

Tactic Quick Guides Preliminary FY24 Tactics



Stakeholder Engagement
Committee

STAKEHOLDER ENGAGEMENT COMMITTEE TACTIC OVERVIEW

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16-18	2433-C	Beef Quality Assurance (BQA)	NCBA
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22-24	2431-B	CDC Engagement	NIAA
25-27	2431-C	Educational Resources & Materials	NIAA
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2450-A: Key Audience Insights and Action Platform

Name of Contractor: Cattlemen's Beef Board

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$2,280,000

CBB/BPOC Funding Request for this Tactic: \$270,000

Tactic A | 2450-PC

KEY AUDIENCE INSIGHTS AND ACTION PLATFORM

Cattlemen's Beef Board

Tactic Description:

Each effort under this listening tactic seeks to better identify and understand farmers and ranchers, and create more targeted, purposeful messaging that can be shared and leveraged across national and state Beef Checkoff programs.

Data-Driven Producer Listening

The Producer Attitude Survey - The annual Producer Attitude Survey is a national, quantitative, random, independently administered survey of producers. This sample size is a statistically valid representation of producers and participants spread across six regions of the U.S. The annual survey provides valuable benchmarks of producer awareness and affinity for the Beef Checkoff, and highlights areas for ongoing producer communications efforts. Additionally, each Qualified State Beef Council (QSBC) may further fund expansion of this study within its respective state to gain deeper producer insights there.

Key Insights Digital Platform - Both state and national Beef Checkoff programs seek to better understand, research, and learn as much as possible about farmers and ranchers, including likes, dislikes, geographical location, brand loyalties, memberships, and more. By taking a deeper look at the layers of data surrounding producers through use of digital insights dashboards, more targeted messaging can occur. Key research insights about producers from a variety of data sources will be tabulated and shared with state and national Checkoff programs to enable more efficient producer communications, informing Beef Checkoff messaging and content topics for FY24. As the platform continues to gather digital producer insights in FY24, we will begin exploring how to serve targeted messages directly to specific producer audiences through this unique platform.

The Drive Producer Content Survey - This online survey is designed to seek input from producers, including top preferences regarding how Beef Checkoff dollars are invested. With a focus on gathering opinions on *The Drive* platform content and *DrivingDemandForBeef.com* website, this survey invites current subscribers to *The Drive* as well as to other cattle producers (who are then given an opportunity to receive *The Drive*) an opportunity for input. Renewed efforts in FY24 to encourage other beef industry organizations to invite their members to participate in the survey will allow the PC program a means of broadening producer listening efforts and growing *The Drive* subscriber list.

One-on-One Producer Input

Checkoff Communications Discussions - Discussions with various Beef Checkoff and industry groups continue to be useful communication tools. In FY23, PC conducted quarterly discussions between QSBCs, national Checkoff contractors, and other ag groups. This allowed the PC team to share updates and seek program input into current and future programming. In the coming year, we will build off progress made by continuing these discussions to gather insights from these and other important industry groups inside and out of the Beef Checkoff.

Direct Producer Feedback -The PC team continues to seek convenient ways for individual producers to share their thoughts regarding the program. Expanded efforts in the digital space through the Beef Checkoff website, ongoing targeted digital surveys, tracking and organizing producer calls, exploring new outreach opportunities, and attending events where producers gather.

Measurable Objectives

Measurable Objective #1

Develop opportunities to gain insight from producers and influencers, so as to create more targeted, purposeful Beef Checkoff messaging that can be shared and leveraged across national and state programs.

Measurable Objective #2

Conduct one independent, national quantitative study/survey of producers to gauge input and sentiment of the Beef Checkoff and the PC program.

Measurable Objective #3

Plan, develop and share insights from a key audience research initiative to define how to engage with producers and key audiences most efficiently, including facilitating channels for feedback.

Measurable Objective #4:

Expand access to insights generated from the key audience platform to include at least two semi-annual summaries shared with the QSBCs and Stakeholder Engagement Committee Members to encourage greater consistency in Producer Communications across the national and state level.

LRP Initiatives Addressed by this Tactic

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Educate producers, lawmakers and industry stakeholders on the benefits and impact of the Beef Checkoff

Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

Tactic Considerations	Table Agreement Level
<p>Recognizing potential Beef Checkoff Contractors have drafted their tactics to align with the Beef Industry Long Range Plan and Beef Demand Drivers consider these expectations when providing scores and comments.</p> <p>For this tactic, quantify your table's level of agreement using the following 5-point scale.</p> <p><i>1 = Strongly Disagree</i> <i>2 = Disagree</i> <i>3 = Neither Agree nor Disagree</i> <i>4 = Agree</i> <i>5 = Strongly Agree</i></p>	
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2450-B: Producer Reach

Name of Contractor: Cattlemen's Beef Board

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$2,280,000

CBB/BPOC Funding Request for this Tactic: \$1,770,000

Tactic B | 2450-PC
PRODUCER REACH
Cattlemen's Beef Board

Tactic Description:

The Drive, *The Drive in Five*, social media properties, *DrivingDemandForBeef.com*, multimedia campaigns, and more ensure this platform reaches as many producers and importers as possible regarding Beef Checkoff program updates and results, and encouraging understanding of the program.

The Drive Publishing Platform

A multichannel publishing platform that includes *The Drive* quarterly print newsletter, regular eNewsletters, *The Drive in Five* video series, the website *DrivingDemandforBeef.com*, social media including Facebook, Twitter, YouTube, and LinkedIn, *The Drive* publishing platform serves as the foundation for communication about current Beef Checkoff programming and information dissemination to those who pay into the program, and the beef industry as a whole.

Growth and accessibility to *The Drive* platform, and consistent, quality content remain top priorities. Creating timely, educational and highly-relevant content featuring all efforts and programs gives producers access to the information they consistently ask for – and in a variety of formats.

The Drive has grown into an important communication tool for Qualified State Beef Councils. State content is shared through the national distribution channels – mailed inserts inside the print newsletter, and state content inside of *The Drive*'s enewslatters. This partnership provides valuable, cost-effective opportunities for QSBCs to extend their messages to a broader producer audience within their state, along with providing the reader more local flavor alongside the national Beef Checkoff content, too.

The Drive Podcast / Audio Series New in FY24, *The Drive* publishing platform will develop and launch an audio series to showcase Beef Checkoff program and educational content in yet another medium to reach more producers. Initial focus will be on platform and topic research, content planning, and rollout, with the aim of using original and curated stories, and previously recorded pieces for efficiency.

Refresh to DrivingDemandForBeef.com

Launched in 2019, *DrivingDemandForBeef.com* has become an important repository of producer communications and program workings. A vehicle for transparency for all program updates, Beef Checkoff financials, frequently asked questions, videos, and more, this platform has grown significantly in traffic and content in the past four years. A refresh to this valuable asset will include more moving content and graphics, more frequent content updates, strengthened drivers for search engine results, and updated user experience.

Social Media

Social media channels that carry the “Beef Checkoff” name - Facebook, Twitter, LinkedIn, and YouTube – are increasingly valuable mediums to reach a multitude of producer audiences. Producer-facing social media carries different messaging and tone compared to consumer audience posts, and many state beef councils seek to replicate and share what works on digital platforms for the main Beef Checkoff channels. New in FY24, we will add Instagram to the Beef Checkoff social media network, with messaging and posts targeting younger producers.

Producer Awareness and Engagement Campaign

Limited paid media can be an important tool to reach farmers and ranchers outside of everyday Beef Checkoff channels. The nationally award-winning *Your Dollar Does* campaign features producer portraits from across the U.S. paired with strong statements about the program's successes. This campaign has been well-received in-market since the campaign launched in FY19. After testing new campaign concepts with producers in FY22, *Your Dollar Does* continues to be a producer favorite. The updated look and feel of the campaign will continue in FY24 through print and digital ads, and radio.

Measurable Objectives

Measurable Objective #1

Continue to strengthen the distribution platforms for *The Drive*, *The Drive in Five*, social media properties, *DrivingDemandForBeef.com*, multimedia campaigns, and other outreach efforts to ensure Beef Checkoff program updates and results reach as many producers and importers as often as they like, leading to a deeper understanding of the Beef Checkoff program.

Measurable Objective #2

Maintain a base distribution and focus on growth in *The Drive* print and email subscribers by 10%, based on the FY23 Q3 benchmark.

Measurable Objective #3

Develop and distribute timely content for *The Drive* platforms, including enewsletters, printed newsletters, *The Drive in Five* video series, social posts, and Beef Checkoff website articles

Measurable Objective #4:

Analyze the creation of a pilot podcast / audio series for *The Drive*, including platform and topic research, content planning, and rollout, with the aim of using original and curated stories, and previously recorded pieces for efficiency, with an expected launch in spring 2024.

Measurable Objective #5:

Determine five areas of the Beef Checkoff's *DrivingDemandForBeef.com* website set for update, including the addition of efficiencies, navigation, and heightened user experience.

LRP Initiatives Addressed by this Tactic

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Educate producers, lawmakers and industry stakeholders on the benefits and impact of the Beef Checkoff

Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE
Tactic Score Sheet Considerations, Scores, and Notes

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2450-C: Industry and Media Collaboration

Name of Contractor: Cattlemen's Beef Board

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$2,280,000

CBB/BPOC Funding Request for this Tactic: \$240,000

Tactic C | 2450-PC
INDUSTRY AND MEDIA COLLABORATION
Cattlemen's Beef Board

Tactic Description:

The Beef Checkoff plays a key role in developing demand for beef amid an increasingly competitive protein market both in the U.S. and abroad. However, a generation of producers have been born and raised since the Checkoff was first implemented in 1986, and many do not fully understand the important role the program plays in the industry. The goal of this tactic is to communicate the Beef Checkoff's efforts in driving beef demand by connecting key voices with those who can amplify the message -- especially trade media and industry influencers.

Checkoff Thought Leadership & Spokesperson Development:

Established thought leaders are identified in CBB and Federation of State Beef Council officer teams, Checkoff Program and Administrative Committee leadership, and CBB staff. By identifying, developing and positioning these key thought leaders for speaking opportunities around the country -- as resources for print, for online and radio interviews, and for social media -- we can educate beef industry stakeholders about the Beef Checkoff. Extensive media training and Beef Checkoff spokesperson development programs will continue for these individuals, supporting their knowledge of how to tackle important issues.

Media Relations:

Developing relationships with editorial staff and broadcasters is critical for earned media coverage. A strong media relations effort can support the authentic partnership of transparent communications, foster media relationships and help tell the Beef Checkoff story. It also helps ensure that the media includes CBB executives and members when developing their own stories about current topics affecting the beef industry. Access may include the opportunity to interview board members and Qualified State Beef Council executives to demonstrate their commitment to the programming of the Checkoff and the beef industry at large. Ag trade media will be supported with data and valuable access to regional or local Beef Checkoff insiders to ensure that they are able to present their producer audiences with the most transparent and accurate updates and information.

Industry Outreach:

Efforts will continue to communicate with those in the beef industry who communicate with producers. Together with QSBCs, development of engaging, customizable outreach materials, talking points, best practices, videos, and in-person meetings will continue in FY24. As the outreach program is developed and implemented, feedback from QSBCs will determine where customization to particular audiences is needed.

Measurable Objectives

Measurable Objective #1

Broadly communicate the program's efforts in driving beef demand by connecting educated and media-trained Beef Checkoff voices with those who can amplify their message -- especially trade media and industry influencers -- which will illicit earned trust and credibility among producer and importer peers.

Measurable Objective #2

Conduct three media training and Checkoff spokesperson development sessions, reaching new CBB board members and officers, Checkoff Program Committee Co-Chairs, QSB staff and boards, and Checkoff stakeholders.

Measurable Objective #3

Grow total number of Checkoff media hits across ag-industry print and broadcast by 8% over FY23 Q3 benchmark, including grassroots letters to the editor / op-ed pieces sent to local media.

Measurable Objective #4:

Grow industry relationships through attendance and participation of CBB board members and staff at various national and regional cattle industry events and meetings.

LRP Initiatives Addressed by this Tactic

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Educate producers, lawmakers and industry stakeholders on the benefits and impact of the Beef Checkoff

Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

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2433-B: Beef Advocacy Training & Engagement

Name of Contractor: National Cattlemen's Beef Association

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$3,593,000

CBB/BPOC Funding Request for this Tactic: \$758,500

Tactic B | 2433-II

Beef Advocacy Training & Engagement

National Cattlemen's Beef Association

Tactic Description:

Research funded by the Beef Checkoff repeatedly shows that consumers and influencers trust farmers and ranchers*. When they have questions about farming and ranching practices, consumers favorably respond to answers from the people who produce the food. NCBA, on behalf of the Beef Checkoff, provides training to develop credible advocates and spokespeople within the beef community, and equips them with information and resources to engage readily in conversations and address consumer concerns about beef and how cattle are raised.

These advocates and spokespeople reach consumers through many avenues, including conversations with consumers online and in-person, and they participate in traditional and digital media opportunities. Through these communication efforts, advocates and spokespeople help educate consumers and influencers about the role of beef in a healthy diet, and how beef farmers and ranchers raise beef responsibly and sustainably. These advocates also help to respond when there is misinformation in the public about beef production and other beef-related issues.

As part of the beef advocacy training and engagement (BATE) program, advocates and spokespeople are equipped to share their beef stories and expertise through the completion of the online Masters of Beef Advocacy (MBA) course, the advanced spokesperson development program, Trailblazers, and in-person training events. The MBA program comprises five online courses to equip advocates with knowledge of the beef lifecycle and information to respond to consumer concerns. In FY23, multiple MBA modules were updated to include the latest beef facts and the MBA teacher toolkit was adapted to create more flexibility for classroom delivery which increased classroom toolkit adoption by teachers. NCBA plans to continue to innovate and improve user experience in FY24, including making more updates to the MBA Classroom Toolkit.

Upon completion of the MBA courses advocates and spokespeople (more than 23,000 to date) are continuously provided resources and information and called on to engage on specific platforms or topics in response to consumer concerns, through monthly emails, continuing education opportunities and a private MBA alumni Facebook group. In FY24, NCBA plans to streamline communication, house resources and virtual educational opportunities, and improve the advocate user experience with a platform that brings the full advocacy experience together in one place.

A portion of the success of the BATE program is through the collaboration with teams from other tactics. BATE takes an integrated approach with content and programs to leverage other tactics' research and information, including campaigns from the Beef Checkoff and *Beef. It's What's For Dinner.* to help extend information to a larger audience and better equip and inform advocates.

As an example, in FY23 MBA extended the *Beef. It's What's for Dinner.* Brand Anthem campaign and used multiple consumer holidays, such as Earth Day, to extend relevant Beef Checkoff resources including content from *Beef. It's What's For Dinner.* to advocates. This content was delivered to MBA graduates through a monthly newsletter, private MBA Alumni Facebook group, and by leveraging NCBA's in-house experts to co-host continuing education webinars instructing advocates about the topic and inspiring advocates to share their story with their audiences.

In FY24, NCBA plans to continue this work with other teams and state partners to leverage their content to trained advocates and spokespersons for their campaign activations and executions to integrate all Checkoff-funded activities more fully. They will also continue to find efficiencies with the Beef Quality Assurance program, nutrition outreach, and supply chain outreach. One way they do this is by sharing technology platforms for their respective online training programs. NCBA will also continue to cross-promote programs between teams.

The BATE program also readies members of the beef community interested in becoming top advocates with advanced communication and spokesperson training. Top advocates trained in media relations and digital media trends along with advanced communication techniques are vital to the beef industry's ability to share its story, correct misinformation, and amplify the good work of the beef industry to consumers through producer voices. The Trailblazers program was launched as a complement to the Masters of Beef Advocacy program to train top advocates as well rounded, communication experts and establish a grassroots cadre of well-trained agriculturalists who can competently and confidently approach beef-related issues in all social environments. In FY23, ten Trailblazers completed several advanced advocacy sessions and media training, were featured in news stories focused on beef industry sustainability, and used their own social media platforms to share facts about beef and their personal ranching stories. In FY24, NCBA plans to continue developing top advocates through the Trailblazers program and finding opportunities for them to engage with media and consumers.

The training efforts established by the MBA and Trailblazers programs, respectively, provide support to beef community spokespersons in preparing for proactive and reactive communication strategies. Training efforts by the BATE team allow for the continuation of an enhanced database of go-to spokespersons that continue to build trust in the individuals who raise beef. Furthermore, the continuation of adding new MBA graduates and conducting advanced training programs will assist in creating empowered, well-informed, and prepared community members of grassroots advocates who can be mobilized and called upon to act within their respective communities, further exposing the benefit of the Beef Checkoff to uniformed audiences.

Citations:

*Consumer Beef Tracker, 2023.

▼ Measurable Objectives

Measurable Objective #1

Add 800 new MBA graduates to the nationwide network and expand the footprint of the MBA classroom toolkit with the facilitation of at least one MBA Classroom Toolkit workshop, where participants will then be able to utilize the MBA Classroom toolkit with their class/group.

Measurable Objective #2

Produce and distribute at least 12 email campaigns for advocate information, activation, or engagement, providing advocates with the data and resources they need to respond to questions about beef production and share beef's positive story, maintaining an open rate of at least 17%.

Measurable Objective #3

Conduct at least 25 in-depth training sessions and/or educational sessions for state and national advocates, staff and third-party subject matter experts, and key food and agriculture influencers from across the beef community to provide them with the content and skills to respond to misinformation and address concerns about the beef industry.

Measurable Objective #4:

Select and employ the 2024 cohort of ten Trailblazers to participate in yearlong training as official national spokespersons for the beef community, equipping them with the tools and resources to participate in top-tier media interviews and higher-profile national opportunities.

Measurable Objective #5:

Realign communication and advocacy training resources to a central platform/hub and conduct at least one workshop to demonstrate the functionality of the platform to effectively meet the needs of state partners and top advocates.

LRP Initiatives Addressed by this Tactic

Grow Consumer Trust in Beef Production

- Educate medical, diet and health professionals about beef and beef production
- Align and collaborate with traditional and nontraditional partners to tell the positive story of beef cattle production

Promote & Capitalize on the Multiple Advantages of Beef

- Promote the role of beef in a healthy and sustainable diet

Improve the Business & Political Climate of Beef

- Demonstrate beef's positive sustainability message and key role in regenerative agriculture

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Consumer Trust, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

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2433-C: Beef Quality Assurance (BQA)

Name of Contractor: National Cattlemen's Beef Association

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$3,593,000

CBB/BPOC Funding Request for this Tactic: \$2,159,100

Tactic C | 2433-II
Beef Quality Assurance (BQA)
National Cattlemen's Beef Association

Tactic Description:

Beef Quality Assurance is a program that provides systematic information to U.S. beef producers of how good husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management conditions. BQA certification is the leading way cattle producers can effectively "walk the walk," in raising healthy, thriving cattle that meet consumer expectations. NCBA, on behalf of the Beef Checkoff, provides producers with the education and training needed to help ensure cattle are raised responsibly and enhance consumer trust in how beef is raised. The BQA program not only targets producers with its programming but also engages and collaborates with stakeholders across the supply chain to develop and implement the necessary tools, resources, and programs to ensure responsible cattle care. The BQA program has a long-standing history of delivering educational programs to producers focused on issues that impact consumer trust and consumer demand in beef, ranging from cattle well-being to quality assurance and certification.

In FY24, BQA programming will provide updated content, including revisions of BQA national manual, additional online training module development, and other training and education tools. These tools are being developed for producers in each sector, and in partnership with sector specific partners (seedstock; cow-calf; stocker/backgrounders; feeders; youth, through support of the Youth for the Quality Care of Animals (YQCA); dairy, through support of the National Dairy Farmers Assuring Responsible Management (FARM); calf ranches through the Calf Care & Quality Assurance (CCQA) program, auction markets and transporters). These efforts support cattle owners, managers, and workers to be certified and/or adopt current cattle rearing techniques and methods (i.e., cattle care and handling in multiple languages). External review of the BQA program, tools and materials will be considered as a strategy to increase program credibility and standing with key stakeholders. Development of improved resources for Spanish language speakers will be a renewed focus. Programming will continue to enhance collaboration between the beef and dairy sectors of the cattle production industry.

Collaborating on BQA training and certification efforts with the state BQA coordinator network is a hallmark of the program. Support of states will continue with in-person training resource development and data management support, as well as continued efforts to maintain consistency across programs. National BQA will also collaborate on research, often with state BQA program coordinators, which strengthens BQA guidance and/or content. Extending BQA promotion resources, content and tools through state beef councils, state cattlemen's and breed associations, livestock marketing organizations, state extension programs, veterinary organizations and other livestock organizations willing to partner in promoting BQA will continue to be a focus through traditional and social media, demonstrations, seminars/webinars, speakers for panels and other engagement opportunities. The National BQA program will continue efforts to promote training and certification through relevant award recognition, public relations, advertisement, sponsorships, face-to-face and virtual training opportunities. NCBA will also continue to find efficiencies between BQA and the Masters of Beef Advocacy program. One way they continue to do this is by sharing technology platforms and customer service resources for Checkoff-funded online training programs at NCBA.

Promoting the understanding of the BQA program and the positive outcomes it provides for the cattle industry will be leveraged to the supply chain. The 2022 National Beef Quality Audit results will continue to be leveraged to both producers and supply chain audiences in 2024.

▼ Measurable Objectives

Measurable Objective #1

Increase the number of producers that are BQA certified (or equivalent) by 10% over 2023 certification numbers to grow the industry's commitment to effectively "walk the walk" in raising healthy, thriving cattle that meet consumer expectations.

Measurable Objective #2

Update and re-publish the national Beef Quality Assurance manual to ensure content accounts for the latest scientific advances, technological innovation, and regulatory changes.

Measurable Objective #3

Engage over half of the nation's state BQA coordinators (coordinators from at least twenty-three states) by conducting a minimum of three "in-person" and/or virtual meetings which focus on continuing education and collaboration toward compelling and aligned BQA programs.

Measurable Objective #4:

Develop one additional continuing education module for the Beef Quality Assurance online certification platform so that users have compelling and relevant educational content to help them achieved re-certification.

Measurable Objective #5:

Develop a benchmark survey of state BQA coordinators to evaluate national program support, services, and resources so that successes (or challenges) in these areas can be tracked over time.

LRP Initiatives Addressed by this Tactic

Grow Consumer Trust in Beef Production

- Intensify efforts in educating consumers as well as supply chain decision makers about the benefits of animal care programs like BQA and their impacts on animal well-being

Improve the Business & Political Climate of Beef

- Demonstrate beef's positive sustainability message and key role in regenerative agriculture
- Drive continuous improvement in food safety

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Consumer Trust, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

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2431-A: 13th Annual NIAA Antibiotics Symposium

Name of Contractor: National Institute for Animal Agriculture

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$185,000

CBB/BPOC Funding Request for this Tactic: \$75,000

Tactic A | 2431-II

13th Annual NIAA Antibiotics Symposium

National Institute for Animal Agriculture

Tactic Description:

The 13th Annual NIAA Antibiotics Symposium will continue the work and collaborations established in prior symposia, funded in part by the Beef Checkoff. The Symposium will focus on continued knowledge and insights about responsible antibiotic use and the primary efforts aimed at combating antimicrobial resistance (AMR). All components of the Symposium impact the beef value chain:

1. **Science:** understanding causal links, resistance mechanisms, bacterial genomics, the microbiome, current/future research, and more.
2. **Alternatives:** preventative and intervention strategies, ensuring antibiotic stewardship, needs and challenges, innovation, and technology.
3. **Communication:** How to effectively engage Qualified State Beef Councils (QSBCs) with reliable information, which can be shared when beef industry leaders and producers are engaging with influencers and consumers.
4. **Education:** Empowering junior high and high school STEM (Science, Technology, Engineering, and Math) educators to more effectively utilize antibiotic stewardship and antimicrobial resistance as teaching catalysts within their classrooms.

Researchers who explore the consumer decision-making process continually find that shared values are what drive human decision-making (The Center for Food Integrity, 2009).¹ Upon establishment of shared values, messengers (QSBCs and beef producers) can then share scientific and economic facts that will also be used within the decision-making process. The 2023 Symposium will ensure beef producers and their fellow attendees are prepared to engage with influencers and consumers through shared values while also having the knowledge and insights about the science behind responsible antibiotic use and measures to address antimicrobial resistance (AMR) by animal agriculture leaders. Each of these areas will be addressed in the content that will drive improvements in how animal agriculture communicates and engages, leading with common values and science.

The Symposium is unique in its design as it follows the **One Health**² approach. **One Health** recognizes the health of people is connected to the health of animals and the environment.

The Symposium creates a synergistic environment where stakeholders from the Centers for Disease Control & Prevention (CDC), the U.S. Food & Drug Administration (FDA), United States Department of Agriculture (USDA), American Veterinary Medical Association (AVMA), National Institute for Antimicrobial Resistance Research and Education (NIAMRRE), state public health offices, and experts from all points along the beef (animal agriculture) supply chain (producers, packers, retailers, etc.), industry associations, and other animal agriculture leaders can come together to celebrate the progress and diligent efforts of industry and veterinary medicine and the work that has broadened the **One Health** collaboration with human medicine and environmental activities. In addition, the Symposium fosters shared learning, networking, and collaboration as, together, food and agriculture system leaders continuously improve the responsible use of antibiotics in animal agriculture while ensuring animal agriculture is doing its part to combat antimicrobial resistance (AMR).

Through keynote addresses, panel conversations and breakout sessions that allow for further exploration and application of knowledge, beef producers will leave the 2023 Symposium and follow-up conversations with skills, knowledge, and insights to more effectively engage with key opinion leaders as they preserve and enhance trust in beef production, safety, and products.

Citations:

¹The Center for Food Integrity - Trust Model - The Center for Food Integrity

²One Health | CDC

▼ Measurable Objectives

Measurable Objective #1:

Stakeholders from all segments will attend the 2023 Symposium: Animal agriculture leaders (including beef producers), processors, retailers, research scientists, academia, environmental NGOs, human health professionals, and government. Success is:

- At least 80 percent of attendees sharing that the Symposium improves their knowledge and understanding of responsible antibiotic use and measure to combat AMR.
- A successful Symposium will have 80 percent of attendees reporting increased knowledge and skills about communicating with influencers and consumers.

Measurable Objective #2:

Engage at least two state beef councils in pre- and post-Symposium media interviews, such as commercial radio, podcasts, farm news, etc. that reach a minimum of 65,000 beef producers with key take-aways advanced by the Symposium agenda.

LRP Initiatives Addressed by this Tactic

Grow Consumer Trust in Beef Production

- Measure, document, improve, and communicate the net climate and environmental impact of beef production
- Educate medical, diet, and health professionals about beef and beef production
- Align and collaborate with traditional and nontraditional partners to tell the positive story of beef cattle production
- Engage positively in the sustainable nutrition conversation
- Intensify efforts in educating consumers as well as supply chain decision makers about the benefits of animal care programs like BQA and their impacts on animal well-being

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Attract innovation and intellectual capital and cultivate the next generation of talent into the beef industry
- Encourage the cooperation and collaboration of existing industry advisory committees to identify and prioritize research efforts
- Increase industry funds for beef marketing, promotion, and research
- Educate producers, lawmakers and industry stakeholders on the benefits and impact of the Beef Checkoff

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Safety & Product Innovation, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

Tactic Considerations	Table Agreement Level
<p>Recognizing potential Beef Checkoff Contractors have drafted their tactics to align with the Beef Industry Long Range Plan and Beef Demand Drivers consider these expectations when providing scores and comments.</p> <p>For this tactic, quantify your table's level of agreement using the following 5-point scale.</p> <p><i>1 = Strongly Disagree</i> <i>2 = Disagree</i> <i>3 = Neither Agree nor Disagree</i> <i>4 = Agree</i> <i>5 = Strongly Agree</i></p>	
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<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>	

2431-B: CDC Engagement

Name of Contractor: National Institute for Animal Agriculture

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$185,000

CBB/BPOC Funding Request for this Tactic: \$25,000

Tactic B | 2431-II
CDC Engagement
National Institute for Animal Agriculture

Tactic Description:

Previously, the Beef Checkoff has provided specific funding for beef producers to engage in antibiotic symposia events and a subsequent meeting with the Centers for Disease Control and Prevention (CDC) and related stakeholder groups. Building on the positive outcomes of previous producer engagement with the CDC, a group (approx. 15 to 20) of state beef council producer-leaders will attend and participate in the Antibiotic Symposium and after the Symposium at least 5 to 10 beef producers will attend meetings at the CDC in Atlanta, GA.

Beef producers will be empowered to use face-to-face presentations to share information on both scientific developments learned at the Symposium and at the CDC meeting specifically within the beef industry to influence their peers' commitment toward continuous improvement, related to responsible antibiotic use. In addition, they will share the results of communication strategies and effectively communicating the safety and wholesomeness of beef.

This tactic includes support for working with Qualified State Beef Councils (QSBCs) to identify targeted in-person and online tools and events that can be leveraged to engage beef producers in important antibiotics-related conversations, that can be conducted via online webinars, state and regional cattle association meeting presentations, unique social media events, sponsored producer influencer events, etc.

▼ Measurable Objectives

Measurable Objective #1:

Between 5 to 10 beef producers will participate in a tour, presentations, demonstrations, and discussions with officials from the Centers for Disease Control, engaging in open dialogue, questions on next steps in communication and collaboration opportunities.

- A minimum of five (5) beef producer participants will further engage with CDC leaders to serve as trusted resources on information related to farm/ranch practices. This will be measured via three-month, six-month and twelve-month surveys.
- At least two (2) CDC professionals will visit/tour a beef farm/ranch to better understand and explore how farmers and ranchers - with counsel from their veterinarians, are using antibiotics judiciously while doing their part to combat antibiotic resistance.

Measurable Objective #2:

Create a short video featuring beef producers, and professionals from CDC, FDA or USDA to share the responsible use of antibiotics across the beef value chain. Share the video with a minimum of two influencer-based organizations such as the Food Marketing Institute, Grocery Manufacturers Association, National Restaurant Association, American Academy of Pediatrics, etc.

LRP Initiatives Addressed by this Tactic

Grow Consumer Trust in Beef Production

- Measure, document, improve, and communicate the net climate and environmental impact of beef production
- Educate medical, diet, and health professionals about beef and beef production
- Align and collaborate with traditional and nontraditional partners to tell the positive story of beef cattle production
- Engage positively in the sustainable nutrition conversation
- Intensify efforts in educating consumers as well as supply chain decision makers about the benefits of animal care programs like BQA and their impacts on animal well-being

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Attract innovation and intellectual capital and cultivate the next generation of talent into the beef industry
- Encourage the cooperation and collaboration of existing industry advisory committees to identify and prioritize research efforts
- Increase industry funds for beef marketing, promotion, and research
- Educate producers, lawmakers and industry stakeholders on the benefits and impact of the Beef Checkoff

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Safety & Product Innovation, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

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2431-C: Educational Resources & Materials

Name of Contractor: National Institute for Animal Agriculture

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$185,000

CBB/BPOC Funding Request for this Tactic: \$85,000

Tactic C | 2431-II
Educational Resources & Materials
National Institute for Animal Agriculture

Tactic Description:

Providing robust resources for Qualified State Beef Councils and NIAA partner organizations - such as the National Agriculture in the Classroom Organization, ensures the knowledge and insights garnered from Symposia and CDC engagements can be put into action. This tactic supports NIAA staff's creation of resources and materials to be shared with QSBCs. Additionally, this tactic supports curriculum development for the National Agriculture in the Classroom Organization.

In addition to multi-media materials developed in collaboration with QSBCs, junior high and high school curriculum will empower STEM educators across the U.S. National Agriculture in the Classroom is the lead agricultural literacy education organization that serves the full spectrum of Pre-K–12th grade formal education. Their total impact during the past two years was 6,106,116 youth and adults through in-person and virtual teacher training, classroom instruction and through virtual learning.

Beef Checkoff dollars will be invested in the creation of three (3) lessons that address significant challenges within beef production today.

The first challenge is the public's misperceptions of the use of animal medicines, vaccines and genetics. The more than 80,000 U.S. teachers Ag in the Classroom works with want science-based, STEM focused lessons for use with students in their classrooms. We propose the development of three (3) lessons on Antibiotics, Vaccines & Genomics with career spotlights in each lesson. We will use an agricultural lens/context for these content areas and the content will be compelling to high school science teachers and students. The National Center for Agricultural Literacy (NCAL) at Utah State University will develop these three (3) lessons, pilot test with nine (9) teachers to obtain their feedback to improve each lesson, and upon completion of the lessons, conduct teacher webinars to help them use the lessons in their classrooms.

The second challenge that the beef industry faces is a shortage of large animal veterinarians. We know that through the use of our lessons by teachers in their classrooms that students are considering careers in the agricultural industry. Teachers are very likely to discuss careers in the context of the lessons developed through this grant. These are teachable moments for students. We will include a career spotlight in each of the Antibiotics, Vaccines & Genomics lessons.

▼ Measurable Objectives

Measurable Objective #1:

Creation of three (3) science-based, STEM lessons with National Agriculture in the Classroom addressing the use of medicines, vaccines, and genomics in beef production. To be tested by nine (9) STEM educators.

Measurable Objective #2:

Providing support through state-specific infographics sharing the continuous improvement of the beef industry in antibiotic stewardship and antimicrobial resistance to five (5) Qualified State Beef Councils.

▼ LRP Initiatives Addressed by this Tactic

Grow Consumer Trust in Beef Production

- Measure, document, improve, and communicate the net climate and environmental impact of beef production
- Align and collaborate with traditional and nontraditional partners to tell the positive story of beef cattle production
- Intensify efforts in educating consumers as well as supply chain decision makers about the benefits of animal care programs like BQA and their impacts on animal well-being
- Develop a direct-to-consumer beef safety campaign

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Safety & Product Innovation, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

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2432-A: Consortium Development

Name of Contractor: National Institute for Animal Agriculture

Start Date: 10/1/2023

End Date: 9/30/2024

CBB/BPOC Funding Request for this AR: \$50,000

CBB/BPOC Funding Request for this Tactic: \$50,000

Tactic A | 2432-II
Consortium Development
National Institute for Animal Agriculture

Tactic Description:

Through the Consortium, NIAA will continue its long history of stakeholder engagement that influences key audiences – in this case, innovators and investors, who greatly affect the future of animal agriculture. The work of the Consortium is imperative to foster improved knowledge of how animal agriculture remains a viable industry sector. Consortium work will increase innovators and investors' knowledge of animal agriculture, allowing for greater innovation and investment in animal agriculture – a behavior change.

For example, many innovators and investors may be hearing and feeling that cell-cultured or plant-based meat alternatives are the future of the food system. This "noise" could be coming from other innovators and investors "talking their positions up" or from non- governmental organizations (NGOs) with a specific mission - to decrease or eliminate animal-derived proteins. The Consortium will counter this narrative with data and verified information demonstrating to societal, economical, and nutritional necessity of animal- derived proteins.

NIAA will reach innovators and investors through in-person engagements as well as through e-blasts, LinkedIn, and various trade publications. A constant "drum-beat" of information and engagement will solidify the role of animal agriculture – and its allied sectors. Engagements that seek to collectively improve the viability of animal agriculture will foster greater demand for beef.

Ideal spaces for engagement are where Agri-Food Tech innovators and investors are already gathering. One such space is the Animal Ag-Tech Innovation Summit. NIAA already serves as an advisor for this Summit that annually draws over 1,000 innovators and investors.

Upon launch of the Consortium, NIAA will manage a digital resource library. This will ensure a robust, up-to-date resource for innovators and investors exploring the animal agriculture sector of today's food system. In addition, NIAA will regularly engage with key stakeholders within animal agriculture and innovators and investors to advocate for greater investment in animal agriculture.

The Resource Library will house a directory of innovators and investors with an animal agriculture thesis, Beef Industry-facilitated research, farmer and rancher feedback/needs, key opinion leader commentary, and additional insights that innovators and investors can learn from and build upon as greater collaboration is fostered to enhance innovation and investment in animal agriculture.

Like many industry sectors, innovation and investment in animal agriculture is highly relationship-based. NIAA will continue fostering and building relationships that benefit animal agriculture and beef producers.

▼ Measurable Objectives

Measurable Objective #1:

An initial, digital resource library that aggregates animal agriculture innovation and investment needs, funds with an animal agriculture investment thesis, and innovators/entrepreneurs with animal agriculture applications/technologies.

Measurable Objective #2:

Direct support via technical knowledge and expertise in an animal agriculture-focused fund with a minimum of \$3 million in funding to support multiple \$250,000 to 500,000 projects.

LRP Initiatives Addressed by this Tactic

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Attract innovation and intellectual capital and cultivate the next generation of talent into the beef industry
- Increase industry funds for beef marketing, promotion, and research
- Educate producers, lawmakers and industry stakeholders on the benefits and impact of the Beef Checkoff

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Safety & Product Innovation, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

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2413-A

Molecular epidemiology and antimicrobial-resistance profile of *Salmonella* isolated from Kentucky local supply chain and development of novel therapeutics for infection control in pre-harvest stages of beef

Name of Contractor: National Institute for Animal Agriculture

Start Date: 10/1/2023

End Date: 9/30/2026

CBB/BPOC Funding Request for this AR: \$1,250,000

CBB/BPOC Funding Request for this Tactic: \$1,250,000

Tactic A | 2413-R

Molecular epidemiology and antimicrobial-resistance profile of Salmonella isolated from Kentucky local supply chain and development of novel therapeutics for infection control in pre-harvest and post-harvest stages of beef
National Institute for Animal Agriculture

Tactic Description:

Salmonella is the leading cause of bacterial foodborne poisoning with significant public health importance worldwide. Beef and beef products (ground meat) are considered one of the primary sources of *Salmonella* infections in humans. Beef cattle raised on open pastures can be infected with *Salmonella* from different sources such as food, water, soil, or other environmental sources. There is also a high risk of circulating different *Salmonella* serotypes, increasing the risk of its transmission to humans through the food chain. We hypothesize that early detection of *Salmonella* in beef cattle will help track the source of infection, reduce the risk of infection transmission between different animal species and humans, reduce the incidence of outbreaks, reduce the prevalence of antimicrobial resistance, and consequently improve *Salmonella* prevention and treatment strategies. This hypothesis can be achieved through specific objectives:

1. Monitor the burden of *Salmonella* infection and determine the frequency and distribution in beef's pre-harvest, harvest, and post-harvest stages of the Kentucky local supply chain. In this specific aim, we will:
2. Collect samples from beef cattle at pre-harvest and post-harvest locations.
3. Isolate, identify, and confirm *Salmonella* strains.
4. Determine the phenotypic and genotypic antimicrobial drug resistance in *Salmonella* isolated from food animals.
5. Assess the risk factors, identify the contamination source, and tackle the transmission dynamics of Salmonellosis.
- In this specific objective, we will use whole genome sequencing to understand where the *Salmonella* infection originates—allowing us to know where to apply the mitigation measures, either at the pre-harvest or post-harvest stage.
6. Develop novel therapeutics for the control of antibiotic-resistant *Salmonella* in pre- and post-harvest stages. Here, we propose using some of the novel approaches we have discovered and developed at the University of Kentucky.

Rationale of this study

***Salmonella* infection is estimated to cause 1.35 million infections, 26,500 hospitalizations, and 420 deaths in the USA alone per year. The estimated annual cost of medical treatment for *Salmonella*-related foodborne illnesses in the USA alone is between \$2.3 and \$11.3 billion (CDC, 2022).**

The long-term goal of this study is to improve disease prevention and treatment strategies for Salmonellosis in locally produced and processed beef products. Control of the bacterial dissemination and transmission and prevention of the disease will consequently decrease the medical and economic burdens, expenses, efforts of healthcare professionals, and places for hospitalized patients and reduce the risk of mortality and morbidity. Additionally, studying *Salmonella* species in local Kentucky beef cattle will help to monitor and control the sources of infection that may not only lead to outbreaks but also control the epidemic and endemic crises caused by bacterial dissemination. The surveillance study will specify the exact contributing factors and the causes of Salmonellosis in beef cattle raised and processed in

Kentucky. Once the contributing factors have been identified, further research will determine the most effective practices (probiotics, bacteriophage, quorum sensing small molecule inhibitors, or est agriculture/processing practices) to mitigate the Salmonella risk. These practices will be shared with the industry to reduce the risk of antibiotic-resistant *Salmonella* in the Kentucky local beef food supply.

While previous Beef Industry-funded research on Salmonella has consisted primarily of literature reviews and correlational studies, this study is unique in its seeking of causal relationships pre- and post-harvest. Furthermore, this study can serve as a model for other geographies and sectors of the beef value chain.

▼ Measurable Objectives

Measurable Objective #1

The long-term goal of this study is to improve disease prevention and treatment strategies for Salmonellosis in locally produced and processed beef products.

Measurable Objective #2

Once the contributing factors have been identified, further research will determine the most effective practices (probiotics, bacteriophage, quorum sensing small molecule inhibitors, or est agriculture/processing practices) to mitigate the Salmonella risk. These practices will be shared with the industry to reduce the risk of antibiotic-resistant Salmonella in the Kentucky local beef food supply.

Measurable Objective #3

Applicable conversation guides will be developed for qualified state beef councils and Beef Industry leaders to best communicate the research results and how the findings affect beef [food] safety. At least one shareable infographic will be developed to highlight in succinct form the research results.

LRP Initiatives Addressed by this Tactic

Grow Consumer Trust in Beef Production

- Educate medical, diet, and health professionals about beef and beef production
- Align and collaborate with traditional and nontraditional partners to tell the positive story of beef cattle production

Improve the Business & Political Climate of Beef

- Drive continuous improvement in food safety

Safeguard & Cultivate Investment in Beef Industry Research, Marketing & Innovation

- Attract innovation and intellectual capital and cultivate the next generation of talent into the beef industry
- Increase industry funds for beef marketing, promotion, and research

▼ Checkoff Program Committee(s) to Score This Tactic

Committee(s) to Score This Tactic:

Safety & Product Innovation, Stakeholder Engagement

STAKEHOLDER ENGAGEMENT COMMITTEE

Tactic Score Sheet Considerations, Scores, and Notes

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