

**CENTRAL REGION
MEDIUM COW/CALF BUDGET 2016**

BREED HERD SIZE 160 COW to BULL 20 CALF CROP PERCENT¹ 83%
CULL RATE 15% REPLACEMENT HEIFER'S KEPT 24

VALUE OF PRODUCTION				VALUE PER COW		
	QUANTITY	WEIGHT	PRICE ²	VALUE		NEW VALUE
STEER CALVES	66	515	\$2.10	\$71,812	\$448.82	_____
HEIFER CALVES	42	495	\$2.03	\$42,606	\$266.29	_____
CULL COWS	24	900	\$0.76	\$16,416	\$102.60	_____
CULL BULLS	1	1200	\$0.87	\$1,044	\$6.53	_____
TOTAL	134			\$131,877	\$824.23	_____

VARIABLE COSTS				VALUE PER COW		
	UNITS	QUANTITY/PERCENT	PRICE	COST		NEW VALUE
1. FEED COSTS						
HAY	TON	28.00	\$155	\$4,340	\$27.13	_____
STATE	AUY	30.0%	\$34.20	\$0	\$0.00	_____
FEDERAL LEASE	AUY	40.0%	\$20.88	\$3,341	\$20.88	_____
PRIVATE(Owned)	AUY	30.0%	\$0.00	\$0	\$0.00	_____
PRIVATE(Leased Grazing)	AUY	0.0%	\$0.00	\$0	\$0.00	_____
SALT & MINERAL	TON	5.00	\$710	\$3,550	\$22.19	_____
PROTEIN SUPP	TON	8.00	\$325	\$2,600	\$16.25	_____
OTHER		0.00	\$0	\$0	\$0.00	_____
TOTAL				\$13,831	\$86.44	_____

2. OTHER VARIABLE COSTS				COST		NEW VALUE
VET AND MEDICINE				\$2,374	\$14.84	_____
LIVESTOCK HAULING				\$602	\$3.76	_____
HIRED LABOR				\$0	\$0.00	_____
OPERATING COSTS-EQUIP & MACH				\$1,246	\$7.79	_____
OPERATING COSTS-VEHICLE				\$1,869	\$11.68	_____
RANCH MAINTENANCE				\$2,178	\$13.61	_____
BEEF CHECKOFF				\$109	\$0.68	_____
PURCHASED LIVESTOCK				\$12,000	\$75.00	_____
TOTAL				\$20,379	\$127.37	_____

3. INTEREST ON VARIABLE COSTS				VALUE PER COW	
SUM OF VARIABLE COSTS X MONTHS BORROWED					
X INTEREST RATE PER MONTH					
ANNUAL INTEREST RATE			7.00%		
NUMBER OF MONTHS BORROWED			6		
				\$1,197	\$7.48
TOTAL				\$35,407	\$221.29
TOTAL				\$96,470	\$602.94

OWNERSHIP COSTS				VALUE PER COW NEW VALUE	
Annual Capital Recovery ⁴ (At Replacement Valve):		Represents 65% Asset Ownership ⁵			
CASH COSTS					
Taxes & Insurance				\$4,151	\$25.94
Overhead				\$2,100	\$13.13
Total				\$6,251	\$39.07
NON CASH COSTS					
Purchased Livestock				\$6,918	\$43.24
Machinery & Equipment				\$3,954	\$24.71
Housing & Improvements				\$6,366	\$39.79
Interest on Retained Livestock ⁶				\$17,948	\$112.17
Management & Operation Labor (6% of gross returns)				\$7,913	\$49.45
Total				\$43,099	\$269.37
TOTAL FIXED COSTS				\$49,350	\$308.44
TOTAL CASH AND VARIABLE COSTS				\$41,658	\$260.36
TOTAL COSTS				\$84,757	\$529.73
RETURN ABOVE TOTAL CASH COSTS				\$90,219	\$563.87
RETURN ABOVE TOTAL COSTS				\$47,120	\$294.50

BREAKEVEN CALCULATIONS		
	VARIABLE COSTS	TOTAL COSTS
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$52.80	\$62.12
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$52.80	\$126.38

1) Calf crop is defined as the actual number of calves sold divided, by the total number of cows (assuming all cows were exposed).
2) Prices represent 2016 price projections from Cattle Fax, Doanes reports for New Mexico feeder cattle cash prices.
3) Market prices include commissions, brand inspections, beef council, yardage, feed, and insurance
4) Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.
5) The 35% reduction in asset values which represent a mix of new and used machinery.
6) Interest on average investment.

**CENTRAL MOUNTAIN REGION
MEDIUM RANCH INVESTMENTS**

Number	Land Values	Price Per Unit	10 Yr Avg Rate of Return	Purchase Price	Salvage/Cull Value	Useful Life	Livestock Share	Annual Capital Recovery
750	Acres of private land	\$200	3.9%	\$150,000	\$150,000			\$116.25
216	AU Values ¹	\$3,000	3.9%	\$648,000	\$648,000			
Sub Totals				\$798,000				
Number	Buildings, Improvements	Price Per Unit						
2	Miles of pipeline	\$2,000	3.9%	\$4,000	\$400	25	100	\$244
1	Wells	\$13,000	3.9%	\$13,000	\$1,300	25	100	\$792
18	Miles of Fence	\$4,000	3.9%	\$72,000	\$7,200	25	100	\$4,385
1	Corrals/Working Facilities	\$5,000	3.9%	\$5,000	\$500	30	100	\$277
1	Barns & Shop	\$10,000	3.9%	\$10,000	\$1,000	30	100	\$553
Sub Totals				\$104,000				\$6,366
Number	Machinery & Vehicles	Price Per Unit	Interest Rate³	Price	Salvage/Cull			
1	3/4 ton pickup 4WD	\$30,000	4.0%	\$30,000	\$6,000	7	50	\$2,119
0	3/4 ton pickup 4WD	\$30,000	4.0%	\$0	\$0	7	50	\$0
0	Tractor	\$5,000	4.0%	\$0	\$0	7	100	\$0
1	Gooseneck trailer	\$6,500	4.0%	\$6,500	\$1,300	7	100	\$918
1	Horse tack	\$5,000	4.0%	\$5,000	\$1,000	10	100	\$533
1	Misc. equipment	\$2,500	4.0%	\$2,500	\$500	10	100	\$267
Sub Total				\$44,000				\$3,954
Head	Purchased Livestock	Price Per Unit	Interest Rate³	Price	Salvage/Cull			
6	Horses	\$1,200	5.0%	\$7,200	\$2,736	10	100	\$715
8	Bulls	\$4,000	5.0%	\$32,000	\$12,160	4	100	\$6,203
30	Cows	\$2,500	5.0%	\$75,000	\$28,500	8	100	\$8,620
55	Total AUYS							
Sub Total				\$39,200				\$6,918
Head	Retained Livestock	Price Per Unit	Interest Rate	Price	Salvage/Cull			Interest on Investment
160	Cows	\$2,500	5.0%	\$400,000	\$152,000			\$15,771
24	Replacement Heifers	\$2,300	5.0%	\$55,200	\$20,976			\$2,176
178	Total AUYS							
Sub Total				\$455,200	\$172,976			\$17,948
Total				<u>\$1,440,400</u>				<u>\$28,268</u>

1) The interest rate of 3.9% used to calculate the capital recovery cost is the USDA-ERS's ten year average long-run rate of return to production assets for New Mexico.

2) For intermediate assets an interest rate of 7.00% was used.

3) A rate of 6.50 percent reflects a typical return on a low -risk investment (30 YR Treasury Bond)