



EXTENSION

BEEF CATTLE RESEARCH UPDATE

Britt Hicks, Ph.D., PAS

Area Extension Livestock Specialist

March 2021

Effect of Trucking Distance on Sale Price of Beef Calf and Feeder Cattle Lots Sold Through Video Auctions from 2010 Through 2018

Kansas State University research determined the effect of trucking distance on the sale price of beef calf and feeder cattle lots sold through Superior Livestock Video Auctions from 2010 through 2018.^{1,2} In this study, data were collected from 211 livestock video auctions that included 42,043 beef calf and 19,680 feeder cattle lots. The top six delivery states in this data were Colorado, Iowa, Kansas, Nebraska, Oklahoma, and Texas comprising 70% of calf lots and 83% of feeder cattle lots. Data from these six states were used in these analyses. Based upon the reported state of origin and state of delivery, lots were categorized into one of the following trucking distance categories: 1) within-State, 2) short-haul, 3) medium-haul, and 4) long-haul.

Lots categorized as within-state originated and were delivered within the same state. Lots categorized as short-haul were approximately one state away from the delivery state based on their originating state and delivered to one of the top six delivery states. Lots categorized as medium-haul were approximately two states away from the delivery state based on their originating state and delivered to one of the top six delivery states. Lots were determined as long-haul based on their originating state and delivered to one of the top six delivery states (included all other originating states not included in the other three categories).

In this dataset, the average weight and number of calves in lots analyzed was approximately 571 lb and 101 head, respectively. The average weight and number of feeder cattle in lots analyzed was approximately 790 lb and 111 head, respectively. These researchers reported that beef calf lots hauled within-state sold for more (\$169.24/cwt; $P < 0.05$) than other trucking distance categories (Table 1). The short-haul calf lots sold for the second greatest ($P < 0.05$) sale price (\$168.77/cwt). The medium-haul calf lots sold for the third greatest ($P < 0.05$) sale price (\$167.58/cwt). The long-haul calf lots sold for the lowest ($P < 0.05$) price (\$166.70/cwt). These data suggest that “hauling distance may be related to perceived risk for the buyer in that they are willing to pay more for calves hauled shorter distances perhaps due to less detrimental effects on performance and less cost associated with transport”.

Table 1. The effect of trucking distance on sale price of beef calf lots sold through 211 Superior Livestock Auction video sales from 2010 through 2018.

Distance Hauled	Number of Lots	Sale Price, \$/cwt
Within-State	9,246	169.24 ^a
Short-Haul	13,807	168.77 ^b
Medium-Haul	3,726	167.58 ^c
Long-Haul	15,264	166.70 ^d

^{a,b,c,d}Prices without a common superscript differ ($P < 0.05$).

Adapted from McCabe et al., 2020 and 2021.

Similar to beef calf lots, buyers were generally willing to pay more/cwt for feeder cattle hauled shorter distances (Table 2). Within-state and short-haul feeder cattle lots sold for the greatest ($P < 0.05$) prices (\$149.96 and \$149.81/cwt, respectively). The medium-haul feeder cattle lots sold for the second greatest ($P < 0.05$) sale price (\$149.25/cwt) and the long-haul feeder cattle lots sold for the lowest ($P < 0.05$) price, \$148.43/cwt. These authors noted that the price difference between each trucking distance category within feeder cattle lots was less than for beef calf lots, “likely because feeder cattle are typically lower-risk animals incurring less potentially detrimental effects in performance and cost associated with trucking distance”.

Table 2. The effect of trucking distance on sale price of feeder cattle lots sold through 211 Superior Livestock Auction video sales from 2010 through 2018.

Distance Hauled	Number of Lots	Sale Price, \$/cwt
Within-State	5,256	149.96 ^a
Short-Haul	6,596	149.81 ^a
Medium-Haul	2,239	149.25 ^b
Lon-Haul	5,589	148.43 ^c

^{a,b,c}Prices without a common superscript differ (P < 0.05).

Adapted from McCabe et al., 2020 and 2021.

These researchers concluded that these results indicate there is a price advantage for lots expected to be hauled shorter distances, likely because of cost and risk associated with transportation.

¹ McCabe, E. D., M. E. King, K. E. Fike, M. J. Smith, G. M. Rogers and K. G. Odde. 2021. Effect of Trucking Distance on Sale Price of Beef Calf and Feeder Cattle Lots Sold Through Video Auctions from 2010 Through 2018. Kansas State Univ. Beef Cattlemen's Day Beef Cattle Research Kansas Agricultural Experiment Station Research Reports: Vol. 7: Iss. 1: 18-21. Available: <https://doi.org/10.4148/2378-5977.8023>

² McCabe, E. D., M. E. King, K. E. Fike, M. J. Smith, G. M. Rogers and K. G. Odde. 2020. Effect of trucking distance on sale price of beef calf and feeder cattle lots sold through video auctions from 2010 through 2018. J. Anim. Sci. 98 (Suppl. 3):10-11 (Abstr).