

AUTHORIZATION REQUEST FOR FY 2018

CBB Budget Category: Research

Name of Contractor: National Cattlemen's Beef Association

End Date: September 30, 2020

I. OVERVIEW

A. AR Description: The following AR summarizes Strategies and Tactics supporting the CBB Research Budget Category. Each area provides detailed tactical information describing the breadth and depth of work being recommended.

B. Costs for this AR:

Source of Funding	Direct Costs	Implementation	Total
Beef Board/BPOC	\$ 5,644,000	\$ 3,814,300	\$ 9,458,300
Federation of SBCs (FSBCs)	\$ 831,000	\$561,600	\$1,392,600
Other Potential Sources (describe)			
Total Cost	\$ 6,475,000	\$4,375,900	\$10,850,900

Start date: October 1, 2017

II. PLANNING INFORMATION FOR THIS AR

A. Long Range Plan Core Strategies Addressed by This AR:

- a. Grow Consumer Trust in Beef and Beef Production
- b. Protect and Enhance the Business and Political Climate for Beef
- c. Promote and Strengthen Beef's Value Proposition

B. Committee(s) recommendations for work plan funded by this AR:

Tactic	Consumer Trust	Innovation	Nutrition and Health	Safety
6A				4.2
2A			4.7	
3A		4.5		
3B		4.5		
3C		4.3		
3D	4.0	4.4		
3E		4.2	4.6	
1A	4.1			

C. Digital properties and target audience(s) addressed by this AR:

Domestic Consumer, Influencer and/or Checkoff Payer target audiences: Note that while the websites with the * notation below have now been consolidated into the flagship BeefItsWhatsForDinner.com website, the existing websites will remain active for at least one year to ensure smooth website traffic redirects and transition. The tactics in this AR have traditionally contributed to these properties. Therefore, we have continued to list all of these managed websites. Additionally, as new social media platforms emerge, we will continue to evaluate which social platforms may need to be added to the digital ecosystem.

- BeefItsWhatsForDinner.com
- BeefNutrition.org*
- BeefFoodservice.com*
- BeefRetail.org*
- FactsAboutBeef.com*
- FoodDialogues.com*
- BeefResearch.org
- BeefInnovationsGroup.com*
- @Beef Twitter handle
- @BeefFacts Twitter handle
- “Beef. It’s What’s For Dinner.” Facebook
- BeefFacts Instagram account
- BeefItsWhatsForDinner Instagram account
- BeefFacts YouTube channel
- “Beef. It’s What’s For Dinner.” YouTube channel
- “Beef. It’s What’s For Dinner.” Pinterest page
- ExploreBeef.org*
- Beef.widencollective.com

Influencer and Checkoff Payer target audiences:

- BeefResearch.org
- Extranet for State Partners

III. PROGRAM INFORMATION FOR THIS AR

NOTE: All tactics in this AR contribute expertise to other checkoff programs, state partners and/or global industry influencers/stakeholders. In particular, these tactics provide ongoing counsel and support for the state national beef council partnership to ensure synergy across programs at the national and state level. Given this expertise, attending and traveling to/from key influencer/stakeholder/partner meetings may be required to provide or gain more strategic guidance, training, briefings and/or education in addition to disseminating knowledge and funds in this AR may be used to implement current and previously funded ARs. To accomplish this, it may be necessary for the checkoff to fund international travel to or from the U.S.

A. Committee Name (s): Safety**Tactic 6A: Safety Research and Scientific Affairs**

Export Growth	Protect and Enhance	Consumer Trust	Beef's Value
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NCBA, on behalf of the beef checkoff, builds the science-based evidence through research to inform beef safety decisions throughout the supply chain. Program results also inform communications about the industry's commitment to ensuring the safety of beef.

Results generated through this program are targeted at the scientific community including academia, beef safety decision makers throughout the industry (feedlot operators, packers, processors, retail, foodservice) and regulatory sectors as well as other checkoff program areas that communicate or manage beef safety issues (pre- and post-harvest).

Over time, this program has evolved from a single pathogen focus (*E. coli*) to address several potentially harmful bacterial, chemical or physical threats to beef safety. Today, consumers expect beef to be safe from pathogens but also that the beef industry takes steps to understand if and/or how antibiotic use impacts the development of antimicrobial resistance and if needed, take action to reduce the potential risk to human health. Research in this program has been used to respond to inquiries from the industry, media, regulatory and other influencers about industry's commitment and progress toward addressing these consumer/influencer concerns.

Safety research projects will be funded to understand the safety threats by known pathogens, by perceived or emerging threats (allergens, less known organisms or diseases), or by antimicrobial resistance (use and resistance development/prevention, risk of human health impact, or the impact of alternatives to today's antimicrobials on resistance). Research outcomes will be shared with advisory groups developing safety guidance, the scientific and regulatory communities in forums/symposia (such as the Beef Industry Safety Summit and other scientific forums), through written materials (manuscripts, fact sheets, literature reviews, public comments or graphics), visual tools (video, web content) or in-person briefings. Strategic planning sessions will be continued to track needs for beef safety research.

Measurable objectives:

- Conduct a minimum of three original scientific research projects focused on pre-harvest challenges to beef safety. Outcomes will relate to pathogens such as Salmonella and its harborage and transfer, antimicrobial use and resistance,

mechanisms/formation and transfer of resistance genes or microorganisms to humans or the environment, or risk assessment for impacting human health.

- Develop a minimum of eight tools (web content, reviews, fact sheets, videos, etc.) that share research results or summarize research to provide information for tough questions by consumers and/or influencers about the safety of beef today.
- Showcase safety research program content through three avenues including the Beef Industry Safety Summit, scientific conferences, peer review articles, and forums hosted by other entities. The goal is to influence industry adoption of new scientific evidence or assure stakeholders understand the industry’s commitment to improving beef safety.

B. Committee Name (s): Nutrition and Health

Tactic 2A: Nutrition Research and Scientific Affairs

Export Growth	Protect and Enhance	Consumer Trust	Beef’s Value
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NCBA, on behalf of the beef checkoff, leads research on beef’s role in a healthy diet and shares it with the scientific community. This work is used to ensure beef nutrition communications are based in sound science and also becomes part of the evidence base accessed for dietary recommendations. As the only beef centric U.S. based nutrition research initiative on beef’s positive role in health, this program uniquely contributes to the “body of science” needed to promote, protect and defend beef’s role in health.

This program is targeted to the scientific community including those in academia, government and health organizations (such as American Heart Association and International Agency for Research on Cancer), scientific associations (American Society for Nutrition and Institute of Food Technologist), other checkoff programs, state beef council partners, and industry (corporate scientists in food and/or health and wellness companies).

Since the 1920's, beef checkoff nutrition research has contributed important discoveries about beef's role in health. Recently, this program has demonstrated beef’s positive role in weight and cholesterol management and has shown that beef intake can preserve muscles through aging. Checkoff research also has been used to effectively refute hypothesis about a proposed relationship between meat and cancer.

Nutrition research will be funded on healthy diets with beef for optimal weight, cardio-metabolic health and physical performance through the lifecycle. Research will be conducted with universities and clinical research organizations. Building off previous work, scientific evaluation of the evidence on red meat and cancer (and other topics as needed) will continue. Emerging scientific topics such as plant-based diets and

sustainable nutrition will be monitored and addressed through research and/or scientific communications. Research findings will be shared with the scientific community, including advisory groups developing nutrition guidance, in scientific forums (symposia), written materials (public comments, manuscripts, fact sheets) visual tools (infographics, video, web content) and in-person briefings. Strategic planning sessions will be continued to track needs for beef human nutrition research.

Measurable objectives:

- Conduct a minimum of three original human nutrition research trials on healthy diets across the life span, where beef is used as the primary source of dietary protein. To foster more scientific expertise on beef nutrition research, at least one of the studies will be conducted with new investigators.
- Develop and submit for publication at least one comprehensive scientific paper on beef’s role in a healthy, sustainable diet.
- Increase engagement from 40% in 2017 to 45% in 2018 of the top 100 Nutrition Science Influencers (as identified by historical data monitoring).

C. Committee Name (s): Innovation

Tactic 3A: Product Quality Research and Technical Expertise

Export Growth	Protect and Enhance	Consumer Trust	Beef’s Value
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NCBA, on behalf of the beef checkoff, leads research focused on improving beef’s unique taste attributes and disseminates this research to industry for implementation. As the primary product quality research focused initiative in the U.S., this program uniquely generates scientific research to reduce product inconsistencies and improve eating satisfaction and consumer taste scores.

This program targets research results and insights to multiple audiences including academic scientists and scientific organizations (i.e., the American Meat Science Association), and technical experts or industry scientists at supply chain partners such as packers, processors, foodservice and retail. Also targeted are other checkoff programs, state beef council partners, and allied industry stakeholders and influencers (i.e., USMEF, USDA AMS, etc.).

This tactic has delivered a significant volume of peer-reviewed meat science research to document how taste develops in beef products and demonstrate methods to improve consistency of taste to reduce product outliers resulting in fewer product failures, greater consumer satisfaction and more repeat purchases. Examples of highly-visible research completed by this program include the National Beef Tenderness Survey, development of a beef flavor lexicon to describe unique flavor attributes, and muscle profiling research. Recent research has documented

flavor notes that are critical to consumer satisfaction, along with the chemical compounds innate to beef that deliver these positive flavor notes.

Product quality research projects will be funded at universities and scientific institutions to improve beef’s quality and taste by addressing the specific attributes of beef flavor, tenderness and juiciness following an established product quality research roadmap. More specifically, this will include scientific evaluation of pre- and post-harvest factors (i.e., long aging) that impact these three beef quality attributes. Industry partners will assist in evaluation of research project ideas solicited to address these topics. Research findings will be shared in public conferences (i.e., the Reciprocal Meats Conference), written materials (manuscripts, fact sheets, research briefs), visual tools (videos, web content) or in-person briefings. Strategic planning sessions will be continued to track needs for beef product quality research. Additionally, program technical expertise will continue to ensure checkoff programs and external partners have a key point of contact for knowledge on beef products, strategic insight on cut utilization, product inquiry responses, etc.

Measurable objectives:

- Conduct a minimum of five original scientific research projects focused on improving product quality and taste consistency. Outcomes will relate to achieving better understanding of beef flavor, tenderness and juiciness science for the development of applicable solutions to reduce beef product inconsistencies.
- Develop a minimum of eight tools (web content, reviews, fact sheets, videos, etc.) that share research results or summarize research to provide information for questions by industry, consumers and/or influencers about beef’s quality and taste consistency.
- Showcase product quality research program content through three avenues including scientific conferences, peer review articles, and the www.beefresearch.org website. The goal is to encourage industry adoption of new scientific evidence and continue to demonstrate the industry’s commitment to improving beef product quality and taste.

Tactic 3B: Culinary

Export Growth	Protect and Enhance	Consumer Trust	Beef’s Value
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NCBA, on behalf of the beef checkoff, provides inspiration for consumers to eat beef more often through recipes, images and other content leveraged through other tactics, partners and state beef council programs. Today’s consumers want to provide meals to their families and friends that capitalize on taste while balancing nutrition and emerging food trends through modern and classic cooking methods to break down perceived barriers to beef’s ease and versatility.

Culinary develops concepts that ultimately target consumers (with a focus on the target of Older Millennial Parent) through various audiences (media, influencers,

foodservice operators, supermarket foodservice, etc.) and mediums (websites, media, etc.).

Historically, the program has provided beef recipes/recipe photography to be used on BIWFD.com and checkoff social properties and has responded to over 500 requests for recipes/photography annually for food media, industry partners and state beef council program needs. Additionally, culinary expertise and support has been utilized to execute other checkoff programs including immersion experiences with nutrition and health influencers, videos for BIWFD.com and state-sponsored programs with a culinary focus.

In 2018, this program will focus on developing culinary resources, including recipes and photography, and will be a technical resource for “how to” or “hack” videos on preparing beef. These videos will be developed and posted to on-line media platforms and will be managed in other ARs and tactics. Additionally, culinary support will be provided for both national and state programs where cooking with beef is a way to connect with a consumer or influencer audience on beef’s value, innovation and nutrition.

Measurable objectives:

- Develop a portfolio of new beef inspirations as recipes, new recipe photography, or reshoots of outdated but popular recipe photography, that address healthy, innovative, and on-trend beef meals in collaboration with other checkoff program needs that will increase use of recipes/photography by program and/or partner websites by 15% over 2017.
- Provide culinary expertise to other national or state partner programs that showcase beef’s nutrition, innovation, value, and/or ease of preparation through 20 in-person (demonstrations, panel speaker, etc.) or digital engagements (recorded or live videos or other digital content).

Tactic 3C: Channel Intelligence

Export Growth	Protect and Enhance	Consumer Trust	Beef’s Value
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NCBA, on behalf of the beef checkoff, provides insights that enable other checkoff programs to develop and implement more effective demand driving initiatives. Channel intelligence accomplishes this by leveraging a variety of industry data sources and other fact-based information to inform channel and marketing programs about key trends impacting the consumption of beef. It also plays an important role in the development of state, national and industry-wide annual and long-range plans by spotlighting key industry challenges and opportunities.

Decisions that impact the beef industry and ultimately beef consumption, must be fact-based to ensure industry resources are applied as efficiently as possible. While companies and organizations across the industry apply their efforts and resources to drive specific growth and profit, checkoff-funded channel intelligence efforts are focused exclusively on understanding those challenges and opportunities impacting part or all of the beef supply chain. No other entity plays this role as directly. Industry stakeholders, including state and national checkoff programs, rely on this beef checkoff funded intelligence to make smart, strategic and demand-driving decisions.

Specifically, this tactic will build on past industry metrics by continuing to monitor beef’s retail and foodservice demand and disseminate information to industry influencers/stakeholders to enhance performance, inform communications and leverage beef’s competitive advantage in the marketplace. The tactic will also provide knowledge on supply dynamics, prices, and pound volumes – by primal, cut, claim (such as production type, ethnic, breed, grade) and foodservice channel insights – along with featuring activity and menu trends, to assist checkoff communication teams, channel members, media, state boards, producers and others in planning and execution to optimize beef’s value. Key data sources include retail and foodservice volumes, price and featuring activity as well as foodservice menu activity. These data and insights also inform checkoff program direction, such as culinary, issues management, communications and planning, ultimately promoting and strengthening beef’s value proposition.

Measurable objectives:

- Average 16 channel intelligence data touch points per month to broaden the reach of checkoff funded insights and support research and communications programs.

Committee Name(s): Innovation, Consumer Trust

Tactic 3D: Foundational Market Research

Export Growth	Protect and Enhance	Consumer Trust	Beef’s Value
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NCBA, on behalf of the beef checkoff, provides insights that reach across checkoff demand building and issues management efforts. These studies accomplish this by assessing broad consumer/influencer/stakeholder attitudes, knowledge and needs, and by tracking progress towards key long-term goals. It also plays an important role in the development of state, national and industry-wide annual and long-range planning by spotlighting key industry challenges and opportunities.

Specifically, this tactic will include the tracking of the most important consumer attitudes, usage of and preference for beef using a range of studies. These studies

monitor beef's ongoing competitive position in the marketplace related to beef's value proposition, focusing on key attributes that support the beef industry long range plan. This data is analyzed to uncover stronger industry perspective and support program development. Insights are disseminated widely within the industry and data is integrated into internal planning presentations, consumer and influencer PR programs, state trend overviews and channel member presentations focused on opportunities for increasing demand.

- The Consumer Beef Index (CBI) will be conducted twice in FY2018, building on ten years of key consumer perceptions. In addition to long-term tracking measures, a few questions are added to each "wave" of the CBI that provide insights on new opportunities and/or threats. This study helps track efforts in improving consumer perceptions, as measured by the "bucket" question which tracks the percentage of consumers with positive attitudes about beef, as well as reasons for eating less beef, and beef's performance on price, taste, convenience and a host of other measures. The CBI provides insights that indicate whether the beef industry is making progress in changing consumer attitudes toward beef and how it also compares to competing proteins.
- The Consumer Image Index (CII) will build on six years of key consumer perceptions and inform efforts to identify and impact consumer perceptions of the beef production process. Efforts will be made to further integrate production findings into other aspects of beef marketing as consumers are becoming more and more holistic in their attitudes towards beef.
- NPD Group's National Eating Trends will continue to identify shifts in types and frequency of beef meals eaten, supporting and informing communication, culinary and product development efforts. This trended dataset is the most definitive information available on actual beef meals eaten in the home and provides insights about beef by gender, generation, age group, income level, household size, ethnicity, etc.
- The Millennial Listening Panel and other quick response survey tools will continue to provide insights into the beef checkoff's target markets by engaging millennials and other audiences in a variety of key demand building and image related topics. For example, the Millennial Listening Panel may be used to gain nutritional insights, or for the testing of videos that enhance the knowledge and positioning of beef production practices.

Measurable objectives:

- Provide Consumer Beef Index findings and implications to key beef industry stakeholders and program managers to help ensure checkoff priority decisions continue to be data-driven; dissemination will include posting on beefresearch.org accessible by industry stakeholders and sharing of key findings with at least six state beef councils.
- Post online summaries of 2-3 topics researched with the Millennial Listening Panel on beefresearch.org.

Committee Names: Innovation, Nutrition and Health**Tactic 3E: Key Topic Market Research**

Export Growth	Protect and Enhance	Consumer Trust	Beef's Value
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NCBA, on behalf of the beef checkoff, will explore key topic areas, with individual studies digging deep on a specific subject. An example is the recently completed work on the producer image building campaign, which will promote the beef production system and the people behind it. Included in this area are studies that will help in the area of innovation, nutrition, issues/stewardship and other efforts that address challenges and opportunities impacting long range plan initiatives and checkoff committee priorities. These studies focus primarily on the consumer, but strategic learnings from key influencers are also sought.

Projects in this tactic planned for FY2018 will specifically support long range plan initiatives and committee priorities and fall into the following categories. Some examples include:

- Nutrition – Checkoff-funded studies in this area will directly support several long range plan initiatives, including protecting beef's image, communicating beef's nutritional benefits and helping revolutionize the meat shopping experience by including key learnings about the value to consumers and influencers of beef's nutritional benefits.
- Innovation – Research will be conducted to support the checkoff funded website consolidation effort to ensure content optimization. User assessments will continue to determine the impact of current online promotional programs and satisfaction with BeefItsWhatsForDinner.com. To support supply chain efforts, understanding new paths to purchase activities and progress will continue and if in-market tests occur in this category, support could be provided to evaluate consumer reaction. Consumer satisfaction with steak will continue to be tracked.
- Issues/Stewardship – Checkoff-funded studies in this area will directly support several long range plan initiatives including ensuring beef's safety, protecting beef's image, and connecting & communicating directly with consumers through a variety of testing methodologies. Output will include key learnings about messaging, consumer perceptions of production, and proof points that relate to stewardship topics as well as issues response and preparedness.

Measurable objectives:

- Assist the issues team with a study on a consumer hot-button issue to enhance understanding of consumer concerns, and possible messaging points for the industry.
- Test and validate a content piece(s) being leveraged for promotion and/or education with consumers and/or influencers.

D. Committee Name (s): Consumer Trust**Tactic 1A: Sustainability Research and Scientific Affairs**

Export Growth	Protect and Enhance	Consumer Trust	Beef's Value
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NCBA, on behalf of the beef checkoff, provides science-based evidence to inform and engage industry stakeholders on the comprehensive sustainability of beef. Though a complex topic for all audiences, sustainability research continues to provide clarity for audiences by identifying and benchmarking areas for improvement. Research in this program advances life cycle assessment science to measure beef sustainability using a balanced approach that includes social, economic, and environmental indicators.

Multiple audiences are targeted with this program work, including the scientific community, regulatory decision makers, the supply chain sectors (retail, foodservice, packers and the feeding sector), as well as those that influences consumer opinion (health professionals and consumer media).

Previous completion of the foundational U.S. beef sustainability life cycle assessment (LCA) has measured the beef industry's improvements on beef sustainability footprint and provided a benchmark to share with the public. The collection of region specific data continues to reflect the geographical differences in how beef is raised sustainably. Additionally, the science of life cycle assessments has evolved as the field matures and new techniques can more accurately reflect the true sustainability of beef. It is critical for the beef industry to better understand these complex topics to maintain consumer confidence in the way beef is produced today.

Research will be funded to measure improvements in beef sustainability in the three sustainability pillars (social, economic or environmental), including the initiation of an update to the sustainability benchmark (new LCA). Scientific outreach will focus on industry adoption of new evidence, measurement parameters, or opportunities that bring these key audiences together. Technical presentations or session sponsorship (i.e., industry meetings, desk sides, briefings, workshops, symposia at scientific meetings, etc.) will be identified to share key outcomes. Strategic planning sessions will be continued to track needs and contributions to beef sustainability research.

Measurable objectives:

- Conduct a minimum of four original scientific research projects focused on understanding and benchmarking the sustainability of beef systems and the beef value chain.
- Produce a minimum of eight tools (web content, reviews, fact sheets, videos, etc.) that clarify sustainable beef production today based on both checkoff and non-checkoff funded research findings.
- Inform a minimum of five audiences (i.e., scientific community, consumer or industry influencers, retail or foodservice, etc.) on how beef is sustainably raised today.

IV. DETAILED BUDGET SUMMARY

Beef Board/BPOC Funding Request:

Committee and Tactic	Program Manager	Completion Date	Total Direct Cost	Est. Impl.	Total
Safety Committee					
Tactic 6A: Safety Research and Scientific Affairs	Mandy Carr	9/30/2020	\$ 784,500	\$ 368,300	\$1,152,800
Nutrition and Health Committee					
Tactic 2A: Nutrition Research and Scientific Affairs	Shalene McNeill	9/30/2020	\$1,743,300	\$ 689,200	\$2,432,500
Innovation Committee					
Tactic 3A: Product Research and Technical Expertise	Bridget Wasser	9/30/2020	\$ 784,500	\$ 266,300	\$1,050,800
Tactic 3B: Culinary	Laura Hagen	9/30/2020	\$ 196,100	\$ 839,400	\$1,035,500
Tactic 3C: Channel Intelligence	Alison Krebs	9/30/2020	\$ 523,000	\$ 384,600	\$ 907,600
Tactic 3D: Foundational Market Research	John Lundeen	9/30/2020	\$ 305,100	\$ 523,300	\$ 828,400
Tactic 3E: Key Topic Market Research	John Lundeen	9/30/2020	\$ 523,000	\$ 357,100	\$ 880,100
Consumer Trust Committee					
Tactic 1A: Sustainability Research and Scientific Affairs	Sara Place	9/30/2020	\$ 784,500	\$ 386,100	\$1,170,600
AR Totals Research			5,644,000	\$3,814,300	\$9,458,300

Other Potential Funding Source(s): *(Informational Only)*

Committee and Tactic	Program Manager	Completion Date	Total Direct Cost	Est. Impl.	Total
Safety Committee					
Tactic 6A: Safety Research and Scientific Affairs	Mandy Carr	9/30/2020	\$ 115,500	\$ 54,200	\$169,700
Nutrition and Health Committee					
Tactic 2A: Nutrition Research and Scientific Affairs	Shalene McNeill	9/30/2020	\$ 256,700	\$101,500	\$358,200
Innovation Committee					
Tactic 3A: Product Research and Technical Expertise	Bridget Wasser	9/30/2020	\$ 115,500	\$ 39,200	\$ 154,700
Tactic 3B: Culinary	Laura Hagen	9/30/2020	\$ 28,900	\$123,600	\$ 152,500
Tactic 3C: Channel Intelligence	Alison Krebs	9/30/2020	\$ 77,000	\$ 56,600	\$ 133,600
Tactic 3D: Foundational Market Research	John Lundeen	9/30/2020	\$ 44,900	\$ 77,000	\$ 121,900
Tactic 3E: Key Topic Market Research	John Lundeen	9/30/2020	\$ 77,000	\$ 52,600	\$ 129,600
Consumer Trust Committee					
Tactic 1A: Sustainability Research and Scientific Affairs	Sara Place	9/30/2020	\$ 115,500	\$ 56,900	\$172,400
AR Totals Research			\$ 831,000	\$561,600	\$1,392,600

Total Cost Summary for All Funding Sources: (Informational only)

Committee and Tactic	Program Manager	Completion Date	Total Direct Cost	Est. Impl.	Total
Safety Committee					
Tactic 6A: Safety Research and Scientific Affairs	Mandy Carr	9/30/2020	\$ 900,000	\$ 422,500	\$1,322,500
Nutrition and Health Committee					
Tactic 2A: Nutrition Research and Scientific Affairs	Shalene McNeill	9/30/2020	\$2,000,000	\$ 790,700	\$2,790,700
Innovation Committee					
Tactic 3A: Product Research and Technical Expertise	Bridget Wasser	9/30/2020	\$ 900,000	\$ 305,500	\$1,205,500
Tactic 3B: Culinary	Laura Hagen	9/30/2020	\$ 225,000	\$ 963,000	\$1,188,000
Tactic 3C: Channel Intelligence	Alison Krebs	9/30/2020	\$ 600,000	\$ 441,200	\$ 1,041,200
Tactic 3D: Foundational Market Research	John Lundeen	9/30/2020	\$ 350,000	\$ 600,300	\$ 950,300
Tactic 3E: Key Topic Market Research	John Lundeen	9/30/2020	\$ 600,000	\$ 409,700	\$ 1,009,700
Consumer Trust Committee					
Tactic 1A: Sustainability Research and Scientific Affairs	Sara Place	9/30/2020	\$ 900,000	\$ 443,000	\$1,343,000
AR Totals Research			\$6,475,000	\$4,375,900	\$10,850,900

V. SUPPLEMENTAL INFORMATION**A. Will all of the work detailed in this AR be completed by the end of the fiscal year? If not, please provide an explanation.**

No. The work of the programs in tactic 6A, 2A, 3A and 1A will be completed by the end of the AR (September 30, 2020). The plans exceed 12 months due to time needed for a Request for Proposals (RFP) and/or targeted research planning, project design meetings, industry expert review of proposals and contract negotiation. Project approvals by university campus committees may also be required if live animals will be used in the research (Animal Care & Use Committee) and in case of human subjects, Institutional Review Board reviews. These standard requirements for biological science research take additional time before a project can begin. Therefore, to provide an ample timeline for project work to be completed, additional time is needed (24 - 36 months in total).

Market Research and Intelligence – No, the market research plan extend to December 30, 2019. All work is planned for completion by that time. As in the past, the additional time is required to execute market research projects with completion anticipated within 15 months. This time is also needed to allow for data analysis and report generation.

B. Changes from FY 2017 Approved AR:

The research tactics 6A, 2A, 3A and 1A build upon research priorities of the previous year as the research roadmaps are for 5 years, aligning with the current Long Range Plan. However the scientific acceptance efforts continue to develop from previous years. The above tactics indicate a continued narrower focus as resources have become more limited. Outreach and education activities continue to be essential to spur implementation/adoption of science and technical knowledge.

Tactic 3B, has a narrower focus of only culinary activity and the work with supply chain partners has been consolidated into the CI tactic for supply chain efforts.

Because of its broad foundational context, the Consumer Image Index study has been moved from Tactic 3E, Key Topic Market Research, to Tactic 3D, Foundational Market Research.

C. Subcontractor information (agencies, etc.):**Name of proposed subcontractors:****Will all work with subcontractors be competitively bid? If not, why not?**

Various laboratories, universities, health science centers and their affiliated research scientists, independent research companies, government agencies, and other contractors and vendors will be used to complete the research program outlined (tactic 6A, 2A, 3A and 1A). Subcontractors will be chosen via a Request for Proposals process and/or through the development of targeted research projects that are based on previous research expertise, budget rational, and industry need and committee priorities.

In tactic 3B, professional food photographers may be utilized.

IPSOS U.S. Public Affairs, Google Analytics and Toluna have solutions for consumer issues and consumer preference research that provide for speedier results. Ypulse offers a unique set of techniques and experience that greatly facilitates the millennial listening panel. NPD NET will be used to measure in-home eatings of beef due to their proprietary panel. Most work conducted related to the target audience (e.g., Consumer Beef Index & Consumer Image Index) will be conducted by Pelegrin Research Group due to their deep knowledge of how to segment the data in accordance with our target audience definition, and compare results to historical research conducted. Core Insights will be used for most in-store and in-home use studies due to their extensive expertise in this area and demonstrated ability to consistently deliver excellent results at a substantially lower cost than other vendors as evidenced in a number of previous competitive bid situations for this type research. Hall & Partners will support ongoing work related to the new BIWFD website. Technomic will continue to conduct the foodservice volumetric study since they have extensive contacts in the foodservice industry that helps to ensure participation, and they also provide a suite of strategic services and proprietary databases, including Menu Monitor and Digital Resource

Library, used by channel intelligence to craft a wide range of foodservice insights. FreshLook (IRI) and Meat Solutions have built a custom system for analyzing the value of beef sold at retail, starting with scanner data, and reassembling cuts back to beef primals, so that long-term value to producers can be tracked. Other contractors will be selected based on expertise in respective areas (e.g., nutrition) and will be part of the competitive bid process.

For certain market research tracking studies in Tactic 3D, Foundational Research (e.g., Consumer Beef Index and Consumer Image Index) maintaining continuity of methodologies is important to ensure accurate data comparisons year over year.

D. Identify any relationships between this AR and projects previously funded by the Operating Committee:

The programs in tactic 6A, 2A, 3A and 1A, and 3B builds upon, but does not duplicate work from previous ARs and is leveraged by this, other checkoff programs, key industry stakeholders and the research community.

Some of the research included in this AR is ongoing tracking research that has been funded for a number of years (Foodservice Volumetric, National Panel Data). It is important that the industry stay current on consumer trends and perceptions in order to ensure that the industry is properly responding to changes as they occur.

The Consumer Beef Index work allows for ongoing analysis of trends in consumer perceptions and consumption of beef with time series data beginning in 2007. The Consumer Image Index now allows for trend tracking since 2012 on subjects related to beef production.

E. Summary of Prior Year AR Budgets and Expenses:

1704-R / Research	FY 2017 Approved Budgets					
	CBB/BPOC	FSBCs	Total	Direct Cost	Impl.	Total
AR Totals	\$ 9,000,000	\$ 1,671,601	\$ 10,671,601	\$ 6,130,801	\$ 4,540,800	\$ 10,671,601

1704-R / Research	FY 2017 Actual Expenses (through April 30, 2017)					
	CBB/BPOC	FSBCs	Total	Direct Cost	Impl.	Total
AR Totals	\$ 3,844,761	\$ 503,001	\$ 3,347,762	\$ 1,169,909	\$ 2,177,853	\$ 3,347,762

F. Historical Summary of Budgets and Expenses: *(includes all funding sources listed in original AR)*

Research AR	Total Approved Budgets			Total Actual Expenses		
	FY2016	FY2015	FY2014	FY2016	FY2015	FY2014
	\$ 11,537,900	\$ 10,657,400	\$ 9,759,000	\$ 9,572,294	\$ 9,766,702	\$ 9,315,377