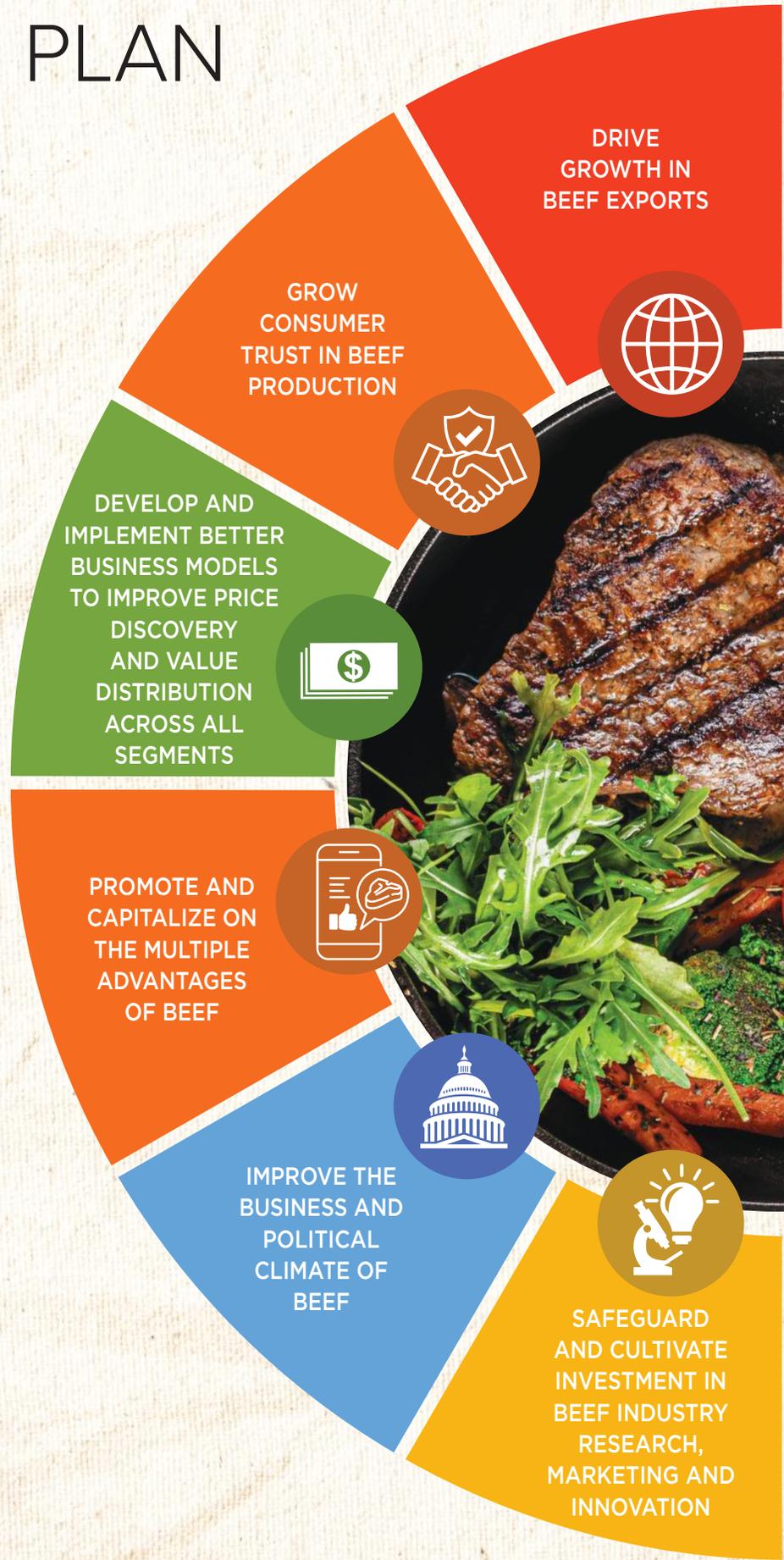


BEEF INDUSTRY

LONG RANGE PLAN

2021-2025





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EXECUTIVE SUMMARY

Every five years, the Cattlemen's Beef Board, the Federation of State Beef Councils, and the National Cattlemen's Beef Association come together to develop a strategic plan for the United States' beef industry. While the development of this plan is funded by the three organizations outlined above, the plan is intended to provide insight and strategic direction to the entire industry.

In December 2019, fifteen beef industry leaders, selected by the officers of the Cattlemen's Beef Board (CBB) and the National Cattlemen's Beef Association (NCBA) embarked on a long-range planning process. The purpose of this task force was to assess the current industry environment, analyze key issues and trends impacting the beef community, and develop a five-year strategic plan to guide the efforts and focus the collective resources of the U.S. beef industry.

GUIDING STATEMENTS

The task force outlined the following mission for the U.S. beef industry:

“Ensure the long-term prosperity of the U.S. beef industry by sustainably producing the most trusted, highest quality and consistently satisfying protein for consumers around the world.”

Given the increasingly crowded and competitive protein market and the growing global focus around sustainability, the team outlined its long-term aspirations in the following vision statement:

“To be the protein of choice around the world, trusted and respected for our commitment to quality, safety and sustainability.”

OBJECTIVES

The previous beef industry long-range plan outlined a singular measurable objective focused on growing beef demand. While the task force agreed that improving consumer demand continues to be critical, it concluded that long term industry viability and growth requires a focus on targets beyond the Wholesale Beef Demand Index. Consequently, the task force outlined a total of four overarching industry objectives:

- 1.) Grow global demand for U.S. beef by promoting beef's health and nutritional benefits, satisfying flavor and unparalleled safety.**
- 2.) Improve industry-wide profitability by expanding processing capacity and developing improved value-capture models.**
- 3.) Intensify efforts in researching, verifying, improving, and communicating U.S. beef industry sustainability.**
- 4.) Make traceability a reality in the U.S. beef industry.**



STRATEGIES

Achieving the stated objectives will require the industry to focus its energies and devote its resources to six core strategies:



DRIVE GROWTH IN BEEF EXPORTS

- Export markets currently generate more than \$300 per head and offer significant promise for continued growth. This strategy focuses on executing current and negotiating new free trade agreements, driving adoption of traceability, advocating for the adoption and use of international science-based trading standards, collaborating with partners to promote U.S. beef in foreign markets and investing in research, marketing and education programs to further capitalize on the unique attributes of U.S. beef.



GROW CONSUMER TRUST IN BEEF PRODUCTION

- Activist groups and organized misinformation campaigns are causing some consumers to question, or feel guilty, about their decision to consume beef. Research documents an increased desire among all consumers to know more about where their food comes from and how it is produced. While progress has been made in this area, additional effort is needed to improve consumer trust. For example, given the growing interest in food system sustainability, the industry must invest in measuring, documenting, improving and ultimately communicating the positive net environmental impact of beef production. Another critical focus must be to educate medical, diet and health professionals about beef production and engage experts, inside and outside the beef industry, in delivering fact-based messages about animal care, beef industry sustainability, beef safety and nutrition.



DEVELOP AND IMPLEMENT BETTER BUSINESS MODELS TO IMPROVE PRICE DISCOVERY AND VALUE DISTRIBUTION ACROSS ALL SEGMENTS

- The beef industry is a highly fragmented industry. The lack of coordination and communication between segments within the beef value chain has contributed to inequitable value distribution between industry segments and extreme market volatility for the industry as a whole. The closure of packing facilities due to the lack of available cattle during the last drought has resulted in a recent shortage of packing capacity following several years of growth in the nation's cowherd. Constrictions at the packer/processor level have been further exacerbated by the COVID pandemic leading to increased packer leverage and decreased producer profitability. The long-term viability and growth of the beef industry depends on more equitable and consistent profit opportunities for all stakeholders. This begins with increasing packing capacity. However, building sustainable profit opportunities will also require innovative new business models, the adoption of existing and new risk management tools and the development of new technologies and approaches for measuring and capturing value.



PROMOTE AND CAPITALIZE ON THE MULTIPLE ADVANTAGES OF BEEF

- While the diet and health community has substantiated the value of protein in a healthy diet, today's consumers have more options for consuming protein than ever before. Therefore, it's critically important to effectively promote and communicate beef's competitive advantages. This strategy is a continuation from a strategy outlined in the 2015 Long Range Plan and focuses on expanding marketing and education efforts which highlight the role of beef in a healthy lifestyle and sustainable diet. Special attention must also be given to effectively defining and communicating the advantages beef has over alternative proteins and leveraging technology to create more convenient, engaging and memorable beef eating experiences.



IMPROVE THE BUSINESS AND POLITICAL CLIMATE OF BEEF

- The beef industry has scored some significant policy and regulatory wins over the past several years, but with each election and appointment comes new challenges. This plan calls for leveraging the use of the Beef Lifecycle Assessment and other research efforts to reinforce the important role beef cattle play in regenerative agriculture. Furthermore, the industry must continually engage in efforts to defend beef's product identity while insuring that future dietary recommendations are based on sound science. Additional initiatives outline key priorities in the areas of food safety, public lands grazing policies and science-based production technologies.



SAFEGUARD AND CULTIVATE INVESTMENT IN BEEF INDUSTRY RESEARCH, MARKETING AND INNOVATION

- Given the decline in U.S. cattle numbers, Beef Checkoff funding available from the Beef Promotion Operating Committee has declined from \$42.8 million in 2006 to \$36 million in 2018 — a 15.9% reduction in funding. Simultaneously, governmental budget cuts have resulted in fewer dollars being allocated towards new beef industry research and technologies. This strategy encourages the exploration of options to increase checkoff funding coupled with the execution of initiatives to increase resourcing specifically for production research. Another critical activity includes the establishment of beef industry innovation forums to attract intellectual capital and stimulate innovation in the U.S. beef industry.



PURPOSE OF PLAN

Every five years, the beef industry develops a long range plan. The purpose of this plan is to outline objectives for the industry to achieve and define strategies and initiatives for the industry to implement. Ultimately, this plan is intended to help guide the decisions of industry leaders and focus the resources of industry organizations over the next five years (2021-2025). The process involved surveying the market environment, assessing the industry's resources and capabilities, identifying current and future opportunities and threats and evaluating various strategic alternatives to achieve targeted objectives. While this plan is intended to inform the activities and resource allocation of the Cattlemen's Beef Board, the Federation of State Beef Councils and the National Cattlemen's Beef Association, the usefulness of this plan extends far beyond these industry organizations. The recommendations provided and insights generated by this plan can also be used by for-profit companies, educational institutions, governmental agencies and other stakeholders to develop their own strategies for effectively serving and supporting the U.S. beef industry. While this plan uses the terms "beef industry" and "beef community", it is meant to be inclusive of the beef, veal, and dairy segments.

Not only will the sponsoring organizations use this plan to develop their own annual plans of work and allocate their human and financial resources, but the task force also expects allied industry partners and other stakeholders to explore opportunities to align their individual business priorities with this long range plan while collaborating with others to support the specific industry-wide strategies and initiatives outlined in this document.

This comprehensive document is designed to provide insight into some of the critical research, data and information that helped shape this plan while summarizing some of the key process steps the task force completed in the development of this plan.

LONG RANGE PLAN TASK FORCE

The Long Range Plan Task Force was comprised of industry leaders representing the entire beef value chain:

Keith Belk, Department Head of Animal Science, Colorado State University (Fort Collins, CO)

Andy Bishop, Fairfield Farms (Cox Creek, KY)

Kim Brackett, Owner/Operator, Brackett Ranches, Chair (Three Creek, ID)

Tim Brady, Director of Risk Management, Agri Beef Co. (Boise, ID)

Donnell Brown, Owner/Manager, R.A. Brown Ranch (Throckmorton, TX)

John Butler, CEO, Beef Marketing Group (Manhattan, KS)

Paul Defoor, Co-CEO, Cactus Feeders, Inc. (Amarillo, TX)

Joe Goggins, Owner, Public Auction Yards (Billings, MT)

Ken Griner, President, Usher Land & Timber, Inc. (Chiefland, FL)

Mary Kraft, Owner/Operator, Quail Ridge Dairy (Fort Morgan, CO)

Jon Lowe, Head of Global Commercial Development, Zoetis (Parsippany, NJ)

Dean Meyer, Farmer/Feeder (Rock Rapids, IA)

Bill Rishel, Rishel Ranch (Lincoln, NE)

Suzy Strassburger, Strassburger Steaks, LLC (Carlstadt, NJ)

Jerry Wulf, Wulf Cattle (Hancock, MN)



Front Row: John Butler, Bill Rishel, Kim Brackett (chair), Mary Kraft, Jon Lowe, Donnell Brown. Back Row: Dr. Keith Belk, Tim Brady, Andy Bishop, Suzanne Strassburger, Ken Griner, Dean Meyer, Paul Defoor, Jerry Wulf, Joe Goggins (not pictured). Facilitator: Kevin Ochsner (not pictured)

The task force invited the industry experts listed below to speak to the group and provide their expertise and insight on a number of current and future issues likely to impact the beef industry over the next five years.

Mike Apley, DVM, Kansas State University
 Randy Blach, Cattle-Fax
 Erin Borrer, USMEF
 Don Close, Rabo AgriFinance
 Shawn Darcy, NCBA
 Kevin Good, Cattle-Fax
 John Hinners, USMEF
 Rick Husted, NCBA
 Steve Koontz, Ph.D. Colorado State University
 Kyle Luke, VML
 Patrick Linnell, Cattle-Fax

Ashley McDonald, NCBA/USRSB
 Shalene McNeil, Ph.D., RD, NCBA
 Joe Pawlak, Technomics
 Derrell Peel, Ph.D., Oklahoma State University
 Sara Place, Ph.D., Elanco
 Leann Saunders, Where Food Comes From
 Angie Siemens, Ph.D., Cargill
 Brett Stuart, Global Agri Trends
 Glynn Tonsor, Ph.D., Kansas State University
 Michael Uetz, Midan Marketing
 Colin Woodall, NCBA
 Lance Zimmerman, Cattle-Fax

SITUATION ASSESSMENT

After a devastating drought that resulted in record high feed prices, a severe decline in the U.S. cowherd, and record live cattle and beef prices in 2014, the U.S. beef industry has spent the past five years rebuilding the nation's cowherd, improving the quality of beef and negotiating new trade agreements. Record high cattle prices in 2014 encouraged the industry to expand, resulting in the U.S. beef cow inventory increasing from approximately 29 million head in 2014 to nearly 32 million head in 2019. U.S. commercial beef production also increased approximately 4 billion pounds between 2015 and 2020. Not only did cattle numbers and beef production increase, the quality of beef produced in the United States improved as well. In fact, according to USDA data, the percentage of cattle grading Choice and Prime increased from approximately 74% in 2015 to over 80% in 2019.

A robust economy, coupled with this improvement in quality, drove significant increases in U.S. expenditures on beef. In fact, according to Cattle-Fax data, over the past 20 years, U.S. consumers increased their expenditures on poultry and pork by 70% and 74% respectively while increasing their expenditures on beef by 97%. Unfortunately, while today's U.S. consumer eats an additional 9 pounds of meat (beef, pork and poultry) annually, beef consumption has declined 10 pounds per person. On the export front, in 2018, U.S. beef achieved an all-time export volume record of 1.35 million metric tons and experienced more than \$1 billion in value growth from a year earlier to a record \$8.33 billion. Unfortunately, 2019 ended with beef exports being down 4.4%, primarily challenged by delays in negotiating new trade agreements.

As 2020 began, the beef industry was cautiously optimistic. While supply fundamentals were bearish with experts predicting the production of beef, pork and poultry growing to a record 113 billion pounds, the industry was encouraged by plentiful grain, relatively low feed costs, record low unemployment and encouraging news relative to diplomatic progress on several trade deals. The anticipated growth in protein supplies was balanced, in part, by China's estimated 32 million metric ton shortfall in China's pork supplies due to the African Swine Fever outbreak. With a more optimistic trade outlook and the projections that Australian beef exports would shrink following a drought induced a 25% reduction in their cowherd since 2012, the prospects looked promising for the U.S. beef industry.

There were also some challenges and pending threats looming on the horizon as the beef industry looked ahead into a new decade. From Time magazine's selection of a vocal, outspoken teenage environmentalist as its "Person of the Year", to the proposed Green New Deal legislation and the media attention it created around "flatulating cows", environmental-related concerns associated with beef production were increasing. Simultaneously, companies producing and promoting alternative protein products capitalized on the public's growing environmental concerns by positioning their meat substitutes as more environmentally friendly than beef.

If learning to tell the upcycling story of beef cattle to a misinformed public while devising strategies to compete with well-funded new market entrants were not enough, March 2020 brought the COVID-19 pandemic that turned the food industry,

and especially the meat industry, on its head. Travel restrictions, school closures, work-from-home policies and job layoffs became a reality for many. The pandemic created a unique set of challenges for the meat and beef industry as well. On one hand, the beef supply chain had to pivot from distributing approximately half of its products through food service to nearly all of its product through retail for a short period of time. Simultaneously, while consumers were stocking up on meat, packing plants were becoming COVID hotspots and being forced to close. This resulted in empty meat cases and the implementation of meat rationing policies. The week ending May 2, 2020, saw 248,000 fewer head harvested than the same week a year before.

While strategic planning always involves the need to make projections about an unknown future and define a set of educated assumptions to build a plan around, the timeframe this plan was developed brought with it heightened uncertainty and many unanswered questions. Nonetheless, the task force was diligent in reading articles, collecting information, and inviting experts to share insights in an effort to develop the most educated and informed point-of-view possible. What follows is a summary of the situational analysis completed by the task force.

KEY TRENDS

Outlined below is a high-level summary of key trends the task force believes will shape the U.S. beef industry over the next five years. While this list is not intended to be a comprehensive summary, it does represent the most critical issues that must be addressed by the beef industry.

- Increasing societal interest and focus on natural resources, climate change and the environment and a growing desire among consumers to know more about how cattle are raised and how beef is produced.
- Decreased packing capacity and hook space, fewer and larger packing/processing facilities and increasing packer concentration.
- Increasing activism, cause related marketing and the use of social media to influence consumer choices.
- Heightened scrutiny of biosecurity issues and increased surveillance for infectious disease outbreaks.
- Increasing polarization within the beef industry – between participants in the beef value chain and between organizations within the beef industry.
- Decreased producer access to accurate and timely market information (including live cash cattle and retail value of beef).
- Increased media, consumer interest and investment in cell-cultured and plant-based protein.
- Increased focus and attention on the safety of the U.S. beef supply.
- Increasing consumer desire to include more protein in their diet and an improving perception among consumers that beef is a nutritious protein choice.

CRITICAL ASSUMPTIONS

In developing the long range plan for the beef industry, the task force assessed current industry dynamics, analyzed future issues and trends likely to impact the beef industry, and identified a set of critical planning assumptions. The strategies and initiatives outlined in this plan are designed to succeed in an environment where the following assumptions are true:

- 1.) Consumers will continue to be interested in, and concerned about, the environmental footprint, nutritional quality, and healthfulness of the food they eat.
- 2.) The livestock production sector will continue to face opposition from animal/environmental activists.
- 3.) Poultry will remain the beef industry's most formidable competitor, and there will be increasing capital investment and effort to competitively produce and aggressively market cell-cultured and plant-based alternative proteins.
- 4.) The largest growth opportunities for beef will be in export markets.
- 5.) Consumers will increasingly rely on digital resources, online platforms, and social media to formulate their personal values and beliefs which will, in turn, influence their buying behavior and purchase decisions.
- 6.) Internal industry polarization will continue to jeopardize the Beef Checkoff.
- 7.) The labor market will continue to become more expensive and more of a constraint for animal agriculture.
- 8.) Politics, government policy, trade policy and regulations will play a larger role in cattle/beef production.
- 9.) Packing constraints will drive increased coordination and supply agreements.
- 10.) Consolidation will continue in the beef industry.
- 11.) The COVID-19 experience will drive long-term structural/process/cost changes across the food chain and specifically in the beef value chain.
- 12.) The risk and impact of animal disease outbreaks and zoonotic diseases will increase.



SWOT ANALYSIS

Based on their own personal expertise and the information gathered throughout the planning process, members of the task force identified, and prioritized, the key strengths, weaknesses, opportunities, and threats of the U.S. beef industry.



STRENGTHS

1.) High quality beef

Consistent, high-quality, youthful, grain-fed beef verified by the globally respected USDA grading system.

2.) Upcycling capabilities of beef cattle

Positive environmental impact of beef cattle due to their inherent upcycling capabilities and the efficiency of the U.S. beef production system.

3.) Beef safety and consumer trust

Consumer trust in beef driven by our global food safety advantage and documented verification programs (e.g. Beef Quality Assurance).

4.) Nutritional profile and health benefits

Nutritional profile and health benefits of beef coupled with its global position as the premier protein.

5.) Story and brand image

Beef industry's story/brand image (family-based cow/calf industry, cowboy culture).

6.) Flexibility and efficiency of production

Flexibility and efficiency of production, fabrication, marketing, distribution systems leading to stable supplies and stable prices of beef.



WEAKNESSES

1.) Lack of packing/processing capacity and competition

Lack of packing/processing capacity and lack of competition at the packer/processor level.

2.) Lack of industry-wide traceability

Lack of an industry-wide traceability system to address global market demands, manage potential disease outbreaks and create data flow that facilitates improved value capture.

3.) Fragmented industry and traditional mindset

Disjointed, fragmented industry segments and traditional mindsets challenges our ability to adopt innovative practices, respond to market signals and generate industry-wide profitability.

4.) Competence/resources in telling beef's story

Industry competence/skill/resources in communicating directly with consumers and telling the story of how beef is produced.

5.) Industry infighting

Infighting and lack of unity between organizations within the industry.

6.) Lack of an emergency plan

Lack of an industry plan in case of an emergency (e.g. war, animal disease outbreak, etc.).



OPPORTUNITIES

1.) Export opportunities

Improved international market access and fair-trade agreements.

2.) Global middle-class growth

Long-term growth in the global middle-class and increased demand for protein.

3.) Consumer demand for information and verification

Expectations among global consumers and governments for traceability that provides more information and verification of production practices.

4.) Technology and social media

Society's increased use and reliance on technology and social media together with its ability to impact public opinion and consumer behavior.

5.) Intersection of food choices and environmental values

Societal interest in aligning food choices with environmental values.

6.) Consumer interest in animal care

Increased interest among consumers regarding animal care.

7.) Consumer interest in protein

Consumer interest in increasing protein in their diet

8.) Demand for locally grown beef and local processing

Increased interest and demand for locally grown beef and local/regional processing capabilities.



THREATS

1.) Shrinking margins and profitability

Shrinking margins and profitability of cattle producers driven by the existing model of pricing cattle and distributing value across sectors in the beef value chain based primarily on market leverage.

2.) Legislative and regulatory threats

Legislative, political, and regulatory threats.

3.) Economic recession/depression

Threat of global economic recession/depression.

4.) Disease outbreaks

Infectious disease outbreaks and limited new treatment products/options.

5.) Market disruptions and price volatility

Increased potential for major market disruptions in the beef value chain resulting in increased price volatility and/or depressed market prices.

6.) Investment in and competition from alternative proteins

Increased competition and investment in developing and marketing cell-cultured and plant-based proteins.

7.) Rural/urban divide

Rural/urban divide, ag literacy, overall lack of consumers engagement in food production.

8.) Access to capital and viable risk management tools

Lack of viable and affordable tools and technologies for managing risk and limited access to capital resulting in a lack of new producers entering the business.

9.) Attacks on the Beef Checkoff

Continued efforts to damage or destroy the Beef Checkoff.

CRITICAL STRATEGIC QUESTIONS

After completing the industry scan and conducting a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis, the task force identified a list of questions it considered important for the beef industry to answer. These questions served to stimulate brainstorming around essential strategies and initiatives and are listed in order of importance based on an individual ranking among task force members.

- 1.) What can we do to effectively communicate the positive role cattle play in the environment as upcyclers and recyclers?
- 2.) How can we implement an industry-wide traceability program?
- 3.) How do we educate those who are agriculturally illiterate and tell beef's story in a way that is accepted and appreciated by consumers?
- 4.) What can we do to protect the Beef Checkoff?
- 5.) What can we do to decrease the environmental footprint of U.S. beef production and position the industry as a leader in the field of regenerative agriculture?
- 6.) What price discovery mechanisms could we develop that would incentivize the production of better beef and sustain profitability throughout all segments of the beef industry?
- 7.) What should the industry do to effectively counter the threat of alternative proteins, including meat substitutes?
- 8.) What can we do to further reduce non-tariff trade barriers?
- 9.) What can we do to retain the "right to farm" in any political environment that may emerge?
- 10.) What can we do to continue to grow demand for U.S. beef?
- 11.) How can we assure current/potential consumers that specific health and welfare protocols have been followed?
- 12.) What can we do to find a replacement for Tylan in controlling liver abscesses?
- 13.) What can we do to secure more money to fund necessary research?
- 14.) What can be done to address the conflict and infighting within the beef industry?
- 15.) What can be done to encourage more coordination and alignment in the industry to increase accountability and profitability of all segments?
- 16.) How can we encourage "new blood" to get involved in agriculture and the beef industry?
- 17.) How can we make capital more readily available to beef producers so they can continue to invest in the beef cattle business?
- 18.) What can the beef industry do to capitalize on the growing demand for "click and collect" and other online purchasing technology?
- 19.) How can we achieve acceptance of new growth technologies?
- 20.) What should we do to improve our ability to more quickly, and accurately, identify the most profitable genetics and mass multiple those superior genetics?

STRATEGIC PLAN OVERVIEW

The task force developed the following vision and mission statements to outline the aspirations and define the purpose of the U.S. beef industry.

VISION

To be the protein of choice around the world, trusted and respected for our commitment to quality, safety, and sustainability. *Similar to the previous vision statement, the task force used the word “trusted” as it is essential that the beef industry earns and maintains consumer trust – not just in terms of the nutrition, safety and taste of beef, but also in how that beef is produced. The word “respected” was added to the mission statement because the task force acknowledges that some in society blame beef for being harmful to human health and the environment and are unaware of the benefits cattle and beef bring to society. This vision statement outlines an aspiration for the U.S. beef industry to be genuinely respected for its continuous efforts in improving the quality, safety, and sustainability of our beef. Finally, the vision statement clearly articulates the goal of U.S. beef becoming the “protein of choice around the world” recognizing that future growth in the industry will largely be driven by introducing protein-hungry consumers around the globe to the unsurpassed taste, quality and safety of U.S. beef.*

MISSION

Ensure the long-term prosperity of the U.S. beef industry by sustainably producing the most trusted, highest quality and consistently satisfying protein for consumers around the world. *The task force elected to modify the previous mission statement to reflect the fact that while growing consumer demand for beef is foundational to industry success, it is not the ultimate mission of the industry. Instead, the task force believes the focus should be on long-term industry prosperity. Achieving long-term prosperity begins with producing a high-quality, trusted product that satisfies the wants, needs and desires of consumers and results in a growing demand for beef. But long-term prosperity depends on creating and fulfilling that demand in an economic, environmental and socially sustainable manner.*

INDUSTRY OBJECTIVES

To focus industry resources and activities, the task force defined the following high-level industry objectives:

- **Grow global demand by promoting beef’s health and nutritional benefits, satisfying flavor and unparalleled safety.** The beef value chain begins when a consumer exchanges a portion of their disposable income for beef. Said another way, without growing consumer demand, it is impossible for the industry to grow and prosper. Industry profitability plummeted in the 1980’s and 90’s when beef demand was cut in half. Since the lows in 1998, the Wholesale Beef Demand Index has averaged approximately 1% growth per year and achieved an all-time high of 124 in 2014. The task force believes it is critically important for the industry to continue focusing on growing consumer demand by promoting key attributes including the health and nutrition benefits, satisfying flavor and unparalleled safety of U.S. beef.

- **Improve industry-wide profitability by expanding processing capacity and developing improved value-capture models.** The beef industry has always experienced volatility, but events ranging from the drought-induced cowherd liquidation, to the closure of underutilized packing plants, a packing plant fire, and most recently, the COVID-19 pandemic have created violent and unpredictable swings in cattle prices and stakeholder profitability. The decline in weekly slaughter capacity from 525,000 in 2010 to 490,000 today has created imbalance between segments of the beef value chain. This objective is predicated on the assumption that value is more equitably shared across industry segments when there is more balance between cattle numbers and packing capacity. It also underscores the pivotal role packing capacity plays in setting the stage for long-term industry growth. While increased packing capacity is pivotal to more equitable margin distribution, the beef industry must also explore new and improved value-capture models. (Value capture models could include everything from measurement technologies that more accurately measure the ultimate value of each carcass to new pricing formulas, ownership structures, business models or risk management tools that improve value capture and/or profitability.)

- **Intensify efforts in researching, improving, and communicating U.S. beef industry sustainability.** Consumers are increasingly interested in aligning their personal values with their food choices and are expressing concern about the sustainability of their food supply. While some mistakenly associate sustainability with issues only related to the environment, the task force supports the belief that the concept of sustainability is three-dimensional and includes social responsibility, environmental responsibility, and economic viability. Currently, much of the criticism leveled at the beef industry has been focused on the environmental impact of beef cattle production. This objective highlights the critical need to continue researching, improving and communicating the sustainability of beef with particular attention to documenting the environmental footprint of beef production. Over the next five years, it is imperative that the industry communicates facts about the role beef cattle play in upcycling lower quality plant resources into higher value protein, while seeking opportunities to continually improve the net environmental footprint of U.S. beef production and communicating the progress the beef industry is making in terms of environmental, economic and social sustainability.

- **Make traceability a reality in the beef industry.** Based on the study recommended by the previous Beef Industry Long Range Planning Task Force and completed by World Perspectives in 2018, approximately 61% of beef exports come from countries with nationally significant traceability systems in place. In fact, beef exported by India and the United States represents the majority of global beef exports produced by countries without nationally significant traceability systems in place. The demand among some beef importing countries for traceability coupled with the ongoing threat of an nationwide lock-down, in the case of an infectious disease outbreak that cannot be quickly traced and contained, underscores the importance of implementing an effective traceability system for the U.S. beef industry. The task force believes when it comes to traceability, the time for researching, testing and debating is over and it is now time for action.

CORE STRATEGIES & GOALS

Core strategies are defined as methods that will be used to achieve targeted industry objectives. The task force recommends the U.S. beef industry executes six core strategies.

The task force also outlined specific goals for each of the core strategies. These goals are meant to serve as measurable targets for each strategy and should be used to monitor the industry's progress in implementing the strategic plan.

CORE STRATEGY I: DRIVE GROWTH IN BEEF EXPORTS

While the population of the United States continues to grow, domestic beef consumption is expected to remain relatively constant at 53.8 to 55.5 lbs. per capita according to USDA agricultural projections. The past 20 years have seen a significant growth in global beef consumption (figure 1) and the largest growth opportunities in the future continue to be outside the borders of the United States.

The United States has a comparative advantage in the production of high-quality, youthful, grain-fed beef backed by the internationally recognized USDA grading system. Exciting growth opportunities exist, provided the U.S. beef industry can leverage its advantages, capitalize on the free-trade agreements which have already been negotiated and continue developing new trade agreements to open additional export markets to U.S. beef.

The importance of this strategy cannot be overstated. As of Q1 of 2020, the value of exports accounted for \$317 per head equating to approximately 18% of the value of a fed steer. This is up from \$277 and 13% in 2015 (figure 2).

Prior to the COVID pandemic, the global middle class was growing and prospects for increased global demand for high quality proteins looked promising. Undoubtedly, the speed of economic recovery coupled with how quickly the travel and tourism sectors rebound will have a significant impact on the global demand for high quality protein. Subsequently, this will impact U.S. beef export opportunities.

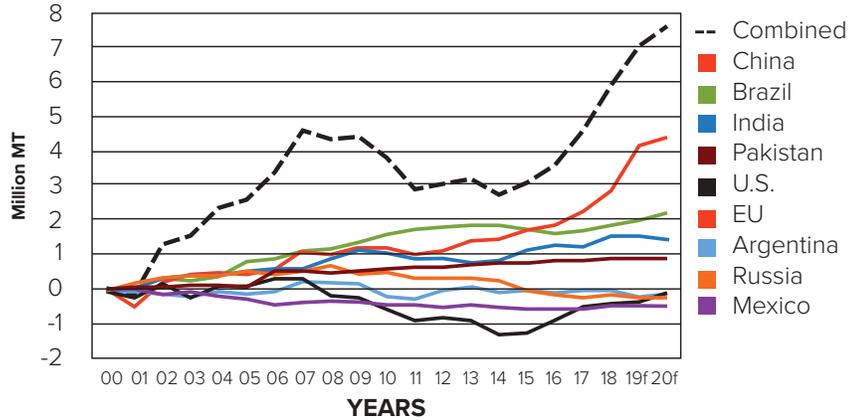
The task force perceived export opportunities to be the most important growth opportunity over the next five years. Capitalizing on this opportunity begins with continued efforts to reduce trade barriers, execute existing trade agreements, and continue negotiating and securing new free trade agreements based on international, science-based trading standards. Driving the adoption of traceability is another critical initiative outlined by the task force – not only to address the needs and concerns of key export markets, but also to protect the domestic industry against the unmitigated spread of an infectious animal disease. Additional initiatives include collaborating

with partners to promote beef in export markets and investing in research, education, and marketing programs to effectively position and communicate the unique attributes of U.S. beef to targeted foreign customers. Given the importance of exports to the future growth and success of the U.S. beef industry, the task force established some aggressive goals in this area:

- Grow U.S. beef exports to 17% of U.S. beef production by 2025.
- Grow the value of U.S. beef exports as a percent of total beef value to 21% by 2025.
- By 2025, 75% of all cattle producing states are participating in a nationwide animal disease traceability program (e.g. U.S. Cattle Trace).

FIGURE 1: GLOBAL BEEF CONSUMPTION

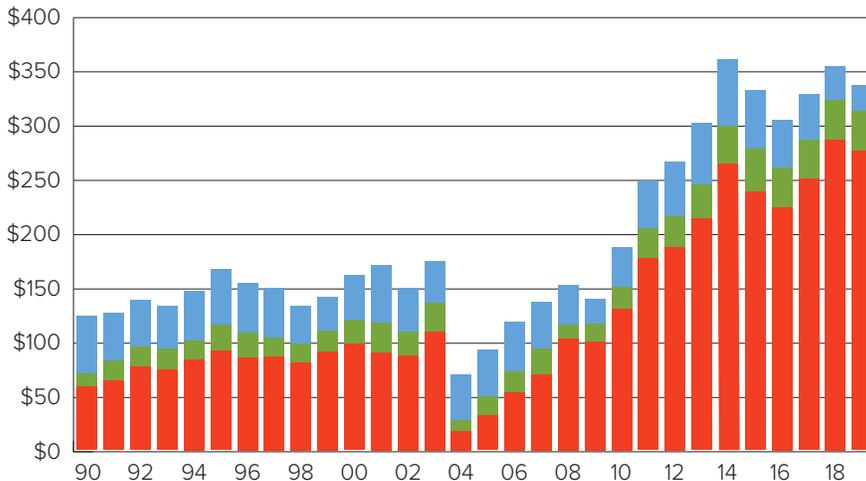
Change from 2000



Source: USDA/FAS PSD Tables

FIGURE 2: U.S. BEEF EXPORT VALUE PER HEAD

■ Beef \$ ■ BVM* \$ ■ Hides \$



Source: USDA, CattleFax

YEARS

* Note: BVM = Beef Variety Meats

STRATEGY II: GROW CONSUMER TRUST IN BEEF PRODUCTION

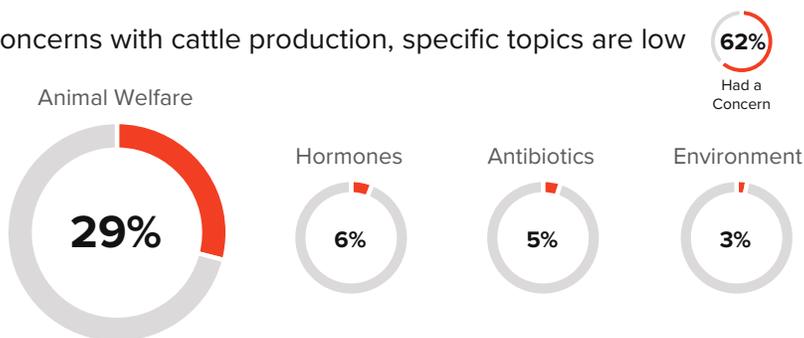
The United States continues to experience an increasing rural/urban divide. The fact is that a majority of our society is three to four generations removed from the farm and has little experience or exposure to food production. According to the Consumer Beef Tracker study (Oct-Dec 2019), only 25% of consumers are familiar with how cattle are raised, but 43% of those consumers either often or always consider how food was raised/grown when choosing a protein (figure 3).

Society is also expanding its definition of health. Health for humans depends on a healthy food system and consumers are increasingly interested in how cattle are raised as demonstrated by year-over-year increases in consumer consideration around all production related attributes from the use of hormones and antibiotics to an assurance that cattle are being humanely raised.

Notably, according to the Consumer Beef Tracker, animal welfare rises to the top of consumer concerns in unaided questioning about beef production. As the chart below indicates, 29% of respondents identified animal welfare as their top concern in an unaided question regarding beef production concerns (figure 4).

FIGURE 4: UNAIDED CONCERNS WITH PRODUCTION

concerns with cattle production, specific topics are low



Source: Consumer Beef Tracker Oct-Dec 2019; coded open end verbatims from consumers

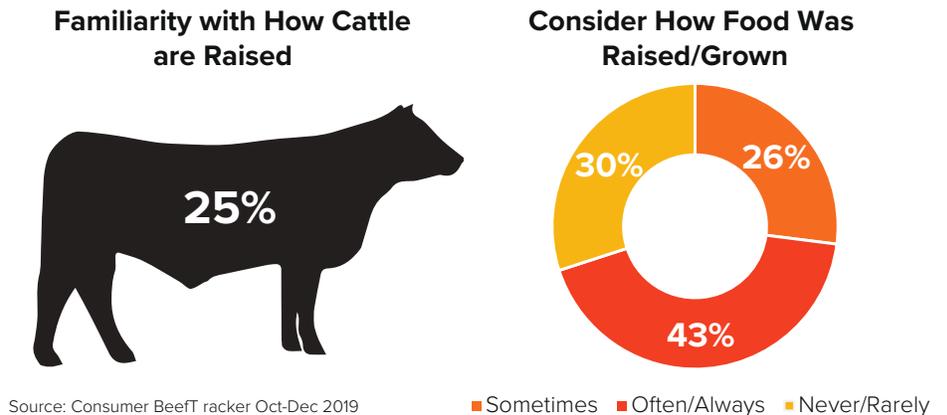
industry invest in measuring, documenting, improving and communicating the net environmental impact of beef production in order to address some of the myths and fallacies being propagated to persuade consumers to reduce beef consumption. Moreover, the industry needs to identify and train experts and grassroots representatives to engage positively in the sustainable nutrition conversation while expanding its educational outreach to professionals in the diet and health communities. To address consumers' growing concerns about how beef is raised, the task force recommends educating the general public about the BQA program while simultaneously creating BQA verification tools for each segment of the industry. Finally, the industry must never lose focus on food safety and should consider a direct-to-consumer campaign to communicate the industry protocols and safeguards used to ensure safe beef.

Several goals the task force hopes to accomplish with this strategy include the following:

- Improve Consumer Trust Index by five percentage points by 2025.
- Grow BQA certifications by a cumulative total of 10% per year and achieve national standardization of the BQA program by 2023.

FIGURE 3: CONSUMER KNOWLEDGE

Consumers are unfamiliar with how cattle are raised, but consider this aspect when choosing a protein



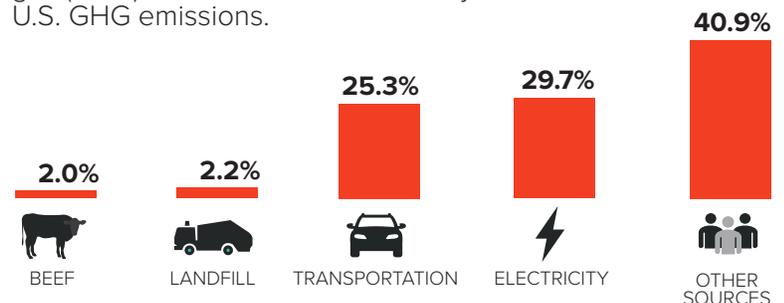
Source: Consumer Beef Tracker Oct-Dec 2019

Finally, there is a growing concern among consumers, and society at large, in regards to the environmental impact of beef production. News stories, commercials and campaigns use false and misleading claims to make consumers feel guilty about consuming beef. Misleading statistics lead consumers to question whether they can even enjoy a beef meal while remaining true to their environmental values. The illustration below summarizes some of the facts about the carbon footprint of cattle versus transportation, electricity, and other sources (figure 5).

The task force recommends that the beef

FIGURE 5: FEWER CATTLE, LESS EMISSIONS

U.S. beef has one of the lowest carbon footprints in the world, 10 to 50 times lower than some nations. Greenhouse gas (GHG) emissions from cattle only account for 2% of U.S. GHG emissions.



Source: US EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014. Available at: <https://www.epa.gov/sites/production/files/2016-04/documents/us-ghg-inventory-2016-main-text.pdf>

CORE STRATEGY III: DEVELOP AND IMPLEMENT BETTER BUSINESS MODELS TO IMPROVE PRICE DISCOVERY AND VALUE DISTRIBUTION ACROSS ALL SEGMENTS

The U.S. beef industry is a highly segmented industry, and each segment has slightly different profitability drivers. Cow/calf operators get rewarded for producing more revenue per acre of forage under their management through more animal units, more pounds or higher prices for each pound produced. Feedlot operators get rewarded for efficiently converting purchased or raised feedstuffs into finished cattle or carcasses and can improve their profitability by producing more pounds per animal, generating more dollars per pound of production, lowering the cost of each pound produced or a combination of these tactics. Packers operate with significant fixed costs and labor expenses. Therefore, their profitability is largely driven by efficient asset utilization and labor management. Their profitability improves when they find ways to reduce fixed costs, spread fixed costs over more units of production or create more value from each animal harvested and pound of beef processed.

FIGURE 6: U.S. CONSUMER EXPENDITURES

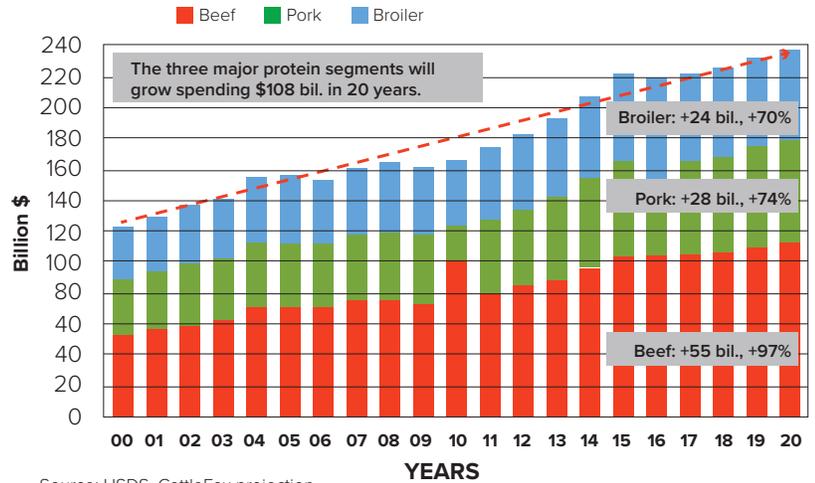
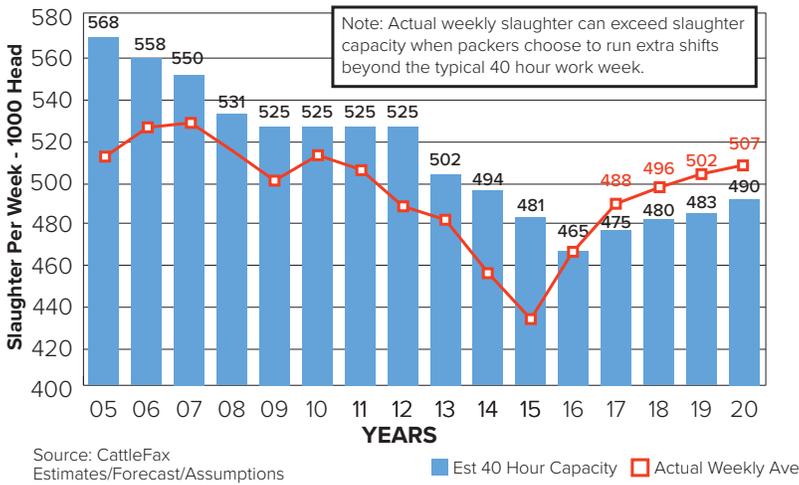


FIGURE 7: WEEKLY STEER & HEIFER SLAUGHTER CAPACITY

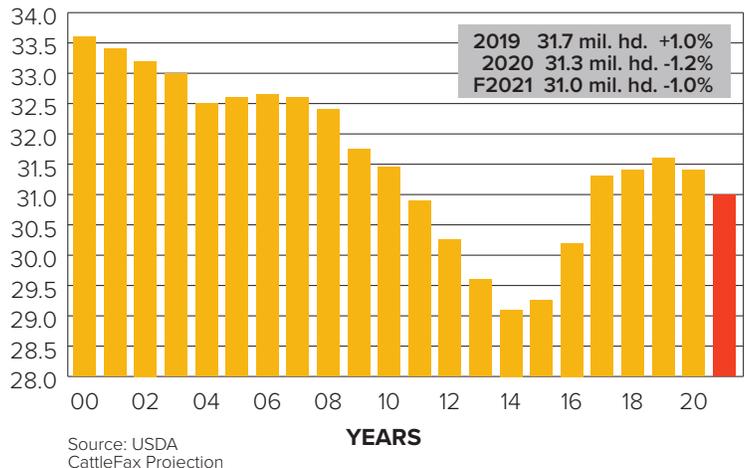


Historically, another way each segment has increased short term profitability is by exercising their individual leverage against other stakeholders in the beef value chain based on the seasonal or cyclical fluctuations in supply and demand and other market dynamics. Over the last 10 years, factors ranging from drought and the subsequent liquidation of the U.S. cowherd to the fire at the Holcomb packing plant to the recent COVID-19 experience have illuminated the extreme volatility that can occur when industry supply, demand and processing capacity becomes unbalanced. Figures 7 and 8 show the extreme variation in cowherd numbers and the subsequent changes in packing capacity that were driven, in large part, by the drought-induced liquidation of the U.S. cowherd.

from \$70 billion in 2005 to \$110 billion in 2019 (figure 6). Unfortunately, producers haven't fully participated in this value creation as the fed cattle price as a percentage of the cutout has declined from 56% in 2005 to 44% in 2020 according to CattleFax data.

Upon further analysis, the percent of cutout value captured by the production sector appears to be largely driven by the relationship between cattle supply and packing capacity. As Figure 9 (next page) demonstrates, when packing capacity represents only 80% of the previous years' beef cow herd packers have significant leverage over cattle feeders resulting in cattle feeders capturing approximately 50% or less of the cutout value of a fed steer. When more packing capacity exists in relation to cowherd numbers (e.g. packing capacity is 82 – 85% of the previous years' beef cow inventory numbers), feeders tend to capture an additional 4 - 5% of the cutout value.

FIGURE 8: BEEF COW INVENTORY



The beef industry has done a tremendous job improving everything from genetics to feeding/management protocols to value-added processing resulting in consumer expenditures on beef increasing

This clearly demonstrates the delicate balance that exists between packing capacity and cowherd inventory and illustrates the negative impact that imbalance has on the profitability of individual segments within the beef value chain. Limited packing capacity in the United States has been further exacerbated by the protocols that have been put in place due to the COVID-19 pandemic and the resulting impact on processing efficiency and throughput.

Based on this analysis, it is difficult to imagine a profitable path towards growing the U.S. beef cattle industry without growth in packing capacity (figure 10). Based on CattleFax projections, if the U.S. beef cow herd grows to 32.5 or 33 million head, the weekly packing capacity will need to grow from its 2020 level of 490,000 head per 40-hour week (Figure 7) to 525,000 head per week. This would result in packing capacity running at approximately 84% of the nation's cowherd which has historically enabled producers to capture 52%-56% of the cutout value.

The task force concluded that unless more balance is created in the system or

new business and marketing models are developed with novel ways to share risk/reward, it will be increasingly difficult for current producers to manage profitable operations or new producers to enter the business. Fundamentally, the task force believes the industry would be better served by more packing/processing capacity, an increase in industry coordination, cooperation and alignment and innovative business structures/models which allow members of the beef value chain to more equitably share in the value created through each step of the beef production process. In most cases, the opportunity to participate in down-stream value creation typically involves more capital, more time and increased risk. Consequently, there is also a need to educate value-chain participants on existing risk management tools and develop innovative, new risk management tools which make capital more accessible and result

FIGURE 10: SIZE VS. PACKING CAPACITY

The cattle cycle suggests the U.S. beef cowherd will always be in contraction or expansion, and margins will shift across the cattle and beef producing segments appropriately.

Annualized weekday fed cattle packing capacity of around 84% of the beef cow inventory would allow for a sustainable long-term margin relationship between processors and producers with normal cyclical shifts in profitability.

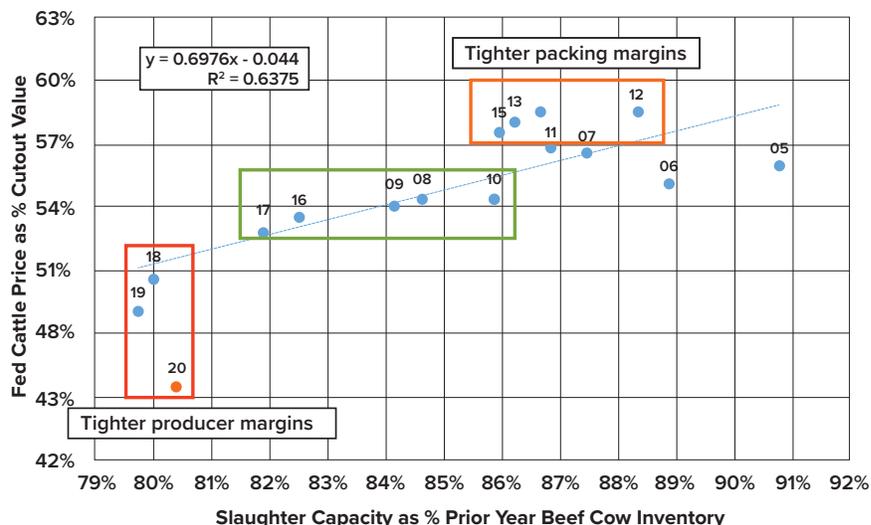
		Lower Boundary			Upper Target	
Beef Cow Inventory (mil. hd.)	29	30	32	31	32.5	33
Packing Capacity (1,000 hd.)	468	485	501	517	525	533

Fed cattle processing capacity was approximately 490,000 head during a typical 40 hour work week in 2020 prior to COVID-19. Based on a target for packing capacity to represent at least 84% of the 2020 beef cow inventory, current packing capacity would need to increase approximately 2,000 head/day by 2021.

If the beef cowherd contracts another 1,000,000 head by the cattle cycle lows, Packers could reduce packing capacity by another 1,000 head per day or 5,000 head per week. (red box)

Growing the beef cowherd to 32.5 million during the next expansion cycle would require an additional 7,000 head per day packing capacity (35,000 head per week). Adding 35,000 head per week would move total capacity from the current 490,000 head/week to 525,000 head per week and would achieve a targeted packing capacity equal to 84% of the cowherd. Historically, this ratio has resulted in producers earning 52-56% of the cutout value of a finished beef animal.

FIGURE 9: PACKING CAPACITY OF A % OF THE BEEF COW INVENTORY VS. CATTLE FEEDER LEVERAGE



The industry has seen annual fed cattle processing capacity drop to around 80% of the size of the US beef cow herd of the preceding year.

This has resulted in a much smaller percentage of the wholesale beef dollar going back to cattle producers (red box) since 2018. Similarly, the processing segment went through significant losses from 2012 to 2015 an illuminated capacity (orange box).

The cattle producer was able to receive a more "normal" share of the wholesale cutout value when capacity was around 84% of the prior year's beef cow inventory, with a range of roughly 52% - 56% of the cutout value.

in more manageable and sustainable profit opportunities. The task force also believes the industry would benefit from additional data collection and analysis to increase the understanding of how revenue and margins are distributed up and down the beef supply chain.

While individual producers or producer organizations can't control the size of the cowherd or packing capacity, the task force outlined several goals it believes the industry should focus on achieving in order to create a more profitable and sustainable industry.

- Maintain a beef cow herd of 30 – 31 million with a growth target of 32-32.5 million head.

- Grow packing capacity by 7% (7,000 head per day) by 2025.

- By 2023, identify and develop margin analysis indices/metrics that measure and track margin distributions to increase understanding of distributions from the cow/calf through the packing sectors.

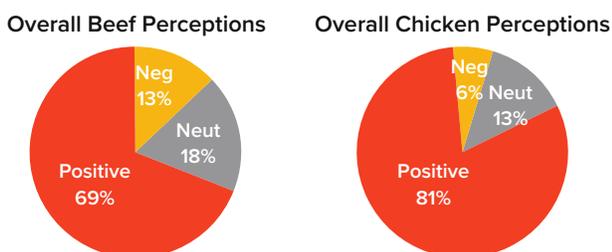
CORE STRATEGY IV: PROMOTE AND CAPITALIZE ON THE MULTIPLE ADVANTAGES OF BEEF

Undoubtedly, consumers have an affinity for protein-centric diets and are consuming protein in more forms and at more times throughout the day than ever before. Fortunately, most consumers who value protein in their diets immediately think of beef (figure 11).

According to the Consumer Beef Tracker, beef also continues to maintain a relatively positive perception with consumers reporting a 69% overall positive perception of beef. However, that compares to an 81% overall positive perception for chicken (figure 12). Beef continues to achieve equal ratings to chicken in terms of taste, safety, flexibility in terms of its ability to be used in a variety of meals, and its reputation as being a great source of protein. However, beef lags chicken in terms of consumers' perception of its overall healthfulness and being a "good value for the money."

FIGURE 12: OVERALL PERCEPTIONS

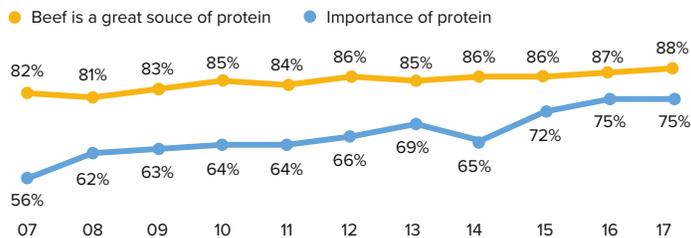
Overall perceptions have increased slightly for beef over time, but beef still lags behind chicken



Source: Consumer Beef Tracker Oct-Dec 2019

Given the demographic and psychographic diversity of U.S. consumers, this cannot be a one-size-fits-all approach (figure 15, next page). The industry must continue researching the specific needs, values and behaviors of target market segments and develop value propositions, marketing and education campaigns tailored to those individual markets. Utilizing a combination of traditional and digital media, together with trusted spokespeople and influencers, the beef industry can promote beef's competitive advantages ranging from its nutritional profile, ease of use and taste to the environmental benefits that accrue when ruminant animals like cattle, are utilized to upcycle plant based material that is inedible to humans. Over the next five years, it will also be important to create more direct connections with consumers. This includes leveraging technology to connect consumers with convenient ways to purchase beef, engage consumers in a more interactive beef purchasing experience and treat consumers to a more memorable beef eating experience. Given the economic headwinds that could stress consumers' wallets, it will also be important to promote underutilized beef cuts and new variety meat products in addition to the traditional and popular cuts.

FIGURE 11: THE MORE PEOPLE THINK OF PROTEIN, THE MORE THEY THINK OF BEEF

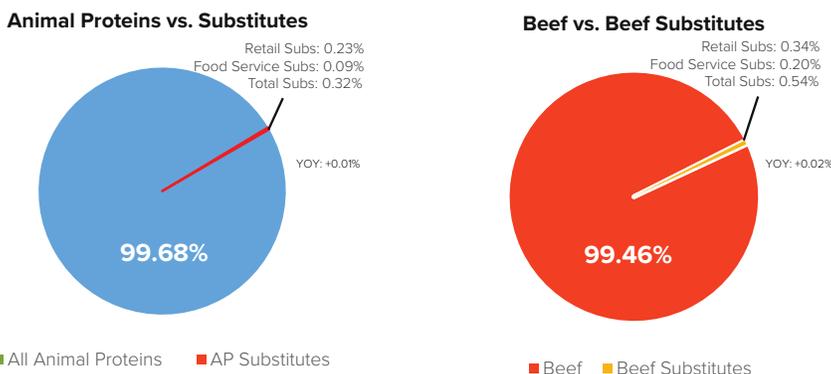


Source: Consumer Beef Tracker 2007 - 2017

Plant-based alternative protein has garnered significant attention from the media and alternative protein companies have raised substantial capital to invest in developing and marketing a variety of meat alternatives. While beef substitutes grew from a \$200 million dollar category to a \$300 million dollar category by the end of 2019, by the middle of 2020, beef substitutes have achieved less than a 1% market share according to IRI data (figures 13 and 14).

Given the multiple factors consumers consider in making food choices and the increasingly crowded and competitive protein market, the task force believes it is more important than ever to aggressively promote the multiple advantages of beef and educate consumers on how beef fits into a healthy lifestyle and sustainable diet.

FIGURE 13: 2019 MARKET SHARE – MID-YEAR



Sources: IRI, Refrigerated/Frozen Meat Substitutes, 52 weeks ending 6/30/19; IRI/Freshlook, Total US MULO ending 5/26/19; Categorized by VMMeat System; Alternative Proteins at Foodservice Study, Technomic, October 2018; Usage and Volumetric Assessment of Beef in Foodservice, Technomic, December 2018

FIGURE 14: MARKET SHARE – GROWTH SINCE 2019

Category	2019 Mid-Year	2019 Year End	2020 Mid-Year
Protein Substitute Mkt. Share	0.32%	0.36%	0.41%
Beef Substitute Mkt. Share	0.54%	0.68%	0.90%

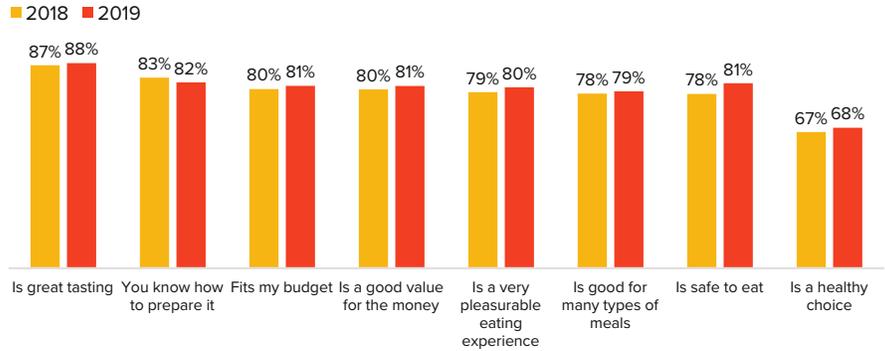
Sources: IRI, Refrigerated/Frozen Meat Substitutes, 52 weeks ending 4/21/20; IRI/Freshlook, Total US MULO ending 4/21/20; Categorized by VMMeat System. Alternative Proteins at Foodservice Study, Technomic, April 2020; Usage and Volumetric Assessment of Beef in Foodservice, Technomic, April 2020

The specific goals the task force established for this strategy included one goal focused on beef demand as measured by the Wholesale Beef Demand Index (figure 16) and several others:

- By 2025, achieve a Wholesale Beef Demand Index of 124.
- By 2025, narrow the perception gap between beef and chicken by at least five percentage points as measured by the checkoff funded Beef Tracker.
- By 2025, increase beef's value index by at least five percentage points, as measured by the checkoff funded Beef Tracker.

FIGURE 15: PROTEIN CONSIDERATION

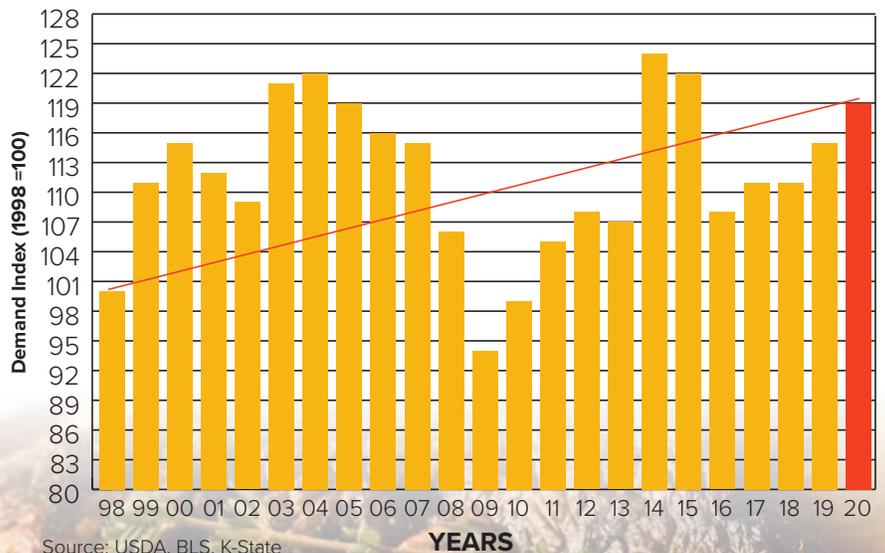
Protein consideration is driven most by taste, followed by things like safety, value, and the eating experience



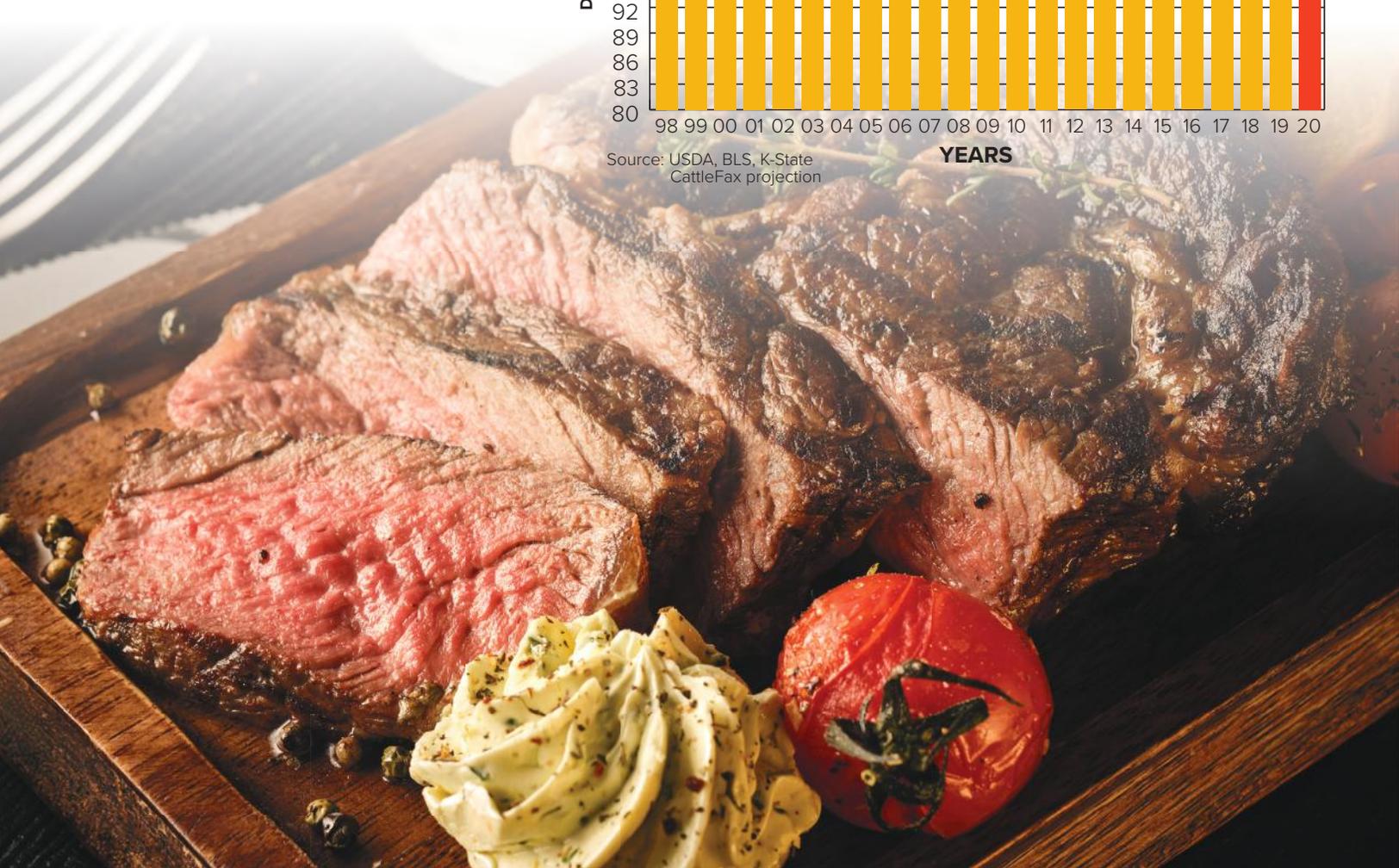
Source: Consumer Beef Tracker Oct-Dec 2019

FIGURE 16:

ANNUAL U.S. WHOLESALE BEEF DEMAND INDEX



Source: USDA, BLS, K-State CattleFax projection



CORE STRATEGY V: IMPROVE THE BUSINESS AND POLITICAL CLIMATE OF BEEF

Government policies and regulations are a continual threat to the beef industry. While the industry has enjoyed some important policy wins over the past several years, it is evident that there are organizations, legislators and regulatory bodies who would like to regulate or legislate cattle producers out of business.

It is highly likely the beef industry will continue to be threatened by legislation and/or regulations aimed at curbing greenhouse gas emissions. To that end the industry must work closely with environmental experts to continue measuring and improving the environmental footprint of U.S. beef production while documenting and communicating the upcycling capabilities of cattle (figure 17).

More than simply recycling, they are upgrading plant proteins (including crop residues) into higher-quality protein for human consumption (figure 18).

Furthermore, there is work yet to be done helping to defend beef's product identity against marketers of alternative protein products who would like to capitalize on consumers' affinity for beef and its strong brand image. Again, significant progress has been made with USDA on this front, but continued vigilance will be critical. Another area that requires continued industry engagement is the dietary guidance issued by government and medical/health organizations. This will likely require continued support of research efforts and the utilization of knowledgeable, trusted experts, inside and outside the industry, to represent the nutritional benefits of beef.

FIGURE 17: GLOBAL GREENHOUSE GAS EMISSIONS BREAKDOWN, 2010

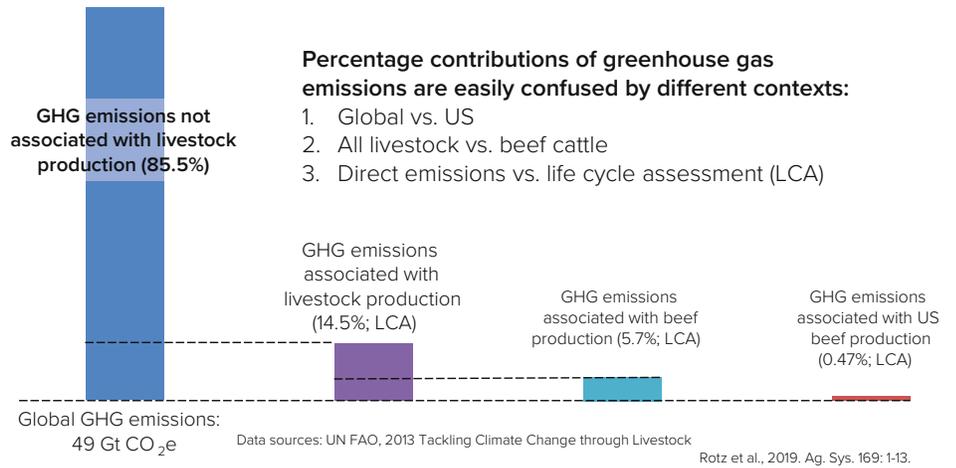


FIGURE 18 CATTLE ARE UPCYCLERS

Cattle are upcyclers: more than simply recycling they are upgrading plant proteins (incl. plant leftovers) into higher quality protein for people

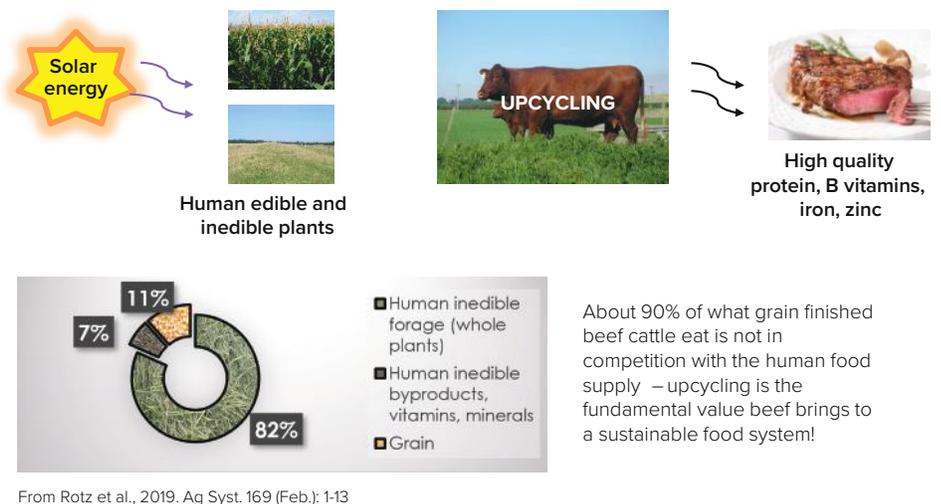


FIGURE 19: FOOD SAFETY - IMPACT OF COVID-19

The majority of consumers are more concerned about food safety as a result of COVID-19, with half of those being significantly more concerned

As a result of COVID-19, consumers are....



How has the current global environment around COVID-19/Corona virus changed your concern for food safety?
Source: Food Safety Handling Practices, 2020

Food safety has always been an important issue for the beef industry, but research suggests that the COVID pandemic has heightened consumer awareness and concern around food safety (figure 19).

The task force recommends continued industry engagement in improving food safety and managing potential food safety regulations. It will be critical to engage with governmental agencies, organizations, and private entities to continue developing proactive protocols that reduce the risk of Salmonella spp. and ensure that Salmonella is never listed as an adulterant.

Another issue that will be crucial to the long-term success of the industry will be protecting access to public grazing lands. One of the primary benefits of beef cattle is their unique ability to traverse land unsuitable for cultivation, consume forages that cannot be utilized by humans and convert that into tasty and nutrient dense human food. Our industry's ability to leverage this advantage is based not only on having access to privately owned land, but also on the vast acres of public grazing lands. Continued focus on protecting the industry from policies and regulations that would limit this access or availability will be a crucial element in maintaining or growing the size of the U.S. cowherd.

Finally, if the COVID-19 pandemic and resulting implications up and down the beef value chain have taught us anything, they have highlighted the importance of anticipating potential risks and uncertainties and developing contingency plans. The task force believes it is critical to update and/or develop crisis management plans to improve the industry preparedness in the case of emergencies.

To focus industry efforts and energy around this strategy, the task force outlined the following goals:

- By 2025, at least 75% of producers will agree that the beef industry is effectively addressing opportunities and challenges in a way that enhances the business climate for beef.
- By 2025, 20% of cow/calf producers have a written grazing management plan.
- Ensure that salmonella is not listed as an adulterant.



STRATEGY VI: SAFEGUARD AND CULTIVATE INVESTMENT IN BEEF INDUSTRY RESEARCH, MARKETING AND INNOVATION

In the 35 years since the establishment of the producer funded and led Beef Checkoff, the U.S. population has increased, global demand for protein has exploded, the marketplace has become more crowded with competitive proteins and the rhetoric against animal agriculture and the beef industry in general has escalated. Unfortunately, the national \$1.00 per head checkoff has not increased since its inception and the decline in the nation's cowherd has resulted in a decline in total Beef Checkoff funding (figure 20).

According to the 2019 Beef Checkoff Return on Investment Analysis completed by Cornell University's Dr. Harry M. Kaiser, from 2014 to 2018, had there not been any domestic Cattlemen's Beef Board (CBB) promotion and research activities, domestic demand for beef would have been 14.3% lower than it has been. Similarly, had there not been any checkoff contributions to foreign market development programs over the past 5 years, U.S. beef export demand would have been 5.5% lower than it actually was in the eight foreign markets studied in the report.

Not only is the Beef Checkoff underfunded as compared to competitive countries and competitive products (e.g. meat substitutes), but it is constantly under attack from vocal producers and anti-animal activist organizations who would like to see this producer-driven "self-help" program discontinued. Consequently, the Task Force believes significant attention needs to be paid to preserving and protecting the existing Beef Checkoff while exploring new and different alternatives for generating increased funding for beef research, marketing, and promotion.

Another critical issue the task force identified was the growing need for the beef industry to attract the best and brightest talent into the industry while simultaneously encouraging the research and development of innovative products, practices, and

technologies. The task force believes the industry must invest in programs and activities focused on encouraging innovation in the beef industry and recruiting high-caliber talent into the industry.

The beef industry, and subsequently the consumer, has been the beneficiary of significant genetic progress over the past twenty years that has improved the quality and consistency of beef. The

genetic field continues to advance, bringing additional tools and technologies which offer tremendous promise for addressing issues ranging from health to methane production to production efficiency. Over the next five years, the industry must continue exploring how genetics can be used to address critical industry issues and opportunities.

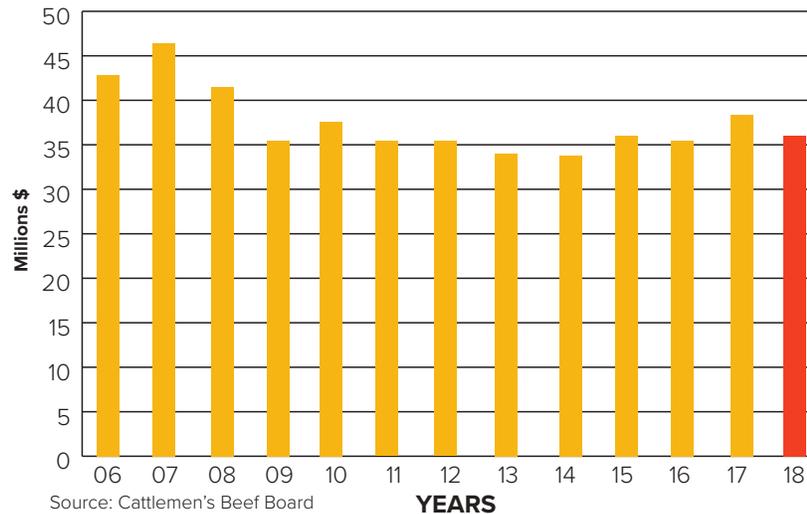
Finally, as government funding for production research at agricultural research stations and universities declines, and the need (and opportunities)

for new and improved production technologies in the areas of genetics/genomics, antimicrobial resistance, food safety and microbiome research increase, it is critical to develop strategies for funding this important research. The task force believes the industry must engage in initiatives focused on increasing both private and public funding for production research to ensure that the beef industry remains efficient and competitive in the global protein arena.

The task force outlined several suggested targets the industry should aim to achieve in the area of industry investment in research, marketing and innovation:

- Increase national industry program funding for beef marketing, research, and promotion efforts to \$100M by 2025.
- Quantify the existing public research funding for beef industry production issues and grow that funding by 25% by 2025.
- Preserve the existing Beef Checkoff.

FIGURE 20: TOTAL CBB BUDGET, 2006 - 2018



STRATEGIC INITIATIVES

Within each core strategy, the task force identified initiatives that describe the type of projects, programs and activities that should be pursued within each core strategy. These initiatives are intentionally designed to provide direction without prescribing specific tactics, actions, or projects. This approach is intended to provide organizational leaders and subject matter experts with strategic direction and guidance without micromanaging the processes, tools and tactics they deem appropriate for executing the strategy. This provides leaders and subject matter experts with the freedom and autonomy to exercise their expertise and judgement within the framework of the strategic priorities outlined in the plan. The task force was passionate about focusing industry efforts and resources around the highest impact initiatives. Consequently, the group elected to prioritize each initiative on a 1 to 5 scale based on importance and urgency.



What follows is a comprehensive list of the core strategies, goals, and initiatives with the average importance and urgency rating for each initiative (initiatives are listed in order of importance). Industry organizations and other industry stakeholders are encouraged to review this plan and utilize it to develop projects and allocate funding, consistent with these strategies, to advance the U.S. beef industry.



CORE STRATEGY I: DRIVE GROWTH IN BEEF EXPORTS



RATIONALE

- In early 2020, exports were generating approximately \$320 per head of value for U.S. beef producers.
- Recent studies have concluded that without investment in foreign market development programs over the past five years, U.S. beef demand would have been 5.5% lower.
- Continued improvement in economic stability of the global middle class has resulted in improved purchasing power and increased demand for high quality protein.
- The U.S. has a comparative advantage against most other countries in the world in terms of producing large volumes of high quality, grain-fed beef.
- Additional export opportunities are possible with the adoption of successful traceability programs.
- The implementation of new free-trade agreements open the doors to increased export opportunities for U.S. beef.
- Future growth in U.S. beef demand will be largely driven by exports.



GOAL

- Grow U.S. beef exports to 17% of U.S. beef production by 2025.
- Grow the value of U.S. beef exports as a percent of total beef value to 21% by 2025.
- By 2025, 75% of all cattle producing states are participating in a nationwide animal disease traceability program (e.g. U.S. Cattle Trace).

INITIATIVE	IMPORTANCE	URGENCY
Negotiate and execute free trade agreements Engage in negotiations to reduce trade barriers, secure free trade agreements, and execute existing agreements.	4.46	4.23
Drive adoption of traceability Invest in education, communication and other activities that drive the industry to unify efforts to achieve traceability (e.g. U.S. Cattle Trace).	4.31	4.08
Identify and address export customer needs and values Invest in research to identify the attributes which are of most interest and concern to foreign customers.	4.15	4.08
Advocate for the adoption and use of international science-based trading standards Partner with industry stakeholders in advocating for the adoption and use of international, science-based trading standards.	4.08	3.85
Collaborate with targeted partners to promote U.S. beef in foreign markets Cultivate existing relationships and develop new relationships with industry partners who are willing to invest resources in promoting and marketing U.S. beef.	4.08	4.08
Invest in research, marketing, and education programs Identify high-potential markets and invest in product innovation, research, marketing, and education programs that leverage the unique attributes of U.S. beef.	3.76	3.31



CORE STRATEGY II: GROW CONSUMER TRUST IN BEEF PRODUCTION



RATIONALE

- A vast majority of the public has little knowledge of how beef is produced, and yet a growing number of consumers want to know more about their food, where it comes from and how it is raised – including animal care and management practices.
- Many consumers are being led to feel guilty about eating beef due to misinformation about the environmental impact of beef production and the confusion on how to fit beef into a healthy diet.
- Downstream supply chain segments and end-users increasingly demand verification of animal care practices at the production level.
- Public/Food policy is increasingly shaped by people who have a very limited understanding of beef production systems.



GOAL

- Improve the Consumer Trust Index by five percentage points by 2025.
- Grow BQA certification by a cumulative total of 10% per year and achieve national standardization of the BQA program by 2023.

INITIATIVE	IMPORTANCE	URGENCY
<p>Measure, document, improve and communicate the net environmental impact of beef production</p> <p>Engage scientific experts in addressing the issue of greenhouse gas, creating data around carbon sequestration, and expanding our knowledge of the methane lifecycle. Aggressively explore alternatives for reducing methane emissions. Cultivate opportunities for the beef industry to participate in carbon credit markets.</p>	4.46	4.54
<p>Educate medical, diet and health professionals about beef and beef production</p> <p>Expand educational outreach programs for professionals in the medical, diet and health communities focused on providing facts about nutrition and beef production.</p>	4.31	4.00
<p>Align and collaborate with traditional and non-traditional partners to tell the positive story of beef cattle production</p> <p>Engage experts in developing fact-based messaging about animal care, beef industry sustainability, beef safety and beef nutrition. Identify, train, and develop grassroots representatives to serve as trained industry spokespeople.</p>	4.08	3.85
<p>Engage positively in the sustainable nutrition conversation</p> <p>Promote the positive contribution the beef cattle industry makes to nutrient dense, healthy, and sustainable food systems with a particular emphasis on in-person and/or virtual engagements with k-12 students who are developing their dietary patterns and preferences.</p>	3.90	3.85
<p>Expand efforts in educating the general public about the BQA program and its impact on animal well-being</p> <p>Broaden use of print, video, social media and virtual/in-person tours to educate consumers, influencers, and the general public about the BQA program and its positive impact on animal care and well-being.</p>	3.69	3.69
<p>Expand BQA program to include verification</p> <p>Create verification tools for each industry segment.</p>	N/A	N/A
<p>Develop a direct-to-consumer beef safety campaign</p> <p>Develop a more direct-to-consumer campaign focused on improving consumer confidence in the unrivaled safety of U.S. beef by communicating the protocols and safeguards used to ensure beef safety (e.g. residue testing).</p>	3.31	3.38



CORE STRATEGY III: DEVELOP AND IMPLEMENT BETTER BUSINESS MODELS TO IMPROVE PRICE DISCOVERY AND VALUE DISTRIBUTION ACROSS ALL SEGMENTS



RATIONALE

- The nature of our segmented supply chain can create an imbalance between fed supplies and packing capacity resulting in extreme leverage in the beef supply chain.
- Lack of industry coordination and unwillingness to engage in shared risk/reward arrangements prevents expectations for reasonable returns for each segment of the beef supply chain.
- Fed cattle are a perishable product and optimum harvest is paramount to industry efficiency, profitability, and product consistency.
- Additional packer/processor capacity would stimulate a more competitive market.
- Volatile margins in the production sector have a negative impact on securing operating capital.
- The lack of profit opportunities makes it extremely difficult for existing producers to remain in business and new producers to enter the business.



GOAL

- Maintain a beef cowherd of 30 – 31 million with a growth target of 32-32.5 million head.
- Grow packing capacity by 7% (7,000 head per day) by 2025.
- By 2023, identify and develop margin analysis indices/metrics that measure and track margin distributions to increase understanding of distributions from the cow/calf through the packing sectors.

INITIATIVE	IMPORTANCE	URGENCY
<p>Increase packer capacity</p> <p>Increase packer capacity to improve competition for market ready cattle, reduce the negative impact of supply chain disruptions and capitalize on opportunities to grow the U.S. beef industry.</p>	3.92	3.69
<p>Develop production/processing/marketing systems that result in more equitable margin distribution</p> <p>Explore the feasibility and support the creation of production/processing/marketing systems that create opportunities for profit within all sectors of the beef supply chain consistent with the principles of free-market capitalism.</p>	3.62	3.54
<p>Explore business models and risk management tools that result in more sustainable producer profit opportunities</p> <p>Explore new business models and financial/risk management tools that create opportunities, reduce risk, attract capital and result in more sustainable profit opportunities for producers. Educate producers on existing business/marketing models and risk management tools that improve profit opportunities and reduce volatility.</p>	3.54	3.46
<p>Use innovative methods and technologies to value carcasses based on eating satisfaction and red meat yield</p> <p>Develop technology and methodologies needed to value individual carcasses based on the use of innovative methods of carcass assessment that more accurately measure and predict consumer eating satisfaction, red meat yield and other attributes that drive consumer demand.</p>	3.31	2.77



CORE STRATEGY IV: PROMOTE AND CAPITALIZE ON THE MULTIPLE ADVANTAGES OF BEEF



RATIONALE

- The beef carcass provides many different cuts that address many different price points and meal preferences.
- The COVID pandemic is changing how consumers shop, cook, and purchase food and the beef industry must proactively address the opportunities and challenges presented.
- The protein market is becoming increasingly crowded and competitive and the beef industry must continue to promote the nutrition, healthfulness, and sustainability of its product
- Grocery shopping is an interactive experience and customers rely heavily on technology to make their purchase decisions.



GOAL

- By 2025, achieve a Wholesale Beef Demand Index of 124.
- By 2025, narrow the perception gap between beef and chicken by at least five percentage points, as measured by the checkoff funded beef tracker.
- By 2025, increase beef's value index by at least five percentage points, as measured by the checkoff funded beef tracker.

INITIATIVE	IMPORTANCE	URGENCY
<p>Promote the role of beef in a healthy and sustainable diet</p> <p>Expand marketing and education efforts specifically highlighting the role of beef in a healthy lifestyle and sustainable diet.</p>	4.08	4.31
<p>Implement a marketing campaign that communicates beef's advantage compared to alternative proteins</p> <p>Conduct market research and develop a marketing campaign that defines and communicates beef's comparative advantages and effectively highlights attributes important to consumers (e.g. on-pack labeling, nutritional facts labeling and/or other point-of purchase communication).</p>	4.08	3.84
<p>Develop targeted marketing programs focused on the highest opportunity market segments</p> <p>Develop targeted messaging that positively resonates with highest opportunity market segments across media platforms to communicate beef's compelling value proposition.</p>	4.00	4.08
<p>Cultivate collaborative promotion partnerships</p> <p>Cultivate opportunities to build collaborative beef promotion partnerships (e.g. complementary commodities, innovative retailers/food service organizations, etc.)</p>	3.75	3.46
<p>Promote innovative online marketing, packaging, and shipping solutions to enable the direct marketing of beef</p> <p>Promote online marketing solutions and identify ways to safely, efficiently and affordably deliver fresh and frozen beef directly to consumers.</p>	3.62	4.08
<p>Engage consumers in a memorable beef eating experience</p> <p>Educate and encourage beef marketers to be more creative in developing and delivering a more robust and memorable beef eating experience (e.g. creation of virtual experience via kiosk at restaurants, water/waitress training, butchers, beef connoisseur program, etc.)</p>	3.54	3.23
<p>Develop a more interactive and exciting beef purchasing experience</p> <p>Research and invest in innovative educational tools and expand the use of technology (e.g. QR codes) in designing a more interactive meat case. Partner with supply chain experts to engage customers in more interactive retail beef purchasing experiences.</p>	3.38	3.00
<p>Promote underutilized cuts and new variety meat products</p> <p>Drive acceptance and use of underutilized beef cuts and the creation of new variety meat products while continuing to promote traditional beef cuts.</p>	3.38	2.54



CORE STRATEGY V: IMPROVE THE BUSINESS AND POLITICAL CLIMATE FOR BEEF



RATIONALE

- Activist groups are using inaccurate and misleading environmental arguments to try to legislate the production of beef and limit consumer demand for beef.
- Food safety is critical to beef demand. It is imperative that the industry continues its progress towards reducing any public health risk associated with the raising and consumption of beef, and to cooperate closely with government agencies to generate a safe product for the public.
- From federal lands grazing policies to regulation of CAFO's, government policies and regulations have significant impact on the ability of beef cattle producers to operate.
- The beef industry lacks consensus around the policies and programs that are necessary to sustain and strengthen the beef industry.



GOAL

- By 2025, at least 75% of producers will agree that the beef industry is effectively addressing opportunities and challenges in a way that enhances the business climate for beef.
- By 2025, 20% of cow/calf producers have a written grazing management plan.
- Ensure that salmonella is not listed as an adulterant.

INITIATIVE	IMPORTANCE	URGENCY
<p>Demonstrate beef's positive sustainability message and key role in regenerative agriculture</p> <p>Work with environmental experts to identify opportunities to improve impactful measurements of the Beef Lifecycle Assessment. Stay engaged with USRSB and conservation groups to document and communicate, to policy makers and others, the regenerative benefit of cattle and their role in effectively stewarding our natural resources.</p>	4.46	4.46
<p>Defend beef's product identity</p> <p>Defend beef's product identity and nomenclature from use by competing proteins including plant-based proteins and other meat alternatives.</p>	4.23	4.15
<p>Manage the political and regulatory environment</p> <p>Defend and protect producers from legislative and regulatory attempts to impose government restrictions on the business climate of beef production and marketing. Educate key influencers and advocate for public policy that can improve the overall business climate for the beef community.</p>	4.15	4.23
<p>Drive continuous improvement in food safety</p> <p>Engage with government agencies, organizations, and private entities to support research and develop proactive protocols that specifically help to reduce the risk of Salmonella spp. and antimicrobial resistance</p>	4.15	4.00
<p>Protect and promote grazing on public land</p> <p>Support agency regulations that protect targeted and broader landscape grazing on federal lands. Collaborate with conservation groups to advance ecological services on private lands.</p>	3.85	4.08
<p>Develop crisis management plans</p> <p>Develop and/or update emergency management plans based on key risks and vulnerabilities facing the beef industry.</p>	3.85	4.15
<p>Collaborate with other organizations to advance policy priorities</p> <p>Engage with other organizations, both inside and outside the industry, to identify issues/ interests we can agree on and build consensus among those organizations to advocate for legislation and policies supportive of the beef industry.</p>	3.85	3.69
<p>Defend science-based production technologies</p> <p>Engage with the legislative bodies to ensure the use of science-based criteria to protect existing beef production systems, inputs and technologies.</p>	3.77	3.69



CORE STRATEGY VI: SAFEGUARD AND CULTIVATE INVESTMENT IN BEEF INDUSTRY RESEARCH, MARKETING AND INNOVATION



RATIONALE

- The beef industry is threatened with losing valuable current and future technologies - partly due to an erosion in federal and state funding for food animal research.
- Compared to other industries and competitors, beef industry funding for research and marketing is relatively small and threatened by industry infighting.
- The buying power of the \$1.00 per head checkoff is declining.
- Funding for research institutions continues to decline.



GOAL

- Increase national industry program funding for beef marketing, research, and promotion efforts to \$100M by 2025.
- Quantify the existing public research funding for beef industry production issues and grow that funding by 25% by 2025.
- Preserve the existing Beef Checkoff.

INITIATIVE	IMPORTANCE	URGENCY
<p>Increase industry funds for beef marketing, promotion, and research</p> <p>Protect the historic success of the beef checkoff in creating beef demand and technologies. Explore new options for increasing beef marketing, promotion, and research funding from the packing/processing/retail sectors. Encourage the development and growth of supplemental checkoff programs on a state-by-state basis while exploring strategies that effectively leverage existing checkoff funds (e.g. matching programs)</p>	4.08	3.77
<p>Attract innovation and intellectual capital into the beef industry</p> <p>Establish beef industry innovation initiatives that create forums/conferences to showcase new technologies and attract capital with the goal of accelerating the discovery and adoption of new technologies while recruiting and educating talent for the beef industry.</p>	4.00	4.08
<p>Encourage the cooperation and collaboration of existing industry advisory committees to identify and prioritize research efforts</p> <p>Establish and publicize beef industry research priorities by fostering collaboration between existing organizations and committees and ensuring that critically important research efforts are adequately addressed (e.g. Antimicrobial research, food safety, microbiome and genomic research, gene editing, environmental/sustainability issues, traceability, big data, etc.)</p>	3.77	3.69
<p>Develop and implement new genetic/genomic tools and technologies</p> <p>Improve the efficient utilization of natural resources in beef production systems by supporting the seedstock sector in researching, developing and using genetic/genomic tools to address sustainability issues and One Health priorities (e.g. gene editing technology, microbiome, carbon credit/methane EPD's, etc.)</p>	3.69	3.38
<p>Increase industry resources for production research</p> <p>Generate support for vital industry research by:</p> <ul style="list-style-type: none"> • Encouraging additional funds through voluntary or structured programs. • Engaging in collaborative efforts with universities, agricultural experiment stations and federally funded research agencies. • Cultivating support from philanthropic organizations, endowments, private parties, accelerators/incubators, etc. 	3.62	3.62
<p>Ensure that publicly funded research and intellectual capital remains in the public domain</p> <p>Advocate for legislation and policies to protect and increase funds for research and education through Agricultural Research Service (USDA) and Universities.</p>	3.42	3.25
<p>Explore and educate producers on creative land use alternatives to generate new revenue streams</p> <p>Explore the use of land trusts, conservation easements and partnerships with private organizations to monetize the value of ecological services provided by progressive cattle management practices.</p>	2.85	3.00



For more information, please visit:

BeefLongRangePlan.com