Advancing Animal Disease Traceability (ADT) Road Map for Oklahoma

A Three-Year Plan

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Date: January 13, 2025

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I. EXECUTIVE SUMMARY

The fundamental problem this plan addresses is the need to improve the ability to trace livestock moving interstate and for the corresponding data to be obtained and recorded in a searchable, shareable electronic format as efficiently as possible. The Oklahoma Department of Agriculture, Food, and Forestry Animal Industry Service (ODAFF AIS) is committed to advancing animal disease traceability efforts both regionally and within the state by aligning our traceability objectives to mirror the overarching goals established by the United States Department of Agriculture (USDA). This includes advancing the electronic sharing of data among federal and state animal health officials, veterinarians, and industry associations. by sharing basic traceability data with the federal Animal Health Events Repository (AHER), promoting and assisting with the transition of mandatory electronic identification for animals requiring individual official identification, exploring the ability to track animals from birth to slaughter through a system that allows for tracking data points to be connected, and by encouraging the use of electronic interstate Certificates of Veterinary Inspection by accredited veterinarians. The key elements of this plan include traceability performance measures, administration of official identification devices, information sharing, electronic records, outreach and communication, and compliance and enforcement of traceability regulations. The primary benefit of a robust Animal Disease Traceability system in Oklahoma is the ability to efficiently and effectively track livestock during disease investigations. The disease threat can be mitigated when control measures are rapidly implemented due to infected or exposed animals being quickly located. These measures protect the vital animal agriculture industry within the state and allows for continuity of business which minimizes the economic impact during a disease response. Our plan builds upon previous efforts to advance animal disease traceability by incorporating successful existing methods and finding new innovative ways to accomplish our goals. For example, ODAFF AIS developed a successful statewide pilot project to increase the capture of official identification of cattle at livestock markets. We have also participated in national pilot projects to determine the feasibility of new technology methodologies by integrating the varied cattle industry sectors into these projects. Ultimately to have an effective traceability system in Oklahoma we will work with our producers, industry, accredited veterinarians, and USDA APHIS VS to build the infrastructure and framework necessary to propel us forward. This plan identifies our overall goals and objectives, identifies strengths and weaknesses, and outlines tasks that need to be accomplished during the timeline for implementation FY 2025-2027. ODAFF AIS is dedicated to doing the best job possible with whatever amounts are allotted for this plan.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

This roadmap is prepared and will be implemented by Oklahoma Department of Agriculture, Food, and Forestry Animal Industry Services (ODAFF AIS). ODAFF AIS serves the livestock producers of Oklahoma, and our mission is to protect the herds and flocks from incursion of disease. Traceability data is used by ODAFF AIS for disease traces, FDA tissue residue investigations when requested, lost and stolen animal inquiries, and all hazard events like natural disasters. The values guiding the animal disease traceability system in Oklahoma include industry protection and the maintenance of animal movement and commerce. The Oklahoma animal disease traceability advisory group represents the multiple facets of the Oklahoma livestock industry. The advisory

group meets when there is a need or when a gap in traceability has been detected to discuss the solutions and innovations to propel traceability in Oklahoma. The advisory group includes representatives from, but is not limited to:

- Oklahoma Secretary of Agriculture
- Oklahoma State Veterinarian
- USDA APHIS VS Area Veterinarian in Charge (AVIC)
- Oklahoma Veterinary Medical Association
- Oklahoma State University Cooperative Extension Service
- Oklahoma State University College of Veterinary Medicine
- Oklahoma Farm Bureau
- Oklahoma Cattlemen's Association
- Oklahoma Livestock Marketing Association
- Oklahoma Pork Council
- American Farmers and Ranchers
- Oklahoma White Tail Deer Farmers Association

2.2 Where are we now?

In Oklahoma, traceability is defined as the cross-cutting component of all animal and disease programs which aids in locating and identifying individual animals, their previous locations, and any exposed animals. Currently, traceability proficiency is measured by the four trace performance measures (TPMs) defined by USDA APHIS VS. These TPMs have been established as one method to measure and document progress. ODAFF AIS will utilize National Priority Traces (NPT) initiated by National Traceability Staff to achieve the assigned number of TPMs. We will continue to use actual traces for either disease, disaster, or theft to help strengthen our response capability. Corrective action will be initiated if an elapsed time for any TPM successfully completed falls within an unacceptable rating. ODAFF AIS's information system being used to support traceability efforts is being coordinated through USAHerds software. This software has been utilized since June 2011 and is currently being used by 17 other states in the nation. However, due to the age of the software platform, ODAFF AIS has begun the process to transition to USAHerds' newest platform, AgEnterprise. We anticipate AgEnterprise to be fully operational by the end of 2025. Once the transition is completed, we will have the opportunity to request enhancements to this software on a yearly basis and it will still be a collaborative effort amongst all partner states (USAHerds and AgEnterprise). This allows for improvements in data standardization (such as the ability to receive the USAHA standard eCVI XML message) and allows for the development of integration or communication into other systems to enhance sharing of vital data. Requests for information are available Monday through Friday 8am to 5pm. There is no specific funding for animal disease traceability through state appropriations; non-federal funds come directly from ODAFF's general fund. Without federal assistance, this program would be restrained and would require prioritization of certain traceability aspects. This application runs on two servers; one is the application server, and one is the database server. These servers are regularly updated and backed up for continuous availability. Upgrades to Servers and Operating System software occur as

needed or as technology changes. Data can be shared within and outside the agency in multiple formats in reasonable amounts of time.

2.3 Strengths and Weaknesses

ODAFF AIS's strengths include USAHerds, the VS Form 4-54 bovine identification data collected electronically at all Oklahoma livestock markets, several administrative assistants proficient at PIN allocation and USAHerds navigation. All livestock data entered into USAHerds is in a searchable format that allows for rapid dissemination of information when performing disease trace backs and trace outs. ODAFF's weaknesses include CVI scanning and electronic retrieval, limited data entry personnel for CVI and test chart integration into USAHerds, shortage of electronic CVI, not operating USAHerds to its full potential, and not having an administrator dedicated to traceability only.

2.4 Opportunities and Threats

Cattle, hog, and broiler production rank as the top three agricultural commodities by 2023 Oklahoma Agricultural Statistics (USDA NASS) with cattle having a value of 3.9 billion dollars in 2023. A domestic or foreign animal disease event could have a devastating direct impact on these producers; however, the indirect economic effects would be far reaching both locally and statewide. Additionally, Oklahoma is subject to multiple catastrophic events on an annual basis, such as tornados, wildfires, drought, winter storms, flooding, and even earthquakes. Although this plan does not specifically create opportunities in ODAFF's ability to respond, the traceability infrastructure is another tool that can be used to provide relief (e.g., linking missing livestock with their owners). This plan would avoid consequences of potential threats due to the comprehensive traceability infrastructure being developed and provide for better use of available resources than current approaches. This plan would also enhance networking opportunities with federal, state, and tribal agencies. If this plan is not implemented, no other agency will be tasked with doing so. In the past, ODAFF AIS has been successful in coordinating with other entities regarding traceability.

2.5 Inventory of existing infrastructure and suitability assessment

Human resources of ODAFF AIS available for traceability purposes include: one state veterinarian, two staff veterinarians, one veterinary medical officer, 13 livestock inspectors, and five administrative assistants. There are no connectivity issues in the office; Oklahoma Management and Enterprise Services (OMES) manages the software and hardware systems for all state agencies allowing for better IT infrastructure and maintenance. All necessary personnel have access to the animal disease traceability information systems. All paper record systems are maintained in storage (by import state, export species, or test program) for at least five years. Automated data capture capability is limited to certificate number and species on CVIs unless it is generated by an eCVI compatible with the USAHA eCVI xml schema. The USAHerds application and database Server uses Dell Power Edge 210 Server and Windows Server 2008R2 Standard. It has eight gigabytes of RAM and a storage capacity of one Terabyte. The servers are protected

by the agency firewall, and only super users have administrative access to the server. Users can apply for accounts through the USAHerds application. We are in the process of switching to the new USAHerds platform, AgEnterprise which will increase our ability to electronically capture data as well as provide improved security features to traceability data.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 Vision Statement

"To advance traceability so as to better protect Oklahoma producers' animals, livelihood, and future."

3.2 Mission Statement

"To protect the herd and flock of Oklahoma."

IV. TRACEABILITY REQUIREMENTS

4.1 Strategic goal(s)

"To further develop and implement a State-wide infrastructure for advancing animal disease traceability compatible with State and USDA standards." This will be accomplished by adherence to the overarching strategic goals of ADT:

1. Enhance electronic sharing of data among Federal and State animal health officials, veterinarians, and industry; including sharing basic ADT data with the Federal Animal Health Events Repository (AHER);
2. Increase use of electronic ID tags for animals requiring individual identification to make the transmission of data more efficient;
3. Enhance the ability to track animals from birth to slaughter through a system that allows tracking data points to be connected; and
4. Elevate the discussion with States and industry to work toward a system where animal health certificates are electronically transmitted from private veterinarians to State animal health officials.

4.2 Programmatic goals (objectives)

FY 2025 – Successful migration of traceability data from USAHerds to AgEnterprise; launch ODAFF backtag program in select cattle livestock markets; discontinue paper CVI distribution to accredited veterinarians; continue allocation of EID tags to accredited veterinarians, livestock markets, and producers for replacement cattle while inventory exists; work with OSU extension to host workshops on utilizing EID technology; increase use of electronic regulatory documents by Category II accredited veterinarians; conduct audits within tag distribution record system to ensure accredited veterinarians are recording allocated EIDs adequately; initiate use of the Mobile MIMs application (if available)

FY 2026– Successful adoption of ODAFF backtag program in cattle livestock markets; less than 5% of accredited veterinarians utilizing paper CVIs issued to them prior to 2025; continued allocation of EID tags to accredited veterinarians, livestock markets and

producers for replacement cattle if inventory exists; continued use of the Mobile MIMs application (if available); conduct audits within tag distribution record system

FY 2027 –All accredited veterinarians utilizing eCVIs; traceability infrastructure in place for livestock markets; all Category II accredited veterinarians utilizing EID tags electronically and submitting regulatory documents in an electronic format; AgEnterprise software used to its fullest extent; conduct audits within tag distribution record system

4.3 ADT Trace Performance Measures (TPMs)

Currently, traceability proficiency is measured by the four trace performance measures (TPMs) defined by USDA APHIS VS. These TPMs have been established as one method to measure and document progress. Because of the unique location of Oklahoma, we are at a crossroads agriculturally speaking. Abundant numbers of cattle are moved interstate into our livestock markets, and this allows us ample opportunity to perform traces. ODAFF AIS will utilize National Priority Traces (NPT) initiated by National Traceability Staff to achieve the assigned number of TPMs. We will continue to use actual traces for either disease, disaster, or theft to help strengthen our response capability. NPT will be reported within the TPM utility provided in the Emergency Management Response System 2. Traces completed for the four trace performance measures thus far have been adequate. However, corrective action will be initiated if an elapsed time for any TPM successfully completed falls within an unacceptable rating.

4.4 Data requirements

Oklahoma's official identification standards follow 9 CFR. Oklahoma has no special arrangements with other states regarding other identification formats. ODAFF AIS distributes white EID tags to livestock inspectors, accredited veterinarians, livestock markets, and producers. Orange EID tags are reserved for official calfhood vaccination and only distributed to accredited veterinarians. Tag distribution records are maintained within USAHerds and Animal Identification Management System (AIMS). Accredited veterinarians are issued a tag distribution excel spreadsheet and required to submit records in a timely basis for inclusion into USAHerds and AIMS. ODAFF AIS audits accredited veterinarians to determine appropriate tag distribution of records are in place. All livestock markets in Oklahoma are approved tagging sites. A premises identification number (PIN) will be necessary for a producer or accredited veterinarian to order tags. A PIN application is available on ODAFF AIS website as well as linked on USDA ADT website. Premises identification shall follow standards set by USDA APHIS VS and the SPIS. Location identification numbers (LID) shall be allocated through the USAHerds software. An account will be necessary for LIDs which will include basic contact information; however, a mailing address will be accepted in place of a physical address. ODAFF AIS verifies, creates, and updates locational information associated with these premises using information obtained from entry of CVIs, test charts, and vaccination records. Commuter swine herds must provide a monthly summary of interstate movements and must also test 5% of the herd annually for brucellosis and pseudorabies. There are no additional forms, except for cervidae, necessary for interstate movement

other than a Certificate of Veterinary Inspection. Traceability data will be shared with USDA APHIS VS through AHER. Export CVIs are emailed to the state of destination within seven days of receipt. Group/lot identification will be handled according to USDA APHIS VS standards and guidelines.

4.5 Information technology plan

ODAFF's budget has fluctuated for the last several years, but projected State of Oklahoma budget for FY2025 remains level. Despite this, ODAFF AIS is investing in better information technology equipment and infrastructure by transitioning to AgEnterprise as it will allow for the successful implementation of this plan. ODAFF AIS has also invested in hardware and software to be provided to cattle livestock markets within the state to standardize the electronic data captured and submitted to ODAFF AIS. When revenues and budgets improve, ODAFF AIS will continue to invest in equipment, software, and hardware. This may include but is not limited to EID equipment and tags, software to assist in the submission of electronic forms, and additional data entry personnel to assist with CVI entry. However, there are no specifics per fiscal year.

4.6 Resource requirements

Specific expertise or consultants are not needed that are not currently available. ODAFF has a continuity of operation plan (COOP) that is updated yearly. Automated data capture resources for paper CVIs are needed. ODAFF AIS has augmented this need by no longer providing paper CVIs to accredited veterinarians. However, priority is given to paper import CVIs with official identification. Civet, an external software, is utilized to capture data more efficiently into USAHerds. No additional space is needed.

4.7 Organizational needs

No need for organizational change exists, and no additional resources can be leveraged within the current administrative structure.

4.7.1 Executive support

No additional support from executive management is needed. Accountability is provided through monthly reports to the Oklahoma Board of Agriculture, ODAFF financial officers, and quarterly reports to USDA APHIS VS. Officials are briefed on progress and baseline measures of performance through quarterly reports.

4.7.2 Coordination and oversight procedures

The Oklahoma animal disease traceability advisory group represents the multiple facets of the Oklahoma livestock industry and meet as needed to address corrective actions or to discuss innovative ways to propel traceability within the state. Responsibilities for implementing this plan are assigned by the Oklahoma State Veterinarian. Emergency preparedness resources are engaged or responded to through the Oklahoma Department of Emergency Management. Compatibility with other states and USDA APHIS VS is monitored through USAHerds and by informal conversation. Disputes are arbitrated with all parties involved. Feedback

is obtained relative to perception of successful implementation above and below the administrative authority by discussion with producer groups and industry associations. When administrators are replaced, transition is achieved by the basic knowledge of programs from the remaining staff veterinarians.

4.7.3 Policy

There is no need to address or change a state policy to align with 9CFR part 86 or the ADT General Standards document as they align with current goals and objectives.

4.7.4 Staffing

Full-time, paid support staff is justified by need and contingent on funding. Budgetary restraints and hiring freezes have limited what is intended to be achieved with traceability. ODAFF AIS currently has only one data entry personnel that is 100% dedicated to animal disease traceability; however, all staff work with traceability in one manner or another. The job requirements list the specific qualifications necessary. No additional human resources can be leveraged to assist in implementing this plan. Professional credentials and certifications are not an issue. Job descriptions for the roles needed are provided. Animal disease traceability information is a distinct function within the unit.

4.7.5 Budget requirements

ODAFF AIS receives $239,920 in federal funding for animal disease traceability and commits at least $48,000 (20% of the cooperative agreement) from its own budget. ODAFF AIS insulates against budget cuts by cross-training employees and combining jobs. No other funding sources can be leveraged to support this plan.

4.7.6 Outreach

4.7.6.1 Accredited veterinarians

ODAFF AIS plans to inform accredited veterinarians of traceability updates with ODAFF AIS emails and a webpage, Oklahoma Veterinary Medical Association's (OVMA) newsletter, OVMA annual convention, and OVMA DVM Listserve. Continuing education is offered for accredited veterinarians regarding traceability at the OVMA's annual convention each year. ODAFF AIS and USDA APHIS VS have a full morning and afternoon each year dedicated to regulatory topics. To enhance the use of eCVIs and to assist with the EID tag transition, ODAFF AIS demonstrates eCVIs and the use of EID tags and associated technology. ODAFF AIS will continue to provide information to veterinarians of the options to capture data automatically utilizing EID tags and electronic software any time an opportunity presents itself at annual meetings and or in-person visits. The accredited veterinarian will be instrumental in distributing and applying the no cost EID tags provided by

USDA APHIS VS. These tags will be allocated to individual accredited veterinarians for their use to officially identify classes of cattle that require identification for interstate movement.

4.7.6.2 Slaughter plants

Oklahoma has 39 state inspected plants that are under the Food Safety (FS) Division of the ODAFF. ODAFF AIS works closely with FS educating inspectors on official identification, record keeping, and traceability drills. The plan for accessing information from our slaughter plants includes providing EID readers to our Food Safety division's meat inspectors to capture and record any EID tags that are collected at harvest.

4.7.6.3 Industry as a whole

The animal disease traceability advisory group will discuss the best methods for informing the industry of the implementation of this plan. This will likely include press releases, webpages, Oklahoma State University Cooperative Extension Service, ODAFF AIS emails, industry associations, and social media sources. The focus of this plan will be the cattle industry since official identification is adequate for other species in Oklahoma. Mandatory EID tags are already required for transitional swine during official Brucellosis and Pseudorabies testing. The value of a robust traceability system will be the focus of outreach efforts towards producers. ODAFF AIS would like to conduct table-top exercises provided by APHIS in cooperation with federal personnel to instill the need for traceability to minimize disease response impacts on the industry. Outreach for this plan will be universal and will not target one group over another so there should be no "under-served" communities. ODAFF AIS has multiple regional field personnel who are familiar with producers in their areas.

4.8 Monitoring and reporting interstate movement activity

ODAFF AIS will utilize movement documents to include but not limited to certificates of veterinary inspection, import permits applications, and commuter herd agreements to determine the number of animals and the number of shipments that move interstate. The data will be validated by normal standard operating procedures for these documents.

The following data points will be tracked and available upon request:

- Number of ICVIs and other interstate movement documents created within the State on a year-to-date basis for move-out animals
- Number of ICVIs and other interstate movement documents received for move-in animals
- Number of animals by species and class for move-in events associated with ICVIs and other interstate movement documents, indicating the number of animals officially identified and the number not officially identified

- Number of animals by species and class for move-out events associated with ICVIs and other interstate movement documents, indicating the number of animals officially identified and the number not officially identified
- Volume of distribution for each official numbering system/device issued by the State. USDA APHIS VS distributes backtags for market facilities

V. ADVANCING TRACEABILITY

5.1 Ranking of priorities for advancement

- Additional data entry personnel to ensure ADT data remains current and timely
- Migration of traceability data from USAHerds to AgEnterprise
- ODAFF Backtag program
- New equipment for automated data capture and IT infrastructure
- Increase utilization of EIDs by Oklahoma producers and accredited veterinarians
- Increase utilization of Mobile MIMs application when available by accredited veterinarians
- All CVIs submitted in electronic format

ODAFF believes that a phased-in approach is appropriate over a three-year period and that various components are dependent upon measurable successes rather than defined time periods.

5.2 Implementation of objectives

FY 2025 – Successful migration of traceability data from USAHerds to AgEnterprise, launch ODAFF backtag program in select cattle livestock markets; discontinue paper CVI distribution to accredited veterinarians; continue allocation of EID tags to accredited veterinarians, livestock markets, and producers for replacement cattle while inventory exists; work with OSU extension to host workshops on utilizing EID technology; increase use of electronic regulatory documents by Category II accredited veterinarians; conduct audits within tag distribution record system to ensure accredited veterinarians are recording allocated EID adequately; initiate use of the Mobile MIMs application (if available)

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