Findings and Recommendations for Supporting Meat Slaughtering and Processing in Maine Pursuant to L.D. 493

January 31, 2022
I. Executive Summary

During the 130th Regular Session, L.D. 493, *An Act To Allow Custom Slaughterhouses to Produce Cuts of Meat to Be Sold Commercially in the State*, was heard before the Joint Standing Committee on Agriculture, Conservation and Forestry (ACF Committee). The ACF Committee ultimately carried the bill forward; however, it also instructed the Department of Agriculture, Conservation and Forestry (DACF) to convene a working group in 2021 to discuss the issues facing custom slaughterhouses. These issues include the urgent need for more meat processing in the state to meet intense demand, more inspectors, additional financial support, and increasing the labor force.

DACF’s working group effort consisted of:

- Holding two listening sessions with custom and inspected processors and one-on-one conversations with processors and other stakeholders regarding the challenges facing the industry.
- Multiple consultations with the University of Maine and Cooperative Extension regarding meat processing and food safety training.
- Conducting a survey to ascertain infrastructure needs within Maine agriculture, with results indicating that meat processing infrastructure is considered a high need and priority among agricultural and food industry respondents.
- Outreach to the Maine Department of Labor, Maine Department of Corrections, and Maine Community College System regarding labor workforce training.
- Submittal of a joint DACF-University of Maine grant application (ultimately unsuccessful) to USDA to conduct a state-specific meat processing feasibility study.
- Outreach to Maine meat and poultry producers to encourage their application for USDA Meat and Poultry Inspection Readiness Grants and provided information on accessing technical assistance for the grant process. Seven projects were funded, three of which are for new inspected slaughter and processing facilities.
- Requested additional staff support for the Maine Meat and Poultry Inspection Program (MMPI) in the pending 2022-2023 supplemental budget.
- Outreach to other states to learn about models for labor training programs specific to meat processing.
- Ongoing review of USDA funding opportunities specific to meat and poultry processing, including the Food Supply Chain Guaranteed Loan Program, announced December 9, 2021.
- Launch of DACF’s Agriculture Infrastructure Investment Program in January 2022 and outreach to inspected, custom, and poultry exempt operators about the program.
- Creation of a new DACF Variance Committee to review and grant variance requests from the Maine Food Code to allow retail operations to expand into smoked/cured meat production. The expansion of retailers’ capability to produce these products will ease bottlenecks on smoking/curing operations at USDA and State-inspected facilities.

Based on this strategic engagement regarding meat and poultry processing bottlenecks and challenges in Maine, the following themes and issues were identified as requiring additional policy engagement and support:
• Lack of labor is the most pressing issue facing processors. Skills training is needed to build a sustainable labor force.
  o Apprenticeships, certifications, vocational courses, and train-the-trainer models should be pursued, including with new Americans and non-traditional workers (e.g., incarcerated individuals).
• The cost of doing business is rising and, in some instances, outpacing the profitability of processors.
• Infrastructure investments are needed to enhance existing plants and start new plants, particularly in locations across the state that currently lack processing resources.
  o Infrastructure investments should include technological resources to help plants better manage scheduling.
• State and federal infrastructure investment programs will be available in 2022, including competitive grant and loan offerings.
• Business planning and training is needed to help plants navigate slower periods of business.
• Education is needed for livestock producers, especially new producers, to better understand animal readiness for processing. The current processing bottlenecks can result in increased costs to producers, as extended wait times mean that they must feed and care for livestock longer than may be optimal.
• More inspectors are needed in the DACF’s MMPI program.

Based on this feedback, the recommendations from the Department to the ACF Committee are for:

• DACF to formally create an Exploratory Committee to prioritize workforce training strategies with the Maine Department of Labor, the Maine Department of Corrections, the Maine Community College System, the University of Maine Cooperative Extension, and processors to report to the 131st Legislature with policy and funding recommendations. Strategies may include a work-release program, the creation of a community college curriculum and certificate program in meat cutting, train-the-trainer modules, and possible funding for mobile training and processing units similar to other states.
• The Legislature to permanently allocate funding to support a new University of Maine Cooperative Extension Hazard Analysis Critical Control Point (HAACP) Coordinator. The position would be responsible for assisting the development and drafting of HAACP plans for processors.
• The Legislature to support the pending Supplemental Budget to make a current limited-term MMPI inspector permanent and to add one new permanent MMPI inspector on staff.
• The Legislature to allocate funding to support a Maine-specific feasibility study conducted by the University of Maine identifying the financial, physical, regulatory, and cultural barriers to increased red meat and poultry slaughter and processing in the state. This study will provide important financial, regulatory, and technical information to potential investors in new or existing processing facilities in the state.
II. L.D. 493 Request to DACF

The ACF Committee sent a letter to DACF dated June 16, 2021, that requested the Department to “convene a working group . . . to discuss the many issues surrounding custom slaughterhouses” and to “report back to the ACF Committee with findings and recommendations no later than February 1, 2022.” (See Attachment 1). The letter further stated that “[t]he sponsor of L.D. 493 and members of the committee believe that the Department needs to do the following: hire more inspectors, provide funding to help custom slaughter operations meet growing demand, and work with the Department of Labor to increase the labor force. It is our understanding that federal help may be on the way via the Strengthening Local Processing Act. Please keep us informed on the federal front.”

In working to meet the requests made in the ACF Committee’s letter, DACF held two listening sessions (discussed in detail in Section V below) and engaged in discussions with stakeholders at the University of Maine Orono and Cooperative Extension, as well as individual processors. Those staff members and individuals engaged include:

**DACF Participants**
Nancy McBrady, Director, Bureau of Agriculture, Food and Rural Resources
Claire Eaton, Director, Natural Resource Markets and Economic Development
Celeste Poulin, Director, Quality Assurance and Regulations Division
Dr. Jennifer Eberly, Director, Maine Meat and Poultry Inspection Program

**University of Maine/Cooperative Extension Participants**
Dean Hannah Carter
Dr. Jason Bolton
Dr. Beth Calder
Dr. Hobson Machado

**Listening Session Processor & Stakeholder Participants**
Ted Colburn, Beech Hill Farm & Bison Ranch
Trey Gilbert, Herring Brothers
Nichole, Windham Butcher Shop
Kevin Woldemach, Pineland Farms
Mark Sprackland, Independent Retailers
Will Nunnally, Perseco Processing
Scott Greaney, Greaney’s Turkey Farm
Tom Wagner, Provider’s Farm
Don Castonguay, Castonguay Meats
Christine Cummings, Maine Grocers and Food Producers Association

**Other Agency & Stakeholder Participants**
Department of Labor: Commissioner Laura Fortman, Deputy Commissioner Kimberly Smith, Bureau of Employment Services Director Kimberly Moore, and Director of Special Projects, Sam Dina
III. Maine’s Current Meat and Poultry Processing Landscape and State Inspection Capacity

DACF oversees the Maine Meat and Poultry Inspection (MMPI) program. The MMPI program is responsible for providing daily inspection to eight State-inspected facilities and performs annual food safety inspections at 44 custom slaughterhouses and processors and 60 poultry operators (under $1,000 exempt category). The eight facilities inspected daily by the MMPI program represent half of the state’s total inspected red meat slaughter capacity and half of the inspected poultry capacity. MMPI inspects the only certified organic poultry facility in the Northeast. In Federal FY20, MMPI-inspected facilities produced 1.5 million pounds of red meat and processed 33,000 poultry birds, an increase of 43% and 74% from FY19, respectively. In FY21, red meat processing fell by 100,000 pounds, to 1.4 million pounds; however, this amount represented 350,000 more pounds of red meat processed than in FY19. Poultry production also increased almost 75% in 2021 over 2020, to 46,200 birds.
The MMPI program operates under two critical Cooperative Agreements with the USDA-Food Safety Inspection Service (FSIS). One allows Maine to operate a State meat inspection program. The second enables Maine to operate the Cooperative Interstate Shipment (CIS) Program, whereby State-inspected facilities that join the CIS program can sell State-inspected meat across state lines. Custom processors are inspected annually. The meat produced by custom operators must be marked as “Not-For-Sale” and can only be used for the personal use of the animal’s owner, family, and non-paying guests.

Maine has long struggled with inadequate institutional capacity for animal slaughter. There are simply not enough inspected slaughterhouses in the state to slaughter and process the number of animals that Maine producers wish to raise. In response to this need, the MMPI program was created in 2003 by the Legislature to supplement the existing over-capacity USDA-inspected facilities in the state. Slaughter and processing capacity in the state doubled with the advent of the program, but as of 2019, all USDA and State facilities were once again at or over capacity. The meat shortages that occurred in 2020 when the large out-of-state meatpacking plants had to shut down during the COVID-19 pandemic accelerated the capacity problem drastically. At present, producers must make appointments for animal processing at inspected facilities many months or even years in advance and often are making appointments for the slaughter and processing of animals not yet born.

The pandemic also laid bare the long-standing problem of massive consolidation within the meat and poultry industries. When many large meat and poultry plants were shut down due to in-plant COVID-19 outbreaks, regional distributors in the Northeast were running out of meat and poultry products to supply to rural Maine supermarkets since Maine is at “the end of the line” for
meat and poultry distribution due to geography. Although local producers and processors were able to meet some of the needs, the imbalance of production and processing capacity hindered the ability to fill the gap caused by supply chain disruptions. Although conditions at the large meatpacking plants have improved, the 2021 cyberattack of JBS meats, which controls approximately 20% of the U.S. processed beef supply, showed another vulnerability resulting from massive consolidation of the meatpacking industry upon local and regional food systems, which continues to have detrimental effects on Maine’s food supply.

The demand for slaughter and processing in the wake of the pandemic also increased the demand for the MMPI program. MMPI’s inspectors must be on-premise at inspected facilities to ensure appropriate sanitation procedures are followed during processing. In 2020, DACF reallocated a temporarily vacant position to MMPI so the program could provide additional state inspection to alleviate the backlog. DACF also worked with the University of Maine and utilized MMPI trained inspectors from DACF’s Weights and Measures program to provide temporary inspection at three custom facilities in summer 2020 to meet the increased demand for meat and poultry products during the pandemic. In 2021, the MMPI program operated at full capacity. Budget support from the Legislature allowed for the limited-term funding of an analyst and inspector position in 2021. However, it is clear that these need to be converted to permanent positions, and at least one additional inspector position will be needed for the two new slaughterhouses joining the program as a result of a federal grant (discussed in Section IV below) and to allow MMPI to keep pace with other demands for its inspection services. Further capacity may very well be needed once Agricultural Infrastructure Investment Program funds, and other federal funds, are distributed if that results in new or expanded facilities.
IV. Assessing Meat and Poultry Processing Infrastructure Needs

Understanding the meat and poultry processing bottlenecks and industry needs has been a priority of DACF predating L.D. 493 and the ACF Committee’s letter. However, we appreciate that the ACF Committee’s request has helped crystalize DACF’s focus and allowed for a full compilation of the work undertaken to understand this sector’s needs. During 2020 and 2021, a host of federal and state financial resources and opportunities arose that have and will continue to provide much-needed support to meat and poultry processors in Maine. Significant funding has already started to reach processors, which will help to expand processing capacity.

Department Outreach in 2020

Outreach to meat processors by DACF began in 2020 during the pandemic to understand resource constraints in light of growing local demand. It was obvious that processors were unable to meet market demands and that facilities were overwhelmed. Some processors reported in mid-2020 that they were already 100% booked for 2021. The surge in demand resulted in turning down additional business, which represented a significant opportunity loss. It was estimated that some processors could do up to 50% more business in 2020 alone, given sufficient space and infrastructure. One inspected facility processed 1,200 head of beef between January 2020 and October 2020, while they had processed 1,125 head in all of 2019. It was indicated that, even if 25% of the customers who bought animals for fall slaughter at customer processors continued their business into 2021, the system would remain overwhelmed. Meanwhile, the delays in finding available processors resulted in increased feed and husbandry costs on livestock producers.

DACF also heard from producers that while there was an immediate need for expansion among custom processors, there was also a need for more inspected slaughterhouses. Unfortunately, many small custom operations rely on old, less efficient equipment and insufficient infrastructure and were not – and continue to not be – in a position to become inspected. Furthermore, these processors have little incentive to take on the financial and administrative burden associated with inspection, given the overwhelming demand in the custom market. This dynamic leaves a major gap in the inspected processing supply chain in a market that could support additional volume. Labor shortages exacerbated production challenges, as processing is labor-intensive and often seasonal. There was serious concern within the industry regarding the burnout of their employees. Facility expansion would allow processors the space to accommodate additional employees, time-saving equipment, and increased cooling and freezing capacity to handle the increased demand for their services.

The targeted investment opportunities identified through this outreach to processors were:

- Increased facility/building square footage for processing;
- Additional livestock holding pens;
- Expanded refrigeration;
- Labeling machinery (for private label business);
- Vacuum bagging equipment;
- Grinders;
- Workforce development; and
• Additional state inspection staff.

At the time of this outreach, multiple existing facilities expressed readiness to scale up if they could access financial support.

2020 CARES Act Investment in Meat Processing

In December 2020, DACF launched the CARES Agriculture & Food Infrastructure Reimbursement Program, which offered up to $100K in reimbursement to farms and processors for unanticipated infrastructure costs (e.g., equipment, PPE). The program was made possible by federal COVID relief funding allocated to DACF by Governor Mills. Over $17.3 million was awarded through the program, including approximately $1.4 million to meat and poultry businesses (farms, processors, and value-added producers). **Approximately $904,000 was awarded to meat processors specifically.** Funding supported projects that focused on expanding animal holding and feed capacity, increasing refrigeration, expanding slaughtering capacity, and meat cutting and processing equipment purchases.

2021 Heritage Industry Survey & University of Maine Research Verifies Continued Need and Identifies Opportunities

The success of the CARES Agriculture & Food Infrastructure Reimbursement Program and data gleaned from the strong response to the program indicated that further investment in agricultural infrastructure in Maine was needed. DACF continued collecting information related to infrastructure expansion opportunities by collaborating with the Department of Marine Resources and Department of Community and Economic Development to survey Maine’s agriculture, forestry, and fisheries sectors to determine specific investment priorities within the heritage industries in May 2021. Agriculture responses generally indicated that key opportunities include expanded on-site storage, increased processing capacity, and increased packaging capacity. Agriculture respondents identified federal and state grants as most important to future infrastructure upgrades, with significantly fewer stakeholders interested in relying primarily on loans and private capital. The survey data suggests that, for over 50% of agriculture stakeholders, investments of $100,000 or less would allow for significant improvements to their business. Over 70% of agriculture respondents indicated that they could afford necessary infrastructure upgrades with investments under $250,000. This data is consistent with other information gathering DACF has conducted by directly connecting with stakeholders in meat processing, grain and malting, dairy, and other sectors.
According to a recent study conducted by the University of Maine School of Economics on behalf of DACF, the presence of processing facilities can provide opportunities for food and agricultural value-added production in a region, and these businesses support local jobs and are stable outlets for agricultural products. The amounts of agricultural products grown and raised on Maine farms in the four priority areas identified in the study (dairy processing; meat processing; grain storage, and drying; and fruit and vegetable co-packing and processing) have the potential to support expansions in statewide food and agricultural processing infrastructure. This study considered a specific investment scenario wherein Maine would experience a 50% increase in local slaughtering and processing capacity. Given the number of animals currently raised on Maine farms, the state could support an estimated 259 jobs in the Animal Slaughtering and Processing industry. Compared to the actual 2018 employment of 86 workers in these businesses, Maine could expand this food processing sector by more than 170 workers. According to the results of the economic impact analysis, a 50% increase in meat processing in Maine would result in a total of $15.3 million in sales, 74 jobs, and $2.9 million in labor income (including multiplier effects).
The MMPI program, in concert with the University of Maine Cooperative Extension, submitted a grant application to USDA’s Regional Food System Partnerships Program to conduct a feasibility study titled “Barriers and Solutions to Expanded Meat and Poultry Production in the State of Maine.” The grant proposed a 24-month study to identify the financial, physical, regulatory, and cultural barriers to increased red meat and poultry slaughter and processing in Maine, inspired by similar feasibility studies conducted by Tennessee and Michigan that had proved beneficial for their meat processing industries. Although ultimately the project was not funded, the grant writing effort was useful for DACF and University of Maine Cooperative Extension personnel as they continued to discuss barriers within Maine as part of the ACF’s committee request. Both entities hope to conduct this feasibility study in the future through alternative funding support, as discussed in part VII of this report.

2021 USDA Meat and Poultry Inspection Readiness Grant

In spring 2021, the USDA announced a new Meat and Poultry Inspection Readiness Grant (MPIRG) Program to assist established meat and poultry slaughter and processing facilities to obtain a Federal Grant of Inspection (USDA) or to operate as a State-inspected facility under the Cooperative Interstate Shipment (CIS) program. The MMPI program reached out directly to all State-inspected, custom exempt, and 20,000 poultry exempt processors to encourage interested parties to apply. Recipients were announced in November 2021, and seven Maine applicants were awarded funding for a total amount of $1,145,000 in support. As a result of this grant, there will be two new MMPI plants and one new USDA plant within the next three years. Four state plants will ultimately move into CIS interstate status. While this will involve significant effort on the MMPI program to perform HACCP and Food Safety Audits before these establishments can move into the CIS program, the benefit will be an increase in Maine meat that can be sold in and out of state, strengthening the Maine brand and market. Grant recipients included:

Recipient: West Gardiner Beef
West Gardiner, Maine

Table 3d. Statewide Economic Impact of a 50 Percent Increase in Maine’s Animal Slaughtering and Processing Sector

<table>
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<th></th>
<th>Direct</th>
<th>Multiplier Effects</th>
<th>Total</th>
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<td>Employment</td>
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<td>Labor Income</td>
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Source: EDA University of Maine Staff Paper: 2021-103—Economic Impacts of Investments in Food and Agricultural Processing Infrastructure in Maine (November 2021)
Award Amount: $150,000
Grant scope: Expand capacity and operate facility under the MMPI CIS program. Install a 16 x 24 cooler with rail access and product handling equipment to increase capacity by 5 to 8 beef cattle per week. The cooler will also accommodate external access with a rail system to accommodate handling of whole carcasses for customers who need slaughter services only. It also will allow for replacement of a 45-year-old smokehouse with a new higher capacity, more flexible smokehouse.

Recipient: Hatch's Custom Meat Cutting
Crystal, Maine

Award Amount: $200,000
Grant scope: Make improvements to the existing MMPI inspected facility to accommodate a larger volume of livestock during months of higher demand and move to MMPI CIS program. Expansion and selected reconfiguration will enable more efficient operations, thus resulting in increased productivity and processing capacity.

Recipient: Jason’s Butcher Shop
Albion, Maine

Award Amount: $200,000
Grant scope: Facility upgrades including ceiling and wall repair in the meat processing room, ceiling and wall repair in smoker room, ceiling and wall repair on the kill floor, concrete floor repair in smoker room, plumbing repair, and repair of the cattle handling/intake area to become an MMPI CIS inspected establishment.

Recipient: Rooney’s Meat Shop, LLC
Mapleton, Maine

Grant scope: Upgrade a newly constructed facility to meet the requirements to obtain USDA inspection, including new vinyl wall and ceiling surfaces, stainless steel rail systems and other product moving equipment, Polyethylene cutting tables, inspected scales, air curtains, packaging, and labeling equipment and refrigeration equipment. Grant funds will also help obtain technical assistance with a sanitation SOP, a HACCP plan, and developing product labeling.

Recipient: Colvard & Company LLC
Southwest Harbor, Maine

Award Amount: $200,000
Grant scope: Improve meat processing capacity, develop new products, and expand markets, and increase access to Colvard’s processing facility for smaller farmers as an MMPI CIS establishment.

Recipient: Weston’s Meat and Poultry
West Gardiner, Maine

Award Amount: $200,000
Grant scope: Expand red meat and swine operating capacity by 75% to respond to the growing demand and achieve MMPI CIS status. This will include expanding the existing facility by 828 square feet to improve operational efficiency, health and safety practices, and productivity.
Recipient: Nest & Mullen LLC
Kennebunk, Maine
Award Amount: $200,000
Grant scope: Rebuild and recover from the 2020 fire that destroyed the plant and caused the company to use a smaller, inefficient temporary building for its operations, and enter the MMPI CIS program.

2022 DACF Agriculture Infrastructure Investment Program

In December 2021, DACF launched the Agriculture Infrastructure Investment Program (AIIP), which will invest more than $19 million in federal funds to help Maine farmers and food processors improve critical infrastructure. This funding will enable farms and agricultural businesses to pursue upgrades that will mitigate the adverse effects of COVID-19, increase the supply of Maine-grown food, enhance supply chain resilience, and help grow and sustain one of Maine’s heritage industries. Grants of up to $500,000 will be available with no match required. **Meat and poultry processing improvements and infrastructure investments will be eligible.** Notably, the funding may be utilized for technology that allows increased capacity (to meet unanticipated demand) or business resilience (including software and hardware related to business functions, logistics, inventory management, plant production controls). This could include technology solutions for online scheduling/appointment management, which currently is a bottleneck for producers as explained in Section V. The MMPI program directly reached out to all USDA and MMPI inspected, custom exempt, and 20,000 poultry exempt processors to alert them to the opportunity.

2022 Variance Committee Development

In early 2022, the DACF’s Quality Assurance & Regulation (QAR) division established a process for reviewing variance requests under Maine’s existing Food Code. The Maine Food Code does not allow for the production of cured meats, reduced oxygen packaged foods, and other high-risk foods unless the retailer has been issued a variance from DACF. The new QAR Variance Committee will review variance requests from the Maine Food Code to allow retail operations to expand into smoked/cured meat production. Expansion of retailers’ capability to produce these products will ease bottlenecks on smoking/curing operations at USDA and State Inspected facilities.

2022 USDA’s Food Supply Chain Guaranteed Loan Program

In December 2021, USDA announced its new Food Supply Chain Guaranteed Loan Program, to be administered by USDA Rural Development Agency. USDA will partner with lenders to guarantee loans of up to $40 million to help eligible entities expand meat and poultry processing capacity and finance other food supply chain infrastructure. Lenders may provide the loans to eligible cooperatives, corporations, for profits, nonprofits, Tribal communities, public bodies, and people in rural and urban areas. Funding may be used to start up or expand food supply chain activities such as aggregating, processing, manufacturing, storing, transporting, wholesaling, or distributing food. MMPI staff continue to monitor the roll-out of this program and have provided information to processors about this opportunity.
2022 Biden-Harris Action Plan for a Fairer, More Competitive, and More Resilient Meat and Poultry Supply Chain

On January 3, 2022, The Biden-Harris Administration announced it will dedicate an additional $1 billion in American Rescue Plan funds to USDA for expansion of independent processing capacity in meat and poultry processing. For instance, in spring/summer 2022, USDA expects to provide gap financing grants totaling up to $375 million for independent processing plants that fill a demonstrated need for more diversified processing capacity. It will further deploy up to $275 million in partnership with lenders to make more capital available to independent processors that need credit. Details on how these funds will be allocated are still emerging, but DACF is monitoring announcements as they come out so we can disseminate the information to Maine livestock and poultry producers and processors.

2021 and 2022 MMPI Staffing

In 2021, a new permanent MMPI inspector position and a new permanent Inspection Process Analyst position were authorized by the Legislature. The Inspection Process Analyst position was filled on January 10, 2022, and the role will be critical to allow MMPI to conduct the extensive audits required for the new CIS and MMPI inspected facilities. The MMPI Inspector hired in 2020 using a vacant position from elsewhere in the division was moved into the new authorized MMPI inspector position. However, this position was term-limited by the Appropriations Committee. As a result, DACF has requested permanent funding for this position in the 2022-2023 supplemental budget, as well as fully funding one new inspector.

Photo courtesy Hatche’s Custom Meat Cutting
V. Listening Session Details

As part of its effort to respond to the ACF Committee’s request to work with processors within the state to understand barriers to their success, DACF held two virtual listening sessions in September 2021. The meetings were publicly noticed via DACF’s Gov Delivery email platform, and the MMPI program also reached out directly to all custom and inspected processors to invite them to participate. On September 14, 2021, the listening session for inspected processors was held. The custom processor listening session occurred on September 22, 2021.

A high-level summary of the topics discussed and key suggestions follow below:

**Labor:**
- The most often cited bottleneck for meat processing in the state was the lack of an available labor force.
  - Processors cannot compete against other jobs (e.g., retail) that pays $16.50 or more an hour.
  - For some, holding onto highly skilled workers has prevailed. Less so with less skilled staff.
  - Expansion of processing capacity, including the construction of new facilities, must involve thoughtful workforce strategies that help ensure labor requirements can be met and sustained.
- Skills training is needed to build a consistent labor force.
  - Consider strategies for engaging vocational schools.
  - Consider labor constraints by geography (e.g., areas that do not benefit from a local community college that is able to feed the labor stream).
  - Enhance culinary arts training at local community colleges to increase interest in meat cutting and butchering.
  - Consider opportunities for collaboration with Department of Corrections programs that could impart trade experience and help previously incarcerated individuals find jobs in the sector.
  - Explore opportunities to collaborate with other agencies and organizations, including the Department of Education, Department of Labor, community colleges, and Farmer Resource Network.
  - Build connections with organizations that work with diverse communities, including minority groups and beginning farmers of all backgrounds.
  - Provide technical assistance grants so that training can be conducted by existing processors (a “train the trainer” model).
  - Planned agricultural clusters may help drive food security, such as small processors in strategic areas of the state.

**Cost of Doing Business:**
- Business costs are increasing. Expenses related to cardboard, plastic wrap, containers, insurance, spices, electricity, and healthcare are all rising.
Meat product prices are increasing simply to keep up – no price gouging is occurring.

Infrastructure Challenges:
- Investments in current processing plants will allow some to only meet existing demand.
- Need for additional Stage 1 (slaughter) capacity.
- Significant investment in larger facilities is needed.
- More state MMPI inspectors will be needed to keep up with current and future demand for inspection services. Ensuring and enforcing food safety protocols is critical to the success of capacity expansion.

Seasonality Challenges:
- The seasonality of meat processing is a real issue. Feeding and raising livestock over the winter takes skill; many producers do not want to do this. But the restaurant/farm-to-table/farmers’ market demand can allow some to carry through. Businesses need to plan appropriately.
  - Increase resilience by expanding to multi-species focus and increasing processing flexibility to help weather slower business periods.

Business Assistance Needed:
- Processors need assistance, whether scheduling or reminding appointment holders of upcoming appointments and the need to confirm. Most are too busy to take on this back-office task.
- Consider having DACF support technology solutions for online/automatic scheduling.
  - New people are getting into growing cows, pigs, and chickens. Some are making appointments 6-12 months in advance – with multiple processors – and then when they do not need the appointment, they do not call to cancel.

Educational Assistance to Livestock Producers:
- More education is needed for livestock producers, especially new producers.
  - Provide tips for successful and appropriate slaughtering (e.g., appropriate weights, seasonality).
  - Help producers understand the difference between Custom, State, and USDA facilities and the rules regarding marketing, selling, and labeling.

VI. Labor Discussions

Maine Department of Labor

In consultations with the Maine Department of Labor (DOL), DACF conveyed the need for workforce development and skills training within the Maine slaughter and processing community. DOL was particularly receptive to the idea of apprenticeship training and the desire to reach out to non-traditional employees. As part of the Maine Jobs and Recovery Plan, DOL is working to finalize plans to launch a grant program that will support developing new and expanding existing apprenticeship and pre-apprenticeship programs, which provide high-quality
bridge programs to registered apprenticeships. This grant program will allow employers, industry associations, unions, and community organizations to apply for funding to create apprenticeship and pre-apprenticeship programs for their businesses. The Request for Applications is expected to be published in January/February 2022. In addition, DOL will also be issuing an RFA specifically focused on forming industry partnerships of employers with shared workforce needs. The Industry Partnerships Initiative seeks to identify, support, and help grow workforce collaboratives in strategic sectors of the state’s economy—composed of businesses, employers, workers, labor unions, and/or industry associations. Leveraging American Rescue Plan Act funds, these workforce collaboratives will identify shared workforce development needs related to recruitment, training, and education, retaining and advancing workers, and develop solutions to address these shared challenges. DACF will promote these two upcoming opportunities to the processor cohort.

DOL also offers a long-standing “Maine Apprenticeship Program” that assists in setting up structured yet flexible training programs designed to meet the specific needs of Maine employers through on-the-job learning and related classroom instruction. Apprenticeship programs can be sponsored by employers, employer associations, or labor/management groups that can hire and train in a working situation. DACF will encourage interested processors to connect with DOL to determine whether the Maine Apprenticeship Program could meet their business needs. More information about the Maine Apprenticeship Program can be found at: https://www.maine.gov/labor/jobs_training/apprenticeship/

DOL also referenced a successful pre-pandemic program that allowed for job fairs to be conducted at Maine correctional facilities. Employers within the construction industry had particularly successful results in recruiting new employees upon release from prison. DOL offered that this could potentially be a model for meat processors and would be willing to explore revisiting this idea when public health concerns regarding COVID-19 have abated. In the interim, employers should be aware that the Maine Worker Opportunity Tax Credit Program currently exists, allowing employers to receive Federal income tax credits for their companies should they hire ex-felons within one year of release or the date of conviction, veterans, and other populations meeting certain eligibility requirements. More information about this tax credit can be found at: https://www1.maine.gov/labor/careerctr/docs/8%20ways%20employers_wotec_program_brochure_5_24_12%5B1%5D.pdf

Given that some employers in Maine have successfully created linkages with employees from diverse racial, ethnic, and religious backgrounds, a resource for employers interested in learning how to engender a more inclusive working environment can be found at the City of Portland’s Employer Hub: https://www.portlandofopportunity.com/employer-hub-home

Maine Department of Corrections and Maine Community College

DACF staff discussed the labor constraints facing the slaughter and processing industry with the Maine Department of Corrections (DOC) and Maine Community College (MCC). Given DOC’s and MCC’s existing close connections regarding training opportunities for incarcerated individuals, it was agreed that further partnership focusing on meat processing skills training
could be possible in the future, especially given the relatively low barrier of entry for unskilled workers.

Work-release programs currently successfully operate at several of Maine’s correctional facilities. DOC Commissioner Liberty suggested that a meat processing work-release program could be explored from their Bolduc and Charleston facilities, as well as the Southern Maine Women’s Reentry Facility. However, in all cases, transportation would need to be provided by an outside party (likely the employers). The group agreed to continue to explore this opportunity and to involve interested employers in the discussion.

Another option discussed was the potential to outfit existing correction facilities to allow for meat processing training to occur on-site. The corrections facilities already have large commercial kitchens and cold storage capacity. MMPI staff and other DACF staff in the Quality Assurance and Regulations Division will visit existing DOC locations to determine what may be needed to allow these facilities to accommodate meat training classes and training on-site. If specialized equipment or other materials is necessary, a budget for obtaining them will be created and presented to the Legislature next session.

With on-site training potentially an option at one or more correctional facilities in the future, an appropriate curriculum will need to be developed. MCC was encouraged to hear that Oklahoma and Minnesota have created a curriculum to train vocational students, which could serve as a model. Beyond curriculum development and facilitation, however, MCC was also amenable to considering building a certificate program relating to meat cutting. The certificate program could be applicable to any DOC training program created and likely also be leveraged within the MCC system, where culinary training programs already exist at five of the seven state community colleges.

Lastly, MCC noted that it is possible for employers, or groups of employers, to work with MCC to create custom worker skills training opportunities, including apprenticeships. In some instances, with employer assistance, MCC can help provide monetary support to help cover the wages of employees undergoing training. This is because training can sometimes take place during working hours, where employees would otherwise be earning their hourly wage. The parties agreed that further discussion around this concept was necessary, including directly connecting interested processors with MCC staff.

Overall, based on MCC’s academic and workforce training experience and DOC’s kitchen facilities and interest in providing skills-based training to enhance job readiness, tangible opportunities may exist to build out meat cutting training support. The group agreed to form an exploratory committee that will continue to meet regularly and further develop these ideas.

**Other State Training and Technical Assistance Models**

DACF has made some preliminary inquiries into workforce development programs in other states to find out how to increase the number of individuals trained for meat cutting. Some of the highlights of our conversations with other states include:
• Oklahoma Department of Agriculture provided CARES Act funding to their Vocational Training Division, which used it to purchase a mobile processing unit and provide grants to high schools to purchase implements (knives, PPE, etc.) and cooler units.
  o The Oklahoma Vocational Training Division purchased and developed in-house curriculums for both online and high school meat cutting modules and is currently working on setting up apprenticeship programs.
• In Minnesota, two community colleges will be offering a one-semester course in meat cutting in the fall of 2022, followed by apprenticeships.
  o The Minnesota community college project was funded by the Minnesota Legislature (purchase of equipment) and the Minnesota Farmer’s Union (purchase of mobile unit to be used for training and as a USDA-inspected unit to be used for backlogs of slaughter as needed). The University of Minnesota developed the curriculum. Further information about these programs is included in Appendix 2.

University of Maine/Cooperative Extension – Current Meat Processing Training and Assistance

The University of Maine Cooperative Extension (UMCE) provides sanitation, Meat and Poultry HACCP and meat cutters training to support the meat and poultry industry in Maine. The sanitation training is a blended program that incorporates online Good Manufacturing Practice (GMP) and Sanitation Standard Operating Procedures (SSOP) education and in-person hands-on sanitation. This course is a prerequisite for the Meat and Poultry course. The Meat and Poultry course requires 16 hours of instruction and hands-on development of a HACCP plan at a cost of $275 and includes the sanitation course. The Meat Cutting school discussed below currently includes 35+ hours of contact lectures and hands-on training and costs $450. The program is in the process of transforming the lecture and demonstration components to an online platform that is followed by a hands-on element. The cost for the online training is anticipated at $75-$125.

The University of Maine’s Dr. Matthew Highlands Pilot Plant is a licensed custom meat processing facility. This typically allows UMCE to offer the meat cutting school with hands-on training to a large group of participants over the course of five days. Training focuses on the history of U.S. meat production, consumer trends, humane handling and slaughter of livestock, meat quality, food safety, labeling, and customer service. In addition, participants have hands-on training with beef, swine, and lamb cutting, and sausage making. This in-person course has been paused due to the COVID-19 pandemic, but the intention is to return to in-person training in 2022.

UMCE will also be offering “microcredentials” to support the food industry and meat processors. Those that complete sanitation, meat cutting, and/or HACCP trainings and “on the job” application of these skills can receive level one, two, three and/or the complete Food Safety badge signifying high competencies in these food processing vital skills.

Faculty and staff involved in these meat and poultry training resources are: Dr. Robson Machado, Assistant Extension Professor and Food Science Specialist, Dr. Jason Bolton, Extension Professor and Food Safety Specialist, Dr. Colt Knight, Assistant Professor of Extension and State Livestock Specialist, and Certified Executive Chef Robert Dumas, Food Science Innovation Coordinator and Facility Manager.
UMCE is currently exploring the possibility of establishing a small slaughter facility and a separate shared-use value-added processing facility that would build capacity in both the research/technical and educational efforts around meat processing. In addition, meat processing educational programs are being developed for both online audiences and as a part of the Maine Jobs and Recovery Plan funding that will be obtained for the University of Maine Center for Food Innovation.

VII. Recommendations

Based on this process of information collection and discussion with the working group and other resources, DACF has formulated the following recommendations to continue to support the sustainable growth of Maine’s meat and poultry processing industry.

Trained Labor Development:

1. DACF recommends the formation of an exploratory committee on Meat and Poultry Processing Labor, comprised of DACF, UMCE, DOL, MCC, DOC, meat and poultry processors, and other stakeholder groups. The charge of the committee will be to:
   a. Foster awareness of existing resources (such as DOL’s apprenticeship program) within the processor community;
   b. Prioritize and propose new programmatic resources, including a work-release program for incarcerated individuals (including developing facilities for meat and poultry processing), the creation of community college curriculum and a certificate program, train-the-trainer models, and potentially the creation of mobile training and processing units similar to other states.
   c. Return to the 131st Legislature in January 2023 with specific funding requests.

Enhance Technical Assistance:

1. DACF recommends that the Legislature allocate funding to the Department to underwrite a new position at UMCE permanently. This position will be responsible for assisting with the development and writing of HACCP food safety plans for meat and poultry
processors as well as seafood processors. It is anticipated that annual funding for this position will cost: $105,000 (total compensation, not including annual cost of living adjustments, etc.). UMCE does not have staff to support food safety plan development. With the addition of these services, processors would still be required to enroll in HACCP food safety trainings but would be coached through the process of writing their plan(s) by an expert. It is known that drafting of these plans is a time-consuming and rigorous process, so this service would alleviate a considerable hurdle to the meat inspection process in Maine.

2. DACF recommends that the ACF Committee support the Department’s current Supplemental Budget request to make a current MMPI limited-term inspector position permanent and to add one new permanent MMPI position to the program.

3. DACF requests the Legislature allocate $100,000 to support a Maine-specific feasibility study conducted by the University of Maine or other Maine academic institution identifying the financial, physical, regulatory, and cultural barriers to increased red meat and poultry slaughter and processing in the state. Based on these findings, the study will model three different theoretical red meat or poultry slaughter and processing operations in three geographically and economically diverse areas of Maine. This study will provide important financial, regulatory, and technical information to potential investors in new or existing processing facilities in the state.

4. DACF recommends that UMCE build out its current training capacity and outreach regarding animal finishing standards (i.e., livestock best practices leading to successful slaughter/processing) to include county extension agents. DACF will continue to partner with UMCE to help support these efforts.
   a. Note that DACF’s MMPI program will continue to be a source of educational and technical outreach regarding opportunities for processors. It will systematize a process to alert the processor community regularly of training opportunities, new funding opportunities, and other relevant industry resources.
ATTACHMENTS:

1. L.D. 493 Letter from Joint Standing Committee on Agriculture, Conservation and Forestry
2. Other States’ Meat Training Examples
   o OK Meat Processing Workforce Education Printout
   o Minnesota article: https://www.minnpost.com/greater-minnesota/2021/10/why-two-minnesota-colleges-are-starting-meat-cutting-programs/
3. UMCE/DACF 2021 feasibility study proposal to USDA’s Regional Partnership Grant
STATE OF MAINE
ONE HUNDRED AND THIRTIETH LEGISLATURE
COMMITTEE ON AGRICULTURE, CONSERVATION AND FORESTRY

June 16, 2021

TO: Nancy McBrady, Director Bureau of Agriculture, Food and Rural Resources
Department of Agriculture, Conservation and Forestry

FROM: Senator Jim F. Dill, Senate Chair,
Representative Margaret M. O’Neil, House Chair, and
Members of the Joint Standing Committee on Agriculture, Conservation and
Forestry

SUBJ: LD 493, An Act To Allow Custom Slaughterhouses To Produce Cuts of Meat To
Be Sold Commercially in the State

Earlier this session, the Agriculture, Conservation and Forestry (ACF) Committee held a public
hearing on LD 493, which proposed to authorize custom slaughterhouses to produce cuts of meat
to be sold commercially in the state.

As you know, the committee unanimously voted to carry over LD 493 to the Second Regular
Session. In the meantime, the ACF Committee respectfully requests that the department convene
a working group during the interim to discuss the many issues surrounding custom
slaughterhouses. In addition, the committee asks that the department report back to the ACF
Committee with findings and recommendations no later than February 1, 2022.

At the public hearing, the sponsor of the bill, Senator Timberlake testified that livestock
producers throughout the state are suffering. The COVID-19 pandemic highlighted the urgent
need for more meat processing in Maine. Senator Timberlake said that one of the biggest
obstacles facing slaughterhouses is the creation of the Hazard Analysis Critical Point Plan
(HACCP). The sponsor of LD 493 and members of the committee believe that the department
needs to do the following: hire more inspectors, provide funding in order to help custom
slaughter operations meet growing demand, and work with the Department of Labor to increase
the labor force. It is our understanding that federal help may be on its way via the Strengthening
Local Processing Act. Please keep us informed of any new developments on the federal front.

Thank you for your consideration and we look forward to hearing from you on this very
important matter.

c: Members of the Joint Standing Committee on Agriculture, Conservation and Forestry
100 STATE HOUSE STATION, AUGUSTA, MAINE 04333-0100 TELEPHONE 207-287-1327
Meat Processing Workforce Education

The Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma Department of Career and Technology Education have partnered to establish a meat processing training program. The training program was developed in response to the ever-growing need for workforce development in the meat processing industry.

The resources in the program include up to 64 hours of coursework with hands-on learning in the processing of beef, pork and lamb. Meat processing training is available at 11 high schools and 2 technology centers in the CareerTech system. Training can also be delivered via the Mobile Meat Processing Laboratory, a mobile classroom capable of traveling across the state to high schools, technology centers and industry partner sites. To learn more about the MMPL, contact Justin Siler.

In addition, CareerTech offers three self-paced online courses approved by the American Meat Science Association.

What you’ll learn:
- Meat Fabrication
- Packaging
- Labeling
- Food Handling
- Storage
- Food Safety
- Beef Grading
- Food Chemistry

Modules included in the curriculum:
- Preparing for Meat Processing
- Fabricating a Carcass
- Fabricating Fresh Meat
- Making Value-Added Products
- Packaging Meat Products
- Marketing Meat Products

Mobile Meat Processing Laboratory

Click this Mobile Meat Processing Laboratory link to download a copy of the flyer.

Course Descriptions
Frequently Asked Questions
AMSA Videos
Additional Resources
Meat Processing Online Courses
AMSA Food Safety and Science Certification (Cost - $75)
The American Meat Science Association Food Safety and Science Certification verifies individuals possess an in-depth knowledge of food safety procedures and standards necessary to thrive in the food industry.
For more information, download the brochure or scroll down to the bottom of the page to watch the video.
Enroll here: https://amsafoodsafetyandsciencecertification.eventbrite.com

AMSA Meat Evaluation Certification (Cost - $75)
The American Meat Science Association Meat Evaluation Certification verifies individuals are better prepared to enter fields related to the meat animal industry, which includes production and processing.
For more information, download the brochure or scroll down to the bottom of the page to watch the video.
Enroll here: https://amsameatevaluationcertification.eventbrite.com

AMSA Culinary Meat Selection and Cookery Certification (Cost - $75)
The American Meat Science Association Culinary Meat Selection and Cookery Certification verifies individuals possess the knowledge and skills needed to thrive within the restaurant and culinary...
industries. For more information, download the brochure or scroll down to the bottom of the page to watch the video.

Enroll here: https://amsaculinarymeatselectionandcookerycertification.eventbrite.com

For help enrolling in an online course, or for more information, contact Justin Siler.

Frequently Asked Questions

What are the requirements to take the online courses?
There are no requirements to be able to take the online courses.

Do I have to take all three online courses at once?
No, you can take the online courses one at a time, all at once, or any combination thereof.

How do I enroll in the online courses?
1. Choose the online course(s) you would like to enroll in.
2. Go to the Eventbrite link provided for each online course to register and pay for the course(s) you wish to take.
3. Email Justin.Siler@Careertech.ok.gov and let him know which online courses you have paid for.
4. He will send you the information to create your username and password to access the online course(s).
5. Enjoy the courses.

When can I enroll in the online courses?
You can enroll at any time.

How long does it take to complete the online course?
Since the course is self-paced, it can be completed as fast or as slow as you like, depending on the amount of time you can commit.

Who do I contact with questions before enrolling?
James Gordon is the designated contact for any questions. While taking the online courses, you can contact James Gordon or technical assistance at the iCEV website.

AMSA Videos

AMSA Meat Evaluation Certification

AMSA Meat Selection & Cookery Certification

AMSA Food Safety & Science Certification
Additional Resources
These videos were provided by the Oklahoma Beef Council and funded through Beef Checkoff.
- Beef fabrication videos
- Beef cutting guides
- Yield data
- Beef University
Why two Minnesota colleges are starting meat cutting programs

Central Lakes College and Ridgewater College are launching programs aimed at training the next generation of animal slaughter, butchery and processing workers.

By Walker Orenstein | Staff Writer

The Senate and House settled on $150,000 for Central Lakes College, and approved another $500,000 in grants to subsidize the mobile slaughter facility, shown above.

Friesla

Oct. 1, 2021  Starting next year, two colleges in the Minnesota State system plan to offer courses in a field not usually associated with higher education: meat cutting.
The Staples campus of Central Lakes College and Ridgewater College in Willmar and Hutchinson are launching programs aimed at training the next generation of animal slaughter, butchery and processing workers.

Central Lakes is even getting $150,000 from the Minnesota Legislature for its program, in part because lawmakers view it as a way to train workers for smaller and mid-sized processing facilities that make farmers less reliant on a handful of massive slaughterhouses — plants that shut down temporarily when workers got sick with COVID-19 early in the pandemic last year.

Dave Endicott, dean of the Staples branch of Central Lakes, said there are no college-level meat cutting programs in Minnesota and only seven that he knows of in North America, despite a shortage of qualified workers. “The workforce need is significant,” he said.

A new program on its way in Staples

In spring of 2020, a handful of the biggest meat processing plants in the Midwest closed temporarily when employees contracted COVID-19. That included JBS USA’s pork plant in Worthington, Smithfield Foods’ facility in South Dakota and Hormel turkey plants in Minnesota.

The situation was dangerous for workers, and it also created a backup for farmers who overwhelmingly rely on a few large slaughter plants in the region. With nowhere to slaughter animals, many farmers had to euthanize livestock and waste them — or send them to rendering plants, which kill animals and turn them into things like pet food.

The issues renewed a push among some lawmakers and state officials to expand and diversify meat processing in Minnesota by helping smaller and mid-size farms and slaughter plants, and the money for the meat-cutting program at Central Lakes College was part of that effort.

Initially, Republican legislators in the House and Senate proposed $2 million for courses at Minnesota State schools, and another $1 million to subsidize a “mobile slaughter unit” that can be used to train
students — but could also travel around the state to serve farmers. Some Democrats signed on to the bill as well.

Eventually, the Republican-led Senate and DFL-majority House settled on $150,000 specifically for Central Lakes to develop a meat cutting and butchery program, and approved another $500,000 in grants to subsidize the mobile slaughter facility.

Endicott, dean of Central Lakes’ campuses in Staples, said the college plans to offer a one-semester certificate program beginning in the fall of 2022. Central Lakes is still in the process of writing its curriculum and getting necessary approvals, but Endicott said he hopes to attract about 10 students to the program in the first year and grow to 20 or more students in the years after.

The program would teach everything from slaughtering to processing and packaging, which can prepare people to work in a range of places, including butcher shops, grocery stores and slaughtering facilities. “We’re really focused more on the small and medium-sized producers and trying to help alleviate where it gets jammed up in the system,” Endicott said. “It starts at slaughter, and then we also know we have a lot of our local butchers and local folks that are working in meat processing that are getting close to retiring.”

To help with the lack of slaughtering and meat-cutting capacity, Central Lakes was already exploring such a program before Endicott arrived at the school two years ago, and then “COVID came and it obviously exacerbated that need,” he said. Eventually, Endicott said the school might add a second semester of classes to include training in specialized meats, such as halal and kosher products or smoked meats.

Central Lakes is a good fit for the meat cutting courses because they have a 2,000-acre research farm and a “strong reputation in the ag world,” Endicott said. The college is also starting an agronomy program.
Currently, people can get hired in the industry without a meat-cutting certificate and get some on-the-job training, Endicott said. But the program is still worthwhile, he said, because Central Lakes expects students who graduate from the program to get paid more — and be able to move into management positions easier because of their understanding of the business.

In a March hearing in the Minnesota Senate on the legislation to fund a meat-cutting program, Eliza Theis, a veterinary medicine and master of public health student at the University of Minnesota working for the Minnesota Farmers Union, said she was part of a team that conducted case studies on small and mid-sized meat processors in the midwest. “Without fail, every meat processor identified labor as one of the top challenges for maintaining their business,” she said.

Central Lakes plans to charge tuition and fees, but Endicott said they hope to find businesses that will sponsor students or hire them while they’re still in school.

‘Mobile slaughter unit’

The college is also working to raise money to buy a mobile slaughter unit with help of the grant money so that students can learn how to slaughter animals with it for a few weeks each year. Right now, Endicott said they hope the Minnesota Farmers Union would own the slaughter facility, and Stu Lourey, government relations director for the farmers union, said the organization would contract with a local business to take the slaughter unit around the state to help reach farmers the rest of the year. (The Montana Farmers Union operates a similar mobile unit for students and farmers.)

Dan Skogen, director of government and industry relations for the Agricultural Utilization Research Institute, which is administering the grant money approved by the Legislature for the mobile slaughter facilities, said the units are similar to a semi-truck trailer and can typically handle fewer than 20 or 30 animals per day.
Skogen said the state is subsidizing the slaughter unit both to help students and because meat processing and slaughter businesses can be expensive to start up, and carry a huge financial risk “that bankers have not been willing to take on.” A cheaper mobile unit allows people to start up quicker and travel to where customers are, which “de-risks the whole process a little bit,” he said.

Even if Central Lakes doesn’t get a mobile slaughter unit or find one to work with, Endicott said the school will have meat cutting courses anyway, and has pledged to match the state’s $150,000 grant.

Ridgewater College didn’t receive money from the Legislature, but Jeff Miller, the school’s dean of instruction, said the school’s “very robust” agriculture department, plus support from the meat processing industry, pushed them to create a meat-cutting program, too. “The overarching message was there’s such a shortage of meat cutters and processors in the region and then there’s nobody that offers training locally to help support workforce demand,” Miller said.

Starting in fall of 2022, Ridgewater plans to offer a certificate that teaches “basic, foundational meat-cutting techniques and skills,” Miller said, which can prepare students for everything from a rural butcher shop or locker plant to a large corporate job with a company like Hormel.

Ridgewater also hopes to add a second-level certificate program in the winter of 2023 focused on advanced meat processing techniques, such as making sausages, processing wild game, smoking and curing and specialty meat processing for animals like bison and elk. Finally, in the fall of 2024, the school wants to create a third certificate program aimed at teaching skills needed to run a business, such as getting federal regulatory approvals and proper licensing.

At the March hearing, Sen. Carrie Ruud, a Breezy Point Republican who sponsored the original Senate plan for lawmakers to fund a meat-
cutting program, said the courses will help students who don’t want to get a four-year degree start a career and attend school close to home.

“We always want to keep our bright young people in our own home areas and this gives them that opportunity,” Ruud said. “It gives entrepreneurs the opportunity to open up their own shop should they choose, or to go work for a company.”

**Walker Orenstein**

Walker Orenstein reports on the state Legislature for MinnPost, with a particular focus on covering issues affecting Greater Minnesota. He can be reached at worenstein@minnpost.com, and you can follow him on Twitter at @walkerorenstein.
Why two Minnesota colleges are starting meat cutting programs | MinnPost
This form is mandatory. Thoroughly review the Regional Food System Partnerships Request for Applications (RFA) before completing this form. Upon completion, save this form as a PDF and attach it to the application package within Grants.gov using the “Project Narrative Attachment Form” on the application package.

1. Applicant Organization - Must match box 8 of the SF-424.

Name: Maine Department of Agriculture, Conservation and Forestry
Email: Jennifer.Eberly@maine.gov
Phone: (207) 287-7512
Fax: (207) 287-5576
Mailing Address: 28 SHS, Augusta, ME 04333

2. Authorized Organization Representative (AOR) - This person will be the main contact for any correspondence and is responsible for signing any documentation should the grant be awarded. Must match box 21 of the SF-424.

Name: Jennifer Eberly
Email: jennifer.eberly@maine.gov
Phone: (207) 287-7512
Fax: (207) 287-5576
Mailing Address: ☑ Check if same as above

3. Partnership Entity Types - If your organization is a State Agency Regional Farmers Market Authority, you must provide the regulatory statute(s) that identify your agency as that entity type.

Eligible Entity(ies)
☐ Agricultural Business or Cooperative
☐ Community Supported Agriculture (CSA) Network or Association
☐ Economic Development Corporation
☐ Food Council
☐ Local Government
☑ Nonprofit Corporation
☐ Tribal Government
☐ Majority-Controlled Producer-Based Business Venture
☐ Producer Network or Association
☐ Public Benefit Corporation
☐ Regional Farmers Market Authority
☐ State Agency Regional Farmers Market Authority (Indicate Regulation Below):
   _____________________________________________

Eligible Partner(s)
☑ State Agency or Regional Authority
☐ Philanthropic Corporation
☐ Private Corporation
☐ Institution of Higher Education
☐ Commercial, Federal or Farm Credit System Lending Institution
☐ Other (Specify Below):
   _____________________________________________
4. **Project Activity Category** - Identify all the activity categories that fit your project.

☑ Aggregation
☐ Agritourism
☐ Farm to Institution
☐ Partner Recruitment and Retention
☐ Food Safety
☐ Grant Writing
☒ Infrastructure Improvement
☐ Marketing and Promotion
☒ Processing
☒ Production Diversification /Expansion
☒ Resource Development
☒ Strategic Planning
☐ Season Extension
☐ Training and Education
☒ Transportation and Distribution
☐ Value Chain Coordination
☐ Other (specify below):

5. **Project Title** - Must match box 15 of the SF-424. **Barriers and Solutions to Expanded Meat and Poultry Production in the State of Maine**

6. **Grant Application Project Type** - Described in Section 1.3 of the RFA

☐ Planning and Design
☒ Implementation and Expansion

7. **Requested RFSP Funds** - Insert the total amount ($) of Federal funds requested. This must match the amount requested on Line 18a of the SF-424.

$142,970

8. **Matching Funds** - Partnership must provide a minimum 10% (cash and/or in-kind) or 25% (cash only) match of the Federal portion of the grant. This must match the amount on Line 18b of the SF-424. See Section 3.5 of the RFA for more information

19,286.09

9. **Does the proposal address any of the Priority Considerations as described in Section 1.3.4 of the RFA?** If Yes, please select the applicable priorities and provide a reasonable justification within this narrative to verify your response. For example, if you are applying to work in communities with significant opportunities for high impact investment, please briefly explain the community needs, including socioeconomic factors, limited resources, etc.

Yes ☒  No ☐

☒ Leverage significant non-Federal financial and technical resources and coordinate with other local, State, Tribal, or national efforts

☒ Covers an area that includes communities with areas of concentrated poverty that provide significant opportunities for high impact investment

☐ Have a diverse set of relevant project partners
EXECUTIVE SUMMARY

In 250 words or less, briefly describe the operational model of the partnership, and the project’s intended goal(s) with a description of how the goal(s) will be completed during the project period. This summary will be made available to the public.

The University of Maine, in conjunction with the State of Maine Department of Agriculture, Conservation and Forestry (DACF), wishes to conduct an 24-month study to identify the financial, physical, regulatory and cultural barriers to increased red meat and poultry slaughter and processing in Maine. The first six months will be spent gathering stakeholder input from multiple stakeholder groups on their identified and perceived barriers to increased red meat and poultry production in Maine. The study will then use the next 12 months to define, research, and analyze the stakeholders’ identified barriers from multiple angles, with an emphasis on the economic impact of each barrier. This stage of study will also model three different theoretical red meat or poultry slaughter and processing operations in three geographically and economically diverse areas of the state. The final six months of the study will be used to summarize the findings and to develop a white paper document for distribution to the public and stakeholder groups. The white paper will also be submitted by DACF to the State of Maine Legislative Committee on Agriculture, Conservation and Forestry for committee discussion and exploration of future legislative planning.

ALIGNMENT AND INTENT

Describe the food system’s specific issues or needs that the project will address in relation to the statutory language of the program (7 U.S.C. 1627c). Include data and/or estimates that describe the extent of the issue or need and justify the project’s objectives and approach. Address the following points in this section:

- List the objectives for this project, relating them directly to the issue or need mentioned above. Add objectives as needed:
  
  **Objective 1:** Identify, list and analyze barriers (financial, physical, regulatory, cultural or other) to increased meat and poultry production in Maine within the first 6 months of the project.
  
  **Objective 2:** Within the first 18 months of the project, create at least three models of red meat or poultry production facilities (red meat, poultry and a mixed species) that take into consideration variable geographic and economically diverse areas of the state of Maine, as well as possible barriers identified in Objective 1.
  
  **Objective 3:** Create and share publicly and with the Maine Legislative Committee on Agriculture, Conservation, and Forestry a comprehensive report of the study’s findings and possible suggestions for overcoming identified barriers during the last 6 months of the project.

- Describe the partnership’s goals, why they are significant and how they improve marketing opportunities in the local or regional food system.

The goal of the partnership is to identify and quantify the barriers to growing Maine’s red meat and poultry capacity. Once these barriers are identified and understood, a plan to cultivate and grow
Maine’s agricultural economy and ensure greater food security for Mainers can be developed in conjunction with DACF, Maine stakeholders and the Maine State Legislature.

Maine has long struggled with inadequate institutional capacity for animal slaughter; there are simply not enough inspected slaughterhouses in the state to slaughter and process the number of animals that Maine producers wish to raise. In response to this need, the Maine Meat and Poultry Inspection (state inspection) program was created in 2003 by the Maine State Legislature to supplement the existing over capacity USDA inspected facilities in the State. Slaughter and processing capacity in the state doubled with the advent of the program, but as of 2019, all facilities, both USDA and State, were once again at or over capacity. The meat shortages that occurred in 2020 when the large meatpacking plants had to shut down during the covid-19 pandemic accelerated the capacity problem drastically; at present, producers must make appointments for animal processing at inspected facilities many months to even years in advance, and often are making appointments for the slaughter and processing of animals not yet born.

The pandemic also laid bare the long-standing problem of massive consolidation within the meat and poultry industries. When many large meat and poultry plants were shut down due to in-plant Covid outbreaks, regional distributors in the Northeast were running out of meat and poultry products to supply to rural Maine supermarkets since Maine is at “the end of the line” for distribution due to geography. There was simply not enough local capacity to be able to meet the demand in rural communities for meat and poultry products during the pandemic when the supply chain was disrupted. Although health and sanitation conditions at the large meatpacking plants have improved, the recent cyberattack of JBS meats, a single supplier that supplies almost 25% of the US beef supply, shows that the issues with massive consolidation of the meatpacking industry and consequent withering of local and regional food systems, will continue to have detrimental effects on Maine’s food supply.

The USDA is set to release the results of a study this summer on resiliency in meat and poultry processing nationally, and our study will build on this work by identifying Maine’s specific challenges to the resiliency of our local meat and poultry food system. Maine DACF is also currently self-funding a study to determine the theoretical economic impact of significant state investment in the meat and poultry sector, as DACF has already identified the need for greater meat and poultry resiliency but wants to quantify the economic benefit that these businesses have on the rural, underserved communities that generally host these types of facilities, as well as the greater Maine agricultural economy.

Ultimately, the intent of the study is to guide institutional and legislative planning to increase the resiliency of Maine’s local meat and poultry system, increase growth of the local meat and poultry food system, and reduce food insecurity in our state.

Description of the Partnership

Scope

Describe the region covered by this partnership (geographic, economic, etc.), and why it is the most appropriate place to carry out partnership activities. Include a discussion about how the partnership adds value to the local or regional food system, as opposed to each entity acting independently.

The region covered by the partnership is primarily geographic, as the educational and regulatory activities of DACF and the educational, extension, and research activities of University of Maine are primarily conducted within the State. Limiting the region of study to Maine is important as Maine has
geographic and socioeconomic challenges that are unique within the Northeast. While both DACF and University of Maine are well established, historic institutions within the state, DACF is frequently perceived more as a regulator of meat and poultry products, and the University of Maine perceived as more as a technical resource for meat and poultry projects. A partnership of these two entities will provide clarity to Mainers on both the technical and regulatory challenges to increased red meat and poultry production.

**Producer or Food Business Benefits**

Describe the intended benefits (direct and indirect) for producers or food businesses resulting from the partnership’s activities, including the number of impacted. How will they be impacted, and how will beneficiaries also be engaged in the partnership as service providers? (NOT required if the application is solely for a planning or feasibility project)

N/A. However, the partnership does hope the study can be used by the public, the partner entities, and the Maine State Legislature to guide the direction of future projects or initiatives.

**TECHNICAL MERIT**

**Partnership Preparation**

Describe any prior activities the partnership has engaged in and/or any current or future activities the partnership plans to engage in, and how the proposed project fits into those plans.

DACF and the University of Maine have a long history of collaboration on local and state projects with the overarching goal of growing Maine’s agricultural capacity. Currently, DACF is funding a study by University of Maine food safety, food science, livestock specialists, and agricultural economists to develop economic impact assessments to model four different agricultural investment scenarios, one of which would model the economic impact of funding a 50% increase in state meat and poultry slaughter and processing capacity in the state. This DACF and University of Maine group is also developing an online platform for quarterly market reports for 15 Maine commodities, to include red meat products. The principals in this proposed RFSP partnership (Dr. Jennifer Eberly, Maine Meat and Poultry Inspection, Drs. Jason Bolton and Robson Machado, University of Maine Cooperative Extension) have also worked together for several years on HACCP training courses, and successfully implemented a pilot project to temporarily increase inspected meat and poultry processing capacity during the height of the pandemic meat shortages in 2020.

**Work Plan**

Describe the planned activities to achieve each Objective listed in the Alignment and Intent section above. Include the information requested below for each planned activity.

<table>
<thead>
<tr>
<th>Objective</th>
<th>List and describe each planned activity</th>
<th>Anticipated completion date</th>
<th>Required resources</th>
<th>Milestones</th>
<th>Who will do the work?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include the objective this activity will be tied to</td>
<td>Include the scope of work and how it relates to the project objectives</td>
<td>For completion of each activity</td>
<td>For assessing progress and success of each activity</td>
<td>Include collaborative arrangements or subcontractors</td>
<td></td>
</tr>
<tr>
<td>Step</td>
<td>Task</td>
<td>Start Date</td>
<td>End Date</td>
<td>Details</td>
<td>Responsible Party</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1/Develop Barrier List</td>
<td>Develop questionnaires and focus group questions</td>
<td>January 15</td>
<td>January 15, 2021</td>
<td>Framework for questionnaires and questions developed and approved by all partners</td>
<td>University of Maine Cooperative Extension staff, DACF Maine Meat and Poultry Inspection</td>
</tr>
<tr>
<td>1/Develop Barrier List</td>
<td>Conduct focus groups, roundtable discussions, targeted interviews of stakeholder groups</td>
<td>April 30, 2022</td>
<td>All planned meetings scheduled, schedule for constituent contact developed by March 15, 2022</td>
<td>University of Maine Economics Graduate and Undergraduate students</td>
<td></td>
</tr>
<tr>
<td>2/Analyze Identified Barriers</td>
<td>Conduct research into barriers, conduct further subject specific interviews as appropriate</td>
<td>December 1, 2022</td>
<td>All barriers researched and analyzed by December 1, 2022</td>
<td>University of Maine Economics Graduate and Undergraduate students</td>
<td></td>
</tr>
<tr>
<td>3/Develop theoretical models</td>
<td>Develop at least three models for a slaughter/processing facility, comprising a mix of species, initial development, economically diverse and geographic regions</td>
<td>January 15, 2023</td>
<td>All models developed by January 15, 2023</td>
<td>University of Maine Economics Graduate and Undergraduate students</td>
<td></td>
</tr>
</tbody>
</table>

University of Maine Cooperative Extension
<table>
<thead>
<tr>
<th>Year</th>
<th>Funding source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the applicant received previous Federal funding to support partnership activities or projects, describe how the proposed project, if funded, would not duplicate that work. Include lessons learned, what can be improved, and how these lessons and improvements will be incorporated into this project to effectively and successfully meet project goals.

Community Engagement

Describe the community engagement process that the partnership uses to ensure inclusivity, including non-traditional entities such as housing authorities, transportation providers, etc. Include any partners that may have limited resources and describe the value that such partners bring to the partnership.

Identify any real or potential challenges to partner recruitment or engagement and describe possible strategies to address them.
What specific types of technical assistance will the partnership provide, and by whom? (NOT required if the application is solely for a planning or feasibility project)

The initial phase of the project will include surveys, roundtables, targeted interviews or any other appropriate surveying tool to gather information on the real and perceived barriers to increased meat and poultry capacity in Maine. The partnership has identified the following groups for initial engagement:

Small scale Maine poultry producers
Large scale Maine poultry producers
Small scale Maine livestock producers
Large scale Maine livestock producers
Maine Beef Producers Association
Maine Organic Farmers and Growers Association
Maine Farm Bureau
Custom Slaughter and processing facility owners
State inspected facility owners
USDA inspected facility owners
State regulators
USDA-FSIS regulators
University of Maine Cooperative Extension
Maine food service distributors
Maine Retail Association
Maine Grocers and Food Production Association
Maine Farmland Trust
Maine Farmers Markets Association
Somali Bantu Community Association
Wabenaki Alliance

**ACHIEVABILITY**

This section includes the outcome indicator evaluation plan.

**Outcome Indicators**

Complete all applicable project Outcomes and Indicators with baseline and/or estimated realistic target numbers.

Applicants should note that Outcomes/Indicators are designed to represent Local Agriculture Marketing Program (LAMP) priorities which include other USDA grant programs. Some indicators may be dependent on the partnership’s ability to obtain additional funding for implementation. If an outcome indicator does not apply, check N/A (Not Applicable).

Applicants must choose at least one Outcome and Indicator(s) from 1-6 and are strongly encouraged to select Outcome 7.

Outcome 1: To Increase Consumption of and Access to Locally and Regionally Produced Agricultural Products.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a.</td>
<td>Total number of project beneficiaries/stakeholders to be reached</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>1.b.</td>
<td>Of the number in 1.a., the number that will report buying, selling, aggregating, storing, producing, and/or distributing locally or regionally produced agriculture products</td>
<td>450</td>
<td></td>
</tr>
</tbody>
</table>
Outcome 2: To Increase Customers and Sales of Local and Regional Agricultural Products.

For projects that do not already have a baseline of sales in dollars or an initial customer count, one of the objectives of the project must be to determine such a baseline to meet the requirement and to document the value of sales increases or percent change in customer count by the end of the project.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.a.</td>
<td>Sales increased as a result of marketing and/or promotion activities during the project performance period.</td>
<td>$</td>
<td>☒</td>
</tr>
<tr>
<td></td>
<td>Initial (Original) Sales Amount (in dollars)</td>
<td>$</td>
<td>☒</td>
</tr>
<tr>
<td></td>
<td>Estimated Final (Resulted) Sales Amount (in dollars)</td>
<td>$</td>
<td>☒</td>
</tr>
<tr>
<td></td>
<td>Percent Change ((n final – n initial)/(n initial) * 100 = % change)</td>
<td>%</td>
<td>☒</td>
</tr>
<tr>
<td>2.b.</td>
<td>Customer counts increased during the project performance period.</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initial (Original) Customer Count</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated Final (Resulted) Customer Count</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent Change ((n final – n initial)/(n initial) * 100 = % change)</td>
<td>%</td>
<td>☒</td>
</tr>
</tbody>
</table>

Outcome 3: To Develop New Market Opportunities for Farm and Ranch Operations Serving Local Markets.

Please provide estimated target numbers.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.a.</td>
<td>Number of farmers markets</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>3.b.</td>
<td>Number of roadside stands</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>3.c.</td>
<td>Number of Community Supported Agriculture programs</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>3.d.</td>
<td>Number of agritourism activities</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>3.e.</td>
<td>Number of other direct producer-to-consumer market opportunities</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>3.f.</td>
<td>Number of local and regional food business enterprises that process, aggregate, distribute, or store locally and regionally produced agricultural products</td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>

Of the local and regional farmers and ranchers, processors, aggregators, and/or distributors reached, the:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.g.</td>
<td>Number that reported an increase in revenue expressed in dollars</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>3.h.</td>
<td>Number that gained knowledge about new market opportunities through technical assistance and education programs</td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>

Number of careers, jobs, farmers that went into production
### Outcome 4: To Improve the Food Safety of Locally and Regionally Produced Agricultural Products.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.a.</td>
<td>Number of individuals that will learn about prevention, detection, control, and intervention food safety practices</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>4.b.</td>
<td>Of the number in 4.a., the number that will report increasing their food safety skills and knowledge</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>4.c.</td>
<td>Number of growers or producers who will obtain on-farm food safety certifications (such as Good Agricultural Practices or Good Handling Practices)</td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>

### Outcome 5: To Establish or Expand a Local and Regional Food Business Enterprise.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.a.</td>
<td>For projects developing a plan to establish or expand a local or regional food system enterprise and conducting a needs assessment: Number of unmet consumer needs, barriers to local foods, unserved populations, etc. identified through a comprehensive needs assessment.</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>5.b.</td>
<td>Number of plans (business, economic, feasibility) developed based on a comprehensive needs assessment.</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>5.c.</td>
<td>Amount of non-Federal financial, professional, and technical assistance measured in dollars secured as a result of the developed plan(s).</td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>

### Outcome 6: To Increase Capacity and Efficiency of the Local or Regional Food System.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.a.</td>
<td>Total number of relevant partners engaged, including those representing diverse, non-traditional eligible entities and eligible partners</td>
<td>20</td>
<td>☐</td>
</tr>
<tr>
<td>6.b.</td>
<td>Of the total number of food system collaborators engaged, the number that:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1 **Socially Disadvantaged Farmer** is a farmer who is a member of a Socially Disadvantaged Group. A Socially Disadvantaged Group is a group whose members have been subject to discrimination on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual’s income is derived from any public assistance program.
AMS is interested in developing Outcomes and Indicators for RFSP as the program continues to develop. As such, applicants are strongly encouraged to add at least one Outcome and Indicator(s) based on relevant partnership efforts not covered above. Creativity is highly recommended, particularly regarding any metrics measuring systemwide planning efforts, and reflecting coordination, learning, and responsiveness to regional realities.

Outcome 7 (OPTIONAL). Please be sure to enter your project specific outcome here:

**Project Specific Outcome Indicator(s): Add more rows as needed.**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Estimated number</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.a.</td>
<td>Develop a comprehensive analysis of the financial, physical and cultural barriers to increased meat and poultry production</td>
<td>1</td>
</tr>
<tr>
<td>7.b.</td>
<td>Create at least three models of red meat or poultry production facilities (red meat, poultry and a mixed species) that take into consideration variable geographic and economically diverse areas of the state of Maine</td>
<td>1</td>
</tr>
<tr>
<td>7.c.</td>
<td>Create, distribute, and publish a while paper document for all stakeholders, partner organizations and the Maine State Legislature</td>
<td>23 entities</td>
</tr>
</tbody>
</table>
### Outcome Indicator Measurement Plan

*For each selected outcome indicator above, describe how you derived the numbers, how and when you intend to evaluate your progress, and any potential challenges to achieving the estimated targets and action steps for addressing them. Add more rows as needed.*

<table>
<thead>
<tr>
<th>Outcome and indicator #</th>
<th>How did you derive the estimated numbers?</th>
<th>How and when do you intend to evaluate?</th>
<th>Anticipated key factors predicted to contribute to and restrict outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.a.</strong> Total number of project beneficiaries/stakeholders to be reached</td>
<td>Estimate based on the number of identified facilities and membership numbers of associations and stakeholder groups interviewed/surveyed</td>
<td>Will use a combination of surveys, roundtables, focus groups and targeted interviews during the first 6 months of the project</td>
<td>Anticipate strong interest in participation among regulators and association groups but may need to do follow up interviews/outreach to business entities due to high demand on their time.</td>
</tr>
<tr>
<td><strong>1.b.</strong> Of the number in 1.a., the number that will report buying, selling, aggregating, storing, producing, and/or distributing locally or regionally produced agriculture products</td>
<td>Subtracted number of regulators and association management from numbers in 1.a</td>
<td>See 1.a</td>
<td>Expect high participation from regulators and association management</td>
</tr>
<tr>
<td><strong>6.a.</strong> Total number of relevant partners engaged, including those representing diverse, non-traditional eligible entities and eligible partners</td>
<td>Added up the identified groups for initial survey phase of project</td>
<td>See 1.a</td>
<td>See 1.a</td>
</tr>
<tr>
<td><strong>7.a</strong> Develop a comprehensive analysis of the financial, physical and emotional barriers to increased meat and poultry production</td>
<td>Study proposed to develop one white paper document</td>
<td>The study will be evaluated monthly and then evaluated at the conclusion of the project</td>
<td>No significant factors to restrict outcome at this time</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The need to produce a Master’s thesis based on the white paper will motivate graduate student to complete work in timely fashion</td>
</tr>
</tbody>
</table>
7.b. Create at least three models of red meat or poultry production facilities (red meat, poultry and a mixed species) that take into consideration variable geographic and economically diverse areas of the state of Maine

<table>
<thead>
<tr>
<th>Task</th>
<th>Study proposed to develop one white paper document</th>
<th>The study will be evaluated monthly and then evaluated at the conclusion of the project</th>
<th>see 7.a</th>
</tr>
</thead>
</table>

7.c. Create, distribute, and publish a white paper document for all stakeholders, partner organizations and the Maine State Legislature

<table>
<thead>
<tr>
<th>Task</th>
<th># of stakeholder groups + project partners + Maine Legislative Committee for Agriculture, Conservation and Forestry</th>
<th>The study will be evaluated monthly and then evaluated at the conclusion of the project</th>
<th>No significant factors to restrict outcome at this time</th>
</tr>
</thead>
</table>

Dissemination of Project Results
Describe how you will disseminate project’s results (positive and negative) to similar organizations, stakeholders, and others that may be interested in the project’s results or implementing a similar project.

The final project results as well as a description of the project will be hosted on a University of Maine website dedicated to the project, and links to the study website will appear on the DACF website, the University of Maine Cooperative Extension website, issued as a press release by both DACF and University of Maine, disseminated to all project interviewees and associations, and presented to the Maine State Legislative Committee on Agriculture, Conservation and Forestry. Results may also be used to write journal articles(s) for publication in agricultural or economic scientific or trade journals and a Master’s Thesis. Principal Investigators will present findings and a summary of the feasibility study at the International Association of Food Protection conference and the Maine State Agricultural Trade Show.

Project Sustainability
Describe how the project, and its partnerships and collaborations, will be sustained beyond the project’s period of performance (without grant funds), if necessary.

It is not anticipated that this study will need to be sustained beyond the period of performance as it has a single deliverable at the conclusion of the project and will not require further funds for maintenance. If circumstances prevented completion of the project by the end of the performance period, either DACF or University of Maine could likely find additional funds within their operating budgets to finish the project or new grant applications. DACF could also ask the Maine State Legislature for additional funding to complete the project if required.
EXPERTISE AND PARTNERS

Key Staff (Applicant Personnel and External Partner/Collaborators)
List key project partner staff that comprise the Project Team, their roles, and provide a one- to two-page resume or summary of relevant experience and/or qualifications for each of the participants listed. Longer resumes or summaries will be disregarded. Applicant must include Letters of Commitment from Partner and Collaborator Organizations to support the information (see section 4.2.4 in the RFA). Add more rows as needed.

<table>
<thead>
<tr>
<th>Key staff Name and Title</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jason Bolton</td>
<td>Direct food safety stakeholder objectives</td>
</tr>
<tr>
<td>Robson Machado</td>
<td>Support food safety stakeholder objectives</td>
</tr>
<tr>
<td>Jonathan Malacarne</td>
<td>Supervise master’s student work related to feasibility study</td>
</tr>
<tr>
<td>Colt Knight</td>
<td>Will provide guidance on livestock assessment in Maine</td>
</tr>
<tr>
<td>Jennifer Eberly</td>
<td>Provide guidance on regulatory issues and monitor output of study to ensure project is meeting stated objectives and goals</td>
</tr>
</tbody>
</table>

Provide the information below for each partner under the partnership agreement at the time of application. The partnership must have at least one eligible entity and at least one eligible partner, as described in Sections 3.2 and 3.3 of the RFA. Add more rows as needed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Entity or partner</th>
<th>Type</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine Department of Agriculture,</td>
<td>partner</td>
<td>State Agency</td>
<td>Receive and manage award</td>
</tr>
<tr>
<td>Conservation and Forestry</td>
<td></td>
<td></td>
<td>Provide information on regulatory barriers as part of study research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Monitor progress of project to ensure is meeting milestones and objectives</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Distribute project results to stakeholders and Maine State Legislature</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Maine</td>
<td>entity</td>
<td>Non-profit Corporation</td>
<td>Conduct the project study</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Select and manage graduate and undergraduate students involved in project</td>
</tr>
</tbody>
</table>
Subaward funds will be managed by Cooperative Extension and Graduate and Undergraduate programs.

Host digital infrastructure for communications between partners during study and a website to host study results and project information.

If your project includes mid-tier value chain coordination activities, provide details of the value chain entities that will be engaged and what their respective roles will be.

Project Management Plan

Describe your management plan for coordination, communication, and data sharing and reporting among members of the Project Team and stakeholder groups, including both internal applicant personnel and external partners and collaborators.

Internal University of Maine personnel will meet twice a month for coordination, updates, and planning. Meetings will use video conference technology (e.g., Zoom) and meeting minutes will be shared with internal personnel that could not join the meeting. All project partners (University of Maine and DACF personnel) will meet monthly utilizing the same technology and parameters.

Stakeholders will be issued project updates by email or U.S. mail every six months and will have the opportunity to ask questions and make suggestions on the execution of the project. These suggestions will be followed when possible and when they do not detract from the objectives of the project.

A final report will be created at the end of the project and will be shared widely with stakeholders and for further sharing, such as with UMaine Cooperative Extension, the Maine Department of Maine Agriculture Conservation and Forestry, and the partners identified before in this proposal (see Community engagement) and the Maine Legislative Committee on Agriculture, Conservation and Forestry. The final report will have an executive summary and suggested short descriptions of the results to be shared on social media.

Data Storage and Preservation

All the digital data generated during the project (brief description of the data) will be stored digitally on encrypted and password-protected personal computers used by the PI and Co-PIs (i.e., computers that are used only by one individual) and encrypted and password-protected cloud sharing software (i.e., Google docs) that are linked to the PI or Co-PIs accounts protected by passwords.

Materials created during the program (e.g., models and reports) will be uploaded to UMaine’s and DACF websites when the materials are relevant to the stakeholders.
Please complete the Budget and Justification below.

The budget must show the total cost for the project and describe how category costs listed in the budget are derived. The budget justification must provide enough detail for reviewers to easily understand how costs were determined and how they relate to the Project Objectives and Expected Outcomes. The budget must show a relationship between work planned and performed to the costs incurred. Add additional rows to a table as needed.

Refer to RFA Section 1.3.3 Projects and Activities not Eligible for Funding for more information on allowable and unallowable expenses.

Applicants must ensure the information provided below reflects the minimum 10% or 25% match requirement.

**Budget Summary**

<table>
<thead>
<tr>
<th>Expense category</th>
<th>Federal funds</th>
<th>Cost share or match applicant and 3rd parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>54,203</td>
<td>9308</td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>22,281</td>
<td>4990</td>
</tr>
<tr>
<td>Travel</td>
<td>15,380</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>Contractual/subawards</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td>6500</td>
<td></td>
</tr>
<tr>
<td><strong>Direct costs subtotal</strong></td>
<td><strong>103,364</strong></td>
<td><strong>14,298</strong></td>
</tr>
<tr>
<td>Indirect costs</td>
<td>39,606</td>
<td></td>
</tr>
<tr>
<td><strong>Total budget (direct + indirect)</strong></td>
<td><strong>142,970</strong></td>
<td><strong>14,298</strong></td>
</tr>
</tbody>
</table>
Personnel
List each person who has a substantive role in the project and the amount of the request and/or the value of his or her match. Personnel costs should be reasonable for the services rendered, conform to the established written policy of your organization, and consistently applied to both Federal and non-Federal activities.

<table>
<thead>
<tr>
<th>Name, title</th>
<th>Justification for requesting funds</th>
<th>Level of effort (# of hours OR % FTE)</th>
<th>Annual salary requested</th>
<th>Total funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Student</td>
<td>performs the vast majority of work on the feasibility study and modelling</td>
<td>100%</td>
<td>Year 1: $23,272 Year 2: $23,931 Year 3: $</td>
<td>$47,203</td>
<td></td>
<td>Cash □ In-Kind ☐</td>
</tr>
<tr>
<td>Undergraduate Students</td>
<td>labor to assist with feasibility study data collection and analysis @ $12.15/hr</td>
<td>576</td>
<td>Year 1: $7,000 Year 2: $ Year 3: $</td>
<td>$7,000</td>
<td></td>
<td>Cash □ In Kind □</td>
</tr>
<tr>
<td>Principal Investigator Jason Bolton</td>
<td>Bolton will lead and organize efforts for UMaine which will include working with Drs. Machado, Malacarne and Knight and UMaine Graduate student to ensure clear communication and completion of proposal objectives. Dr. Bolton will work with Dr. Machado to develop, administer and collect food safety survey and interview data from stakeholders.</td>
<td>0.03 FTE</td>
<td>Year 1: $2,524 JB, 2,130 RM Year 2: $2,524, 2,130 RM Year 3: $</td>
<td>$ 9,308</td>
<td></td>
<td>Cash □ In-Kind X</td>
</tr>
<tr>
<td>Personnel subtotals</td>
<td>$ 54,203</td>
<td>$ 9,308</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>----------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

collect food safety survey and interview data from stakeholders.
Fringe Benefits

Provide the fringe benefit rates for each of the project’s salaried employees listed above. The costs of fringe benefits should be reasonable and in line with established policies of your organization.
<table>
<thead>
<tr>
<th>Name, Title</th>
<th>Fringe Benefit Rate</th>
<th>Funds Requested</th>
<th>Match Value</th>
<th>Match Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Student</td>
<td>Graduate student tuition and health insurance. Tuition based on 18 credit hours per year with a base rate of $472.50 per credit in year 1 ($8505) with mandatory 3% increase applied in year 2 ($8760). Graduate student health insurance is included at a base rate of $2,447 in Year 1 with a mandatory increase in Year 2, $2,569.</td>
<td>$22,281</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Principal Investigator Jason Bolton</td>
<td>Fringe benefits are charged at the rate of 53.6% on regular salary</td>
<td>$</td>
<td>$2706</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Principal Investigator Robson Machado</td>
<td>Fringe benefits are charged at the rate of 53.6% on regular salary</td>
<td>$</td>
<td>$2284</td>
<td>Cash ☐</td>
</tr>
</tbody>
</table>
### Travel

*Explain the purpose for each Trip Request. Please note that travel costs are limited to those allowed by formal organizational policy; in the case of air travel, project participants must use the lowest reasonable commercial airfares. For recipient organizations that have no formal travel policy and for-profit recipients, allowable travel costs may not exceed those established by the Federal Travel Regulations, issued by GSA, including the maximum per diem and subsistence rates prescribed in those regulations. This information is available at [https://www.gsa.gov/](https://www.gsa.gov/).*

<table>
<thead>
<tr>
<th>Trip details <em>(Destination, Timing, Justification)</em></th>
<th>Expense type <em>(airfare, car rental, etc.)</em></th>
<th>Unit of measure <em>(days, miles, etc.)</em></th>
<th># of units</th>
<th>Cost/unit</th>
<th># of travelers</th>
<th>Funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-state Travel for master’s student, undergraduate, PI’s travel to meet with stakeholders in throughout the state.</td>
<td>mileage, hotels</td>
<td>miles and nights</td>
<td>15 hotel 2000 miles</td>
<td>$200/night $0.44/mi</td>
<td>5</td>
<td>$3,880</td>
<td>$</td>
<td>Cash ☐ In-Kind ☐</td>
</tr>
<tr>
<td>Travel for PIs and Master’s Student to present work at conferences in year 2</td>
<td>airfare, ground transport, lodging, conference fees, per diem @ $46/day</td>
<td>days, per diem</td>
<td>2 out of state conferences</td>
<td>$3,750</td>
<td>3</td>
<td>$7,500</td>
<td>$</td>
<td>Cash ☐ In-Kind ☐</td>
</tr>
<tr>
<td>Travel for Project Partners to Coordinator meeting in Year 1</td>
<td>airfare, ground transport,</td>
<td>days, per diem</td>
<td>1 out of state meeting</td>
<td>$4000</td>
<td>2</td>
<td>$4000</td>
<td>$</td>
<td>Cash ☐ In-Kind ☐</td>
</tr>
<tr>
<td>Description and funds justification</td>
<td>Rental or purchase?</td>
<td>Date acquired?</td>
<td>Funds requested</td>
<td>Match value</td>
<td>Match type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>-------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer for graduate student to collect, house and process data for report.</td>
<td>2021</td>
<td>$2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies for printing and online livestock, food safety and economic survey development.</td>
<td>2021</td>
<td>$3,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By checking this box, I affirm that my organization’s established travel policies will be adhered to when completing the above-mentioned trips in accordance with 2 CFR 200.474 or 48 CFR subpart 31.2, as applicable.

**Equipment**

Describe any special purpose equipment to be purchased or rented under the grant. “Special purpose equipment” is tangible, nonexpendable, personal property having a useful life of more than one year and an acquisition cost that equals or exceeds $5,000 per unit and is used only for research, medical, scientific, or other technical activities. Rental of “general purpose equipment” must also be described in this section. Purchase of general purpose equipment is not allowable under this grant.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description and funds justification</th>
<th>Rental or purchase?</th>
<th>Date acquired?</th>
<th>Funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td>Cash ☐</td>
</tr>
</tbody>
</table>

**Supplies**

List the materials, supplies, and fabricated parts costing less than $5,000 per unit and describe how they will support the purpose and goal of the proposal.

<table>
<thead>
<tr>
<th>Description and funds justification</th>
<th>Cost/unit</th>
<th># of units</th>
<th>Date acquired?</th>
<th>Funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer for graduate student to collect, house and process data for report.</td>
<td>$2,000</td>
<td>1</td>
<td>2021</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies for printing and online livestock, food safety and economic survey development.</td>
<td>$3000</td>
<td>1</td>
<td>2021</td>
<td>$3,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Travel subtotal | $15,380 | $ |
Contractual

The Contractual section includes contractual, consultant, and subaward agreements that are part of the completion of the project. A subaward is an award provided by the non-federal entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the non-federal entity. Contractual/consultant costs are expenses associated with purchasing goods and/or procuring services performed by an individual or organization other than the applicant in the form of a procurement relationship. If there is more than one contractor or consultant or subaward, each must be described separately.

<table>
<thead>
<tr>
<th>Type</th>
<th>Name/organization and funds justification</th>
<th>Hourly/flat rate</th>
<th>Funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract ☐</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Subaward ☐</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>In-Kind ☐</td>
</tr>
<tr>
<td>Contract ☐</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Subaward ☐</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>In-Kind ☐</td>
</tr>
<tr>
<td>Contract ☐</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Subaward ☐</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>In-Kind ☐</td>
</tr>
<tr>
<td>Contracted subtotal</td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

By checking this box, I affirm that my organization followed the same policies and procedures used for procurements from non-federal sources, which reflect applicable State and local laws and regulations and conform to the Federal laws and standards identified in 2 CFR §200.317 through §200.326, as applicable. If the contractor(s)/consultant(s) is/are not already selected, I affirm that my organization will follow the same requirements.

Other

Include any expenses not covered in any of the previous budget categories. Be sure to break down costs into cost/unit. Expenses in this section include, but are not limited to, meetings and conferences, communications, rental expenses, advertisements, publication costs, and data collection.

<table>
<thead>
<tr>
<th>Description and funds justification</th>
<th>Cost/unit</th>
<th># Units/pieces purchased</th>
<th>Date acquired?</th>
<th>Funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional final report editing services</td>
<td>$1500</td>
<td>1</td>
<td>2023</td>
<td>$1500</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Stipends for survey and focus group participants</td>
<td>$50</td>
<td>50</td>
<td>2021</td>
<td>$2500</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
<tr>
<td>Printing Services for hard copies of final report</td>
<td>$2500</td>
<td>1</td>
<td>2023</td>
<td>$2500</td>
<td>$</td>
<td>Cash ☐</td>
</tr>
</tbody>
</table>
Indirect costs (also known as “facilities and administrative costs”—defined at 2 CFR §200.56) represent the expenses of doing business that are not readily identified with a particular grant, contract, or project function or activity, but are necessary for the general operation of the organization and the conduct of activities it performs. For the indirect cost formula and additional information, refer to Section 4.6.1 of the RFA.

<table>
<thead>
<tr>
<th>Indirect cost rate requested (%)</th>
<th>Funds requested</th>
<th>Match value</th>
<th>Match type</th>
</tr>
</thead>
<tbody>
<tr>
<td>46% MTDC federally negotiated rate</td>
<td>$ 39,606</td>
<td>$</td>
<td>Cash ☐ In-Kind ☐</td>
</tr>
</tbody>
</table>
Program Income

Program income is gross income—earned by a recipient or subrecipient under a grant—directly generated by the grant-supported activity or earned only because of the grant agreement during the grant period of performance. Program income includes, but is not limited to, income from fees for services performed; the sale of commodities or items fabricated under an award (this includes items sold at cost if the cost of producing the item was funded in whole or partially with grant funds); registration fees for conferences, etc.

<table>
<thead>
<tr>
<th>Income source</th>
<th>Description of how income is reinvested</th>
<th>Funds expected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Program income total</strong></td>
<td></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

Equal Opportunity Statement

USDA is an equal opportunity provider, employer, and lender.

Paperwork Burden Statement

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 0581-0240. Public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reading and utilizing this document to prepare an application, reviewing which items are allowable, and understanding the terms and conditions of the grant award.