



### Operating and overhead cost

Operating costs include the cost to transport cattle to and from the feedlot, labor costs, interest charges, utility expenses, veterinary costs, manure handling and other miscellaneous costs. Overhead costs include the amortized depreciation of the facilities and equipment.

Transportation costs include the expense of trucking calves 200 miles to arrive at the feedlot site, and trucking finished cattle 100 miles to a packing facility. Trucking costs are calculated from a base per mile trucking fee of \$2.50 per loaded mile and an addition fuel surcharge when the price of road diesel fuel exceeds a threshold of \$1.20 per gallon. Fuel surcharges per mile are 20 percent of the cost of a gallon of diesel above the \$1.20 threshold price. The price of Midwest No. 2 over-the-road diesel is obtained from historic price database on the U.S. Department of Energy Web site.

Some of the production costs detailed in the *Beef Feedlot Systems Manual* have little to no fluctuation and remain constant in the estimated returns to cattle finishing.

Interest expenses include the finance cost of purchasing feeder cattle, feedstuffs, cattle delivery, and other variable inputs. The finance charge for the cost of purchasing feeder cattle is charged at a feeder cattle loan rate for the duration of the feeding period. Costs of feed and other operating costs are financed at an operating loan rate for half of the feeding period. The loan rates for feeder cattle purchase and operating are reported quarterly by the Chicago Federal Reserve Bank.

Feedlot facility cost are based on the estimated construction costs outlined in the *Beef Feedlot Systems Manual*. The facility cost of the assumed feedlot is the average facility costs of 750 and 1,500 head feedlots, as detailed in the manual.

### Steer Calf

Transportation costs per head are determined under the assumption that a truck is filled by either 73 feeder calves or 35 finished steers. The cost of

delivering calves also is assessed a finance charge included in the interest expenses. At a minimum, transportation will cost \$13.99 per head sold.

Labor cost is assumed to be \$40.08 per animal finished, based on a rate of \$22 per hour and slightly more than 1.8 hours of labor per animal finished. Machinery and equipment costs are \$6.47, and other marketing and miscellaneous costs are \$8.23 per head finished. An estimated 3 tons of solid open lot manure is produced per animal each year and the cost of custom manure handling is \$1.50 per ton. Based on 1.7 turns per year the estimated cost of manure handling is \$2.65 per animal finished.

	Annual cost per space	Cost per calf finished
Labor	\$68.15	\$40.08
Mach. & equip.	11.00	6.47
Marketing & misc.	14.00	8.23
Manure handling	4.50	2.65

Veterinary, health, and implant costs are \$12 per head, based on the following health program for calves:

Pour on-\$1.49	8 way-\$2.84	8 way booster-\$0.53
5 way-\$1.05	5 way booster -\$0.44	First implant -\$2.00
Second implant -\$2.90	Miscellaneous costs -\$0.75	

Average annual cost of facility ownership of the two sizes of feedlot is \$34.19. This includes depreciation and annual repair costs for pens, fences, windbreaks, bunks, sheds, and livestock handling equipment. This amount is divided by 1.7 animals fed per space per year for an estimated \$20.11 per animal finished.

### Finishing Yearlings

Transportation costs per head are determined under the assumption that a truck is filled to roughly 20 tons of capacity by either 53 yearlings or 32 finished steers. The cost of delivering feeder cattle is also assessed a finance charge included in the interest expense. At a minimum, transportation will cost \$17.24 per yearling finished.

Labor cost is assumed to be \$30.98 per animal finished based on an hourly rate of \$22. The following table contains the non-feed operating costs derived from the feedlot manual. Annual costs are converted to a cost per yearling finished based on 2.2 animals being finished per space per year.

	Annual cost per space	Cost per yearling finished
Labor	68.15	30.98
Mach. & equip.	11.00	5.00
Marketing & misc.	14.00	6.36
Manure handling	4.50	2.05

Veterinary, health, and implant costs are \$11.38 per head, based on the following health program for calves:

Pour on-\$2.02	8 way-\$2.84	8 way booster-\$0.53
5 way-\$1.05	5 way booster -\$0.44	First implant -\$2.00
Second implant -\$2.00	Miscellaneous costs-\$0.50	

Based on the annual ownership costs of 750 and 1,500 head feedlots the average annual fixed costs are \$34.19 per head of capacity. This includes depreciation and annual repair costs for pens, fences, windbreaks, bunks, sheds, and equipment. This amount is divided by 2.2 animals fed per space per year for an estimated \$15.54 per animal finished.

### Purchase price

#### *550 pound feeder steer calf*

Purchase price is the Missouri combined auction monthly average price of 500-550 and 550-600 pound animals in the purchase month. Missouri combined auction prices are reported in USDA report

JC\_LS795. The purchase price, reported as dollars per hundred pounds of weight, is multiplied by 5.5 to determine the total cost of a 550 pound animal.

#### *750 pound feeder steer*

Feeder cattle purchase price is the Missouri combined auction monthly average price of 700-750 and 750-800 pound animals in the purchase month. Missouri combined auction prices are reported in USDA report JC\_LS795. The purchase price, reported as dollars per hundred pounds of weight, is multiplied by 7.5 to determine the total cost of a 750 pound animal.

### Sale price

#### *1,150 pound fed steer*

A price for finished cattle is determined from the average monthly Iowa, Southern Minnesota live cattle price reported by Ag Market News. The live cattle price reported as dollars per hundred weight, is multiplied by 11.5 to determine the per head value of a finished 1,150 pound animal.

#### *1,250 pound fed steer*

The price for finished cattle is determined from the average monthly Iowa, Southern Minnesota live cattle price reported by Ag Market News. The live cattle price reported as dollars per hundred weight, is multiplied by 12.5 to determine the per head value of a finished 1,250 pound animal.

... and justice for all

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.