

2019 FENCE MATERIAL AND CONSTRUCTION
COST IN KANSAS

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The Fence Construction and Material Cost Survey was conducted by the Land Use Survey Center in the Department of Agricultural Economics at Kansas State University in 2019. Respondents were businesses involved in building and/or selling fence supplies. The survey was conducted through phone interviews and mailings. Because pastureland is distributed throughout the entire state, the supplier contact list was constructed so that responses should be evenly distributed across Kansas. Respondents provided valuable input on fence construction and cost information. Data were collected for costs of barbed wire, different types of posts, and labor for constructing fences. Similar fence cost surveys were conducted in 2015, 2010, 2006, 2002, and 1998. All surveys collected data for the calendar year prior to the year in which they were conducted. The data are referred to according to the year of the survey. The data were summarized from the survey results to increase the information available on fence construction costs.

Table 1 summarizes the average fence construction costs for the 2019 and 2015 surveys. Fence material costs dropped in 2019 compared to the corresponding 2015 numbers. Fence building labor costs in 2019, however, were higher than the 2015 numbers.

Hedge/Corner Posts

Hedge/corner posts were specified as 8 inch in diameter by 8 foot in length. The average cost per post for the corner posts slightly decreased by 2.48%, from \$35.89 in 2015 to \$35.00 in 2019.

Steel Post

Steel posts were specified as 5.5 feet tall and either 1.25 lb/ft or 1.33 lb/ft in weight. The 2019 cost of a steel post decreased slightly from 2015 cost. A 1.25 lb/ft post cost \$3.81 in 2015 and decreased to \$3.69 in 2019. The cost of a 1.33 lb/ft post decreased slightly from \$4.61 in 2015 to \$4.56 in 2019.

Treated Wood Posts

Treated posts were specified as 4 inch in diameter by 8 foot in length. The cost for treated wood posts decreased significantly from \$13.22 per post in 2015 to \$9.66 per post in 2019.

Barbed Wire

The cost of one 80-rod roll of two-point barb, 12.5 gauge wire decreased slightly from \$68.26 per roll in 2015 to \$67.32 in 2019.

Labor: Fence Building per Rod

The cost of fence construction labor per rod increased from \$20.71 in 2015 to \$21.86 in 2019. The latest Bluestem Pasture Survey conducted by the Land Use Survey Center in 2019 indicated that the average labor rate charged for building a five-wire, all steel post fence, excluding

materials, was \$30.63 per rod, and the rate was \$39.71 when materials were included. The difference may represent differences in the fence specifications, as the Fence Construction and Material Costs survey did not provide fence specifications to respondents. In addition, the regional factors might be another contributor to the difference in the cost because the Bluestem Pasture Survey results are limited to the 14 bluestem counties.

Labor: Hedge/Corner Posts

The labor cost for building hedge/corner post increased by 19.88% from 2015. The labor cost for hedge/corner posts was \$147.50 in 2019 versus the cost of \$123.04 in 2015.

Total Material Costs

The Land Use Survey Center divides fencing costs by crop reporting district; the district divisions used are based on the Kansas Office of the National Agricultural Statistic Services’ (NASS) regional divisions. The nine NASS districts are: Northwest-10, West Central-20, Southwest-30, North Central-40, Central-50, South Central-60, Northeast-70, East Central-80, and Southeast-90 (Figure 1).

Table 2 shows the total material cost by district for a quarter-section, square pasture with one gate. These costs were calculated using the mode material types for each district as determined from the 2019 Pasture Leasing Survey conducted by the Kansas Department of Revenue and the Land Use Survey Center. Total material cost by district ranged from \$6,218.00 in districts EC-80 and SE-90 to \$9045.60 in district NW-10. This range is explained by the addition of another strand of barbed wire, a shorter distance between fence posts, and a different combination of post types, resulting in an overall increase in materials used. The change in total material cost of fence building from 2015 was not the same across crop reporting districts. The change in total materials cost can be attributed to the changes in fence characteristics and changes in labor and component material costs.

Table 1. Average Fencing Costs

	2019	2015	Percent Change
Hedge/Corner Posts	\$35.00	\$35.89	-2.48%
Steel Post (5.5FT, 1.25 LB/FT)	\$3.69	\$3.81	-3.15%
Steel Post (5.5FT, 1.33 LB/FT)	\$4.56	\$4.61	-1.14%
Treated Wood Posts (4 IN X 8 FT)	\$9.66	\$13.22	-26.93%
Barbed Wire (2 Point Barb, 12.5 Gauge-80 Rods/Roll)	\$67.32	\$68.26	-1.38%
Labor Fence Building/Rod	\$21.86	\$20.71	5.58%
Labor Hedge/Corner Posts	\$147.50	\$123.04	19.88%

Figure 1. Kansas Crop Reporting Districts

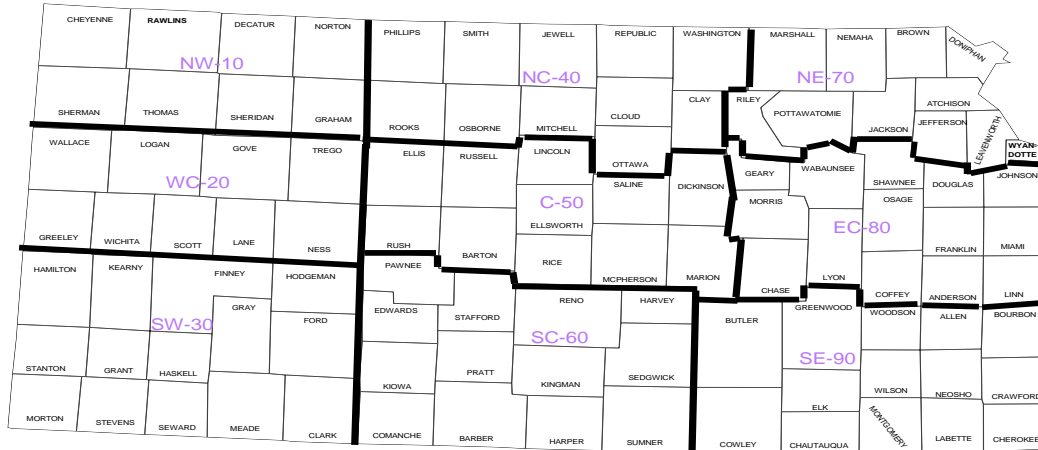


Table 2. Total Material Cost by District, Quarter-section, Square Pasture

District	Fence Type 2019	Post Type 2019	Post Spacing 2019 (Feet)	Total Material Cost 2019	Total Material Cost 2015
Northwest-10	4-Wire-Barb	Treated Wood	15	\$9,045.60	\$7,616.20
West Central-20	4-Wire-Barb	2 Steel:1 Wood	16	\$6,801.60	\$7,466.87
Southwest-30	5-Wire Barb	2 Steel:1 Wood	12	\$8,726.00	\$7,997.53
North Central-40	5-Wire Barb	3 Steel:1 Wood	12	\$8,352.00	\$7,986.60
Central-50	5-Wire Barb	5 Steel:1 Wood	12	\$7,978.00	\$8,543.93
South Central-60	5-Wire Barb	4 Steel:1 Wood	15	\$7,138.48	\$7,986.60
Northeast-70	5-Wire Barb	2 Steel:1 Wood	12	\$8,726.00	\$8,092.20
East Central-80	5-Wire Barb	All Steel	16	\$6,218.00	\$7,282.60
Southeast-90	5-Wire Barb	All Steel	16	\$6,218.00	\$6,473.00