

2004 North Dakota Custom Rates Part I - Early Season Operations

August 31, 2004

Introduction

The data in this report are the result of a survey conducted during July and August by the USDA's North Dakota Agricultural Statistics Service. Approximately 2,800 reports from aerial sprayers, farmers/ranchers, and other custom operators were tabulated. The survey was designed to provide state and regional averages for custom work rates. The early season survey has been conducted every three years since 1962, except during the early 1980's when it was conducted every other year.

Appreciation is expressed to all survey participants who provided the data for this report and also to the North Dakota State University Extension service personnel for their assistance on this project. Funding was provided by the North Dakota State University Experiment Station and Extension Service.

The Data

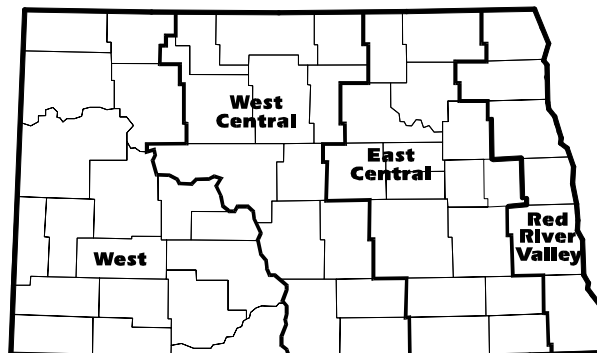
This report contains state and regional level custom work rates for land tillage, planting, fertilizer and pesticide application, haying operations and other custom work.

Included for each operation are the number of reports, range, most frequently reported and average rates. Also included are

state level 2001 average rates, 2004 rates as a percent of 2001, and historical comparisons back to 1982 for selected operations. Regional averages are reported where there are a sufficient number of reports. We advise the reader to exercise discretion when using rates where fewer than fifteen reports were tabulated.

The range shows the minimum and maximum rate reported for each custom operation. The range is affected by the locality of the reporter and the size of the custom operator. A farmer/rancher who does a small amount of custom work for his or her neighbors may charge less than a large-scale operator.

FARMING REGIONS

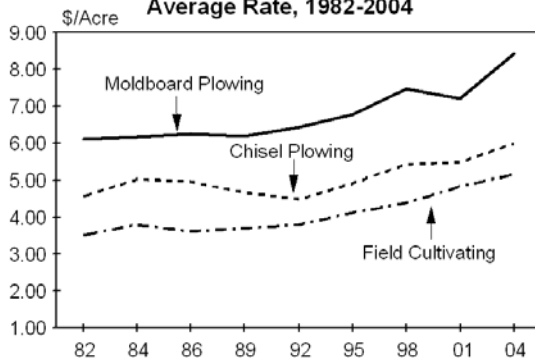


The rates in this report include charges for equipment, power, fuel, and the operator. Exchange work is not considered custom work for this survey.

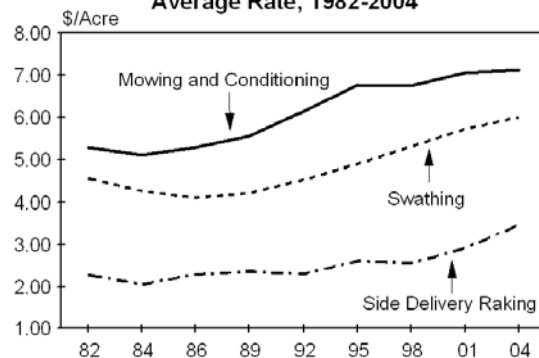
Other Reports

A late season custom rates survey will be conducted in October. It will collect data on harvesting, grain drying, crop and hay hauling and other miscellaneous custom rates. This information will be released in November.

Land Tillage
Average Rate, 1982-2004



Haying Operations
Average Rate, 1982-2004



~ Compiled and Published by ~

LAND TILLAGE, SMALL GRAIN SEEDING AND ROW CROP PLANTING

STATEWIDE AVERAGES, NORTH DAKOTA, 2004

Operation	2004				2001 Average Rate	2004 as Percent of 2001
	Number of Reports	Range in Rates	Most Frequent Rate Reported	Average Rate		
	- No. -		----- Dollars Per Acre -----			- Pct. -
LAND TILLAGE						
Primary Tillage (Deep)						
Plowing (Moldboard)	77	3.00-15.00	10.00	8.44	7.22	117
Sod Breaking	51	2.00-20.00	10.00	9.34	8.59	109
Heavy Disking	179	1.50-18.00	5.00	6.66	6.43	104
Chisel Plowing	214	1.50-15.00	6.00	5.99	5.47	110
Sub Soiling (16-20 inches deep)	80	3.00-30.00	10.00	10.30	8.59	120
Disk/Chisel Plowing	123	3.00-25.00	8.00	7.12	6.63	107
Secondary Tillage (Shallow)						
Field Cultivation	229	2.00-20.00	5.00	5.15	4.85	106
One-Way Disking	90	2.00-15.00	6.00	6.01	5.26	114
Tandem Disking	147	2.50-20.00	6.00	6.29	5.44	116
Rod Weeder	36	1.50-12.00	4.00	5.11	4.78	107
Rotary Hoe	79	1.00- 8.00	3.00	4.15	3.94	105
Land Rolling	217	1.00-12.00	3.00	3.98	NA	
Light Harrowing	153	1.00-10.00	3.00	3.42	3.18	108
Heavy Harrowing	179	1.00-12.00	3.00	4.19	3.62	116
Row Crop Cultivation	137	1.00-12.00	5.00	4.87	4.20	116
SMALL GRAIN SEEDING						
With Fertilizer						
Regular Drilling	216	1.00-15.00	10.00	7.95	7.30	109
Drilling & Tillage	161	3.00-22.00	10.00	9.55	9.08	105
Pony Press Drill	40	3.50-16.00	8.00	8.94	9.59	93
Air Seeding	465	2.50-20.00	10.00	9.98	9.34	107
No Till Drill	342	2.50-25.00	12.00	10.65	10.17	105
Without Fertilizer						
Regular Drilling	205	1.00-13.00	10.00	7.18	6.38	113
Drilling & Tillage	141	2.00-18.00	10.00	8.69	8.02	108
Pony Press Drill	40	3.00-15.00	10.00	8.64	8.04	107
Air Seeding	384	2.00-18.00	10.00	9.49	8.50	112
No Till Drill	292	2.00-22.00	10.00	10.26	9.19	112
ROW CROP PLANTING						
With Fertilizer						
Corn, Soybean, Sunflower (Regular)	224	2.50-18.00	10.00	8.93	7.54	118
Corn, Soybean, Sunflower (Air Seed)	205	2.50-20.00	10.00	10.10	NA	
Dry Edible Beans	116	2.50-15.00	10.00	9.32	8.22	113
Potato	7	7.00-25.00	NA	14.00	10.30	136
Sugarbeet	15	4.50-18.00	10.00	10.43	12.40	84
Without Fertilizer						
Corn, Soybean, Sunflower (Regular)	225	2.00-15.00	10.00	8.12	6.97	116
Corn, Soybean, Sunflower (Air Seed)	191	2.00-18.00	10.00	9.53	NA	
Dry Edible Beans	111	2.00-15.00	10.00	8.79	7.71	114
Potato	6	7.00-20.00	NA	11.79	9.00	131
Sugarbeet	21	3.35-20.00	10.00	9.00	10.35	87
No Till With Fertilizer						
Corn, Soybean, Sunflower	215	1.00-18.00	10.00	10.16	9.36	109
No Till Without Fertilizer						
Corn, Soybean, Sunflower	183	1.00-16.00	10.00	9.57	8.59	111

FERTILIZER AND PESTICIDE APPLICATION AND HAYING OPERATIONS

STATEWIDE AVERAGES, NORTH DAKOTA, 2004

Operation	2004				2001 Average Rate	2004 as Percent of 2001
	Number of Reports	Range in Rates	Most Frequent Rate Reported	Average Rate		
	- No. -			Dollars Per Acre		- Pct. -
FERTILIZER APPLICATION						
Dry Fertilizer						
Broadcast	753	0.50-12.00	4.00	3.87	3.64	106
Deep Banded	182	1.00-15.00	6.00	6.23	6.10	102
Liquid Fertilizer	252	1.00-15.00	4.00	4.42	4.49	98
Anhydrous Ammonia						
With Knife Applicator	275	1.00-20.00	5.00	6.12	5.33	115
While Chiseling	218	1.00-20.00	6.00	6.61	6.32	105
PESTICIDE APPLICATION						
By Surface Vehicles						
Herbicides						
Broadcast, Liquid	778	2.00-12.00	4.00	4.07	3.89	105
Dry	347	1.00-10.00	4.00	4.04	3.93	103
Incorporated, Liquid	291	2.00-13.00	4.00	4.91	4.80	102
Dry	212	2.00-13.00	4.00	5.11	4.87	105
Insecticides						
Broadcast, Liquid	452	1.00- 9.00	4.00	4.11	3.93	105
Dry	230	2.00- 8.00	4.00	4.18	4.04	103
Incorporated, Liquid	221	1.00-12.00	4.00	4.80	4.53	106
Dry	164	2.70-12.00	4.00	4.99	4.71	106
Fungicides	409	2.00- 8.50	4.00	4.19	4.00	105
Desiccants	270	1.00-10.00	4.00	4.21	4.07	103
By Aircraft (All Pesticides)						
1 Gallon	324	1.00-12.00	4.00	4.65	4.02	116
2 - 3 Gallons	355	2.00-12.50	5.00	4.76	4.22	113
4 - 5 Gallons	358	2.00-13.00	5.00	4.98	4.47	111
Over 5 Gallons	201	1.00-13.50	5.00	5.29	4.88	108
HAYING OPERATIONS						
Mowing and Raking						
Mowing	125	1.00-12.50	5.00	5.37	5.27	102
Mowing and Conditioning	208	1.00-12.00	8.00	7.14	7.06	101
Swathing	188	2.00-12.50	6.00	6.01	5.72	105
Raking	112	1.00- 8.00	3.00	3.47	2.90	120
Baling (Wire or Twine Included)						
				Dollars Per Bale		
Small Square Bales, 250 Lbs or less	107	0.14- 8.00	1.00	1.03	0.81	127
Large Square Bales, Over 250 Lbs	111	1.00-12.00	5.00	5.91	7.33	81
Round Bales, 1,500 Lbs or less	410	1.25-25.00	5.00	6.25	5.71	109
Round Bales, Over 1,500 Lbs.	298	1.00-30.00	6.00	7.03	6.88	102
				Dollars Per Stack		
Mechanized Loose Hay Stacking	31	1.50-75.00	10.00	25.08	NA	

OTHER CUSTOM WORK AND HISTORICAL DATA

OTHER CUSTOM WORK, STATEWIDE AVERAGES, NORTH DAKOTA, 2004

Operation	2004				2001 Average Rate	2004 as Percent of 2001
	Number of Reports	Range in Rates	Most Frequent Rate Reported	Average Rate		
	- No. -					- Pct. -
Branding Calves	50	0.25- 6.00	1.00	1.71	1.58	108
Shearing Sheep	75	0.80- 4.00	2.00	2.33	2.15	108
Custom Feeding Livestock						
Weaned Calves	97	0.20- 4.50	1.00	1.23	1.01	122
Yearlings and Cull Cows	94	0.25- 5.50	1.00	1.42	1.12	127
Wintering Pregnant Beef Cows	115	0.50- 6.50	1.00	1.48	1.22	121
Calving Out Cows	50	0.75- 10.00	1.50	2.17	1.93	112
On-Farm Feed Grinding & Mixing						
Mobile Truck	42	2.50- 50.00	10.00	16.07	14.83	108
PTO Unit	39	1.00- 40.00	20.00	12.13	10.26	118
Tub Grinding Hay						
Farmer Supplies Power	68	10.00-150.00	50.00	63.93	44.00	145
Power Supplied	128	15.00-180.00	100.00	89.76	79.62	113
Self Contained Unit	254	10.00-180.00	100.00	95.74	85.01	113
Pneumatic Handling of Grain						
Per Bushel	281	0.01- 0.50	0.05	0.08	0.08	100
Post Hole Digging						
Digging	103	0.02- 8.00	1.00	2.64	2.49	106
Building Multi-Strand Wire Fence (No Supplies Included)						
Per Rod	54	0.70- 25.00	5.00	6.28	NA	
Per Hour	48	2.00- 60.00	10.00	15.51	NA	
Loader Work						
Skid-Steer Loader	319	6.00-100.00	35.00	36.07	34.05	106
Tractor Loader	243	5.00-100.00	40.00	38.22	35.18	109
Industrial Loader	312	20.00-125.00	50.00	65.26	62.21	105

HISTORICAL DATA, STATEWIDE AVERAGES, NORTH DAKOTA, 1982 - 2004

Operation	1982	1984	1986	1989	1992	1995	1998	2001	2004
Plowing (Moldboard)	6.11	6.18	6.25	6.19	6.43	6.78	7.48	7.22	8.44
Chisel Plowing	4.59	5.03	4.96	4.68	4.51	4.93	5.41	5.47	5.99
Field Cultivation	3.52	3.81	3.63	3.70	3.81	4.13	4.40	4.85	5.15
Small Grain Drilling									
Regular, With Fertilizer	4.68	4.54	4.78	4.76	5.28	6.00	6.48	7.30	7.95
Regular, Without Fertilizer	4.14	4.40	4.44	4.53	4.76	5.44	6.27	6.38	7.18
Air Seeding ^{1/}	4.80	4.82	5.46	5.27	6.29	7.36	7.92	8.50	9.49
No-Till Drilling ^{1/}	5.47	6.19	7.06	7.08	8.02	8.60	9.00	9.19	10.26
Fertilizer Application									
Dry Fertilizer (Broadcast)	2.58	2.44	2.29	2.42	2.66	2.95	3.27	3.64	3.87
Liquid Fertilizer	3.08	3.23	3.10	3.18	3.33	3.44	3.70	4.49	4.42
Anhydrous Ammonia									
With Knife Applicator	NA	4.20	4.35	4.14	4.16	4.66	5.11	5.33	6.12
While Chiseling	NA	4.95	4.90	4.92	5.09	5.38	5.79	6.32	6.61
Ground Application of:									
Liquid Herbicides (Broadcast)	2.08	2.19	2.02	2.21	2.48	2.85	3.32	3.89	4.07
Liquid Insecticides (Broadcast)	2.11	2.23	2.27	2.37	2.65	2.88	3.38	3.93	4.11
Haying									
Mowing and Conditioning	5.29	5.10	5.28	5.55	6.15	6.77	6.76	7.06	7.14
Swathing	4.57	4.26	4.11	4.21	4.53	4.89	5.31	5.72	6.01
Raking	2.28	2.04	2.28	2.36	2.29	2.60	2.54	2.90	3.47
Post Holes									
Digging	1.42	1.65	1.96	1.71	1.90	1.82	2.38	2.49	2.64

^{1/} Without Fertilizer NA = Not Available

FARMING REGION AVERAGES, NORTH DAKOTA, 2004

Region	Moldboard Plowing				Heavy Disking				Chisel Plowing			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	14	5.00-12.00	10.00	9.29	36	1.50-15.00	5.00	6.61	45	1.50-15.00	5.00	5.86
WC	14	3.00-13.00	5.00	7.89	46	2.00-16.00	5.00	6.54	56	2.50-15.00	6.00	5.87
EC	29	3.50-15.00	7.00	7.76	64	2.25-18.00	6.00	6.41	72	2.50-12.00	6.00	5.76
RRV	20	4.00-15.00	10.00	9.20	33	2.50-14.00	8.00	7.34	41	2.50-13.00	8.00	6.71
STATE	77	3.00-15.00	10.00	8.44	179	1.50-18.00	5.00	6.66	214	1.50-15.00	6.00	5.99

Region	Field Cultivation				Tandem Disking				Light Harrowing			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	50	2.00-20.00	5.00	5.46	30	3.00-20.00	6.00	6.80	30	1.50-10.00	3.00	3.88
WC	54	2.00-15.00	5.00	5.06	41	2.75-15.00	5.00	6.20	41	1.00- 6.00	3.00	3.40
EC	72	2.50- 9.00	5.00	5.00	43	2.50-15.00	6.00	6.20	49	1.00- 8.00	3.00	3.25
RRV	53	2.00-12.00	5.00	5.17	33	2.50-13.00	5.00	6.05	33	2.00- 7.00	3.00	3.26
STATE	229	2.00-20.00	5.00	5.15	147	2.50-20.00	6.00	6.29	153	1.00-10.00	3.00	3.42

Region	Heavy Harrowing				Row Crop Cultivation				Regular Drilling With Fertilizer			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	42	1.50-12.00	3.00	4.49	23	1.00-12.00	6.00	5.91	58	2.00-15.00	10.00	8.28
WC	55	1.00- 8.00	3.00	3.99	36	1.00-12.00	5.00	4.61	55	3.00-15.00	10.00	8.73
EC	52	1.50-10.00	3.00	4.11	46	2.00- 7.00	4.00	4.51	63	1.00-14.00	5.00	7.27
RRV	30	2.00- 9.00	3.00	4.28	32	1.00-12.00	4.00	4.91	40	1.00-15.00	10.00	7.47
STATE	179	1.00-12.00	3.00	4.19	137	1.00-12.00	5.00	4.87	216	1.00-15.00	10.00	7.95

Region	Drilling and Tillage With Fertilizer				Air Seeding With Fertilizer				No-Till With Fertilizer			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	33	4.50-22.00	12.00	10.98	120	3.00-20.00	10.00	10.78	81	4.50-25.00	12.00	10.82
WC	48	4.00-17.00	12.00	9.35	138	3.50-17.00	10.00	9.98	109	5.00-17.00	10.00	10.46
EC	47	3.00-20.00	10.00	8.91	132	2.50-15.00	10.00	9.56	108	2.50-15.00	12.00	10.73
RRV	33	4.00-18.00	10.00	9.30	75	3.00-20.00	10.00	9.46	44	5.00-20.00	10.00	10.63
STATE	161	3.00-22.00	10.00	9.55	465	2.50-20.00	10.00	9.98	342	2.50-25.00	12.00	10.65

Region	Corn, Soybean and Sunflower Planting Without Fertilizer				Dry Fertilizer Application (Broadcast)				Liquid Fertilizer Application			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	29	5.00-14.00	10.00	8.52	169	1.00- 6.50	3.50	3.69	39	2.00-10.00	4.00	4.86
WC	61	2.00-14.00	10.00	8.01	195	0.50-12.00	3.50	3.66	64	1.00-15.00	4.00	4.36
EC	80	2.00-14.00	8.00	8.03	220	0.50- 7.00	4.00	3.99	78	1.00- 9.00	4.00	4.33
RRV	55	2.00-15.00	8.00	8.15	169	3.00- 5.25	4.00	4.12	71	3.00- 6.50	4.50	4.34
STATE	225	2.00-15.00	10.00	8.12	753	0.50-12.00	4.00	3.87	252	1.00-15.00	4.00	4.42

FARMING REGION AVERAGES, NORTH DAKOTA, 2004

Region	Anhydrous Ammonia With Knife Applicator				Anhydrous Ammonia With Chisel				Liquid Herbicide Application (Broadcast)			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	80	1.00-20.00	6.00	6.43	61	1.00-20.00	6.00	6.64	176	2.00-12.00	4.00	3.94
WC	62	2.75-15.00	5.00	5.93	51	2.75-15.00	6.00	6.38	204	2.50- 8.00	4.00	3.88
EC	88	2.00-20.00	5.00	6.12	70	2.00-12.00	7.00	6.51	229	2.00-10.83	4.00	4.15
RRV	45	3.50-14.00	5.00	5.81	36	1.00-16.00	5.00	7.07	169	2.00-10.00	4.00	4.35
STATE	275	1.00-20.00	5.00	6.12	218	1.00-20.00	6.00	6.61	778	2.00-12.00	4.00	4.07

Region	Liquid Insecticide Application (Broadcast)				Aerial Spraying 2 - 3 Gallons Per Acre				Aerial Spraying 4 - 5 Gallons Per Acre			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Acre ---			
W	78	2.00-8.00	4.00	3.90	65	3.00-11.00	4.00	4.65	42	3.00-12.00	4.00	4.89
WC	119	2.58-9.00	4.00	3.91	94	2.25-12.50	4.00	4.65	76	3.00-13.00	4.00	4.94
EC	143	1.00-7.50	4.00	4.19	104	2.00- 6.00	5.00	4.78	120	2.00- 7.50	5.00	5.03
RRV	112	2.50-6.50	4.00	4.36	92	4.00- 9.00	5.00	4.92	120	4.00- 7.00	5.00	4.97
STATE	452	1.00-9.00	4.00	4.11	355	2.00-12.50	5.00	4.76	358	2.00-13.00	5.00	4.98

Region	Mowing & Conditioning Hay				Swathing Hay				Small Square Baling 250 Lbs. or Less			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Acre ---				--- Dollars Per Acre ---				--- Dollars Per Bale ---			
W	75	1.00-12.00	8.00	7.06	84	2.00-12.50	6.00	6.35	39	0.15-6.00	0.50	0.85
WC	69	2.00-12.00	10.00	7.29	55	2.00-10.00	5.00	5.97	31	0.20-5.00	1.00	1.18
EC	45	2.00-12.00	7.00	7.13	29	2.00-10.00	5.00	5.47	22	0.15-3.00	1.00	0.87
RRV	19	3.50-10.00	6.00	6.92	20	3.00-10.00	5.00	5.48	15	0.14-8.00	1.00	1.45
STATE	208	1.00-12.00	8.00	7.14	188	2.00-12.50	6.00	6.01	107	0.14-8.00	1.00	1.03

Region	Round Baling 1,500 Lbs. or Less				Round Baling Over 1,500 Lbs.				Tub Grinding Self-Contained Unit			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Bale ---				--- Dollars Per Bale ---				--- Dollars Per Hour ---			
W	140	3.00-25.00	5.00	6.61	102	1.00-30.00	6.00	7.71	91	30.00-175.00	100.00	108.19
WC	131	2.00-15.00	5.00	5.94	96	2.00-25.00	6.00	6.67	90	10.00-160.00	100.00	87.06
EC	102	1.25-25.00	5.00	5.94	69	5.00-15.00	6.00	6.46	61	20.00-180.00	100.00	88.89
RRV	37	4.50-25.00	6.00	6.83	31	4.00-15.00	6.00	7.18	12	90.00-125.00	100.00	101.25
STATE	410	1.25-25.00	5.00	6.25	298	1.00-30.00	6.00	7.03	254	10.00-180.00	100.00	95.74

Region	Pneumatic Grain Handling				Skid-Steer Loader				Industrial Loader			
	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate	No. Rpts.	Range	Most Frequent	Average Rate
	--- Dollars Per Bushel ---				--- Dollars Per Hour ---				--- Dollars Per Hour ---			
W	69	0.02-0.30	0.05	0.08	100	10.00-100.00	35.00	35.25	75	30.00-110.00	50.00	60.95
WC	76	0.01-0.50	0.10	0.09	99	6.00- 75.00	25.00	36.47	108	20.00-125.00	60.00	66.28
EC	82	0.01-0.50	0.05	0.08	87	10.00- 90.00	35.00	37.18	86	20.00-100.00	80.00	66.58
RRV	54	0.02-0.50	0.05	0.08	33	10.00- 75.00	40.00	34.39	43	30.00-100.00	50.00	67.59
STATE	281	0.01-0.50	0.05	0.08	319	6.00-100.00	35.00	36.07	312	20.00-125.00	50.00	65.26