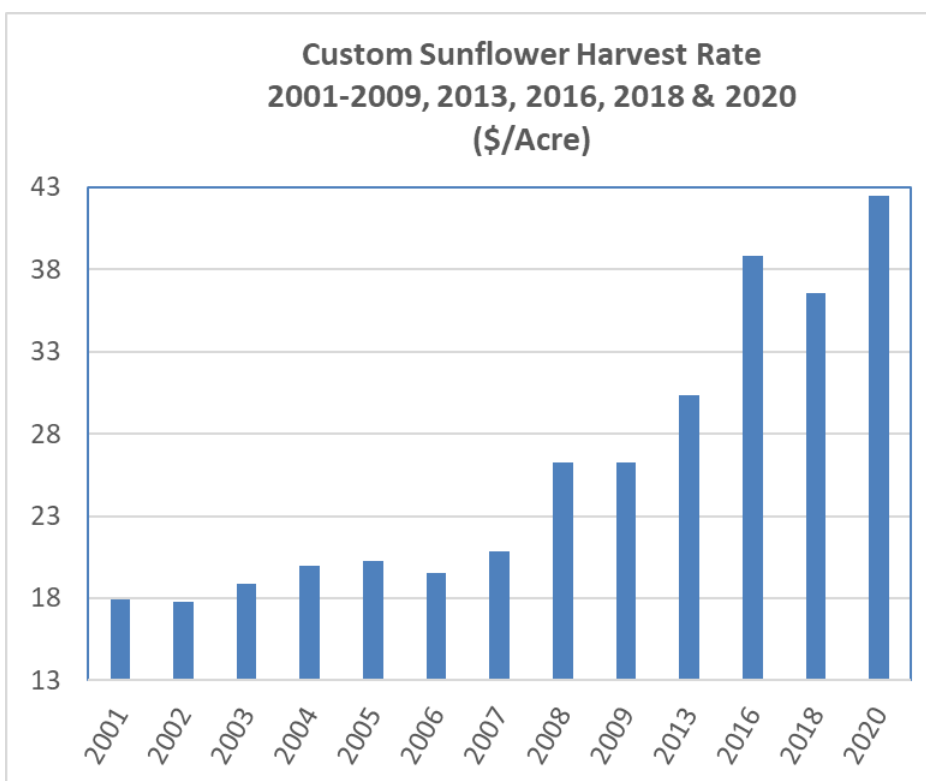
Custom Rates for Sunflower Harvest & Cotton Harvest, 2020, by Region

District	Sunflower			Cotton		
	Dollar Per Acre			Dollar Per Lint Pound		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	4	35-65	42.50	4	0.10-0.13	0.120
Central	-	-	-	11	0.10-0.14	0.123
Eastern	-	-	-	-	-	-
State	4	35-65	42.50	15	0.10-0.14	0.122

^{1/} Insufficient number of reports.

Custom Sunflower Harvest Historical Rates

Year	Dollars Per Acre	Extra Charge for High Yield	
		Dollar per Bushel	Above Bushels
1998	16.94	0.119	11.8
1999	18.35	0.120	10.8
2000	16.33	0.127	9.6
2001	17.93	0.138	8.3
2002	17.80	0.131	6.7
2003	18.90	0.137	6.4
2004	19.95	0.203	7.4
2005	20.24	0.197	7.2
2006	19.55	0.213	12
2007	20.88	0.198	14
2008	26.28	0.265	18
2009	26.26	0.274	19
2013	30.33	^{1/}	^{1/}
2016	38.80	^{1/}	^{1/}
2018	36.55	^{1/}	^{1/}
2020	42.50	^{1/}	^{1/}



Note: Rates before 2016 are from surveys conducted by NASS.

^{1/} Insufficient number of reports.

SEED CLEANING

Rates for seed cleaning are higher with treatment than without treatment. Wheat seed cleaning with treatment averaged \$2.55 per bushel, an increase of \$0.55 from 2018 and comparable to 2016 rate. Rates for cleaning wheat without treatment averaged \$0.83 per bushel, 27 cents lower than in 2018. The average cost of cleaning other seeds in 2020 was not reported here because of the small number of responses received.

Custom Rates for Wheat Seed Cleaning (\$/Bushel), 2020, by District

District	With Treatment			Without Treatment		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	3	1.50-3.50	2.83	4	0.60-1.00	0.86
WC	^{1/}			-	-	-
SW	6	0.65-6.00	2.43	5	0.60-0.90	0.73
NC	^{1/}			^{1/}		
C	^{1/}			4	0.65-1.00	0.76
SC	^{1/}			5	0.30-1.00	0.82
NE	^{1/}			^{1/}		
EC	3	1.50-7.25	5.33	^{1/}		
SE	^{1/}			^{1/}		
State	22	0.65-7.25	3.10	23	0.30-1.20	0.83

^{1/} Insufficient number of reports.

Historical Custom Rates for Wheat Seed Cleaning (\$/Bushel)

Year	With Treatment	Without Treatment
2003	0.90	0.48
2004	0.82	0.47
2005	0.98	0.48
2006	1.14	0.51
2007	1.07	0.54
2008	1.45	0.60
2009	1.36	0.58
2013	2.87	0.73
2016	3.17	0.68
2018	2.55	1.10
2020	3.10	0.83

Note: Rates before 2016 are from surveys conducted by NASS.

GRAIN HAULING

Rates for hauling wheat, grain sorghum, and soybeans from the field to the farm or to the nearest elevator in 2020 were slightly lower, with the same maximum distance, and significantly higher extra charges, compared to the rates in 2018. The average base rate charged for hauling wheat was 19.8 cents per bushel, with an extra charge of 8.2 cents per bushel per mile over 18 miles. The 2020 average custom rates for hauling corn were higher than 2018 averages and averaged 17.3 cents per bushel plus 8.1 cents per bushel per mile over 19 miles. The average rate for hauling sunflower was not reported, as an insufficient number of responses were received.

Custom Rates for Hauling Grain from Field to Farm Storage or Elevator, 2020, by District

District	No. of Reports	Hauling Charge (\$/Bushel)	Mile Limits (Miles)	Extra Charge for Longer Distances (\$/Bushel/Mile)	No. of Reports	Hauling Charge (\$/Bushel)	Mile Limits (Miles)	Extra Charge for Longer Distances (\$/Bushel/Mile)
	Wheat					Grain Sorghum		
NW	19	0.219	25	0.059	5	0.210	19	0.005
WC	34	0.216	18	0.064	23	0.208	18	0.043
SW	20	0.190	16	0.034	10	0.202	20	0.043
NC	8	0.148	15	0.121	8	0.154	11	0.121
C	28	0.174	18	0.068	22	0.168	19	0.075
SC	24	0.213	17	0.123	6	0.223	19	0.180
NE	^{1/}				^{1/}			
EC	4	0.133	10	0.150	3	0.117	10	0.150
SE	3	0.213	15	^{1/}	^{1/}			
State	141	0.198	18	0.082	79	0.188	18	0.093
	Corn					Soybeans		
NW	12	0.201	28	0.068	^{1/}			
WC	24	0.205	19	0.084	4	0.223	16	0.035
SW	6	0.123	18	0.113	^{1/}			
NC	8	0.165	16	0.103	10	0.155	19	0.121
C	16	0.160	18	0.074	25	0.168	19	0.074
SC	13	0.145	15	0.007	14	0.201	17	0.007
NE	9	0.154	20	0.005	8	0.169	23	0.006
EC	6	0.160	19	0.150	8	0.150	25	0.150
SE	^{1/}				5	0.204	12	^{1/}
State	95	0.173	19	0.081	78	0.179	19	0.068

^{1/} Insufficient number of reports.

GRAIN HAULING (Continued)

The 2020 average custom rates for hauling canola averaged 24.6 cents per bushel plus 0.5 cents per bushel per mile over 15 miles. The survey included questions on hauling cotton. However, most cotton gins do not charge hauling as a line item, so the data are not included in this report.

Custom Rates for Hauling Canola, 2020, by Region

Region	No. of Reports	Hauling Charge (\$/Bushel)	Mile Limits (Miles)	Extra Charge For Longer Distances (\$ Per Bushel Per Mile)
Western	1/			
Central	3	0.243	15	0.005
Eastern	-	-	-	-
State	5	0.246	15	0.005

^{1/} Insufficient number of reports.

SILAGE OPERATIONS

Custom rates for silage operations were separated into four categories: 1) chopping, hauling, and filling the silo, 2) chopping and hauling, 3) chopping only, and 4) hauling only. The average rate per ton for the complete silage operation was \$11.10 per ton, down \$0.46 from \$11.56 in 2018. Operations which included only chopping and hauling averaged \$8.02 per ton, down \$0.46 from 2018. Chopping averaged \$5.88 per ton, up \$0.11 from 2018, and hauling averaged \$2.68 per ton, up \$0.54 from 2018.

Custom Rates for Silage Operations, 2020, by Region

Region	Chopping, Hauling, & Filling Silo			Chopping & Hauling		
	No. of Reports	Dollars per Ton		No. of Reports	Dollars per Ton	
		Range	Average		Range	Average
Western	1/			16	7.00-9.50	7.81
Central	10	8.00-16.25	11.18	9	7.25-8.50	8.06
Eastern	5	10.00-17.25	11.75	4	8.50-8.85	8.76
State	17	8.00-17.25	11.10	29	7.00-9.50	8.02

Custom Rates for Silage Operations, 2020, by Region

Region	Chopping Only			Hauling Only		
	No. of Reports	Dollars per Ton		No. of Reports	Dollars per Ton	
		Range	Average		Range	Average
Western	13	3.75-8.25	5.47	15	0.25-3.75	2.32
Central	8	5.00-9.85	6.65	6	3.25-3.50	3.42
Eastern	1/			1/		
State	22	3.75-9.85	5.88	22	0.25-3.75	2.68

^{1/} Insufficient number of reports.

HAYING

The average custom rate for mowing or swathing hay was \$13.96 per acre in 2020, down \$0.02 from 2018. The rate for mowing or swathing forage was higher than hay, averaging \$15.20 per acre, up \$0.70 from 2018. Mowing or swathing with conditioning averaged \$14.72 per acre in 2020, compared to \$14.10 in 2018. The charge for side raking averaged \$4.90 per acre, up 37 cents from 2018.

Custom Rates for Mowing or Swathing, 2020, by District

District	Hay			Forage		
	Number of Reports	Dollars per Acre		Number of Reports	Dollars per Acre	
		Range	Average		Range	Average
NW	5	13.00-17.00	14.40	3	13.00-17.00	14.67
WC	5	15.00-17.00	15.40	^{1/}		
SW	3	8.00-20.00	12.00	5	8.00-20.00	15.20
NC	8	12.00-17.00	14.50	3	12.00-18.00	15.67
C	12	12.00-15.00	13.58	6	12.00-19.00	15.33
SC	8	10.00-17.00	13.88	4	15.00-15.00	15.00
NE	^{1/}			-	-	-
EC	7	10.00-12.50	11.57	^{1/}		
SE	4	15.00-18.00	15.75	-	-	-
State	54	8.00-20.00	13.96	25	8.00-20.00	15.20

Custom Rates for Swathing & Conditioning and Side Raking, 2020, by District

District	Swathing and Conditioning			Side Raking		
	Number of Reports	Dollars per Acre		Number of Reports	Dollars per Acre	
		Range	Average		Range	Average
NW	^{1/}			^{1/}		
WC	9	12.00-20.00	15.39	5	4.00-7.00	5.60
SW	7	8.00-20.00	14.29	5	1.00-4.00	1.80
NC	7	12.00-17.00	14.57	8	4.00-5.00	4.38
C	11	12.00-18.00	14.59	9	2.50-12.00	6.06
SC	8	10.00-17.00	14.81	8	2.00-6.00	4.75
NE	^{1/}			^{1/}		
EC	3	10.00-16.00	12.00	4	4.00-6.00	5.25
SE	^{1/}			^{1/}		
State	49	8.00-20.00	14.72	44	1.00-12.00	4.90

^{1/} Insufficient number of reports.

HAYING (Continued)

The custom rates for baling small square bales in 2020 were higher than the 2018 averages. Custom baling of small square bales with twine averaged \$1.39 per bale in 2020, an increase of 13 cents from 2018. Large round bales weighing less than 1500 pounds, without net wrapping, cost an average of \$11.50 per bale; bales of the same size with net wrapping cost an average of \$13.24 per bale, up \$1.09/bale from 2018. Large round bales weighing over 1500 pounds with net wrapping cost an average of \$13.80 per bale, up \$1.41/bale from 2018. The charge for large square bales weighing about one ton averaged \$16.92 per bale.

Custom Rates for Baling Hay (\$/Bale)

Type of Bale		2020			2018		
		# of Reports	Range	Average	# of Reports	Range	Average
Small Bales, Square	With wire	4	1.25-1.50	1.38	15	0.50-2.00	1.16
	With twine	10	0.65-1.75	1.39	11	1.00-2.00	1.26
Large Round Bales under 1,500 pounds	Without net	4	10.00-14.00	11.50	10	10.00-15.00	11.86
	With net	48	8.00-17.00	13.24	48	4.50-17.00	12.15
Large Round Bales over 1,500 pounds	Without net	^{1/}			6	10.00-14.00	11.50
	With net	53	8.00-20.00	13.80	57	8.00-17.00	12.39
Large Square Bales about 1 ton		12	14.50-20.00	16.92	21	8.00-17.00	13.29

^{1/} Insufficient number of reports.

Custom Rates for Baling, Square Bales, 2020, by Region

Region	Small Square with Wire			Small Square with Twine			Large Square		
	No. of Reports	Dollars per Bale		No. of Reports	Dollars per Bale		No. of Reports	Dollars per Bale	
		Range	Average		Range	Average		Range	Average
Western	-	-	-	4	0.65-1.50	1.29	5	14.50-20.00	17.80
Central	3	1.25-1.50	1.42	6	1.00-1.75	1.46	7	15.00-18.00	16.29
Eastern	^{1/}			-	-	-	-	-	-
State	4	1.25-1.50	1.38	10	0.65-1.75	1.39	12	14.50-20.00	16.92

Custom Rates for Baling with Net, Large Round Bales, 2020, by Region

District	Under 1500 lbs			Over 1500 lbs		
	Number of Reports	Dollars per Acre		Number of Reports	Dollars per Acre	
		Range	Average		Range	Average
NW	5	13.00-16.00	14.40	^{1/}		
WC	9	8.00-15.00	12.56	3	10.00-14.00	11.33
SW	^{1/}			6	8.00-20.00	15.00
NC	^{1/}			8	14.00-17.00	14.88
C	7	12.00-15.00	13.43	13	12.00-20.00	13.15
SC	13	10.00-15.00	13.23	8	12.00-15.00	13.25
NE	^{1/}			6	12.00-16.00	13.00
EC	5	10.50-13.00	11.90	4	13.00-15.00	14.38
SE	3	15.00-17.00	15.67	4	14.50-17.00	15.25
STATE	48	8.00-17.00	13.24	53	8.00-20.00	13.80

^{1/} Insufficient number of reports.

HAYING (Continued)

Custom Rates for Baling with Net, Large Round Bales, by Region

Region	2020						2018					
	Under 1500 lbs.			Over 1500 lbs.			Under 1500 lbs.			Over 1500 lbs.		
	No. of Reports	Dollars per Bale		No. of Reports	Dollars per Bale		No. of Reports	Dollars per Bale		No. of Reports	Dollars per Bale	
		Range	Avg.		Range	Avg.		Range	Avg.		Range	Avg.
Western	16	8.00-16.00	13.25	10	8.00-20.00	13.90	9	10.00-17.00	12.89	6	10.00-15.00	13.17
Central	22	10.00-15.00	13.41	29	12.00-20.00	13.66	23	10.50-16.00	12.83	36	8.00-17.00	12.83
Eastern	10	10.50-17.00	12.85	14	12.00-17.00	14.04	16	4.50-17.00	11.83	15	10.00-14.00	11.03
State	48	8.00-17.00	13.24	53	8.00-20.00	13.80	48	4.50-17.00	12.15	57	10.00-14.00	12.39

^{1/} Insufficient number of reports.

Custom rates for hauling small bales from the field to farm storage were not published here due to an insufficient number of responses. The cost of hauling large square bales averaged of \$4.71 per bale in 2020. Rates for hauling large round bales averaged \$4.54 per bale or \$10.70 per ton in 2020. There were too few reports for hay stacking to provide a reasonable indication of current rates; therefore, the table has been removed.

Custom Rates for Hauling Large Bales from Field to Storage, 2020, by Region

Region	Large Round Bales						Large Square Bales		
	Number of Reports	Dollars per Bale		Number of Reports	Dollars per Ton		Number of Reports	Dollars per Bale	
		Range	Average		Range	Average		Range	Average
Western	10	3.50-5.00	4.35	^{1/}			7	4.00-5.00	4.71
Central	^{1/}			7	5.00-40.00	12.14	-	-	-
Eastern	^{1/}			^{1/}			-	-	-
STATE	14	3.50-5.00	4.54	10	5.00-40.00	10.70	7	4.00-5.00	4.71

^{1/} Insufficient number of reports.

The custom rates for the entire haying operation include cutting, conditioning, raking, baling, hauling, and stacking. The average rate for large bales was \$20.65 per bale in 2020, down \$0.70 per bale from 2018. The average rate for small bales was \$1.51 per bale, down 40 cents from 2018.

Custom Rates for Entire Haying Operation, 2020, by Region

Region	Small Bales			Large Round Bales		
	Number of Reports	Dollars per Bale		Number of Reports	Dollars per Bale	
		Range	Average		Range	Average
Western	-	-	-	5	13.00-25.00	18.40
Central	^{1/}			5	14.00-45.00	22.80
Eastern	3	1.20-2.00	1.60	10	12.00-25.00	20.70
State	4	1.20-2.00	1.51	20	12.00-45.00	20.65

^{1/} Insufficient number of reports.

ROTARY MOWING AND TREE SHEARING

The custom rate for rotary mowing averaged \$12.71 per acre or \$65.53 per hour in 2020. In 2018, charges were \$10.67 per acre or \$70.00 per hour. The average custom rate for skid loader tree shearing was \$89.29 per hour for 2020, down \$2.38 from 2018.

Custom Rates for Rotary Mowing and Tree Shearing, 2020, by District

District	Rotary Mowing						Skid Loader Tree Shearing		
	Dollar per Acre			Dollar per Hour			Dollar per Hour		
	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.
NW	-	-	-	-	-	-	-	-	-
WC	4	7.50-12.00	9.75	4	20.00-60.00	40.00	-	-	-
SW	-	-	-	-	-	-	-	-	-
NC	-	-	-	3	65.00-85.00	78.33	4	65.00-90.00	81.25
C	-	-	-	5	65.00-85.00	73.00	11	65.00-125.00	87.73
SC	^{1/}	-	-	6	50.00-100.00	66.67	3	85.00-100.00	95.00
NE	-	-	-	-	-	-	3	85.00-120.00	96.67
EC	-	-	-	^{1/}	-	-	3	65.00-85.00	71.67
SE	^{1/}	-	-	-	-	-	4	75.00-135.00	105.00
State	7	7.50-20.00	12.71	19	20.00-100.00	65.53	28	65.00-135.00	89.29

^{1/} Insufficient number of reports.

Custom Rates for Rotary Mowing and Tree Shearing, 2020, by Region

Region	Rotary Mowing						Skid Loader Tree Shearing		
	Dollar per Acre			Dollar per Hour			Dollar per Hour		
	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.
Western	4	7.50-12.00	9.75	4	20.00-60.00	40.00	-	-	-
Central	^{1/}	-	-	14	50.00-100.00	71.43	18	65.00-125.00	87.50
Eastern	^{1/}	-	-	^{1/}	-	-	10	65.00-135.00	92.50
State	7	7.50-20.00	12.71	19	20.00-100.00	65.53	28	65.00-135.00	89.29

^{1/} Insufficient number of reports.

LAND TILLAGE

Custom rates for tillage operations vary depending on many factors, including location, type of soil tillage practice, size and shape of fields, and the size of equipment. The average charge for disking (including one-way disking), was \$13.12 per acre in 2020, up \$1.27 from 2018. The average offset disking charge of \$15.56 per acre in 2020 was up \$2.31 from the 2018 rate. Tandem disking averaged \$11.67 per acre in 2020, down \$0.03 from the 2018 rate.

Custom Rates for Disking, 2020, by District

District	Disking			Offset Disk			Tandem Disking		
	Dollar per Acre			Dollar per Acre			Dollar per Acre		
	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.
NW	8	14.00-15.00	14.63	1/			1/		
WC	12	8.50-18.00	12.63	8	10.00-22.00	15.00	1/		
SW	6	10.00-18.00	15.33	4	12.00-22.00	18.50	1/		
NC	8	10.00-15.00	12.38	1/			5	10.00-15.00	12.00
C	12	8.50-18.00	13.08	6	14.00-18.00	15.67	7	8.00-15.00	11.00
SC	13	9.50-14.00	11.88	3	10.00-14.00	11.33	7	10.00-16.00	12.57
NE	4	8.50-25.00	16.38	-	-	-	1/		
EC	4	8.50-13.00	10.88	-	-	-	4	10.00-14.00	13.00
SE	1/			-	-	-	3	12.00-14.00	13.33
State	68	8.50-25.00	13.12	24	10.00-22.00	15.56	33	5.00-16.00	11.67

^{1/} Insufficient number of reports.

The average custom rate for chiseling, 4-12 inches, was \$14.21 per acre in 2020, up \$0.42 from 2018. The charge for deep chiseling, over 12 inches, averaged \$17.79 per acre in 2020, \$0.01 higher than the rate in 2018.

Custom Rates for Chiseling (\$/Acre), 2020, by District

District	Chisel (4-12")			Deep chisel (Over 12")		
	Number of Reports	Dollars per Acre		Number of Reports	Dollars per Acre	
		Range	Average		Range	Average
NW	3	10.00-10.00	10.00	4	15.00-20.00	16.25
WC	4	10.50-12.00	11.25	1/		
SW	-	-	-	1/		
NC	3	14.00-18.00	15.33	6	12.00-22.00	18.33
C	9	12.00-20.00	15.56	9	12.00-25.00	17.11
SC	8	15.00-16.00	15.75	8	18.00-20.00	18.75
NE	-	-	-	-	-	-
EC	1/			1/		
SE	1/			-	-	-
State	29	10.00-20.00	14.21	33	12.00-25.00	17.79

^{1/} Insufficient number of reports.

LAND TILLAGE (Continued)

The charges for strip tillage averaged \$18.61 per acre in 2020, up \$1.05 from 2018. Deep strip till, over 6", averaged \$20.00 per acre. The average rate for shallow, high speed vertical tillage, 2-4", was \$14.07 per acre in 2020, an increase of \$0.82 from 2018. Custom subsoiling/in-line ripping, about 30 HP per shank, averaged \$20.47 per acre in 2020, up \$2.23 from 2018.

Custom Rates for Strip and Vertical Tillage, 2020, by District

District	Strip Tillage			Deep Strip Tillage (over 6" deep)			Vertical Tillage--high speed, shallow (2-4")		
	Dollar per Acre			Dollar per Acre			Dollar per Acre		
	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.
NW	5	17.50-20.00	19.00	3	20.00-20.00	20.00	4	14.00-20.00	15.50
WC	8	12.00-25.00	19.38	7	13.00-25.00	20.57	14	8.50-18.00	13.68
SW	11	17.50-25.00	19.91	13	17.00-25.00	21.00	12	13.00-22.00	17.42
NC	4	15.00-18.00	16.50	^{1/}			5	10.00-13.00	10.60
C	6	15.00-25.00	18.83	6	15.00-25.00	18.17	11	7.00-18.00	14.09
SC	5	13.00-24.00	16.40	7	18.00-22.00	19.71	7	10.00-18.00	14.29
NE	-	-	-	^{1/}			6	7.00-16.00	12.17
EC	^{1/}			^{1/}			5	7.00-16.00	11.20
SE	-	-	-	-	-	-	^{1/}		
State	41	12.00-25.00	18.61	40	13.00-25.00	20.00	65	7.00-22.00	14.07

^{1/} Insufficient number of reports.

Custom Rates for Subsoiler/In-line Ripper (about 30 HP per shank), 2020, by Region

District	No. of Reports	Range	Avg. (\$/Acre)
Western	18	15.00-25.00	19.78
Central	21	18.00-25.00	21.33
Eastern	4	18.00-20.00	19.00
State	43	15.00-25.00	20.47

LAND TILLAGE (Continued)

The custom rate for field cultivators, 5 HP per linear foot of implement, averaged \$11.10 per acre in 2020, up \$0.63 from 2018. The average rate for shallow undercutting operations in 2020 was \$12.59 per acre, an increase of \$1.80 from 2018. The average rate for undercutting operations with large V blade was \$10.92 per acre, down \$0.13 from 2018.

Custom Rates for Cultivation and Undercutting, 2020, by District

District	Field Cultivator (5 HP per linear foot of implement)			Undercutter (Shallow, e.g. Fallow Master)			Undercutter (Large "V" Blade)		
	Dollar per Acre			Dollar per Acre			Dollar per Acre		
	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.
NW	^{1/}			6	11.00-14.50	13.75	5	6.50-14.50	11.30
WC	^{1/}			10	6.75-19.00	12.03	16	8.00-15.00	11.25
SW	4	11.00-11.00	11.00	4	16.00-16.00	16.00	11	5.00-15.00	9.91
NC	8	10.00-13.00	11.00	^{1/}			^{1/}		
C	10	7.00-15.00	10.40	5	8.00-15.00	10.80	5	8.00-15.00	10.80
SC	3	14.00-14.00	14.00	8	10.00-14.00	12.00	6	10.00-12.00	11.00
NE	^{1/}			-	-	-	-	-	-
EC	9	7.00-15.00	11.44	-	-	-	-	-	-
SE	3	11.00-14.00	13.00	-	-	-	-	-	-
State	42	7.00-15.00	11.10	35	6.75-19.00	12.59	44	5.00-15.00	10.92

^{1/} Insufficient number of reports.

In 2020, charges for spiketooth harrowing averaged \$8.14 per acre, an increase of \$0.51 per acre from 2018. The charges for finishing and packing for a seed bed averaged \$13.83 per acre in 2020, down \$0.55 from 2018. The average rate for springtooth harrowing was unavailable.

Custom Rates for Harrowing & Finishing, 2020, by Region

Region	Spiketooth Harrow			Finisher (Finish & Pack Seed Bed)		
	Dollar per Acre			Dollar per Acre		
	No. of Reports	Range	Avg.	No. of Reports	Range	Avg.
Western	3	6.00-6.00	6.00	6	14.50-15.00	14.75
Central	^{1/}			3	12.00-12.00	12.00
Eastern	3	10.00-12.00	10.67	-	-	-
State	7	6.00-12.00	8.14	9	12.00-15.00	13.83

^{1/} Insufficient number of reports.

LAND TILLAGE (Continued)

Custom rates for land tillage operations in 2020 increased from 2018 rates, except for finishing and packing for a seed bed.

Custom Rates for Land Tillage, Historical Averages (\$/Acre)

Type of Operation	2002	2003	2004	2005	2006	2007	2008	2009	2013	2016	2018	2020
Disking	6.34	6.42	6.84	7.54	7.79	7.93	9.02	9.06	11.31	12.2	11.85	13.12
One-Way Disk	6.11	6.5	7.22	6.66	8	8.06	9	-	-	-	-	-
Offset Disk	6.72	7.02	7.01	7.76	8.53	8.37	9.56	9.52	10.98	12.6	13.25	15.56
Spiketooth Harrow	4.82	5.33	5.25	5.31	5.88	6.68	6.71	7.3	8.82	8.33	7.63	8.14
Springtooth Harrow	4.03	4.17	4.88	5.75	5.58	5.83	6.42	8.4	8.25	^{1/}	9.17	-
Chisel (4-12")	7.61	8.02	7.96	8.45	9.1	9.75	11.19	10.06	12.71	13.95	13.79	14.21
Deep Chisel (Over 12")	10.33	8.94	10.05	10.85	11.88	11.46	15.81	13.7	15.88	13.5	17.78	17.79
Moldboard Plow	9.45	9.98	11.63	11.36	11.04	10.64	15.41	14	14.13	17.5	18.17	18.38
Undercutter (large V Blade)	5.38	5.47	5.58	6.07	6.43	6.66	7.73	7.42	9.34	11.13	11.05	10.39
Shank Cultivator	6.16	6.18	6.27	7.13	7.37	7.25	8.95	8.84	10.4	-	-	-
Wheel Springtooth Cultivator	5.67	5.27	6	5.75	7.02	7.56	6.93	7.43	8.25	-	-	-
Field Cultivator (5 HP per linear foot of implement)	-	-	-	-	-	-	-	-	-	11.78	10.37	10.37
Subsoiler/In-line ripper (about 30 HP per shank)	-	-	-	-	-	-	-	-	-	18.24	18.24	20.47
Strip Tillage	-	-	-	-	-	-	-	-	-	17.07	16.56	18.61
Deep Strip Tillage	-	-	-	-	-	-	-	-	-	-	19.38	20.00
Vertical Tillage	-	-	-	-	-	-	-	-	-	13.33	13.25	14.07
Finisher	-	-	-	-	-	-	-	-	-	-	14.38	13.83

Note: Rates before 2016 are from surveys conducted by NASS.

Disking and One-Way Disking were combined beginning in 2009. Subsoiler/In-line ripper, Strip Tillage and Vertical Tillage were added from the 2016 Survey. Finisher and Rotary Hoe were added from the 2018 Survey.

PLANTING

Regular-Till

Custom rates for planting crops were separated into four categories in 2020: planting without fertilizer & chemical application, planting with only fertilizer application, planting with only chemical application, and planting with fertilizer & chemical application. Planting rates for the latter two categories were not reported here because the number of responses was too small.

Small grain seeding charges without fertilizer and chemical application in 2020 averaged \$14.11 per acre, comparable to 2018 rate of \$14.25 per acre. Charges for planting other crops increased from 2018. Rate for planting grain sorghum and corn averaged \$16.65 per acre and \$17.00 per acre, respectively, in 2020. Soybean planting charges averaged \$17.67 per acre for row planting, \$18.07 for drilling, and \$20.00 for twin-row planting in 2020.

Custom Rates for Regular-Till Planting (\$/Acre), 2020, by District without Fertilizer & Chemical Application

District	No. of Reports	Range	Average	No. of Reports	Range	Average
Small Grain Drilling				Grain Sorghum- Row Planting		
NW	3	16.00-16.00	16.00	3	17.00-17.00	17.00
WC	10	8.00-16.00	12.60	10	10.00-16.00	14.60
SW	7	12.00-15.00	13.43	9	13.00-18.00	17.00
NC	5	14.00-15.00	14.80	4	15.00-20.00	17.50
C	3	15.00-20.00	18.33	3	20.00-20.00	20.00
SC	4	10.00-15.00	12.25	1/		
NE	1/			1/		
EC	3	15.00-15.00	15.00	1/		
SE	1/			1/		
State	37	8.00-20.00	14.11	34	10.00-20.00	16.65
Corn-Row Planting				Soybeans-Row Planting		
NW	4	18.00-23.00	19.25	3	17.00-17.00	17.00
WC	17	10.00-23.00	15.12	1/		
SW	10	18.00-20.00	18.80	6	18.00-20.00	19.33
NC	4	15.00-20.00	17.50	4	14.00-20.00	17.00
C	3	20.00-20.00	20.00	3	20.00-20.00	20.00
SC	1/			1/		
NE	4	14.00-20.00	16.75	5	15.00-20.00	17.80
EC	5	15.00-20.00	17.20	6	13.00-20.00	16.96
SE	3	16.00-18.00	16.67	-	-	-
State	52	10.00-23.00	17.00	31	13.00-20.00	17.67
Soybeans-Drilling				Soybeans-Twin Row Planting		
NW	-	-	-	3	24.00-24.00	24.00
WC	1/			-	-	-
SW	6	16.00-22.00	20.00	-	-	-
NC	4	15.00-20.00	17.50	1/	20.00-20.00	20.00
C	3	20.00-20.00	20.00	1/	20.00-20.00	20.00
SC	3	12.00-18.00	14.33	-	-	-
NE	1/			-	-	-
EC	1/			1/		
SE	-	-	-	1/		
State	21	12.00-20.00	18.07	10	16.00-24.00	20.00

^{1/} Insufficient number of reports.

PLANTING (Continued)

Regular-Till

The custom rates for planting small grains, grain sorghum, corn, and soybeans with fertilizer were higher than the corresponding planting rates without fertilizer and chemical application. These rates were also higher than the corresponding 2018 rates. The average rates in 2020 for small grain drilling, grain sorghum row planting, soybeans drilling, soybeans row plant, corn row planting, and corn twin row planting with fertilizer application were \$15.96, \$17.23, \$18.44, \$18.61, \$18.24, and \$20.44, respectively.

Custom Rates for Regular-Till Planting (\$/Acre), 2020, by District With Fertilizer Application

District	No. of Reports	Range	Average	No. of Reports	Range	Average
Small Grain Drilling				Grain Sorghum- Row Planting		
NW	7	10.00-20.00	15.43	^{1/}		
WC	12	10.00-20.00	15.83	9	0.50-18.00	15.61
SW	13	13.00-25.00	18.62	13	16.00-18.00	17.38
NC	4	15.00-15.00	15.00	^{1/}		
C	7	12.00-20.00	15.00	10	14.00-21.00	17.95
SC	10	10.00-18.00	14.60	6	13.00-20.00	16.67
NE	^{1/}			-	-	-
EC	^{1/}			^{1/}		
SE	-	-	-	-	-	-
State	56	10.00-25.00	15.96	43	0.50-21.00	17.23
Soybeans-Drilling				Soybeans-Row Planting		
NW	-	-	-	3	19.00-19.00	19.00
WC	^{1/}			^{1/}		
SW	9	18.00-24.00	20.67	7	18.00-22.00	20.29
NC	^{1/}			^{1/}		
C	5	12.00-20.00	16.80	10	15.00-21.00	18.20
SC	8	16.00-18.00	16.50	11	13.00-20.00	17.27
NE	-	-	-	-	-	-
EC	^{1/}			^{1/}		
SE	-	-	-	-	-	-
State	27	12.00-24.00	18.44	36	13.00-22.00	18.61
Corn-Row Planting				Corn-Twin Row Planting		
NW	7	16.00-19.00	17.71	-	-	-
WC	15	16.00-20.00	17.60	5	20.00-20.00	20.00
SW	17	16.00-22.00	18.94	-	-	-
NC	^{1/}			^{1/}		
C	9	15.00-21.00	18.11	^{1/}		
SC	15	13.00-20.00	18.00	-	-	-
NE	-	-	-	-	-	-
EC	^{1/}			^{1/}		
SE	-	-	-	-	-	-
State	67	13.00-22.00	18.24	9	20.00-21.00	20.44

^{1/} Insufficient number of reports.

PLANTING (Continued)

Regular-Till

The grass seeding rate averaged \$16.10 per acre, an increase of 6 cents per acre from 2018. The price for seeding alfalfa-legumes averaged \$17.78 per acre, up \$1.59 from 2018.

Custom Rates for Grass Seeding and Alfalfa-Legume Seeding (\$/Acre), 2020, by District

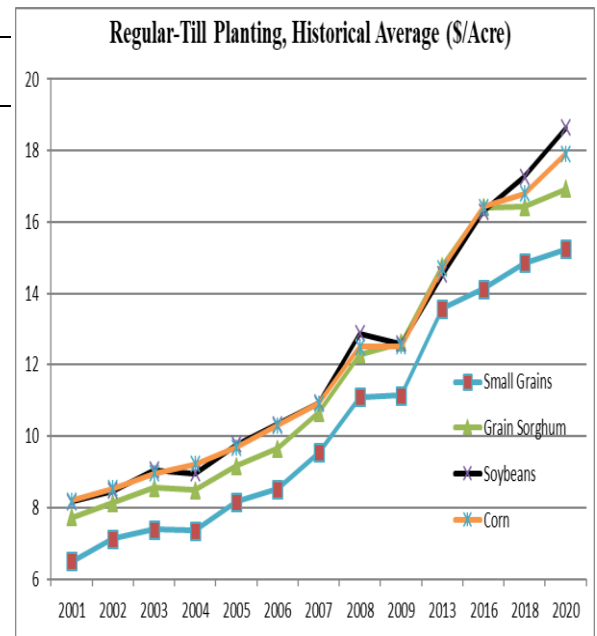
District	Grass Seeding			Alfalfa-Legume Seeding		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	1/	15.00-15.00	15.00	1/		
WC	15	10.00-25.00	17.53	8	18.00-18.00	18.00
SW	5	15.00-25.00	18.60	5	12.00-15.00	13.80
NC	1/			14	18.00-22.00	20.43
C	6	14.00-20.00	15.67	11	12.00-20.00	17.36
SC	-	-	-	1/		
NE	3	14.00-15.00	14.67	-	-	-
EC	8	9.00-20.00	14.19	5	15.00-20.00	16.60
SE	1/			-	-	-
State	42	4.50-25.00	16.10	45	12.00-22.00	17.78

1/ Insufficient number of reports.

The custom charges for planting small grains, grain sorghum, corn, and soybeans has been steadily increasing since 2001. Small grain seeding charges in 2020 averaged \$15.24 per acre, up \$0.39 from 2018. The average price charged for planting grain sorghum was \$16.92 per acre, compared to \$16.42 in 2018. Charges for planting corn increased \$1.13 per acre from 2018 to \$17.92 in 2020. Soybean planting charges averaged \$18.64 per acre in 2020, an increase of \$1.38 from 2018.

Custom Rates for Regular-Till Planting, Historical Averages (\$/Acre)

Year	Small Grains	Grain Sorghum	Soybeans	Corn	Grass	Alfalfa-Legume
2001	6.49	7.72	8.17	8.19	8.92	8.59
2002	7.13	8.13	8.47	8.54	9.77	9.83
2003	7.38	8.55	9.06	8.95	10.61	10.29
2004	7.35	8.48	8.95	9.21	10.83	9.63
2005	8.17	9.17	9.76	9.69	11.45	10.52
2006	8.52	9.65	10.33	10.3	11.44	10.79
2007	9.54	10.65	10.94	10.91	12.6	11.35
2008	11.09	12.3	12.87	12.51	14.65	13.75
2009	11.14	12.61	12.58	12.52	14.02	12.68
2013	13.58	14.77	14.53	14.71	15.35	15.04
2016	14.13	16.41	16.29	16.43	13.96	14.88
2018	14.85*	16.42*	17.26*	16.79*	16.04*	16.19*
2020	15.24*	16.92*	18.64*	17.92*	16.10*	17.78*



Note: Rates before 2016 are from surveys conducted by NASS.

*Combined average of planting with fertilizer and planting without fertilizer & chemical.

PLANTING (Continued)

Minimum-Till or No-Till

The average custom rate for minimum-till or no-till drilling of small grains and grain sorghum row planting without fertilizer and chemical applications averaged \$16.22 per acre in 2020. Corn row planting in 2020 averaged \$16.93 per acre, up \$0.97 from 2018. Soybean row planting, drilling, and twin row planting without fertilizer and chemical application averaged \$17.32 per acre, \$17.45 per acre, and \$19.46 per acre, respectively. Minimum-till or no-till planting rates without fertilizer and chemical application in 2020 were higher than corresponding 2018 rates.

Custom Rates for Minimum-Till or No-Till Planting (\$/Acre), 2020, by District Without Fertilizer & Chemical Application

District	No. of Reports	Range	Average	No. of Reports	Range	Average
Small Grain Drilling				Grain Sorghum- Row Planting		
NW	9	14.00-20.00	17.56	5	15.00-17.00	16.40
WC	9	11.00-20.00	16.00	21	10.00-18.00	15.90
SW	14	13.00-22.00	17.07	8	13.00-17.50	15.88
NC	7	15.00-18.00	17.14	5	15.00-20.00	17.80
C	11	7.50-20.00	15.95	7	14.00-20.00	17.14
SC	4	10.00-18.00	14.50	4	10.00-18.00	13.50
NE	3	14.00-15.00	14.67	-	-	-
EC	8	10.00-22.00	15.75	3	15.00-20.00	16.67
SE	4	10.00-16.00	13.75	1/		
State	69	7.50-22.00	16.23	54	10.00-20.00	16.22
Corn-Row Planting				Soybeans-Row Planting		
NW	7	15.00-20.00	17.43	3	17.00-17.00	17.00
WC	23	10.00-20.00	15.46	1/		
SW	8	18.50-20.00	19.25	6	18.00-20.00	19.33
NC	7	15.00-20.00	17.29	6	16.00-20.00	17.67
C	9	14.00-20.00	17.11	8	15.00-20.00	17.69
SC	5	10.00-18.00	14.30	7	10.00-18.00	15.21
NE	5	14.00-24.00	18.60	4	15.00-22.00	17.75
EC	7	15.00-22.00	17.57	8	14.00-20.00	16.28
SE	1/			1/		
State	72	10.00-25.00	16.93	45	10.00-25.00	17.32
Soybeans-Drilling				Soybeans-Twin Row Planting		
NW	-	-	-	3	24.00-24.00	24.00
WC	1/			-	-	-
SW	7	15.00-22.00	19.29	-	-	-
NC	5	16.00-20.00	18.00	1/		
C	10	15.00-20.00	17.20	1/		
SC	5	12.00-18.00	15.20	-	-	-
NE	1/			1/		
EC	6	15.00-20.00	17.00	1/		
SE	1/			2	16.50-16.50	16.50
State	38	12.00-20.00	17.45	12	16.00-24.00	19.46

^{1/} Insufficient number of reports.

PLANTING (Continued)

Minimum-Till or No-Till

Minimum-till or no-till custom rates for planting small grains, grain sorghum, corn, and soybeans with fertilizer were higher than the corresponding planting rates without fertilizer and chemical application. These rates were also higher than the corresponding 2018 rates. The average rates in 2020 for small grain drilling, grain sorghum row planting, corn row planting, soybeans row planting, soybeans drilling, and soybean twin row planting with fertilizer application were \$18.26, \$18.05, \$18.83, \$18.92, \$19.27, and \$22.27, respectively.

Custom Rates for Minimum-Till or No-Till Planting (\$/Acre), 2020, by District With Fertilizer Application

District	No. of Reports	Range	Average	No. of Reports	Range	Average
Small Grain Drilling				Grain Sorghum- Row Planting		
NW	11	13.00-20.00	17.23	9	1.00-20.00	16.22
WC	18	14.50-20.00	18.42	22	14.00-20.00	17.36
SW	12	18.00-25.00	20.83	13	16.00-22.00	18.92
NC	15	15.00-22.00	18.63	14	16.00-22.00	19.57
C	21	12.00-25.00	17.10	22	14.00-25.00	17.73
SC	12	15.00-22.00	18.58	8	12.50-22.00	17.75
NE	-	-	-	-	-	-
EC	4	15.00-18.00	16.50	4	20.00-21.00	20.25
SE	-	-	-	-	-	-
State	93	12.00-25.00	18.26	92	1.00-25.00	18.05
Corn-Row Planting				Soybeans-Row Planting		
NW	14	15.00-20.00	18.07	7	17.00-20.00	19.14
WC	27	14.00-22.00	18.15	6	15.00-20.00	17.17
SW	14	16.00-22.00	19.50	4	22.00-22.00	22.00
NC	17	12.50-22.00	18.65	14	15.00-23.00	19.68
C	23	15.00-30.00	18.57	22	15.00-25.00	18.32
SC	11	15.00-26.00	20.41	9	12.50-22.00	18.28
NE	^{1/}	-	-	-	-	-
EC	5	16.00-22.00	20.20	4	20.00-21.00	20.25
SE	-	-	-	-	-	-
State	112	12.50-30.00	18.83	66	12.50-25.00	18.92
Soybeans-Drilling				Soybeans-Twin Row Planting		
NW	4	17.00-20.00	19.25	3	27.00-27.00	27.00
WC	6	18.00-20.00	18.33	-	-	-
SW	5	18.00-24.00	22.80	-	-	-
NC	9	17.00-22.00	20.22	4	20.00-21.00	20.50
C	16	12.00-25.00	17.50	^{1/}	-	-
SC	6	17.00-22.00	20.17	-	-	-
NE	-	-	-	-	-	-
EC	3	20.00-20.00	20.00	^{1/}	-	-
SE	-	-	-	-	-	-
State	49	12.00-25.00	19.27	11	20.00-27.00	22.27

^{1/} Insufficient number of reports.

PLANTING (Continued)

Minimum-Till or No-Till

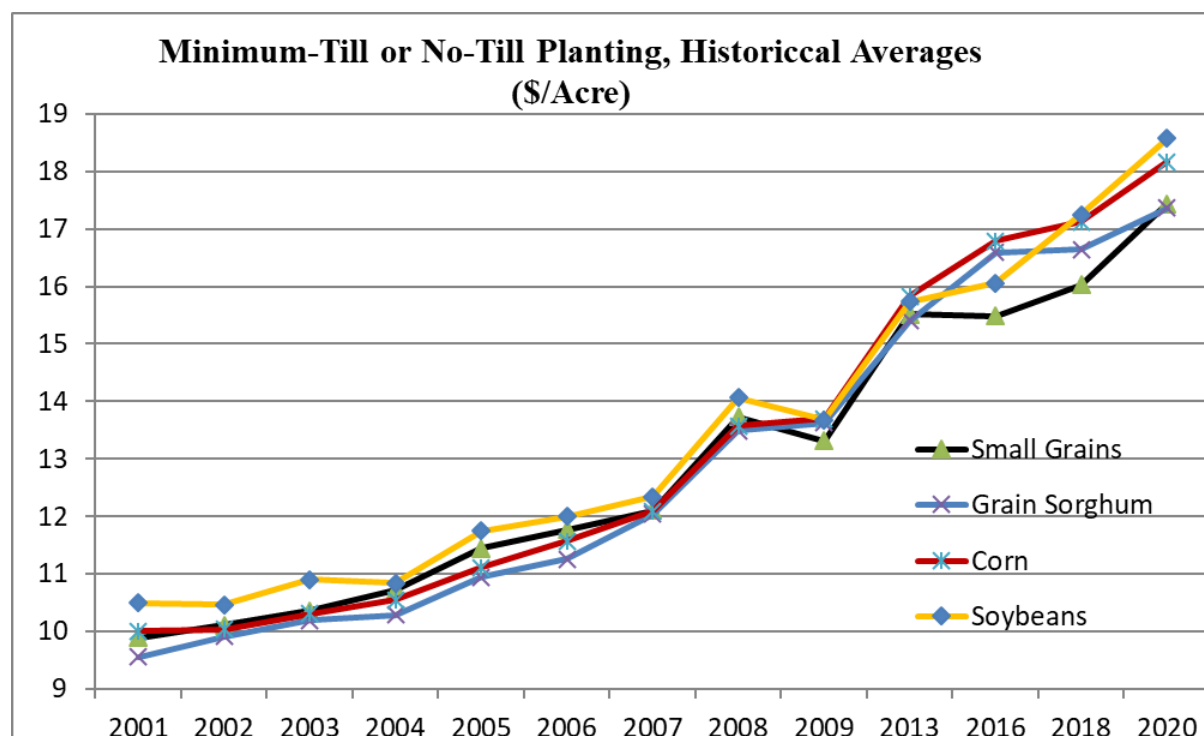
Over time the custom rates for minimum-till planting of crops have been on the rise. The custom charges for minimum-till or no-till planting small grains, grain sorghum, corn, and soybeans in 2020 were higher than the corresponding 2018 rates. The custom rate for minimum-till or no-till drilling of small grains averaged \$17.43 per acre in 2020, up \$1.40 from 2018. Minimum-till grain sorghum planting averaged \$17.36 per acre, an increase of 72 cents from 2018. Corn planting in 2020 averaged \$18.16 per acre, an increase of \$1.04 from 2018. Soybean planting averaged \$18.58 per acre, up \$1.33 from 2018's average of \$17.25 per acre.

Custom Rates for Minimum or No-Till Planting, Historical Averages (\$/Acre)

Year	Small Grains	Grain Sorghum	Corn	Soybeans
2001	9.89	9.56	10.00	10.50
2002	10.11	9.91	10.04	10.46
2003	10.36	10.19	10.31	10.90
2004	10.72	10.29	10.55	10.84
2005	11.45	10.94	11.11	11.75
2006	11.77	11.26	11.57	12.00
2007	12.10	12.04	12.09	12.34
2008	13.73	13.49	13.57	14.07
2009	13.31	13.63	13.70	13.68
2013	15.52	15.40	15.83	15.74
2016	15.49	16.59	16.79	16.06
2018	16.03*	16.64*	17.12*	17.25*
2020	17.43*	17.36*	18.16*	18.58*

Note: Rates before 2016 are from surveys conducted by NASS.

*Combined average of planting with fertilizer and planting without fertilizer & chemical.



PLANTING (Continued)

Cover Crops

Regular-till cover crop drilling without fertilizer and chemical application averaged \$16.45 per acre in 2020, down 18 cents per acre from 2018. Minimum or no-till cover crop drilling rates in 2020 were higher than the corresponding rates in 2018. Minimum-till or no-till cover crop drilling without fertilizer and chemical application averaged \$16.50 per acre, an increase of 13 cents from 2018. The rate for minimum-till aerial planting of a cover crop with fertilizer application averaged \$18.16 per acre in 2020, up \$1.01 per acre from 2018.

Custom Rates for Cover Crop Drilling, Regular-Till Planting (\$/Acre), 2020, by Region

Region	No Fertilizer & No Chemical Application			With Fertilizer Application		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	13	13.00-22.00	17.23	11	15.00-25.00	20.09
Central	5	15.00-15.00	15.00	9	12.00-20.00	16.11
Eastern	^{1/}			^{1/}		
State	20	13.00-22.00	16.45	21	12.00-25.00	18.14

^{1/} Insufficient number of reports.

Custom Rates for Cover Crop Drilling, Minimum-Till or No-Till Planting (\$/Acre) 2020, by District

Region	No Fertilizer No Chemical			With Fertilizer Application		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	5	13.00-20.00	18.00	4	19.00-20.00	19.75
WC	5	12.00-18.00	15.40	10	18.00-20.00	19.20
SW	8	13.00-22.00	18.50	5	20.00-25.00	24.00
NC	^{1/}			10	12.00-22.00	17.80
C	6	15.00-20.00	16.67	12	12.00-20.00	15.58
SC	^{1/}			3	15.00-20.00	17.33
NE	3	15.00-17.00	15.67	^{1/}		
EC	6	15.00-15.00	15.00	^{1/}		
SE	^{1/}			-	-	-
State	38	10.00-22.00	16.50	47	12.00-25.00	18.16

^{1/} Insufficient number of reports.

CHEMICAL APPLICATIONS

The custom rates for chemical applications presented here include the cost of machine, power, and the operator; however, the costs of the chemicals are excluded. Rates charged for row crop cultivation with fertilizer application averaged \$12.67 per acre in 2020, an increase of \$0.65 from the 2018 average. The average rate for row crop cultivation without fertilizer application in 2020 was \$9.50 per acre, a decrease of \$1.01 from 2018.

Custom Rates for Row Crop Cultivation, 2020, by Region

Region	With Fertilizer Application (\$/Acre)			Without Fertilizer Application (\$/Acre)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	9	12.00-19.00	15.22	3	11.50-12.00	11.83
Central	3	5.00-5.00	5.00	5	5.00-11.50	7.60
Eastern	3	5.00-18.00	12.67	1/		
State	15	5.00-19.00	12.67	10	5.00-16.50	9.50

^{1/} Insufficient number of reports.

The rate for the application of dry fertilizer averaged \$5.74 per acre in 2020, up 13 cents per acre from the 2018 rate. Liquid fertilizer application, on average, cost \$6.16 per acre in 2018, 43 cents per acre higher than in 2018.

Custom Rates for Fertilizer Application, 2020, by District

District	Dry Fertilizer (\$/Acre)			Liquid Fertilizer (\$/Acre)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	6	5.00-6.75	5.92	12	3.50-14.00	7.29
WC	23	5.00-7.00	5.43	27	3.00-12.00	6.04
SW	12	4.50-6.00	5.63	12	4.50-7.00	5.88
NC	26	5.00-7.50	6.05	22	5.00-7.50	6.24
C	21	5.00-7.50	5.69	30	4.00-15.00	6.11
SC	25	4.50-8.00	5.64	29	5.00-10.00	5.71
NE	17	6.00-7.00	6.47	12	6.50-8.00	7.39
EC	9	4.25-7.00	5.74	7	6.00-7.00	6.46
SE	19	4.50-8.00	5.25	17	5.00-7.00	5.56
State	158	4.25-8.00	5.74	168	3.00-15.00	6.16

CHEMICAL APPLICATIONS (Continued)

Custom chemical applicators charged an average of \$16.61 per acre to apply anhydrous ammonia in 2020, an increase of \$1.52 from the 2018 average.

Custom Rates for Application of Anhydrous Ammonia, 2020, by District

District	No. of Reports	Range	Average (\$/Acre)
NW	^{1/}		
WC	5	18.00-24.00	19.20
SW	12	5.00-18.00	14.00
NC	6	13.00-21.00	16.67
C	10	12.00-21.00	15.60
SC	3	12.00-21.00	17.00
NE	13	14.00-22.00	18.46
EC	7	15.00-21.00	17.93
SE	8	5.00-21.00	15.25
State	65	5.00-24.00	16.61

^{1/} Insufficient number of reports.

The average cost for aerial application of herbicide in 2020 was \$7.97 per acre, down 10 cents from 2018. When herbicide was applied with a ground rig, the average cost in 2020 was \$5.99, up 26 cents from the average of \$5.73 in 2018.

Custom Rates for Herbicide Application, 2020, by District

District	Aerial (\$/Acre)			Ground Rig (\$/Acre)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	3	6.00-8.00	6.67	17	4.00-7.00	5.43
WC	15	4.50-8.50	6.50	35	3.00-6.50	5.28
SW	11	5.75-7.25	6.50	20	4.50-6.50	5.70
NC	6	7.00-12.00	9.33	23	5.00-7.50	6.55
C	8	4.50-12.00	7.88	35	4.00-8.00	5.66
SC	10	5.00-10.00	8.13	23	5.00-10.00	5.90
NE	9	8.00-10.00	9.61	20	5.00-9.00	7.53
EC	6	8.00-12.00	9.67	10	5.00-7.00	6.33
SE	6	8.00-10.25	9.38	18	5.00-13.00	6.39
State	74	4.50-12.00	7.97	201	3.00-13.00	5.99

CHEMICAL APPLICATIONS (Continued)

The custom rates for aerial insecticide/fungicide application in 2020 were lower than the corresponding rates in 2018. The average cost for aerial application of insecticide was \$8.14 per acre, down \$0.34 from 2018. When insecticides were applied with a ground rig, the average cost was \$5.98 per acre in 2020, up 27 cents from the 2018 average.

Custom Rates for Insecticide/Fungicide Application, 2020, by District

District	Aerial (\$/Acre)			Ground Rig (\$/Acre)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	^{1/}			5	6.00-7.00	6.20
WC	14	4.50-7.50	6.21	14	3.00-6.00	5.18
SW	11	6.00-7.75	7.00	8	4.50-8.00	6.56
NC	6	7.00-12.00	9.33	17	5.25-7.50	6.43
C	10	4.50-12.00	7.65	27	4.00-7.50	5.51
SC	11	5.00-22.00	9.50	16	5.00-10.00	5.96
NE	12	7.00-10.00	9.04	9	6.75-8.00	7.39
EC	5	8.00-12.00	9.40	7	6.00-7.00	6.64
SE	6	8.00-10.25	9.38	15	5.00-7.00	5.57
State	77	4.50-22.00	8.14	118	3.00-10.00	5.98

^{1/} Insufficient number of reports.

Custom Rates for Chemical Application, Historical Averages (\$/Acre)

Type of Operation or Application	2002	2003	2004	2005	2006	2007	2008	2009	2013	2016	2018	2020
Cultivation with Fertilizer	6.19	6.64	6.73	7.59	7.60	6.33	8.41	8.00	10.84	9.40	12.02	12.67
Cultivation without Fertilizer	6.01	5.95	6.08	7.05	7.09	6.32	8.46	7.24	9.39	8.27	10.51	9.50
Dry Fertilizer	3.58	3.68	3.78	4.01	4.15	4.20	4.96	4.68	5.31	5.48	5.61	5.74
Liquid Fertilizer	3.72	3.78	3.87	4.17	4.42	4.37	4.98	4.82	5.71	5.65	5.73	6.16
Anhydrous Ammonia	5.90	6.18	6.93	7.12	6.75	8.46	10.20	10.55	12.60	15.15	15.09	16.61
Herbicide-Aerial	4.52	4.30	4.29	4.56	4.83	5.19	6.20	6.93	7.60	7.69	8.07	7.97
Herbicide-Ground Rig	3.81	3.85	4.03	4.26	4.40	4.50	5.01	4.98	5.44	5.61	5.73	5.99
Insecticide-Aerial	4.49	4.83	4.30	4.74	5.20	5.48	6.20	6.60	7.73	7.65	8.48	8.14
Insecticide-Ground Rig	3.90	3.92	4.02	4.33	4.51	4.49	5.07	4.95	5.45	5.62	5.71	5.98

Note: Rates before 2016 are from surveys conducted by NASS.

FEED PREPARATION

Rates for custom feed preparations are those generally charged by grain elevators and feed mills. For grinding grain, the average custom rate in 2020 was 45 cents per hundredweight (cwt), up 1 cent from 2018. The average rate for rolling grain in 2020 was 45 cents per cwt, down 2 cents from 2018. Too few reports were available for the custom rates of grinding hay to be published. Mixing operations cost an average of 46 cents per cwt in 2020, compared to 42 cents per cwt in 2018. The average rates for rolling and mixing and for grinding and mixing in 2020 were 90 cents per cwt and 91 cents per cwt, respectively, compared with 88 cents per cwt and 64 cents per cwt, respectively, in 2018.

Custom Rates for Feed Preparation (\$/cwt), 2020, by District

District	Grinding Grain			Rolling Grain		
	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	-	-	-	-	-	-
WC	-	-	-	-	-	-
SW	4	0.45-0.45	0.45	6	0.45-0.45	0.45
NC	-	-	-	4	0.50-0.50	0.50
C	5	0.40-0.40	0.40	5	0.40-0.40	0.40
SC	-	-	-	-	-	-
NE	5	0.45-0.56	0.47	5	0.45-0.56	0.47
EC	^{1/}			^{1/}		
SE	7	0.32-0.64	0.46	7	0.32-0.64	0.42
State	22	0.32-0.64	0.45	28	0.32-0.64	0.45

^{1/} Insufficient number of reports.

Custom Rates for Feed Preparation (\$/cwt), 2020, by District

District	Mixing Feed			Rolling and Mixing			Grinding and Mixing		
	No. of Reports	Range	Average	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	-	-	-	-	-	-	-	-	-
WC	-	-	-	-	-	-	-	-	-
SW	4	0.50-0.50	0.50	4	0.95-0.95	0.95	-	-	-
NC	4	0.40-0.40	0.40	-	-	-	-	-	-
C	5	0.40-0.40	0.40	5	0.80-0.80	0.80	5	0.80-0.80	0.80
SC	-	-	-	-	-	-	-	-	-
NE	5	0.45-0.56	0.47	4	0.90-0.90	0.90	4	0.90-0.90	0.90
EC	^{1/}			-	-	-	-	-	-
SE	7	0.32-0.84	0.49	6	0.69-1.48	0.95	6	0.76-1.48	1.00
State	26	0.32-0.84	0.46	19	0.69-1.48	0.90	15	0.76-1.48	0.91

^{1/} Insufficient number of reports.

FEED PREPARATION (Continued)

Charges for pelleting feed operations in 2020 averaged \$0.94 per cwt, 5 cents higher than in 2016. Custom rates for grinding, mixing and pelleting operations averaged \$1.69 per cwt in 2020, up 12 cents from the 2016 average. Charges for pelleting feed operations and grinding, mixing and pelleting operations in 2018 were unavailable. Sacking operations, excluding the cost of sacks, averaged \$1.45 per cwt, down 12 cents from the 2018 average.

Custom Rates for Feed Preparation (\$/cwt), 2020, by District

District	Pelleting Feed Only			Grinding, Mixing, and Pelleting			Sacking Feed		
	No. of Reports	Range	Average	No. of Reports	Range	Average	No. of Reports	Range	Average
NW	-	-	-	-	-	-	-	-	-
WC	-	-	-	-	-	-	-	-	-
SW	-	-	-	4	1.75-1.75	1.75	6	0.85-2.00	1.23
NC	-	-	-	-	-	-	4	1.25-1.25	1.25
C	5	0.50-0.50	0.50	5	0.90-1.25	1.18	5	1.00-1.00	1.00
SC	-	-	-	-	-	-	-	-	-
NE	-	-	-	-	-	-	5	1.00-2.80	1.36
EC	-	-	-	-	-	-	^{1/}	-	-
SE	4	1.50-1.50	1.50	4	2.26-2.26	2.26	7	1.50-2.50	1.93
State	9	0.50-1.50	0.94	13	0.90-2.26	1.69	28	0.85-2.80	1.45

^{1/} Insufficient number of reports.

Custom Rates for Feed Preparation, Historical Average (\$/cwt)

Year	Grinding Grain	Rolling Grain	Grinding Hay	Mixing Feed	Rolling and Mixing	Grinding and Mixing	Pelleting Feed	Grinding, Mixing, and Pelleting	Sacking Feed (excluding sack costs)
2001	0.34	0.31	0.66	0.23	0.49	0.53	0.70	1.18	0.91
2002	0.36	0.33	0.74	0.26	0.51	0.53	0.76	1.19	0.95
2003	0.35	0.33	0.62	0.26	0.52	0.57	0.84	1.14	1.16
2004	0.36	0.34	0.25	0.26	0.56	0.57	0.79	1.16	1.12
2005	0.39	0.36	0.32	0.28	0.58	0.62	0.89	1.20	1.15
2006	0.38	0.37	0.55	0.28	0.58	0.61	0.86	1.02	1.13
2007	0.44	0.39	0.57	0.33	0.57	0.58	0.83	1.34	1.27
2008	0.40	0.36	0.69	0.34	0.64	0.68	1.03	1.52	1.44
2009	0.41	0.37	0.61	0.32	0.61	0.67	0.90	1.51	1.30
2013	0.37	0.38	0.69	0.33	0.72	0.69	1.17	^{1/}	1.49
2016	0.47	0.45	^{1/}	0.34	0.77	1.03	0.89	1.47	1.74
2018	0.44	0.47	^{1/}	0.42	0.88	0.64	^{1/}	^{1/}	1.57
2020	0.45	0.45	^{1/}	0.46	0.90	0.91	0.94	1.69	1.45

Note: Rates before 2016 are from surveys conducted by NASS.

^{1/} Insufficient number of reports.

FEED DELIVERY

Various methods were used to charge for bulk feed deliveries. Rates for the most commonly reported methods are presented. If the feed delivery charge was based on a straight charge per mile, the average rate in 2020 was \$3.50 per loaded mile on an average load of 17.29 tons. In 2018, operators charged \$2.98 per loaded mile on an average load of 9.45 tons. Operators also had fee structures with straight charge per ton for feed delivery. For an average load of 21.33 tons, an average rate per ton was \$10.67 in 2020.

Custom Rates for Feed Delivery, 2020, by Region

Region	Straight Charge per Mile			Straight Charge per Ton		
	Number of Reports	Dollars per Loaded Mile	Avg. Load (Tons)	Number of Reports	Dollars per Ton	Avg. Load (Tons)
Western	4	3.69	16.50	-	-	-
Central	4	3.00	-	-	-	-
Eastern	10	3.55	17.60	6	10.67	21.33
State	18	3.50	17.29	6	10.67	21.33

MACHINERY RENTAL

Rental costs listed below do not include the cost of fuel or labor for self-propelled equipment and tractors. Tractors and combines were the most commonly reported rental items, followed by corn headers, no till drills, anhydrous applicators, and disks. Some items, such as liquid fertilizer application and chemical sprayers, were reported but had too few reports to summarize.

Combine rental averaged \$200.50 per hour, a decrease of \$12.83 per hour from 2018. Rental charges for corn headers in 2020 averaged \$8.73 per acre, down \$2.27 from 2018. Average rental for a no-till drill was \$12.39 per acre in 2020, up \$3.81 from 2018. Rental for tractors with horsepower of 151-250 averaged \$48.33 per hour in 2020; while rental for tractors more than 250HP averaged \$77.45 per hour. Average rental costs show increases or decreases due to the varied demand and increasing costs of implements. Some of the variation may be due to the small number of reports for some rental items.

Machine Rental Rates, 2020

Machine or Tool	Method of Charge	No. of Reports	Range	Average
Combine	\$/Hour	30	110.00-300.00	200.50
Corn Header	\$/Acre	11	4.00-12.00	8.73
No-Till Drill	\$/Acre	19	7.50-22.00	12.39
Baler, Large Round Bales	\$/Bale	5	10.00-20.00	15.00
Dry Fertilizer Applicator	\$/Acre	8	2.00-5.50	3.13
Liquid Fertilizer Applicator	\$/Acre	5	5.00-12.00	8.00
Chemical Sprayer	\$/Acre	4	3.00-5.00	4.00
Tractor				
151-250 HP	\$/Hour	6	40.00-75.00	48.33
250+ HP	\$/Hour	21	40.00-120.00	77.45

TERRACING AND DOZING

The cost of building terraces averaged \$1.77 per foot in 2020, up \$0.85 from 2018. The average cost for general dozer work was \$152.17 per hour, down \$4.83 per hour from 2018.

Custom Rates for Terracing and Dozing, 2020, by Region

Region	Terracing			Dozing		
	No. of Reports	Dollars per Foot		No. of Reports	Dollars per Hour	
		Range	Average		Range	Average
Western	10	0.70-3.00	1.87	10	75.00-150.00	127.00
Central	5	1.10-2.00	1.67	12	130.00-180.00	164.58
Eastern	^{1/}			8	125.00-200.00	165.00
STATE	16	0.70-3.00	1.77	30	75.00-200.00	152.17

^{1/} Insufficient number of reports.

MANURE REMOVAL AND SPREADING

Custom rates for manure removal alone averaged \$3.60 per ton in 2020. Custom rates for manure spreading alone averaged \$3.69 per ton. Manure removal and spreading in 2020 averaged \$7.23 per ton, an increase of \$3.26 per ton from 2018 average. Additional mileage charge averaged \$0.42 per mile hauled in 2020, compared to \$1.04 per mile hauled in 2018.

Custom Rates for Manure Removal, 2020, by Region

Region	Removal Only (\$/Ton)			Spreading Only (\$/Ton)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	4	4.00-4.00	4.00	16	2.60-7.00	3.77
Central	^{1/}			4	3.00-3.50	3.38
Eastern	-	-	-	-	-	-
State	5	2.00-4.00	3.60	20	2.60-7.00	3.69
Region	Removal and Spreading (\$/Ton)			Additional Charges (\$/Mile)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	6	3.55-10.00	7.85	19	0.20-0.39	0.29
Central	^{1/}			3	0.20-0.20	0.20
Eastern	-	-	-	^{1/}		
State	7	3.50-10.00	7.23	24	0.20-2.85	0.42

^{1/} Insufficient number of reports.

HAULING LIVESTOCK

Questions related to rates for hauling livestock were added to the survey starting in 2016. Custom rates for hauling livestock with a belly-semi truck in 2020 averaged \$4.11 per mile hauled at 63,167 lbs. capacity. In 2018, the average rate for hauling livestock with a belly-semi was \$3.84 per mile with 51,577 lbs. capacity. In 2020, custom rates for hauling livestock with a small truck or gooseneck trailer averaged \$3.12 per mile, with average capacity of 15,083 lbs.

Custom Rates for Hauling Livestock, 2020, by Region

Region	Belly Semi Truck					
	Weight Capacity (lb.)			One-Way Load Charge (\$/Mile)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	3	48,000-48,000	48,000	3	5.00-5.00	5.00
Central	-	-	-	^{1/}		
Eastern	3	55,000-90,000	78,333	4	3.00-4.00	3.46
State	6	48,000-90,000	63,167	8	3.00-5.00	4.11

Custom Rates for Hauling Livestock, 2020, by Region

Region	Small Truck or Gooseneck Trailer					
	Weight Capacity (lb.)			One-Way Load Charge (\$/Mile)		
	No. of Reports	Range	Average	No. of Reports	Range	Average
Western	4	15,000-15,000	15,000	5	3.00-5.00	3.60
Central	7	14,000-19,000	14,857	10	2.00-4.00	3.06
Eastern	^{1/}			4	2.00-3.85	2.68
State	12	14,000-19,000	15,083	19	2.00-5.00	3.12

^{1/} Insufficient number of reports.

FENCE BUILDING

Rates for fence building were reported in the Bluestem Pasture Survey report published in June of 2019. The 2019 average fence building costs were computed from responses in the 14 Flint Hills counties. The reported rates varied considerably due to the difference in materials, equipment, and terrain. The rate charged for building a five-wire fence, excluding materials, averaged \$23.75 per rod in 2019, an increase of \$3.67 from 2017. The rate including materials averaged \$39.48 per rod, up \$8.47 from 2017. Average hourly rates charged for fence building in 2019 were \$45 per hour with equipment. In 2019, the additional charge for gates was \$123 and for corners was \$220. The hourly rate for rough or rocky terrain averaged \$70 per hour, up \$7.50 from 2017.

Custom Rates for Fence Building, 2019, by Post Types

Post Type	5 Wire Including Materials (\$/Rod)		5 Wire Excluding Materials (\$/Rod)	
	Average	Range	Average	Range
Steel Post Only	39.71	30.00-62.5	30.63	30.00-31.25
Steel & Wood Posts	39.02	18.75-100	16.88	15.00-18.75
Combined Rate	39.48	18.75-100	23.75	15.00-31.25

Custom Rates for Fence Building, Additional Charges, 2019

Additional Charges	Average	Range
Additional Charge for Gates (\$)	123	30-250
Additional Charge for Corners (\$)	220	50-500
Average Hourly Rate With Equipment (\$/hour)	45	15-95
Average Hourly Rate for Rough or Rocky Terrain (\$/hour)	70	25-100