

Oregon Food Infrastructure Gap Analysis

**Where Could Investment Catalyze Regional
Food System Growth and Development?**

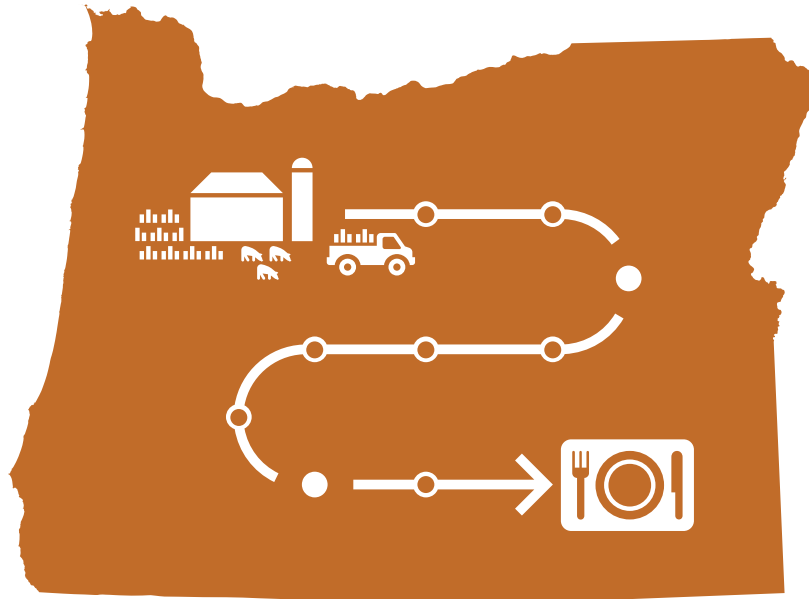
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Food System Growth and Development?**

By Ecotrust, with Matthew Buck
Funded by Meyer Memorial Trust

April 2015

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Beef



7.1. Introduction to the Beef Industry at the National Level

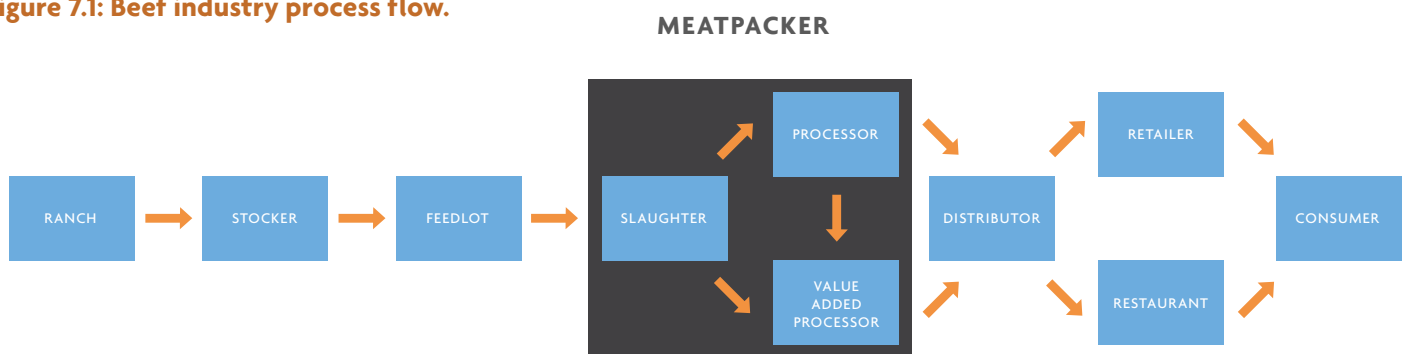
US consumption of beef¹²⁰ has been declining since the late 1970s. However, spending on beef is still higher than for other meats, and in 2013 per capita consumption was estimated at fifty-five pounds (retail weight).

Total US beef production¹²¹ in 2012 was about 26 billion pounds. The National Agriculture Statistics Service estimated the value of beef cattle production in 2012 at \$48 billion.¹²²

7.2. Segmentation, Key Issues, and Trends

Over 90 percent of US beef is produced in a “conventional” system with three major stages.

Figure 7.1: Beef industry process flow.



In the first stage, producers managing “cow-calf operations” see new calves born in the spring, which weigh 70 to 90 pounds at birth. These calves stay with the mother cow on range or pasture until weaned after 6 to 8 months, at which time they weigh 500 to 600 pounds.

In the second stage, the calves are raised to weights of 600 to 900 pounds. The second stage may happen on the same farm/ranch, but weaned calves are often sold on to specialized “stocking” or “backgrounding” operations. Cattle in this stage still forage on grass or pasture, but often receive supplemental feeds over winter as forage quality declines.

In the final stage, “feeder” cattle are sold to feedlots, where they are kept for a period of 90 to 120 days and fed rations that may include a total of 1,800 pounds of corn and 1,200 pounds of sorghum, and/or other equivalent feeds. (Kuhl, Marston, and Jones 2002) Hormone treatments are used to enhance weight gain, including naturally occurring (Oestradiol, Progesterone, Testosterone) and synthetic hormones (Zeranol, Trenbolone, Melengestrol).

Antibiotics or ionophores (an antimicrobial) are blended with feed to improve

¹²⁰ “Marketing Quality on Creative Growers’ Farms,” Rural Roots and the University of Idaho Research Team, 2005.

¹²¹ Total Beef Production in the US from 2000 to 2012 (in billion pounds), Statista, 2015.

¹²² “Meat Animals Production, Disposition, and Income Final Estimates 2008-20012,” USDA, NRSS, 2014.



conversion efficiency and to manage the transition from eating grass to eating the “hot ration” of grain. Cattle are sent to slaughter when they reach a live weight of about 1,100 to 1,250 pounds.

The majority of cow-calf operators have fewer than 50 head. So the average producer may have fewer than 30 calves to sell each year, after accounting for replacement heifers, losses, and other factors, and those calves will be of both sexes and will weigh different amounts. This is problematic, because most cattle in transition between stages are sold through auction and small cow-calf operators are not able to offer cattle in uniform lots of sufficient size to receive best prices. According to the National Sustainable Agriculture Information Service (ATTRA 2006), buyers want feeder cattle grouped by weight and sex, and the optimum lot sizes are 50 to 55 head for a regular ring auction, and 240 head for a video auction.

There has been a significant consolidation in meatpacking. USDA figures show that since 2005, the four largest beef processors have purchased over 79 percent of steers and heifers brought to market. With consolidation, livestock slaughter facilities and processing have become larger and operate at greater speed. As a result of competition, many midsized and smaller slaughter and processing facilities have closed. Between 1998 and 2007, the number of USDA-inspected plants declined 18 percent and the number of state-inspected or custom plants declined 22 percent.

With fewer plants, independent cattle producers seeking to market their own beef have faced difficulty slotting animals for processing, as well as increasing costs to transport their animals, and often higher processing costs as well. Many large facilities have also simply refused to work with small producers due to difficulties segregating products and losses of efficiency processing small batches of animals.

Consumer interest in alternatives to “conventional beef” has been stoked by:

- Concerns for food safety:
 - + Incidences of e-coli contamination and the “mad cow” disease scare.
 - + Perceived and real risks from hormone and antibiotic treatments.
 - + Campaigns by Physicians for Social Responsibility, Health Care Without Harm, and others to ban routine use of hormones and antibiotics in livestock.
- A belief that alternative beef products are healthier:
 - + Research showing grassfed beef is lower in fat and may have higher levels of conjugated linoleic acid (CLA) and omega-3 fatty acids (ALA, EPA, and DHA), which may in turn have positive health benefits reducing risk of heart disease or cancer.¹²³

¹²³ “Greener Pastures: How grassfed beef and milk contribute to healthy eating,” Kate Clancy, Union of Concerned Scientists, 2006.



- Concerns for animal welfare:
 - + Discomfort with conditions in feedlots, which may hold as many as 100,000 animals.
 - + Well-publicized videos showing mistreatment of animals.
- Concern for the environment:
 - + The positive effects of a grass-based system (less erosion, carbon sequestration) versus the chemical and energy intensive production of corn and other feeds for animals.
- Interest in unique, high-quality local foods and a desire to support local farm economies.

A 2008 survey of forty-two meat buyers representing distributors, retailers, and foodservice in California shows how one group of industry professionals ranked the importance of different attributes for niche marketing of meat.¹²⁴ Rankings are presented in Figure 7.2. Consistent size and shape, and year-round supply were top ranked attributes related to business opportunities (on a five-point scale). Taste, no hormones or antibiotics, health benefits, and humanely raised were the highest ranked value-added differentiators.

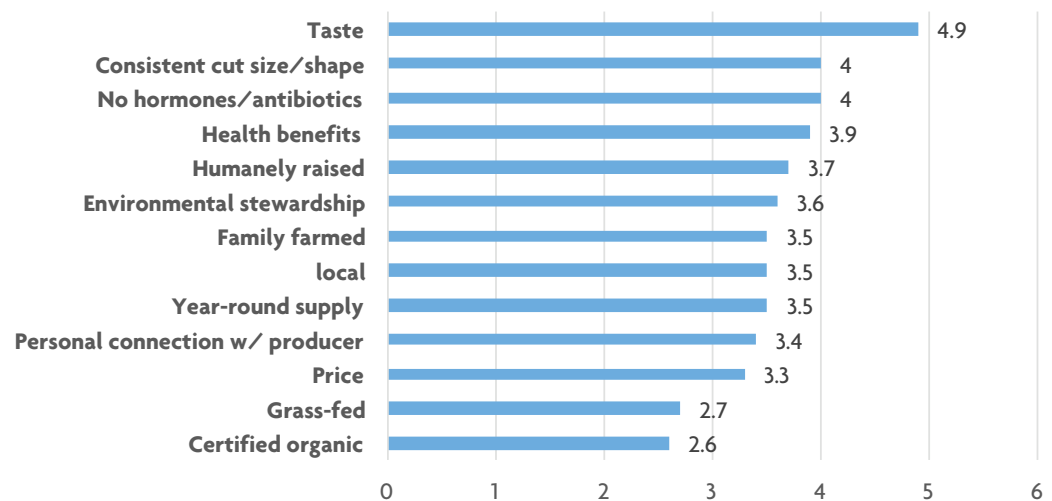


Figure 7.2: Importance of meat attributes according to wholesale meat buyers.

Alternatives to conventional beef discussed in this report include:

- Natural
- Organic
- Grassfed
- High animal welfare (Animal Welfare Approved, Certified Humane, Food Alliance, etc.)
- Local products from small and mid-sized farms offering one or more of the above attributes

¹²⁴ “Northern California Niche Meat Market Demand Study,” Lauren Gwin and Shermain D. Hardesty, University of California, Cooperative Extension, 2008.



7.2.1. Natural

As a marketing term, “natural” actually says very little about beef. The USDA has three requirements for use of “natural,” which for beef all relate to handling of meat after the animal has been slaughtered—not to conditions under which the animal was raised:

1. The product must be minimally processed
2. It cannot contain any artificial ingredients
3. It cannot contain any preservatives

Most conventionally produced fresh beef meets these minimum requirements if it has not been packed with a marinade, tenderizer, or other ingredients. However, companies marketing branded beef (Coleman Natural, Niman Ranch, Laura’s Lean Meats, etc.) typically have their own additional, internal program requirements. These can include:

- No use of hormone implants
- No antibiotics (“never ever”—with animals treated for health reasons sold conventionally)
- Limited antibiotic use (“not recently” —with antibiotics prohibited for a period prior to slaughter)
- No feed containing animal protein or fat (often with allowances for milk)

These companies may also make humane animal handling claims, though criteria for those claims may not be public or may not be clear. Verification of requirements and claims also often happens internally, without the involvement of an independent auditor, and sometimes only with submission of affidavits.

7.2.2. Organic

“Organic” is regulated by the USDA and requires a third-party audit. USDA certified organic beef must come from cattle raised in compliance with the standards from the last third of gestation to slaughter.

- Feeds must be certified organic. Vitamin and mineral supplements must be approved.
- Forage must be grown without the use of synthetic fertilizers, herbicides, or pesticides.
- Genetically modified (GMO) feedstock and forage are prohibited.
- Cattle must have access to pasture and in season 30 percent of their diet must come from foraging.
- Use of growth hormones or antibiotics is prohibited.
- Animals must also be slaughtered and processed under USDA certification.

It is not typically practical for cattle raised in the West on rangeland to be certified organic, particularly if cattle are grazed for any period of time on public land. The rangeland acreages are large, the drier climate means stocking rates are low, and in a public lands situation ranchers do not have the ability to guarantee that chemicals were not used for weed or fire suppression in areas



grazed. Access to irrigated organic pasture for better quality forage is limited. Supplies of organic feeds are also limited and quite expensive.

7.2.3. Grassfed

The USDA has published a definition of “grassfed,” which applies to beef from cattle whose diet (with the exception of milk prior to weaning) is solely from forage and does not include grain or grain products. Cattle must have continuous access to pasture during the growing season. Hay, silage, crop residue without grain, and other roughage sources are acceptable feeds to supplement grazing. Process verification is also now required to approve new “grassfed” label claims.

However, there is still confusion in the marketplace about the term “grassfed.” The USDA grandfathered a number of beef companies with existing “grassfed” label claims when it published its definition. As a result, there are a number of companies making “grassfed, grain-finished” claims—which are essentially a description of conventional beef production. These companies, like the natural beef producers above, often layer on internal requirements, including limits on use of hormone and antibiotic treatments.

The American Grassfed Association and Food Alliance also collaborated to publish their own standards for third-party certification of “grassfed” beef, which include strict limits on confinement of animals and explicit prohibitions on use of hormone and antibiotic treatments.

Managing a successful grassfed beef program can be challenging, particularly when producers are transitioning a conventional cow-calf operation. Cattle raised on forage grow more slowly and gain less weight than cattle finished in feedlots on grain. Grassfed beef is a seasonal product in the Pacific Northwest, with animals typically harvested in the fall at the end of the grazing season. So grassfed beef is sold frozen most of the year. Ranchers that overwinter cattle can harvest starting in late spring, but face additional feed costs and must have access to irrigated pasture for finishing. Ranchers used to selling stocking calves after 8 months may also face cash flow challenges holding over animals for another 12 to 18 months until they can be harvested, processed, and eventually sold to a consumer or commercial buyer.

Grassfed beef faces some consumer acceptance challenges, with perceptions that it can be dry, tough, or gamey. However, experienced ranchers tend to say these are not issues with good grazing and animal handling, or with meat placed in the hands of an experienced chef or home cook.

Domestic grassfed beef producers do also face competition with lower-priced import from countries that have lower land and labor costs.

7.2.4. High Animal Welfare

A 2014 survey of 5,900 US consumers by the American Humane Association reports that 95 percent of respondents described themselves as concerned about farm animal welfare. This and a number of other surveys show



consumers expressing willingness to pay premiums for humanely raised meat. A grain of salt is appropriate given competing studies showing promises failing to be fulfilled at the register.

There are conventional beef producers certified for animal welfare under one or another organization. It is common, however, to see animal welfare claims paired with natural, organic, or grassfed beef claims. Animal Welfare Approved, for example, is also the certifier for the American Grassfed Association label. There has also been a move by the Whole Foods Market natural grocery store chain to develop and promote its own standards and criteria for animal welfare, and to require audits of farms and ranches supplying meat for its butcher cases.

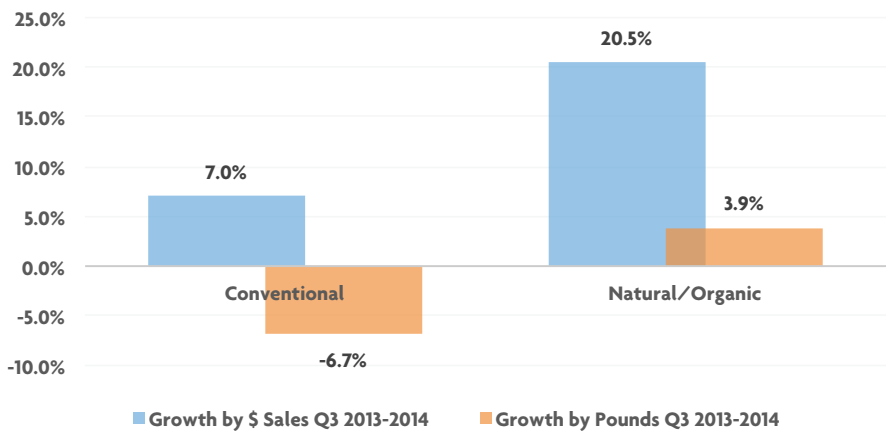
7.2.5. Local

The “local” segment of the market is represented by independent ranchers, often marketing direct to consumers or to commercial food buyers (retail, restaurants, food service), and by smaller regional brands (such as Painted Hills Beef).

7.2.6. Growth in Markets for Alternative Beef

The USDA Economic Research Service reported in 2012 that sales of alternative beef—including natural, certified organic, and grassfed—made up about 3 percent of the US beef market. ERS noted at that time that sales of alternative beef had grown at a combined rate of about 20 percent per year for the past several years.

Figure 7.3: Growth in conventional and natural/organic beef.



The graph above adapted from the National Cattlemen’s Beef Association compares category growth for conventional and natural/organic beef. As of the third quarter of 2014, the association estimates that natural and organic beef now represents 6 percent of all US beef sales.

A 2008 niche meat marketing study noted that price premiums for niche meats (over conventional) depend on a variety of factors including the specific cut of meat, niche attributes, brand strength, and variability in conventional pricing



(with swings in the commodity market).¹²⁵ Premiums of 10–30 percent were observed to be common, and even higher for certified organic meats.

Price differences for conventional and alternative beef observed in Portland December 2014 include:

	Major Grocer	New Seasons Market	Deck Family Farm
Generic 80% lean ground beef	\$4.46/lb.		
Natural 80% lean ground beef	\$5.29/lb.	\$5.49/lb. (Country Natural Beef)	
Grassfed 90+% lean ground beef	\$6.99/lb.	\$6.99/lb. (Country Natural Beef)	\$6.75/lb.
Natural NY Steak	\$8.99/lb.	\$16.99/lb. (Country Natural Beef)	
Natural Rib Eye Steak	\$11.49/lb.	\$16.99/lb. (Country Natural Beef)	
Grassfed NY Steak	\$17.99/lb.		\$15.50/lb.
Grassfed Rib Eye			\$21.50/lb.
Grassfed Tenderloin		\$25.99/lb. (Unspecified NW)	

Table 7.1: Price differences for conventional and alternative beef observed in Portland, December 2014.

As with other products studied in this report, despite the potential to realize higher prices overall for differentiated products, mid-sized and smaller-scale farmers pursuing niche markets must earn a margin that enables profitability in spite of typically higher per unit production, processing and marketing costs.

7.3. Demand for Beef in Oregon

Understanding market demand is critical to evaluating potential investments to increase production and profitability of local and alternative beef.

7.4. Consumer Spending on Beef

According to the Bureau of Labor Statistics, the average household (2.6 persons) in the western US spent \$7,180 in 2013 on food at home (59 percent) and away (41 percent) in 2013.¹²⁶ This includes \$213 spent on beef for at-home consumption. The average price per pound paid for fresh beef at retail during that period was \$4.43.¹²⁷ As noted above, US per capita consumption of beef is about 55 pounds.

In 2013, the split for sales of beef by weight was retail 39 percent (just under 5 billion pounds) and foodservice 61 percent (about 8 billion pounds). A look at BLS and industry reports on consumer spending suggests that dollars actually

¹²⁵ "Northern California Niche Meat Market Demand Study," Lauren Gwin and Shermain D. Hardesty, University of California, Cooperative Extension, 2008.

¹²⁶ "Meat Animals Production, Disposition, and Income Final Estimates 2008-20012," USDA, NRSS, 2014.

¹²⁷ "Retail Beef Performance," FreshLook Marketing and USDA Market News, 2014.



spent on beef by consumers split a little differently, with 36 percent retail and 64 percent foodservice.

About two-thirds of beef in foodservice was purchased by restaurants (5.3 billion pounds), and of that total, 65 percent (3.5 million pounds) was purchased by limited service restaurants.

In September 2013, the USDA Economic Research Service listed fresh beef at the farm level at \$2.64, wholesale at \$2.96, and retail at \$5.29.¹²⁸ This implies wholesale could average 56 percent of the final retail price.

A number of sources indicate foodservice ingredient costs average 30 percent of the final price, but can range lower or much higher depending on the type of establishment. Schools and hospitals may be seeking to keep food costs closer to 20 percent. Fine dining establishments may be comfortable with food costs reaching 40 percent or more with a priority placed on high-quality ingredients.

Using population data and the figures above, it is possible to form estimates of the consumer market for beef in Oregon, at the county level or for municipalities. (See chart below.) The estimates represent averages for all beef cuts. An estimated 60 percent of beef in the US is consumed in the form of ground beef. ERS reports show July 2014 retail prices for ground beef averaging \$3.91/pound and a composite for all steaks of \$7.00/pound.¹²⁹ Obviously, prices for premium steaks and roasts can go significantly higher. However, given that producers developing branded beef programs to target local and regional markets will have to find markets for all cuts, the average is worth considering.

Table 7.2: Implied wholesale opportunity for local beef.

Geographic Unit	Total Beef “Consumed”	Total Spending: Retail Beef for at Home	Implied Wholesale Opportunity (\$6)	Estimated Spending: Beef in Foodservice	Implied Wholesale Opportunity (20–40)
Oregon (pop. 3,919,020)	216M lbs.	\$321M	\$180M	\$568M	\$114M–\$228M
Multnomah Co. (pop. 756,530)	42M lbs.	\$62M	\$35M	\$110M	\$22M–\$44M
Jackson Co. (pop. 206,310)	11.3M lbs.	\$17M	\$9.5M	\$30M	\$6M–\$12M
City of Bend (pop. 79,109)	4.4M lbs.	\$6.5M	\$3.6M	\$11.5M	\$2.3M–\$4.6M
City of La Grande (pop. 13,048)	718K lbs.	\$1.1M	\$598K	\$1.9M	\$380K–\$760K

The figures above are rough, and for foodservice likely conservative. These estimates account only for the resident population, and do not take into account spending by tourists, business travelers, or others who may be present or pass through. Consumer spending figures also do not account for purchases by entities such as schools, hospitals, nursing homes, or prisons that do not pass the cost of food directly to consumers. (These purchases are addressed in more detail below, where information is available.)

¹²⁸ “Overview: Meat Price Spreads,” USDA, ERS, 2015.

¹²⁹ “Overview: Meat Price Spreads,” USDA, ERS, 2015.



It should also be reiterated that the large majority of beef consumed comes from lowest-cost commodity producer/processors. This has bearing on interpreting the scope of the implied wholesale opportunities referenced above.

As noted above, industry figures are that natural/organic beef currently represents about 6 percent of the total beef sales.¹³⁰ Opportunities for local and regional beef producers to capture a share of that market or to push that percentage higher vary by marketing channel.

7.5. Market Channels

Beef makes its way from farm to market through a number of channels both direct and wholesale. A 2009 Oregon Department of Agriculture report on small-scale beef processing reported a representative of United Western Grocers saying there are two main beef suppliers to markets in Oregon. About 75 percent of products come from Tyson Fresh Meats. Another 24.5 percent comes from JBS/Swift (formerly ConAgra). About 95 percent of the meat is graded “select” (45 percent of that is black angus beef) and the rest is “choice.”¹³¹

7.5.1. Direct Market—Custom Exempt

Ranchers with access to “custom exempt” slaughter and processing can sell “locker beef” directly to consumers—though technically they are selling whole live animals or shares of whole live animals (halves or quarters). Under state license, ranchers are not able to sell beef by the piece or by the pound.

As an example, Emerson Dell Farm in Wasco County offers customers halves or quarters at a “hanging weight” price of about \$3.20/pound. A quarter share of a 715-pound to 825-pound beef carcass is \$572 to \$660. The resulting 85 to 90 wrapped packages containing approximately 100 to 120 pounds of meat fill half a 10-cubic-foot freezer.

Northeast Oregon Economic Development District conducted a beef marketing study in 2009 and determined that about 300 head of cattle were processed locally for bulk sales. They noted that significant work was involved for a rancher selling more than 5 to 10 head, and that there was competition for processing slots in the peak August–September season.¹³²

Locker beef also requires a significant commitment on the part of the customer to make a large upfront purchase, and then store and make good use of a large quantity of meat, including less desirable cuts.

¹³⁰ “Natural/Organic Share of Total Beef (Dollar, 4th Quarter 2014,” Beef Retail Marketing, 2014.

¹³¹ “Beef Processing: Is It for You?” Jerry Gardner, Oregon Department of Agriculture, 2009.

¹³² “Product Development and Market Research for Beef and Lamb USDA Inspected Meat Products from Wallowa County,” Northeast Oregon Economic Development District, Wallowa Resources, and USDA Rural Development, 2009.



There may be 10,000 head of cattle being produced for ranchers' own use or sold as locker beef in Oregon, representing 4,800,000 pounds of wrapped beef (at an average yield of 480 pounds per animal). If accurate, that figure represents 2 percent of the beef consumed in Oregon.

Given challenges at the ranch, processor, and consumer levels, it is difficult to imagine sales of locker beef increasing dramatically in the near future—though that would be a very desirable outcome. Regardless, there is an argument for promoting and educating consumers about the benefits of locker beef.

7.5.2. Direct Market—Under USDA License

Ranchers with access to USDA-licensed slaughter and processing are also selling individual cuts of meat direct to consumer at farmers' markets, thorough buying clubs, and even online. Producers using USDA processing also have the option of selling product to distributors, restaurants, retailers, and institutions.

Selling individual cuts of meat has its own challenges, including inventory management, more complicated pricing, and the need to find viable markets for all parts of the animal.

Ranchers are also often in locations remote from both processors and end markets, requiring travel to deliver animals for processing, to develop and maintain relationships with buyers, and in some cases to actually fulfill ongoing orders for meat. There is also a lot of work involved in developing sufficient scale to be able to engage the interest of retail and foodservice customers, and ultimately enter distribution.

The Oregon Department of Agriculture reports that approximately thirty-five thousand head of beef were slaughtered in Oregon under USDA inspection in 2008.¹³³ The entities contracting and end markets for those cattle are not fully known. One might assume at least half were marketed in state. That would suggest a total of 8.4 million pounds representing 3.9 percent of the beef consumed in Oregon.

7.5.3. Processing/Manufacturing

There are few examples of food processors/manufacturers sourcing beef raised and processed in Oregon to be featured as an ingredient in products. This requires traceability to the ranch and access to USDA-licensed processing necessary for sale of finished products across state lines. More common are cases where entities like Truitt Brothers Inc. have sourced from regional beef brands like Country Natural Beef, with cattle pooled from multiple states and processed in both Washington and Oregon.

7.5.4. Retail

US Census County Business Patterns data indicate there were 763 grocery stores and 56 independent meat markets in Oregon in 2012. Many grocery

¹³³ "Beef Processing: Is It for You?" Jerry Gardner, Oregon Department of Agriculture, 2009.



stores are outlets of major chains, like Safeway and Kroger, which are likely too large to integrate smaller local beef suppliers, but do carry natural and organic products from multiregional and national companies like Coleman Natural Meats.

However, there are also about 80 independent or natural food stores, like New Seasons Market (15 stores), Market of Choice (9 stores), Whole Foods Market (8 stores in Oregon), Zupan's (4 stores), and about a dozen cooperative grocery stores (like People's Food or Oceana Natural Food), that may be interested in relationships with local suppliers.

Average sales of fresh beef per grocery store nationally are reportedly \$17,923 per week.¹³⁴ That implies that the 80 independent stores in Oregon could be vending \$74.6 million worth of fresh beef annually. Dividing that total by the average \$4.43 price per pound paid by consumers for beef in 2013, indicates throughput as high as 16.8 million pounds—or about 35,000 head of cattle. Given the product mix and target demographic for those stores, the average price per pound is likely higher and the throughput correspondingly lower.

New Seasons Market does have a “Seasons Peak” grassfed beef line, for which it procures beef from twelve Oregon and Washington ranches. Whole Foods Market is known to buy from Country Natural Beef (formerly known as Oregon Country Beef, but now a multistate venture). Market of Choice features Painted Hills Beef, raised by seven ranchers in Wheeler County and processed in Washington.

7.5.5. Restaurants

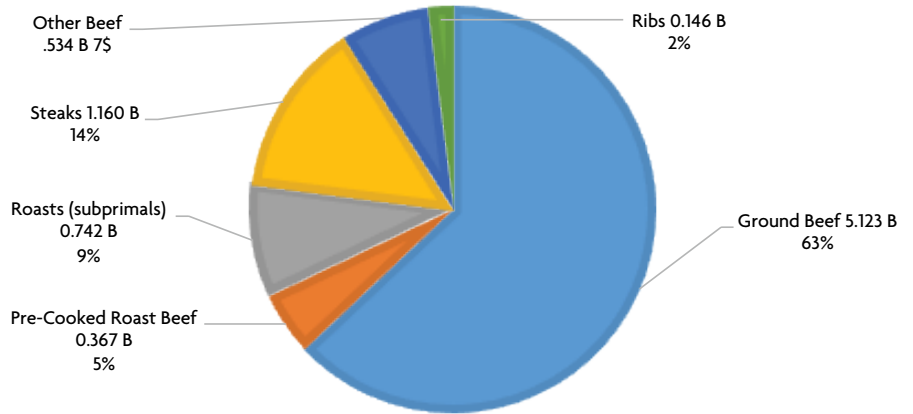
US Census County Business Patterns data indicate there were 3,974 full-service restaurants (not including limited service “fast food”) and 123 catering companies in Oregon in 2012. The top 10 percent may be considered “fine dining” and more likely to be engaged in procurement of local products (though primarily through wholesalers). However, it is clear that interest in local and natural is widespread across the industry, including with fast casual restaurant chains like Burgerville, Dick's Kitchen, Little Big Burger, and others. Therefore a 20 percent slice of restaurants may be worth considering.

¹³⁴ “Statistics and Facts on the US Beef Market,” Statista, (n.d.).



Figure 7.4 Foodservice utilization of beef.

2013 ANNUAL TOTAL=8.072 BILLION LBS.



The chart in Figure 7.4 shows a National Cattlemen’s Beef Association breakdown for foodservice utilization of beef, which reportedly represents 32 percent of total protein sales. A total of 5.3 billion pounds is sold to restaurants—of which about 1.8 billion pounds is sold to full-service restaurants. Nationally, independent full-service restaurants reportedly spend some \$50 billion on select products annually, of which 30 percent is for proteins¹³⁵—suggesting at least \$4.8 billion spent on beef. Dividing those figures by the 232,000 venues nationally suggests each operator spends an average of \$21,000 for 7,800 pounds of beef annually.

Using that estimate for 397 Oregon restaurants (top 10 percent) suggests a \$16.6 million market for 6.2 million pounds of beef or about 13,000 head. This estimate is likely conservative.

7.5.6. Farm to Hospital

Health Care Without Harm (HCWH) is an international environmental health organization that supports sustainable food procurement at hospitals and healthcare facilities, including sourcing of antibiotic-free meat. A 2008 report¹³⁶ by HCWH indicated that 44 percent of 112 hospitals surveyed were buying some quantity of hormone- and antibiotic-free meat, and that another 47 percent had plans to start sourcing such products.

A contributor to the report, the Oregon Center for Environmental Health, documented 4 Portland area hospitals purchasing a total of 94,827 pounds of fresh beef in 2007, with purchasing of hormone- and antibiotic-free beef (Food Alliance Certified) ranging from 10 percent to 20 percent (1 response); to 40 percent to 60 percent (2 responses); to 80 percent to 100 percent (1 response).

¹³⁵ “Independent Full Service Restaurants & Protein: A Match Made in Heaven,” CHD Expert, (n.d.).

¹³⁶ “Menu of Change: Healthy Food in Health Care,” Health Care Without Harm, 2008.



Follow-on inquiries about food procurement by Oregon Physicians for Social Responsibility in 2009 resulted in detailed reports of beef purchases from 4 Portland-area hospitals. Combined, the 4 institutions represent about 1,325 hospital beds and reported purchasing about 130,000 pounds of fresh beef annually (Primarily preformed hamburger patties, ground beef, stew meat, and roasts—not including any cooked, cured, or other processed beef products). Extrapolating from those 4 institutions to Oregon's 33 private hospitals and 6,008 total hospital beds suggests hospitals could represent a market for 590,000 pounds of beef or 1,230 head of cattle.

Adding the 12,403 beds in Oregon's licensed nursing care facilities would triple the market estimate, but it has not been shown those facilities would follow a similar procurement pattern.

Conclusions should be tempered with the knowledge that price remains a major consideration for foodservice in healthcare. If ABF beef is available from large, conventional suppliers, the added value of local products from smaller farm suppliers may not be enough to justify paying a price premium.

7.5.7. Farm to School

School Food FOCUS is a national collaborative working with fifteen large school districts across the US (including Portland Public Schools and the Beaverton School District) to make school meals nationwide healthier, regionally sourced, and sustainably produced, and has made meat raised without antibiotics a priority.

In Oregon, approximately 24 percent of school food budgets are spent on local food—the highest percentage in the nation. (USDA, 2014) Schools, with limited budgets and limited ability to prepare fresh foods, offer an interesting procurement challenge. Portland Public Schools (PPS) has enrollment of about 46,000 students, serves 21,000 lunches daily, and does provide meals prepared with natural and grassfed beef.

PPS conducted trials of “grassfed” hamburger patties from Cascade Natural Beef supplied by SP Provisions in 2008—from cattle that northwest ranchers actually finished conventionally on grain rations. Costs for the trial were reported at \$44.85 a case (75 patties) Cascade Natural versus \$17.11 per case (140 patties) for commodity hamburger.¹³⁷ The difference is \$0.60 per serving vs. \$0.12 per serving—500 percent.

PPS has two offerings of true grassfed (grass-finished) beef (from Carmen Ranch beef in Wallowa County) scheduled for lunches in the 2014–2015 school year as part of a Harvest of the Month program. Providing quarter-pound beef patties for a 21,000–lunch seating requires 5,250 pounds of beef.

¹³⁷ “OSU Taste Tests Grain-Fed vs. Grass-Fed Beef in Portland Schools,” OSU Extension Service, 2008.



Extrapolating to the 567,000 students enrolled in districts across Oregon suggests 65,000 pounds would be required each time ground beef was served. If local grassfed beef were featured monthly during the school year, that suggests a need for 2.3 million servings—582,000 pounds or about 1,215 head of cattle.

Extending that scenario to serve grassfed beef weekly to the approximately 190,000 students enrolled in Oregon universities and colleges (with 45 percent participation in lunches) suggests a need for another 810,000 pounds of beef per year—or about 1,690 head of cattle.

The combined total is 2.4 million pounds or about 2,900 head of cattle.

7.6. Demand Summary

Combining the estimates provided for retail, restaurants, hospitals, and educational institutions suggests there is potential demand in Oregon for about 26 million pounds of fresh beef that offers a combination of desired attributes including: local, antibiotic free, free-range or pasture-raised. This is the equivalent of about 52,000 head of cattle. The total represents about 12 percent of beef consumed in Oregon each year.

The breakdown by channel is as follows:

- Retail: 65% (~16.8 million lbs. or 35,000 head)
- Restaurants: 24% (~6.2 million lbs. or 13,000 head)
- Hospitals: 2% (~590,000 lbs. or 1,230 head)
- Education: 9% (~2.4 million lbs. or 2,900 head)

With the assumption that at least half of the approximately 35,000 head of cattle already slaughtered under USDA inspection in Oregon are marketed in state, opportunity may remain for 34,500 additional head of cattle representing 16.4 million pounds of beef.

7.7. Oregon Beef Production

The 2012 USDA Census of Agriculture¹³⁸ shows a total of 11,638 farms in Oregon reported sales of cattle or calves. The number of farms is down 11 percent from 2007 (1,439 fewer farms).

A combined total of 879,251 animals were sold in 2012 with a total estimated value of \$894 million. This is a 14 percent decline in the number of animals since 2007 (141,000 fewer), but total value has increased 11 percent.

All told, Oregon farmers and ranchers produce enough cattle to satisfy 195 percent of in-state consumption of beef. However, nearly all cattle produced are shipped for processing and marketing out of state.

¹³⁸ "Poultry—Inventory and Sales," 2012 Census of Agriculture—County Data, (n.d.).



Of all farms reporting sales of cattle, 84 percent sold fewer than 50 head (9,763 farms). Combined, those smallest farms represented about 86,000 head.

The 1,081 farms in the middle, with sales of between 50 and 200 head, sold a combined 83,000 animals.

The 794 largest farms, each with sales over 200 head, sold a combined 685,000 animals.

There is clearly capacity for smaller and midsized farms to meet a major portion of Oregon’s demand for beef. The question is why those producers currently capture likely less than 2 to 3 percent of market share, and why production and sale of grassfed beef in particular is so limited.

7.8. Small Beef Producer Challenges

Most small natural, organic, or grassfed producers send cattle to slaughter in the fall, and as a result fresh beef is actually a seasonal product. These farmers market frozen beef for much of the year, which turns away some consumers and commercial buyers used to year-round availability of fresh meat.

Ranchers face cash-flow challenges holding animals an additional year until they reach target weights, can be harvested, processed, and eventually sold to a consumer or commercial buyer.

Ranchers implementing grassfed programs face financial risks if any number of their cattle ends up redirected to commodity markets, where the USDA grading system is based largely on marbling. Beef finished on grass tends to be leaner and grades poorly as one study showed below: (ATTRA 2006)

- **Grain-fed:** 0 percent Standard, 45 percent Select, 55 percent Choice
- **Grassfed:** 15 percent Standard, 70 percent Select, 15 percent Choice

Because of poor grading, grassfed producers “take a price kicking—to the tune of \$220/head, or up to a 24¢/pound discount.” (Martz et al., 1998)

Beef producers that have access to USDA-inspected facilities that allow them to retail meat (selling individual cuts by the pound) often struggle to manage inventories effectively. While high-end steaks sell quickly, some ranchers report difficulty finding profitable markets for lower-value cuts and ground beef. Several promising start-ups have failed because they could not sell enough hamburger.

With small lot sizes, ranchers may have difficulty assembling cuts of consistent size, appearance, and quality that are most appealing to restaurant and retail buyers.

Another challenge is that marketing beef instead of cattle requires additional skills and labor—a burden that on smaller farms may fall directly on family members. For smaller operations to be profitable, farmers must have technical,



managerial, and marketing skills that help them produce high-quality products, manage expenses and debt, and connect with appropriate customers. However, it is relatively rare to find all those skills in one person or even one family.

7.9. Oregon Beef Processing

Processing capacity is frequently referenced as an infrastructure gap and a barrier to the development of more midsized farm and food businesses.

The Niche Meat Processor Assistance Network lists ten USDA slaughter facilities in Oregon that as of October 2012 are accessible to producers.

- Bartels Packing, Eugene
- Carlton Packing Co, Carlton
- Central Oregon Butcher Boys, Prineville
- Dayton Natural Meats, Dayton
- Malco's Buxton Meat, Sandy
- Marks Meats, Canby
- Mohawk Valley Meats, Springfield
- Mt. Angel Meat Company, Mt. Angel
- Oregon Beef Company, Madras
- Stafford's Custom Meats, Elgin

The Oregon Department of Agriculture reported in 2009 that Oregon is also home to:

- 50 USDA-inspected meat processors (no slaughter—secondary processing only)
- 55 custom mobile slaughter trucks
- 12 custom slaughterhouses
- 86 custom meat processors

In a 2006 Ecotrust survey of eighty-four livestock producers, 24 percent stated their major obstacle is distance to slaughter and processing facilities:

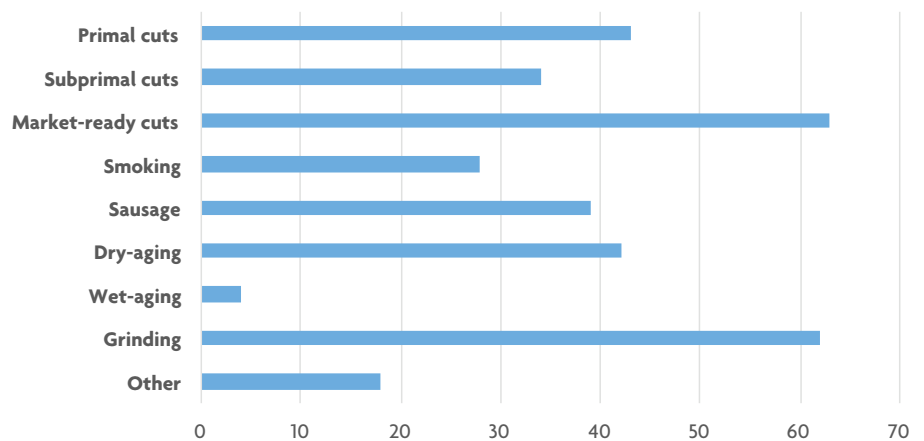
- 60 percent use facilities more than 30 miles away.
- 33 percent use facilities more than 60 miles away.
- 29 percent use facilities more than 90 miles away.
- 16 percent use facilities more than 120 miles away.

Interestingly, 37 percent report that there is a closer processing facility. Reasons given for not using that facility include: dissatisfaction with the quality of processing, the facility is not USDA-inspected, or the facility doesn't provide all the services that the producer requires.

The graph below describes services typically sought.



Figure 7.5: Commonly requested further beef processing.



Additional surveys by Oregon State University and others show dissatisfaction with available processing facilities, including:

- The distance to the facility—transportation costs, and effects on animals and meat quality.
- Limited capacity of the facility—lack of services and difficulty scheduling in peak seasons.
- Lack of skilled labor (butchers and meat cutters)—quality control concerns.
- Inadequate packaging options.

A number of surveys show livestock producers saying they would be able to expand marketing, increase production, and/or improve profitability with better access to USDA slaughter and processing.

At the same time, however, existing small-scale USDA processing facilities are not operating at full capacity. Surveys suggest that USDA-inspected facilities in both Oregon and Washington are capable of processing more animals. Owners of custom mobile and fixed processing facilities also say they do not see a business need to face additional costs and licensing requirements for USDA certification.

A 2012 ERS report advises caution in considering the need for additional processing capacity, noting:

“the presence of small livestock operations does not necessarily indicate demand for inspected processing. Many small livestock farmers and ranchers may not wish to participate in local markets. There may be a perception that there is demand for a small slaughter establishment in a particular area, but this could be due to a misperception between perceived and real demand. Furthermore, even if real demand appears to exist in a county, that demand may not be sufficient for a small slaughter establishment to be viable. There may not be enough producers willing to process enough animals at a high enough price to support the fixed and operational costs, especially for labor and equipment, of even a small facility.”

Costs for opening a small USDA-inspected slaughter plant can run over \$2 million. The same 2012 ERS report notes:

“getting a plant to meet USDA inspection regulations can be a costly endeavor. To open a new plant, facilities must comply with a large number of regulations detailing the requirements for construction, lighting, ventilation, plumbing, sewage, water supply, dressing rooms, lavatories and toilets. Often it is just as costly, or even more so, to get a plant up to code after it has been out of commission. There are more costs associated with running a USDA inspected facility than a custom-exempt facility in part due to the money required for licensing. Once a facility is licensed, there is the extra requirement of paperwork and meat testing that must be completed which is a time burden to many small processors.”

In a 2009 report, the Oregon Department of Agriculture described the costs and the profit margin of small-scale meat processors, based on review of 285 firms nationally with annual revenues between \$500,000 and \$999,999.

EXPENSES	Percent of Gross Revenues
Cost of Goods	83.8%
Gross Margin	16.2%
Selling, General & Admin	6.1%
Officer compensation	5.6%
Pension & benefits	0.8%
Advertising & sales	0.6%
Rents	0.3%
Depreciation and amortization	0.9%
Operating Expenses	14.3%
Net Income Before Tax	1.9%

Figure 7.6: Costs and profit margin of small-scale meat processors.

According to ODA’s analysis, an operation processing 1,500 head of cattle might see gross revenues of \$696,000, with net income before taxes of only \$13,224—making it a marginal business, at best.

ODA also reports that economies of scale allow large meat processing facilities to slaughter 325 head an hour for about half the cost of a processor slaughtering 25 head an hour.

The expense of a fixed plant and difficulties finding appropriate sites for such plants (to maximize utilization and avoid conflicts with neighbors), have increased interest in USDA-inspected mobile slaughter units (MSU). An MSU is significantly cheaper—usually less than \$300,000. However, MSUs also often need to work in tandem with one or more existing fixed “cut and wrap” facilities by facilitating a flow of meat products for secondary processing and packaging.

Ecotrust’s 2006 survey had 65 percent of respondents reporting they would prefer to use a USDA inspected mobile slaughter unit and then transport carcasses to a fixed-site USDA-processing facility. The most commonly cited reason was decreased stress on the livestock.

The first USDA-inspected MSU was constructed in Washington in 2002 by the Island Grown Farmers Cooperative. This MSU is a 33-foot-long, 13-foot-tall trailer divided into three sections: processing, refrigeration, and storage. The MSU provides services to farmers within a 100-mile radius, but must process a minimum of 4 steers at each stop to break even. It can handle as many 8 steers a day, and can store 10 carcasses in its cooler. The MSU operates three days a week and meat is cut and packaged five days a week at a fixed-site processing facility—supporting six full-time employees.



The Oregon Department of Agriculture conducted a feasibility study in 2003 for establishment of a USDA-inspected MSU in eastern Oregon. More recent studies have continued to promote the idea.

However, there are also concerns that the MSU model does not scale well. With limits on the size of the trailer, slaughter capacity usually cannot exceed ten beeves per day. Rising fuel costs may also restrict the geographic area that can be served cost-effectively.

Whether an MSU, fixed facility, or combination are considered, there appear to be at least three major challenges to implementation:

- Securing funding for construction and initial operations: slaughter and processing are relatively low-revenue, low-margin businesses with some significant risks. As a result, banks and investors have shown little interest. However, nonprofits in other states have successfully secured grant funding and loans for construction, afterward leasing facilities to for-profit operators.
- Developing a business plan to ensure throughput of minimum numbers of livestock necessary for profitability and depreciation: this includes accessing appropriate end markets.
- Finding people with the necessary skills to operate facilities successfully. With few schools training people to slaughter and butcher meat, the potential employee pool is shrinking. The work is physically demanding and wages are modest. The median annual wage for butchers and meat cutters in 2008 was \$28,290, with only the highest 10 percent earning more than \$45,000.

7.10. Support Infrastructure for Beef

Beyond processing capacity, it is important to consider other support infrastructure necessary for production and marketing of beef.

7.10.1. Rendering

Rendering is the conversion of meat processing wastes into marketable goods such as edible fats and proteins, tallow, and grease. Rendering is typically a significant source of income for larger-scale meat processing operations. Smaller processors, however, often do not have sufficient volume to make transport of wastes to the rendering facility cost effective, and lose the opportunity for associated income—increasing the cost of processing. The Oregon Department of Agriculture’s 2009 report on beef processing lists the closure of Oregon’s two in-state rendering plants in 2006 and the subsequent need to ship wastes to California or Washington, as a reason for high in-state processing costs. That report estimates that about 91.65 million pounds of animal byproducts are generated annually in Oregon, with about 81.98 million pounds recoverable.



7.10.2. Hides

Finding a market for hides may also be important to the profitability of local/regional beef brands. A 2012 estimate of the value of cattle by-products showed hides representing 51 percent of the total (\$72 of \$140).

7.10.3. Pet Food

A 2009 NEOEDD study showed some successful niche meat producers generating revenue through sale of by-product, such as organs and ground trim, into the raw pet food market—representing an added value of up to \$100 per animal. That report notes that pet food can be processed in the same facilities used for foods for human consumption, and that pet food sold direct to consumers can achieve prices on par with products sold for human consumption.

7.10.4. Cold Storage

With grassfed beef typically a seasonal product, freezer storage becomes an issue to maintain inventory and year-round sales. There is significant cold storage capacity in the Willamette Valley, but additional cold storage associated with existing or new regional processing facilities may have to be considered.

7.10.5. Distribution

Smaller local or regional beef producers are unlikely to see their products carried by large broadline distributors such as Food Services of America or SYSCO. Once some scale is achieved, there may be opportunities to work with associated businesses, such as Fulton Provision Company (owned by SYSCO). There are also some smaller, specialty distributors that may offer more immediate support. These include companies like SP Provisions, and Nicky USA.

7.11. Paths Forward

Demand for grassfed meats is growing and retail, restaurant, and food service buyers are interested in cultivating local/regional suppliers of high-quality meat. Allen R. Williams, a food industry consultant who specializes in grassfed and organic beef, sees health and sustainability concerns driving more than 100 percent market growth annually.

In 2009, the Food Innovation Center in Portland conducted a blind taste test with 112 consumers to compare commodity ground beef to grassfed ground beef from Wallowa County. Tasters found the grassfed beef significantly more tender and juicy. Perceptions about grassfed beef included:

- 88 percent perceived grassfed to be healthier.
- 76 percent perceived grassfed to be more humane.
- 71 percent perceived grassfed to be better for environment.
- 51 percent had already switched to natural/organic beef due to food safety concerns.



A 2009 survey by the Northeast Oregon Economic Development District (NEOEDD) found all the retail outlets and industry professionals contacted citing growing demand for grassfed meats. Several buyers indicated they cannot source sufficient quantities of grassfed meat from existing suppliers and are working to develop additional supply.

There are two models to consider for expansion of local/regional beef production and marketing: a single entrepreneur-led model and a collective/cooperative model.

7.12. The Entrepreneur Model

Carman Ranch is a family-owned company that combines a production cattle ranch and a beef marketing business. The ranch was established in Wallowa County in 1913, but starting in the 1990s became increasingly less profitable due to a combination of rising grain costs and low prices for commodity beef. While completing an environmental policy degree at Stanford University, Cory Carman did research on grassfed beef production, discovering that only fifty ranches in the US still raised cattle solely on grass. The research convinced her, however, that it could be done, and that there was a market for healthier beef products. Cory moved back to the family ranch in 2003 and started to experiment with grassfed beef production, holding back a few cows each year from sales to feedlots to be grown out, slaughtered, processed, and marketed locally.

Cory started marketing “custom beef “ (half and quarter cows) directly to local families in Wallowa and Union County in 2004. Sales of custom beef to families in Portland started in 2006. In 2007, she and her husband took over fulltime management of Carman Ranch and launched the Carman Ranch brand. Their mission statement is: “As 4th-generation ranchers raising and teaching the 5th generation, we are committed to preserving the natural environment and providing our customers with healthy and delicious beef.” Carman Ranch posted profits starting in 2008.

In 2009, Cory started marketing whole animals to food service buyers. She felt there was too much inventory risk for her small company to sell wholesale beef by the piece. Bon Appétit Management Company made a trial purchase and asked chefs at University of Portland to find ways to use all cuts. Oregon Health Sciences University soon followed suit. In 2010, Bon Appétit signaled that while they wanted to increase purchases of Carman Ranch beef, they did not need middle meats or high-end steak cuts. In the interim, Cory had made connections with chefs in Portland, including Vitaly Paley of Paley’s Place. In 2011, working with Fulton Meat Company, Cory started to sell wholesale in earnest. She quickly developed a growing list of restaurant customers in Portland and Seattle.

Carman Ranch’s initial efforts marketing to institutional buyers were hampered by the comparatively high price of their beef. Universities and hospitals simply could not afford it. With mobile slaughter and processing at a small local plant, nearly 40 percent of Carman Ranch’s cost of production was



incurred after the cattle left the ranch. To reduce cost and facilitate growth, Cory needed larger processing and distribution partners.

A major challenge was finding a USDA-certified slaughterhouse that would take the relatively modest volume offered by Carman Ranch. Currently, there are only 3 USDA-inspected slaughterhouses in Oregon east of the Cascades. As a result, many Eastern Oregon ranchers truck cattle more than 150 miles for butchering. Larger companies like AB Foods in Washington can require a minimum delivery of 250 cattle for a single production run. In contrast, Carman Ranch was often processing fewer than 25 cattle a week during the season.

With an introduction by Food Alliance, Cory developed a relationship with Fulton Meats (Portland), a SYSCO-owned meat processor and distributor. Fulton made several accommodations for Carman Ranch, including agreeing to buy the whole animals, carry inventory on Carman Ranch's behalf, and distribute fresh meat seasonally as available. Fulton also brokered an introduction to a larger-scale USDA processing plant, Walt's Wholesale Meats in Woodland, Washington. Those steps lowered the price of Carman Ranch products by 15 percent. They also enabled sales by the piece so that institutional buyers could take low-end cuts, while restaurants took high steaks and roasts. This opened the door to additional sales by food service operators and restaurants.

Concerns about quality and a need to scale even further subsequently led Cory to take her processing to Dayton Meats and to invest in capacity necessary for self-distribution.

As demand for Carman Ranch beef has grown, Cory has turned to other ranchers in the community to meet the need. Carman Ranch currently manages its own herd of Angus cattle and produced close to 120 marketable calves in 2012, but now requires over 400 head to meet orders. When Carman Ranch entered wholesale, Cory anticipated that demand would exceed Carman Ranch's productive capacity. In preparation, she developed a relationship with the McClaran Ranch in Joseph in 2009. Like Carman Ranch, the McClaran Ranch is a fourth generation cattle ranch, with a daughter, Jill McClaran, now taking a larger role in operations. Cory and Jill have also pursued relationships with other ranchers that could supply additional cattle.

Despite progress, the system still has challenges. While Carman Ranch beef at wholesale has been priced 25 percent higher than the commodity alternative, profits are comparable with commodity because of processing and distribution inefficiencies and added marketing costs.

While the wholesale business has grown substantially, Carman Ranch remains at an awkward stage of development. Cory notes that a small ranch that produces one hundred head can do well with direct sales. In wholesale, however, higher levels of efficiency and a sufficient operating base are not achieved until volume reaches at least one thousand head.



7.13. The Collective/Cooperative Model

Country Natural Beef (CNB) offers an example of producers collaborating to develop and advance a shared brand, with members providing expertise and capacity to manage operations and marketing. Originally known as Oregon Country Beef, CNB has grown beyond Oregon to include ranch members in a number of other western states, and now markets throughout the West and beyond—primarily through Whole Foods Markets.

The Oregon Department of Agriculture noted in its 2009 study that CNB

“. . . learned early on that the economics of beef is about ‘cost of production, return on investment, and a reasonable profit.’ They have done exhaustive accounting of their costs of production and costs of marketing and set their prices based on this accounting regardless of ‘market’ prices. If the price they put on their meat is too high for consumers, they believe they would have to get out of the business and because if they can’t meet their costs and a reasonable profit, they would have to stop producing. They have estimated, however, that they have averaged nearly \$120 per animal profit over the market price for the last 10 years.”

A value-chain study by OSU and the Center for Integrated Agricultural Systems at UW-Madison is the source for the following history and description of CNB:

In 1986, 14 Oregon ranchers formed a cooperative—Country Natural Beef—to escape the rollercoaster cycles of the commodity cattle market and achieve predictable, relatively stable, premium prices. . . . Internally, CNB’s full membership reaches consensus decisions during general meetings. Externally, CNB has developed close and stable relationships with a diverse set of supply chain partners. . . . In recent years, CNB has nearly 100 member ranches in multiple states that raise more than 100,000 brood cows, manage more than 6 million acres of land and sell almost \$50 million of products.

CNB cattle are raised without growth hormones, antibiotics or animal byproducts and most are raised from birth on member ranches. The cattle spend less time in the feedlot (90 to 95 days versus 120 to 150 days for conventional beef) and are fed rations that are, to the extent possible, sourced locally and forage based, including potatoes, alfalfa, barley and some corn. As a result, CNB’s meat is leaner than that of its competitors, reaching USDA grades of “high select” and “low choice” versus the fatter “high choice.”

The rancher members share strong commitments to both animal welfare and sound environmental practices. The cooperative’s “Raise Well” animal welfare standards were written and endorsed by Dr. Temple Grandin, a leading animal behaviorist. . . . CNB Marketing Director Stacy Davies notes the important marketplace impact: “This animal welfare thing



appears to sell meat”. . . . On their ranches, cooperative members have developed pasture management practices that maintain grass, plant and wildlife diversity, water resources and healthy streams.

The cooperative prides itself on its streamlined internal operations and low administrative costs. Money earned from the sale of cattle flows directly to individual ranching families, with few middlemen. Member ranches do not invest equity in the cooperative, and all financing relies on the proceeds of annual cattle sales. The cooperative owns no bricks, mortar, or trucks and therefore has no debt. It employs members who act as independent consultants and “internal partners” to handle key functions including production planning, sales and accounting. This approach allows the cooperative to limit management costs to less than four percent of gross revenue, but it requires a strong commitment to participatory decision-making.

CNB has forged business partnerships based on the Japanese model known as “Shin Rai,” or mutual support and mutual reward. The cooperative works with business partners that provide complementary services and expertise, and share basic values such as humane animal treatment and land stewardship. CNB and its partners are engaged in a values-based food supply chain where everyone reaps the benefits of market premiums and price stability associated with an identity-preserved, high-value product.

A key production partner is Beef Northwest Feeders, which preserves the identity of the Country Natural Beef cattle and provides humane animal handling and non-antibiotic first treatment of ill cattle. AB Foods, another important partner, serves as both Country Natural Beef 's butcher and financial/logistical associate. The co-op's rancher members individually sell live cattle to AB Foods, and CNB buys back boxed beef cuts that the cooperative then seeks to sell

CNB has selected retail partners who share an interest in marketing high-quality, natural beef products to health- and eco-conscious consumers who are willing to pay premium prices. These partners maintain CNB's identity on its products through to the final consumers. Retail partners include Whole Foods Market, New Seasons Market, Burgerville and Bon Appétit Management Company.

7.14. Analysis

The entrepreneur model relies on the drive and skills of an individual, and the resources, partnerships, outside expertise, and employee capacity that person is able to bring into play. Decision-making is quicker with clear ownership and authority. Rancher suppliers can focus on production, but with grassfed systems face some risk holding over cattle from commodity sales. They are also dependent on the entrepreneur's ability to grow the market and may not receive the full benefit of any price premium.



The cooperative model requires more participation on the part of member ranchers, and the consensus decision-making model employed by CNB requires significant patience and ability to navigate internal conflicts. The ability to scale by growing the membership has its own rewards and challenges. CNB's relationship with Whole Foods Market has been important to its success, but with more than 50 percent of sales made to Whole Foods Market, the cooperative also faces concentration risks. Whole Foods Market has been aggressive encouraging further expansion of CNB and has required ranchers to submit to humane practice standards and audits the company developed. Recruitment and intake of members has to be done carefully in order not to upset the internal balance. Managing large numbers of ranch suppliers has sometimes created challenges with quality control and consistency. CNB has also undergone periodic contractions—as in recent years when members frustrated with shrinking returns during the recession turned to other markets.

One lesson to be learned from both models is that beef businesses have been built without investment in new infrastructure, through partnerships to leverage existing capacity. This has added complexity and cost, but has enabled production and growth without the burden of financing and operating facilities.

7.15. Conclusions

Northeast Oregon Economic Development District's 2009 study concluded that:

“Producers who have the time and resources to cultivate relationships with buyers, and with entities actively promoting local and sustainable food production, will likely generate sales and brand awareness. There are opportunities for individual producers to act on their own to move some niche product and a few producers are exploring ways to share infrastructure and marketing costs to make these opportunities more attainable. Efforts to collectively supply larger volume buyers could move forward if the committed leadership of an individual or entity arises to support longer-term relationship development, education, promotion and infrastructure development.”

Barriers to moving forward identified by NEOEDD included:

- The limited capacity of local humane slaughter and processing facilities.
- Lack of access to technical assistance to complete individual ranch business plans needed to transition from commodity to grass-finished systems.
- Difficulty deferring income during the switch to production of grass finished animals.

The reference above to committed leadership appears key. Oregon beef brands that have achieved some success have benefited from an individual or small group with the ability to coordinate production and delivery of cattle, manage processing and distribution partnerships and logistics, and cultivate customer interest and loyalty.



The commitment of individual ranch members/suppliers to grassfed or other “values-added” production systems and to the brand is also critical to the quality and continued availability of cattle for processing. A number of branded beef programs have seen ranchers eager to join when commodity prices are low, but faced challenges with discontent, desertions, and difficulty securing needed cattle when commodity prices swing high and/or other factors affect the work/risk/reward equation.

In short, bringing local/regional grassfed or other “values-added” beef to scale in Oregon will require the commitment of ranchers who truly believe that it is a better production system (better for the land, better for the animals, and ultimately better economically), and who are willing to ignore the commodity market, endure the challenges of growing a brand, and sacrifice short-term gains for the promise of long-term stability and sustainability.

There are potential benefits from bringing local/regional beef to scale in Oregon. A 2011 study by the Leopold Center for Sustainable Agriculture estimated that in small slaughter and processing facilities in Iowa each 1,000 cattle processed support 7.4 jobs and \$257,509 in local wages. If 12 percent of beef consumed in Oregon were produced and processed in state, the 52,000 head of cattle needed would support 385 jobs and generate \$13.4 million in local wages.

However, the Economic Research Service (ERS 2011) offers the following caution, which should temper expectations:

“Expansion of the local meat sector will continue to depend on the willingness of consumers to pay premiums high enough to absorb the costs associated with the particular production program, processing, and the remainder of the supply chain. Consequently, the ability of this market to grow depends on the sector’s capacity to broaden its consumer base in order to generate more consumer demand. This in turn depends on public perceptions about the value of local meat.”

This suggests that entrepreneurs and investors should be careful to quantify demand and evaluate price elasticity to ensure adequate throughput to justify development of systems and infrastructure, and sufficient returns to the ranch to keep producer suppliers/partners engaged.

