

2023 FENCE MATERIAL AND CONSTRUCTION  
COST IN KANSAS

Xianghong Li  
and  
Leah J. Tsoodle

January 2024

The Fence Construction and Material Cost Survey was conducted by the Land Use Survey Office (LUSO) in the Department of Agricultural Economics at Kansas State University in 2023. Respondents were businesses involved in building and/or selling fence supplies. The survey was conducted via online survey, mail survey, and phone interviews. In addition, fence material prices were obtained through fence supply stores' websites. 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 in 2023. Similar fence cost surveys were conducted in 2019, 2015, 2010, 2006, 2002, and 1998. However, all previous surveys collected data for the calendar year prior to the year in which they were conducted. The data were summarized from the survey results to increase the information available on fence construction costs, which is important given the increased concern on the rise of input costs.

Table 1 summarizes the average fence construction costs for the 2023 and 2019 surveys. All fence material costs increased in 2023 compared to the corresponding 2019 numbers due to multiple factors, including inflation, except hedge/corner posts. The labor cost for installing fence increased from the 2019 average; however, the labor cost for installing hedge/corner posts was lower than the 2019 average.

#### Hedge/Corner Posts

Hedge/corner posts were specified as 8 inch in diameter by 8 foot in length. The cost per hedge/corner post averaged \$33.33, a decrease of 4.77% from the 2019 average. The number of responses for hedge/corner post cost, however, was small. The average cost per post for the corner posts in 2019, \$35.00, was a decrease of 2.48%, from the 2015 average of \$35.89.

#### 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 increased from the 2019 cost. A 1.25 lb/ft post cost averaged \$5.19 in 2023, an increase of 40.57% from the 2019 average of \$3.69. The average cost of a 1.33 lb/ft post increased from \$4.56 in 2019 to \$5.90 in 2023.

#### Treated Wood Posts

Treated posts were specified as 4 inch in diameter by 8 foot in length. The cost for treated wood posts increased from \$9.66 per post in 2019 to \$14.76 per post in 2023, an increase of almost 53%.

#### Barbed Wire

The 2023 cost of one 80-rod roll of two-point barb, 12.5-gauge wire increased the most among all the fence building materials surveyed. The barbed wire price averaged \$111.19 in 2023, an increase of 65% over the average price of \$67.32 in 2019.

### Labor: Fence Building per Rod

The cost of fence construction labor per rod increased from \$21.86 in 2019 to \$25.58 in 2023. The latest Bluestem Pasture Survey conducted by the LUSO in early 2023 indicated that the average custom fence building rates in 2022-2023 for building a five-wire, all steel post fence, excluding materials, was \$20.93 per rod. The difference may represent differences in the fence specifications, as the Fence Construction and Material Costs survey did not provide fence specifications to respondents. Moreover, the Bluestem Pasture Survey was conducted in early 2023, so those rates may reflect 2022 and January 2023 prices. In addition, regional factors may contribute to the cost difference, as the Bluestem Pasture Survey results are limited to the 14 bluestem counties.

### Labor: Hedge/Corner Posts

The 2023 labor cost for building hedge/corner posts decreased by 9.60% from 2019. The labor cost for hedge/corner posts was \$133.33 in 2023 versus the average cost of \$147.50 in 2019.

### Total Material Costs

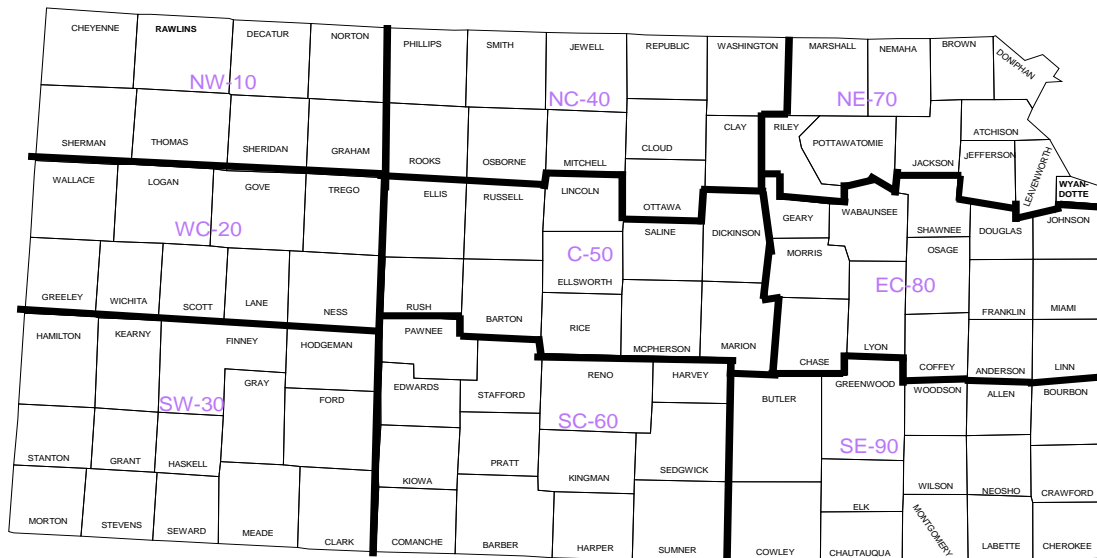
The Land Use Survey Office divides fencing costs by crop reporting district; the district divisions used are based on the Kansas Office of the National Agricultural Statistic Services' (NASS) regional divisions. The nine NASS districts are: Northwest-10, West Central-20, Southwest-30, North Central-40,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

Table 2 shows the average 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 2023 Pasture Leasing Survey conducted by the Kansas Department of Revenue and the LUSO. Total material cost by district ranged from \$8,808.20 in districts C-50 & SC-60 to \$13,792.60 in district NW-10. This range is explained by differences in typical fence specifications, including the number of strands of barbed wire, fence post spacing, and different combinations of post types. The results indicate an overall increase in the average cost of building a typical fence. The change in total material cost of fence building from 2019 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 Fence Costs**

	2023	2019	Percent Change
Hedge/Corner Posts	\$33.33	\$35.00	-4.77%
Steel Post (5.5FT, 1.25 LB/FT)	\$5.19	\$3.69	40.57%
Steel Post (5.5FT, 1.33 LB/FT)	\$5.90	\$4.56	29.57%
Treated Wood Posts (4 IN X 8 FT)	\$14.76	\$9.66	52.84%
Barbed Wire (2 Point Barb, 12.5 Gauge-80 Rods/Roll)	\$111.19	\$67.32	65.17%
Labor Fence Building/Rod	\$25.58	\$21.86	16.98%
Labor Hedge/Corner Posts	\$133.33	\$147.50	-9.60%

**Figure 1. Kansas Crop Reporting Districts**



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

<b>District</b>	<b>Fence Type 2023</b>	<b>Post Type 2023</b>	<b>Post Spacing 2023 (Feet)</b>	<b>Total Material Cost 2023</b>	<b>Total Material Cost 2019</b>
Northwest-10	4-Wire-Barb	Treated Wood	16	\$13,792.60	\$9,045.60
West Central-20	4-Wire-Barb	3 Steel:1 Wood	16	\$9,387.10	\$6,801.60
Southwest-30	5-Wire Barb	3 Steel:1 Wood	12	\$12,064.20	\$8,726.00
North Central-40	4-Wire Barb	3 Steel:1 Wood	12	\$11,174.60	\$8,352.00
Central-50	5-Wire Barb	All Steel	16	\$8,808.20	\$7,978.00
South Central-60	5-Wire Barb	All Steel	16	\$8,808.20	\$7,138.48
Northeast-70	5-Wire Barb	4 Steel:1 Wood	12	\$13,409.13	\$8,726.00
East Central-80	5-Wire Barb	All Steel	12	\$10,106.20	\$6,218.00
Southeast-90	5-Wire Barb	All Steel	12	\$10,106.20	\$6,218.00