Advancing Animal Disease Traceability (ADT) Road Map for Kansas

A Three-Year Plan

Submitted by:

JUSTIN T SMITH DVM

ANIMAL HEALTH COMMISSIONER

KANSAS DEPARTMENT OF AGRICULTURE, DIVISION OF ANIMAL HEALTH

1320 RESEARCH PARK DRIVE, MANHATTAN, KS 66502

(785) 564-6601

Submitted to:

DR. MELISSA LANG
AREA VETERINARIAN FOR KANSAS
VETERINARY SERVICES
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

1131 SW WINDING ROAD

TOPEKA, KS 66608

(785) 228-6565

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I. EXECUTIVE SUMMARY

The Kansas cattle industry is a critical part of the state's agricultural income, the *2024 Economic Contribution Report* shows that beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector, contributed an output to the Kansas economy of $11.7 billion in total economic output. Likewise, the top agricultural employment sector with over 38,000 jobs in the 2024 Economic Contribution Report was the beef cattle sector. Since cattle is the primary livestock species considered under the federal animal disease traceability (ADT) rule, this roadmap for advancing ADT in Kansas will concentrate on electronic infrastructure initiatives aimed at the Kansas cattle industry. The focus will be on collaborating with accredited veterinarians, livestock market operators, and producers to improve and continue developing a functional and efficient animal disease traceability system in the state of Kansas.

To enhance animal disease traceability, it is crucial to improve access to accurate information as swiftly as possible. The efficiency of gathering traceability information from the field and completing data entry into AgEnterprise, the data management program the Kansas Department of Agriculture - Division of Animal Health (KDA-DAH) utilizes to house its traceability information, has progressed significantly in the past three years, but it remains an area for further development. Ongoing improvements in electronic information collection and transmission enable KDA-DAH to be more proactive in disease surveillance and more responsive to emergencies. This can be further improved through more prompt submission of required reports (such as backtag charts, certificates of veterinary inspection [CVIs], Official Calfhood Vaccination (OCV) charts, tuberculosis [TB] test charts, and tag distribution), providing us with real-time traceability of Kansas cattle.

KDA-DAH regularly conducts traces that include both real and test traces which test our processes and systems. Regardless of why the trace is initiated, most of these traces involve cattle subject to federal ADT regulations for identification and documentation; Or are cattle sold through a Kansas livestock market at some point in their lives, often multiple times. This awareness allows us to concentrate our efforts on building a data-sharing infrastructure specifically designed for livestock markets.

The livestock market improvement project represents the culmination of years of groundwork laid by ADT and KDA-DAH staff. Through these efforts, we have identified specific needs and provided tools to enhance the functionality and efficiency of the data-gathering and reporting process. Our work has led directly to the further development of VET-CVI an electronic CVI platform for interstate certificates of veterinary inspection, OCV charts, and TB test charts. All of the documents created and submitted through VET-CVI are fully integrated with AgEnterprise for automatic upload once complete. Additionally, we have been focused on the development and deployment of the KDA BACKTAG software

program, which now has been deployed to 63% of the livestock markets in the state. This program allows livestock market veterinarians to electronically capture information on cattle sexually intact 18 months of age and older and report to KDA-DAH electronically for rapid upload into the AgEnterprise database. These two initiatives have significantly increased the volume of electronic data transfer from veterinarians to KDA-DAH. KDA-DAH has continued to develop a portal for livestock markets to remit calculated backtag fees online and access backtag information in real-time when using the KDA BACKTAG software to capture. This improvement will further the use of KDA BACKTAG and increase traceability data into AgEnterprise.

KDA-DAH prioritizes high-quality, electronic, origin-sourced data transmitted seamlessly to our AgEnterprise database. As we begin to see even more electronic data transfer via OCV charts, TB test charts, CVIs etc., we will lessen our need for data-entry personnel, as well as limit the wasteful need for duplicated data entry.

The KDA-DAH roadmap to traceability success will follow the guidelines established by the United States Department of Agriculture (USDA) in 2018 to implement the ADT Program and the four overarching goals to advance ADT. The following plan outlines the path KDA-DAH will take over the next three years using USDA's guidelines to advance animal disease traceability in Kansas by:

- Increase the continued usage and distribution of electronic identification (EID) tags
- Continuing to deploy and develop the KDA BACKTAG program
- Continue to develop and deploy a dairy calf movement portal process for a quicker, more accurate, and more efficient way to submit movement documentation
- Explore alternative means of a movement documentation and partner with key stakeholders to increase the accuracy of data submitted on feeder calves.
- Continue to assign premises identification numbers (PINs) and begin a model of updating contact information on all PINs on a rotating basis.
- Promote the use of electronic CVIs, OCV charts, TB test charts, tag distribution reports, etc.
- Explore new and novel approaches to enhance traceability across the state from producers, veterinarians, and livestock markets for a more efficient traceability system
- Begin the process of being able to quantify the level of traceability in the state through potential test traces given to stakeholders
- Participate in the National Priority Trace Exercise

ADT Cooperative agreement funding predominantly supports the salary of one ADT Coordinator, 2 data entry personnel, and 2 part time students. The ADT Coordinator is responsible for overseeing the management of the state's animal disease traceability program. This role involves direct communication and coordination with members of KDA-DAH, USDA Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS) personnel, accredited veterinarians, livestock markets, producers, and other state officials to ensure efficient and effective program support and implementation of ADT activities across the state. Two data entry personnel are responsible for the data entry and data management into the AgEnterprise database. Two part-time students who assist in data entry into AgEnterprise. The remainder of the funding goes towards annual maintenance of the AgEnterprise database, and in-state travel to deploy various programs. Through these efforts, the projected cost and benefits are expected to increase slightly each year at approximately 3-4%. These increases, without further funding opportunities, could jeopardize the ability to travel and meet with producers and veterinarians across the state to understand their needs, could lead to loss of staffing which could impact the accuracy and readily available traceability information in the AgEnterprise database, and an ability to ensure the AgEnterprise database can continue to be used for electronic data storage.

II.   CURRENT TRACEABILITY SITUATION

2.1   Who are we?

Through consolidation of the Livestock Sanitary Commission and the State Brand Commission in 1969, the Kansas Division of Animal Health (DAH) was created. Currently, there are three programs that make up the DAH - Animal Disease Control, Animal Facilities Inspection, and the Brands Program - all of which work to ensure the health and welfare of Kansas livestock and domestic animals. The DAH works in conjunction with two essential boards: the Animal Health Board and the Pet Animal Advisory Board. In 2011, the DAH joined with the Kansas Department of Agriculture, and in 2014 relocated to Manhattan, Kansas. The Kansas Department of Agriculture's mission is *"To serve Kansas farmers, ranchers, agribusinesses, and the consumers/ customers they serve. Advocating for and promoting the agricultural industry, the state's largest industry, employer, and economic contributor. And support Kansas and its citizens by ensuring a safe and sustainable food supply, protecting public health and safety, conserving water and other natural resources, protecting animal and plant health, and providing consumer protection to the best of our ability."*

Primary Constituents involved in the success of the traceability system in the state of Kansas include:
- Kansas livestock producers
- Kansas-accredited veterinarians

- Kansas livestock markets
- Kansas Department of Agriculture – Division of Animal Health
- Kansas area USDA–APHIS-VS

Additionally, the Kansas livestock industry is consulted regularly on outreach, education, and direction regarding the ADT program in the state. These external stakeholders are vital to the success of the ADT program and have further contacts with their own constituents statewide. These external stakeholders include Kansas livestock industry representatives from multiple facets of the Kansas livestock industry. These stakeholders include, but are not limited to representatives from:

- Kansas Cattlemen's Association
- Kansas Farm Bureau
- Kansas Livestock Association
- Kansas Livestock Marketing Association
- Kansas Pork Association
- Kansas Dairy Association
- Kansas Horse Council
- Kansas State University
- Kansas State University Research and Extension
- Kansas Veterinary Medical Association
- Kansas State University College of Veterinary Medicine
- Kansas Animal Health Advisory Board

Through collaboration with industry stakeholders, it is clear that traceability information in the state of Kansas shall remain secure and confidential in AgEnterprise, the state ADT database. Further, the data collected as part of the ADT system in Kansas will only be used at the discretion of the KDA-DAH or Kansas USDA officials for traceability or animal disease investigation purposes. Confidential data will not be available or accessible to external users and is protected based on K.A.R 9-7-1 (e). Generalized data may be used for the purposes of presentations and education with external stakeholders, such as percentage of total electronic CVIs vs the number of paper CVIs received. However, all specific data is held confidential and will not be allowed for public release.

The ADT program in Kansas is guided by several key values to ensure the health and safety of livestock within the state. These values include:

- **Innovation and forward-thinking** – KDA-DAH aims to remain at the forefront of innovation for ADT programs and ideas nationwide. KDA-DAH is dedicated to identifying and collaborating with willing partners to explore alternative and more effective methods for producers and veterinarians to collect ADT information.

- **Efficiency and accuracy** – KDA-DAH's goal is to capture animal identification and movement information quickly, accurately, and efficiently through electronic identification tags and electronic documents.
- **Confidentiality** – KDA-DAH acknowledges the sensitive nature of the information gathered as part of ADT, and we are committed to upholding high standards of confidentiality to protect Kansas producers and the livestock industry.
- **Responsiveness** – KDA - DAH ADT aims to be responsive and attentive to the needs of the livestock industry when required, assisting with questions and troubleshooting issues related to EID tags, readers, and eCVIs.
- **Meeting people where they are** – To fully understand the challenges, triumphs, and concerns veterinarians and producers encounter and to establish a highly successful ADT system in the state of Kansas, we strive to engage with our stakeholders in their own environments. This approach ensures we gather genuine insights and foster more meaningful collaborations with stakeholders from across the state.

2.2   Where are we now?

Animal disease traceability is the process of knowing where diseased or at-risk animals are, where they've been, and when. This process is essential in aiding a rapid response in an animal disease event, reducing the number of animals involved in an investigation, while minimizing the time needed to respond, and decreasing the cost and impact to producers and the government. Animal disease traceability is a cross-cutting system in KDA-DAH that correlates with Animal Health Planning and biosecurity, disease eradication programs, and the finalization of the National Bio and Agro-Defense Facility in Manhattan, Kansas.

Historically, the Kansas ADT program was based on a 100-year-old paper system, wherein paper files were mailed to the State, categorized, and filed in a filing cabinet. The measure of tracing capabilities historically, was limited to the successfulness of an actual disease trace-out and the speed at which staff could find a piece of paper in the cabinet. This process oftentimes took days to weeks. The Department of Animal Health (DAH) quickly realized in 2011 that to advance animal disease traceability, it was essential to improve access to accurate information as quickly as possible. Thus, in 2011 the DAH began moving from a paper-based traceability system to an electronic-based system maintained in a state database called USAHerds. As data was continually entered into the database, traces became more efficient and accurate. Kansas routinely performs tests, exercises, and real traces which allows us to routinely check for accuracy and quickly identify any gaps within the system. Traceability performance in the state of Kansas is measured by

the time elapsed in executing a trace-back. Minimizing the time elapsed during a trace will continue to meet USDA's performance standards. Additionally, Kansas measures the capability of the traceability system by quantifiable goals set forth by the Kansas ADT Coordinator each year. These goals and benchmarks set forth by the Kansas ADT Coordinator measure the number of traceability documents received electronically and the number of electronic tags distributed in the state each month. The documents include, but are not limited to import and export CVIs, backtag charts, TB test charts, OCV charts, and tag distribution records.

The goals set forth by the Kansas ADT Coordinator are shared with KDA-DAH personnel and area USDA-APHIS-VS personnel who all work together to achieve these goals. Progress reports are sent out monthly, or more often as needed, to internal KDA-DAH personnel and area USDA-APHIS-VS personnel. Furthermore, as KDA-DAH gives presentations to stakeholders and the most recent ADT information is shared as part of the presentation. This may include information on movement documents received during a certain time frame, the number of paper and electronic certificates of veterinary inspection (CVI) received, or the number of EID tags distributed during a certain time frame.

The KDA-DAH has open communication with other state agencies and area USDA-APHIS-VS personnel. Meetings are held quarterly with the area USDA-APHIS-VS\ Area Veterinarian in Charge (AVIC) and Animal Identification Coordinator (AIC) to inform and gather feedback on current issues and next steps. Additionally, the Kansas ADT Coordinator has been leading a National State ADT Call with the purpose of bringing together state ADT Coordinators, Animal Health Staff, and State Veterinarians from various states to discuss the challenges, successes, and issues related to ADT implementation. Together aiming to share ideas for improvement and serve as a resource to enhance animal disease traceability in all participating states. These efforts have allowed Kansas to continue to boldly lead the conversations regarding ADT nationally and opened opportunities for engagement with states from across the country on ADT issues, triumphs, and the exploration of new novel more efficient ways for the state ADT program.

The performance standards specified in USDA's ADT guidance are the measurement of actual and test trace exercises. Kansas routinely participates in the USDA National Priority Trace Exercise and successfully completes each of these exercise traces each year. Additionally, Kansas standards are focused on measurable quantitative goals set forth each year by the Kansas ADT Coordinator. These goals have included increasing the percentage of livestock markets using the KDA BACKTAG program backtag and official ID submissions, increasing the number of OCV charts received from VET-CVI for automatic upload into AgEnterprise, decreasing the use of paper CVIs and eCVI PDFs, among many other measurable program goals set forth each year.

Each of these goals is reevaluated at the end of each month and new goals are defined at the beginning of each year.

As Kansas continues to advance traceability systems across the state, our primary focus is on further developing a robust technology infrastructure to electronically collect and transmit data to KDA-DAH or other states as needed. All data supporting ADT efforts in Kansas is securely stored in the state database AgEnterprise. Enhancements to AgEnterprise are made annually through collaboration among states using a similar framework. This collaboration ensures that improvements benefit all states utilizing the database while maintaining the security of our data for those with access to AgEnterprise in Kansas. AgEnterprise can receive electronic certificates of veterinary inspection (eCVIs) that comply with the United States Animal Health Association (USAHA) eCVI XML data standard, enabling seamless integration of multiple systems and efficient, accurate information sharing. Other electronic information that AgEnterprise can receive includes but is not limited to, OCV records, TB test charts, livestock market backtag charts, and commuter herd agreements. AgEnterprise electronically submits animal ID information to the USDA Animal Health Events Repository (AHER) daily at 5:00 PM, making information searchable by animal health officials in any state. The Kansas ADT Coordinator actively participates in groups overseeing the approval of eCVIs nationwide and sits on the technical committee for the state database. Kansas continues to develop and refine the VET-CVI application processes with states across the country that use the Acclaim Systems databases (AgEnterprise or USAHerds). VET-CVI is an electronic data capture and transmitting app that allows veterinarians to create and submit certificates of veterinary inspection (CVI), OCV records, and TB test charts electronically into AgEnterprise. Through collaboration and updates to the VET-CVI application, Kansas now has over 525 veterinarians signed up for VET-CVI. Kansas strives to enable veterinarians to begin, work on, and submit a CVI in less than 30 seconds. We believe that the less time veterinarians must spend on, and the easier it is to complete a CVI, the more compliance we will see from producers requesting a CVI and veterinarians writing them.

KDA-DAH receives requests for information from the public. Information requests from the public are deemed confidential under K.S.A. 47-674 and K.A.R. 9-7-1 provide that movement records, diagnostic laboratory results, vaccination records, tag distribution records, livestock market official identification information, enhanced biosecurity plan information, and other records deemed necessary by the Animal Health Commissioner to be confidential. In the event of an animal disease event, other state animal health officials or USDA-APHIS-VS personnel may contact the KDA-DAH for information Monday through Friday 8 AM to 5 PM by calling our main animal health line. For after-hours or weekend inquiries, they can contact the Kansas

Animal Health Commissioner, Assistant Animal Health Commissioner, or ADT Coordinator.

Federal funding supports the Kansas ADT Coordinator, data entry personnel salaries, outreach efforts, and infrastructure improvements. These efforts assist producers and veterinarians in using available technologies to enhance traceability and data capture efficiency. Such funding is crucial for the ADT program's success and the livestock industry's viability in Kansas. Located at the crossroads of the United States, Kansas' large livestock industry faces inherent risks of disease introduction and spread. CVI data shows that Kansas, within any 72 hours, imports animals from over 30 states through over 300 movement documents. These documents account for headcounts such as beef – 28,000+, caprine – 20+, dairy – 5,000+, equine – 50+, ovine – 20+, porcine – 11,000+, and cervid – 5. However, this data excludes movements directly to approved livestock markets in Kansas, movements to slaughter, pass-through movements (e.g., Missouri to Colorado), illegal movements, and intrastate movements. securing appropriate Federal funding is crucial not only for the success of Kansas' livestock industry but also for the overall success of the livestock industry across the United States.

2.3   Strengths and Weaknesses

To ensure a successful ADT program and protect the livestock industry in Kansas, KDA-DAH must continuously assess and reassess the strengths and weaknesses of the current system. The latest evaluation of the ADT program in Kansas highlights several strengths:

- **Strong Relationships**: KDA-DAH maintains an excellent working relationship with Kansas-area USDA-APHIS-VS personnel. Quarterly meetings are held between area USDA APHIS VS AVIC and AIC, along with the Animal Health Commissioner and ADT Coordinator, to discuss concerns and plan next steps for ADT in Kansas. Monthly all staff KDA and USDA meetings are held to give updates on key activities which have happened or are planned to happen.
- **IT Capabilities**: The KDA information technology staff are highly capable and accessible. They are routinely consulted on technical questions and the development of new and innovative initiatives undertaken by the KDA-DAH team.
- **Industry Knowledge**: KDA-DAH personnel have extensive knowledge of the Kansas livestock industry, enabling them to build personal connections with industry leaders and understand the daily challenges they face. This knowledge allows KDA-DAH to explore ways to make processes more efficient and fit seamlessly into the natural workflows of producers and veterinarians.
- **Data Accuracy**: The extensive electronic capture and transmission of ADT information to KDA-DAH have resulted in a large volume of highly

accurate data housed in the AgEnterprise database. KDA-DAH staff routinely check for accuracy and promptly address any issues that arise.

- **Emergency Management**: Kansas is nationally known for its comprehensive emergency management plans and routinely exercises both the plan and the processes in place.
- **Support and Innovation**: KDA-DAH receives strong support from Kansas livestock producers, veterinarians, agribusinesses, and legislators who recognize the importance of safeguarding animal agriculture in the state. KDA-DAH is also known for thinking outside the box and working on innovative ADT programs, utilizing both private and state funding.
- **Electronic Recordkeeping**: KDA-DAH staff routinely consult with private veterinarians across the state to enhance the electronic recordkeeping systems currently in use, aiming for increased adoption statewide. 100% of Kansas livestock markets submit data electronically to KDA-DAH, whether through spreadsheets or KDA BACKTAG.
- **Up-to-date Information**: KDA-DAH ensures that its website stays current with the most relevant information. The website features resources on animal disease traceability, eCVIs, EID tags, readers, taggers, and premises identification numbers.

KDA-DAH encounters several challenges,

- **Missing Target Audience:** While the current approach has achieved success, it largely depends on industry organizations to help KDA-DAH inform and update members on current and evolving ADT approaches. However, KDA-DAH acknowledges that not all primary constituents are part of an industry stakeholder formal organization.
- **Outdated State Movement Regulations:** The livestock industry has undergone significant changes since many of the state movement regulations have been revised. Movement regulations must be updated to reflect and support the current industry landscape. Kansas also lacks intrastate traceability requirements for most species. The ADT system in Kansas predominantly focuses on interstate movements, which rely on CVIs or other movement documentation for animals crossing state lines. Despite the increasing number of electronic import CVIs in recent years, 62.6% of all import CVIs received at KDA-DAH are still paper-based. This reliance on paper import CVIs undermines the accuracy and efficiency of the ADT system in Kansas.
- **Bookend Traceability:** Kansas, like many states nationwide, continues to struggle to meet one of USDA's overarching goals to increase traceability, established in 2018. The goal that Kansas is particularly weak in is *"Enhance the ability to track animals from birth to slaughter through a system that allows tracking data points to be connected."* The inability of slaughter plants and/or USDA FSIS to collect and report all official IDs to KDA-DAH or a centralized database at USDA APHIS makes

this goal extremely difficult to achieve. In the event of a trace, KDA-DAH relies on the slaughter facility to have accurate and timely information to effectively conduct the trace.

- **Updated Premises Identification Information:** The most recent Kansas ADT assessment identified a lack of quality, accurate, and up-to-date premises information as a significant weakness for KDA-DAH. Currently, Kansas has over 35,800 total premises in AgEnterprise, with over 9,300 having a federal premises identification number. While premises registration is voluntary in Kansas, some of these premises with identification numbers may not have been updated since their initial registration in 2011. In the event of a disease outbreak, KDA-DAH needs to have accurate and current information about the locations and contact details of at-risk livestock or poultry to ensure an efficient and effective response.

2.4 Opportunities and Threats

According to USDA 2021 NASS data, Kansas ranks third nationally for the number of cattle and calves (6.5 million head) and cattle on feed (2.66 million head), sixth for beef cows (1.477 million head), tenth for bison (5,727 head) and hogs and pigs (2.04 million head), eleventh for pig crop (3.709 million head), twelfth for goats (40,000 head), fourteenth for sheep and lambs (25,000 head), and sixteenth for milk cows (173,000 head). Given its central location in the United States and the extensive livestock production within Kansas, the threat of animal disease and its potential spread is a top concern for KDA-DAH. While ADT and this strategic plan cannot prevent the introduction of disease, they intend to limit the spread of any potential disease introduction in Kansas. The introduction or continued spread of any domestic or foreign animal disease due to the lack of a functional and efficient traceability system in Kansas would have significant impacts, including direct economic losses to Kansas producers, indirect economic losses to rural Kansas communities and beyond, job losses for agricultural workers, and the immediate closing of export markets worldwide.

In most emergencies in Kansas, counties have the ultimate authority to decide how to handle events, known as Home Rule. However, the Kansas legislature has made it clear through K.S.A. 47-610 that the Kansas Animal Health Commissioner and the Kansas Department of Agriculture – Division of Animal Health serve as the sole agency responsible for responding to and treating animal health events. Additionally, Kansas experiences numerous tornados, wildfires, winter storms, and floods annually. While this plan does not address these situations and KDA-DAH is not the lead agency in those responses, the systems built can assist in relocating lost livestock back to their proper ownership and knowing where animals might be located. KDA-

DAH routinely coordinates with other state agencies on various topics and situations as they arise.

Despite the challenges Kansas faces, there are equally as many opportunities. The resources and broad support for ADT in the state have led KDA-DAH to continuously incorporate new and innovative ways of capturing ADT data in a streamlined and efficient manner. The extensive knowledge and breadth of the Kanas livestock industry, support KDA-DAH to continue being a leader in animal disease traceability nationally, allowing Kansas producers and veterinarians to have the first say in the next steps for ADT nationwide. Kansas producers routinely take advantage of the open export market due to the national traceability system. This export market allows for higher selling prices for producers, with as much as $415 of each bovine sold attributed to these open export markets, according to USDA Economic Research Services in 2024.

2.5   Inventory of existing infrastructure and suitability assessment

In fiscal year 2025, KDA-DAH employed one Animal Disease Traceability Coordinator, two administrative assistants, and four part-time students through cooperative agreement funding. Located on the third floor of the Kansas Department of Agriculture (KDA) in Manhattan, Kansas, next to the National Bio and Agro-Defense Facility (NBAF), Kansas State University, Kansas State Veterinary Diagnostic Laboratory, Kansas State University College of Veterinary Medicine, and the Biosecurity Research Institute, the DAH staff have ample office space, meeting rooms, and boardrooms to conduct work and meet with livestock industry representatives as needed.

The ADT Coordinator is responsible for overseeing the state's animal disease traceability program, involving direct communication and coordination with KDA-DAH members, USDA APHIS VS personnel, accredited veterinarians, livestock markets, producers, and other state officials to ensure efficient and effective program support and implementation of ADT activities across the state. The two administrative assistants primarily handle data entry and management in the AgEnterprise database. The part-time students assist with data entry into AgEnterprise and various projects within the Division of Animal Health (DAH).

KDA provides IT support and infrastructure through the state Office of Information Technology Systems, ensuring availability for any technical issues. While connectivity is not a problem in the office, it can be challenging when traveling across the state. The majority of traceability information is housed in KDA-DAH's state database, AgEnterprise, with access limited to authorized personnel, and even fewer having full access to the entire

database. Those who need access to USDA ADTIS systems for their job duties have the appropriate access.

Although Kansas receives very few paper records, those that do come in are properly scanned and entered into AgEnterprise, with the original paper copies archived and organized by month according to the KDA-DAH record retention schedule. KDA-DAH prioritizes automated data capture processes, with records like electronic CVIs meeting USAHA XML data standards and approved by the National Assembly of State Animal Health Officials (NASAHO). AgEnterprise shares information with the USDA Animal Health Event Repository (AHER) daily.

KDA-DAH utilizes AgEnterprise for various animal health record-keeping processes, including import and export CVI information, tag distribution, foreign animal disease investigations, quarantines, licenses, animal events and sightings, program disease information (National Poultry Improvement Plan, chronic wasting disease, TB, OCV), movement agreements, autogenous vaccination information, premises information, and veterinarian account information.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 Vision Statement

"To be a national leader in animal disease traceability, protecting Kansas's livestock and poultry industries through innovative and efficient traceability systems supported by strong relationships and comprehensive data management."

3.2 Mission Statement

"The Kansas Department of Agriculture – Division of Animal Health is committed to safeguarding the health and economic vitality of Kansas' livestock industry by leading innovative and efficient animal disease traceability (ADT) initiatives. Through strong relationships, cutting-edge IT capabilities, extensive industry knowledge, and a commitment to data accuracy, we proactively address the evolving challenges of animal disease traceability. We strive to enhance efficiency, ensure timely responses to animal health events, and protect the resilience of Kansas' livestock industry. By fostering collaboration with industry stakeholders, leveraging innovative solutions, and maintaining accurate records, KDA-DAH leads the way in securing a prosperous future for producers and the livestock industry across the state."

IV.   TRACEABILITY REQUIREMENTS

4.1   Strategic Goal(s)

To further develop and refine the ADT program in Kansas, the Kansas Department of Agriculture – Division of Animal Health (KDA-DAH) will continue to implement strategic goals in alignment with both the USDA and KDA-DAH to increase traceability.

USDA's Overarching Goals to Increase Traceability - established in 2018:

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 the 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.

Kansas Department of Agriculture – Division of Animal Health Strategic Goals to Increase Traceability:

1. Update the VET-CVI platform in collaboration with the USAHerds/AgEnterprise User Group. VET-CVI is a user-friendly system where animal health certificates, OCV charts, and TB test charts are electronically transmitted from private veterinarians to state animal health officials and integrated into the state database.
2. Maintain and improve the statewide infrastructure for animal disease traceability, ensuring the efficient movement of livestock both interstate and intrastate within Kansas.
3. Increase tag distribution records submitted to KDA-DAH from private veterinarians using EID tags for purposes beyond regulatory requirements.
4. Reduce the number of paper CVIs and eCVI PDFs received, encouraging veterinarians to adopt CVIs that meet the USAHA XML data standard for automatic upload into AgEnterprise.

4.2   Programmatic Goals (objectives)

FY 25 KDA-DAH ADT Programmatic Goals:

1. **Transition to AgEnterprise:** Successfully migrate from USAHERDs to AgEnterprise as the state database, ensuring data cleanup in the current system (USAHERDS), including premises, official ID, CVI information, and veterinarians.
2. **Expand KDABACKTAG Program:** Continue adding Kansas livestock markets to the KDABACKTAG program for electronic backtag chart submission and upload into the state database, along with the ongoing development of the program.
3. **Reduce Paper Export CVIs:** Decrease the number of export CVIs received as paper and begin transitioning Kansas veterinarians from paper and eCVI PDFs to eCVIs that meet USAHA XML data standards.
4. **Increase VET-CVI Records**: Enhance the number of OCV and TB records received through VET-CVI for automatic integration into AgEnterprise.
5. **Boost Tag Distribution Records:** Continue to increase tag distribution records received in Kansas from private veterinarians using EID tags for purposes beyond regulatory requirements.
6. **Develop Dairy Movement Portal**: Collaborate with calf raisers in Kansas and other state animal health officials to create a dairy movement portal for day-old dairy calves. Where the calves are EID tagged at the origin premises and scanned into the portal and then scanned again at the Kansas premises and uploaded into the portal where EID tags are reconciled, and a movement document is created and uploaded automatically in AgEnterprise and the other states' database.
7. **Enhance Education and Outreach:** Increase education and outreach efforts through presentations, webinars, and industry meetings.
8. **Distribute No-Cost EID Tags**: Continue distributing no-cost EID tags as they become available to Kansas livestock markets and licensed and accredited veterinarians in the state.
9. **Provide Affordable EID Tags and Readers:** Ensure KDA-DAH can offer EID tags and readers at the lowest possible cost to the livestock industry through a secured contract.
10. **Collaboration on alternative movement documents:** Explore opportunities to increase the volume and accuracy of traceability documents from livestock markets for feeder animals. Often, a CVI for feeder beef animals serves as a traceability document rather than a health document. The goal is to enhance the number, accuracy, and ease of obtaining movement documentation for feeder beef animals originating from federally approved livestock markets.
11. **Verify and update Kansas premises information:** During a foreign animal disease event, it is critical that KDA-DAH has the most accurate and up-to-date information on premises in Kansas.

To address this need, KDA-DAH will develop a plan to update premises information on a recurring basis.

FY 26 KDA DAH ADT Programmatic Goals:

1. **Collaborate and expand AgEnterprise:** Begin working with other states that now use AgEnterprise as the state database, to expand and explore efficient ways of storing and collecting electronic records. Continue the process of ensuring data integrity within the system and correcting errors as they happen. Begin looking at tools and resources that can assist KDA-DAH in ensuring data integrity in the database.

2. **Expand KDABACKTAG Program:** Transition the final few livestock markets to the KDABACKTAG program for electronic backtag chart submission and upload into the state database, along with the ongoing development of the program for the market office, and other users to input data such as the unloading doc.

3. **Reduce Paper Export CVIs:** Decrease the number of export CVIs received as paper to near zero and increase the transition of Kansas veterinarians from eCVI PDFs to eCVIs that meet USAHA XML data standards. Explore and collaborate with veterinarians and other state animal health officials on ways in which a CVI can be completed in less than 30 seconds, specifically for routine movements.

4. **Increase VET-CVI Records**: Enhance the number of OCV   and TB records received through VET-CVI for automatic integration into AgEnterprise to over 50% of all records received.

5. **Boost Tag Distribution Records:** Continue to increase tag distribution records received in Kansas from private veterinarians using EID tags for purposes beyond regulatory requirements. And explore more efficient ways to upload those distribution records into AgEnterprise.

6. **Develop Dairy Movement Portal**: Continue to collaborate with calf raisers in Kansas and other state animal health officials to develop and utilize the dairy movement portal for 25% of all day-old dairy calves that come into Kansas. Where the calves are EID tagged at the origin premises and scanned into the portal and then scanned again at the Kansas premises and uploaded into the portal where EID tags are reconciled, and a movement document is created and uploaded automatically in AgEnterprise and the other states' database.

7. **Enhance Education and Outreach:** Increase education and outreach efforts through presentations, webinars, and industry meetings.

8. **Distribute No-Cost EID Tags**: Continue distributing no-cost EID tags as they become available to Kansas livestock markets and licensed and accredited veterinarians in the state.

9. **Provide Affordable EID Tags and Readers:** Ensure KDA-DAH can offer EID tags and readers at the lowest possible cost to the livestock industry through a secured contract.
10. **Collaboration on alternative movement documents:** Begin implementing an alternative movement documentation process with other state animal health officials at a select few federally approved livestock markets for beef feeder animals. The goal is to enhance the number, accuracy, and ease of obtaining movement documentation for feeder beef animals originating from federally approved livestock markets.
11. **Verify and update Kansas premises information:** During a foreign animal disease event, it is critical that KDA-DAH has the most accurate and up-to-date information on premises in Kansas. To address this need, KDA-DAH will begin the process of regularly updating premises information on a recurring basis.

FY 27 KDA DAH ADT Programmatic Goals:
1. **Collaborate and expand AgEnterprise:** Continue working with other states that use AgEnterprise as the state database, to expand and explore efficient ways of storing and collecting electronic records. Continue the process of ensuring data integrity within the system and correcting errors as they happen. Begin developing tools and resources that can assist KDA-DAH in ensuring data integrity in the database. Begin exploring efficient innovative methods to gauge if a CVI has met import requirements.
2. **Expand KDABACKTAG Program:** Transition the final few livestock markets to the KDABACKTAG program for electronic backtag chart submission and upload into the state database, along with the ongoing development of the program for the market office. Begin looking at ways in which the BACKTAG program could be used for other species such as sheep and goats at livestock markets.
3. **Reduce Paper Export CVIs:** Receive zero paper CVIs and fully transition away from the eCVI PDFs to eCVIs that meet USAHA XML data standards. Continue to explore and collaborate with veterinarians and other state animal health officials on ways in which a CVI can be completed in less than 30 seconds, specifically for routine movements.
4. **Increase VET-CVI Records**: Enhance the number of OCV and TB records received through VET-CVI for automatic integration into AgEnterprise to over 75% of all records received.
5. **Boost Tag Distribution Records:** Continue to increase tag distribution records received in Kansas from private veterinarians using EID tags for purposes beyond regulatory requirements.

Work with KDA IT to develop an efficient way to report and upload tag distribution records into AgEnterprise.

6. **Develop Dairy Movement Portal**: Continue to collaborate with calf raisers in Kansas and other state animal health officials to develop and utilize the dairy movement portal for 50% of all day-old dairy calves that come into Kansas. Where the calves are EID tagged at the origin premises and scanned into the portal and then scanned again at the Kansas premises and uploaded into the portal where EID tags are reconciled, and a movement document is created and uploaded automatically in AgEnterprise and the other states' database.

7. **Enhance Education and Outreach:** Increase education and outreach efforts through presentations, webinars, and industry meetings.

8. **Distribute No-Cost EID Tags**: Continue distributing no-cost EID tags as they become available to Kansas livestock markets and licensed and accredited veterinarians in the state.

9. **Provide Affordable EID Tags and Readers:** Ensure KDA-DAH can offer EID tags and readers at the lowest possible cost to the livestock industry through a secured contract.

10. **Collaboration on alternative movement documents:** Continue implementing an alternative movement documentation process with other state animal health officials at several federally approved livestock markets for beef feeder animals. The goal is to enhance the number, accuracy, and ease of obtaining movement documentation for feeder beef animals originating from federally approved livestock markets.

11. **Verify and update Kansas premises information:** During a foreign animal disease event, it is critical that KDA-DAH has the most accurate and up-to-date information on premises in Kansas. To address this need, KDA-DAH will continue the process of regularly updating premises information on a recurring basis.

4.3   ADT Trace Performance Measures (TPMs)

KDA-DAH, in cooperation with USDA APHIS VS, will continue to annually administer the National Priority Traces that reflect current tracing capabilities in the state of Kansas. The animal disease traceability performance measures currently used include:

- TPM 1 – Response time to answer: In what state was an imported animal officially identified?
- TPM2 – Response time to answer: Where in your state was the animal officially identified?
- TPM 3 – Response time to answer: From what state was an animal shipped?

- TPM 4 – Response time to answer: From what location in your state was an exported animal shipped?

The first performance standard measures the time required for KDA-DAH to notify the State/Tribe where the reference animal was officially identified. Thanks to the extensive AgEnterprise database, this can be accomplished 99% of the time within a few seconds to a minute. The second performance standard measures the time required for KDA-DAH to validate the application and/or issuance of the reference animal numbers, using distribution records containing contact information for the business or operation to which the tag numbers were issued. Currently, records of tags applied are housed in AgEnterprise and are easily searchable. Initially, this activity was accomplished 75% of the time within 5 business days. As official identification and distribution records have become easier to search, the time required to find the origin of an identification device has significantly decreased, and this standard can now be achieved 99% of the time within a few seconds to a minute. The third performance standard measures the time required for KDA-DAH to notify the State/Tribe from which a reference animal was shipped. Initially, this activity was achieved 95% of the time within 7 business days. As traceability systems in Kansas have matured, this standard can now be accomplished 99% of the time within a few seconds to a minute. Increasing the use of electronic CVIs has made achieving this performance standard significantly easier. The fourth performance standard measures the time required for KDA-DAH to validate the movement of reference animals from Kansas to the State/Tribe of destination, using required CVI information, including the inspection location by an accredited veterinarian and the interstate movement destination. Movement permits or other equivalent documentation can also be used. Initially, this activity was achieved 75% of the time within 5 business days. As the traceability system in Kansas has matured, this activity can now be accomplished 99% of the time within a few seconds to a minute.

4.4   Data Requirements

KDA-DAH relies on AgEnterprise as the primary database for essential records, such as OCV records, TB test records, import and export Certificates of Veterinary Inspection (CVIs), tag distribution, licensing of feedlots, swine facilities, livestock markets, cervid facilities, official ID sightings from livestock markets, and swine and dairy commuter herds. Administrative assistants meticulously monitor each data acquisition area for accuracy and completeness, generating weekly reports to identify and correct errors and monthly reports to analyze trends and accuracy of records. These reports cover paper and electronic CVIs by species, CVI types by month, VET-CVI files for OCV records, monthly tag distribution by tag type, and unapproved CVIs for imports and exports. KDA-DAH follows USDA standards for official identification, accepting all forms of official ID except brands, with tattoos

accepted in rare cases when accompanied by registration papers. Livestock producers, veterinarians, and livestock markets are encouraged to obtain official electronic identification (EID) tags from approved manufacturers, requiring a valid federal premises identification number (PIN) before ordering. KDA-DAH maintains original tag distribution records in the USDA Animal Information Management System (AIMS) and updates further tag distribution records in AgEnterprise, which shares tag information with the USDA Animal Health Emergency Response system daily through an application programming interface (API). With commuter agreements for swine and dairy companies, KDA-DAH receives and uploads weekly movement records from swine companies in Arkansas, Iowa, Illinois, Indiana, Missouri, Minnesota, Nebraska, and Oklahoma, as well as from dairies in Colorado, Nebraska, and Texas. These records are entered into AgEnterprise as movement records similar to CVIs. As part of the commuter agreement, swine companies are required to send records via an Excel spreadsheet to KDA-DAH. This spreadsheet includes the shipment date, purpose, number of animals being moved, and the origin and destination PIN. Dairies are required to send movement records to KDA-DAH weekly via an Excel spreadsheet. This spreadsheet includes the visual ID, EID, age, and sex of each animal and the locations and dates on which the animals moved. Both swine and dairy commuter herd information is uploaded into AgEnterprise for rapid and accurate data entry. KDA-DAH continuously evaluates new movement documents to improve interstate movement processes, however, currently, most interstate movement documents are CVIs or commuter herd agreements. In the event of an animal disease outbreak, KDA-DAH collaborates with USDA APHIS VS officials and other state animal health officials, sharing AgEnterprise data to assist in investigations, with enhanced ease of information sharing when states use AgEnterprise due to its standardized framework.

4.5   Information Technology Plan

KDA-DAH is dedicated to enhancing the IT capabilities of our current in-house systems for veterinarians and livestock markets across the state, ensuring they are as accurate and efficient as possible. Currently, over 520 veterinarians in Kansas are registered for VET-CVI to electronically submit CVIs, OCV charts, and TB test charts, all integrated with the AgEnterprise database. However, limitations remain with the current build of VET-CVI. A major limitation is the inability for clinics to share information such as drafts and templates between veterinarians. Additionally, KDA-DAH has only one dedicated person to troubleshoot VET-CVI issues, making it a time-consuming and challenging task, especially for new users.

In 2022, Kansas began implementing the KDA BACKTAG program in livestock markets statewide to assist with the collection and submission of official ID

information to KDA-DAH. KDA-DAH continues to develop and refine this program to meet market needs and has contracted an IT developer to assist with this task. Currently, approximately two-thirds of Kansas livestock markets are using this program, allowing KDA-DAH to correlate official IDs with backtags and seller information in AgEnterprise in a searchable format on the same day as the sale.

In 2018, Kansas began a highly effective EID reader cost-share program. Throughout the cost-share program, with funds from the USDA ADT Cooperative Agreement, Kansas was able to provide approximately 95 EID reads to veterinarians, livestock markets, and extension offices across the state. Through the cost share program, readers were available for purchase at a 50% discount from the original price to veterinarians and extension agents, while livestock market veterinarians were able to purchase an EID reader at a 75% discount. This program, which has since expired, has allowed 100% of Kansas livestock markets to have access to an EID reader.

KDA-DAH will continue to maintain and develop the AgEnterprise database to enhance the usability of DAH staff and improve data entry efficiency. AgEnterprise currently has a storage capacity of 520 GB located on KDA servers. AgEnterprise implements a robust set of security measures to ensure data protection and system integrity. All microservice APIs are secured with JSON Web Token (JWT) authentication, with optional OpenID Connect (OIDC) support. Each API endpoint is protected with stringent Identity and Access Management policies, and authentication identities are managed using MongoDB as a centralized identity management tool. Public-facing endpoints that do not require user authentication are safeguarded with rate limiting to prevent abuse and ReCaptcha to deter automated attacks. Sensitive information is never stored in code or configuration files but instead managed through environment variables or, if available, Azure Cloud Vault.

Data security is further enhanced with SQL Server encryption at rest and in transit, and all communications are enforced with TLS 1.2 or greater, using HTTPS with HTTP Strict Transport Security (HSTS) headers. Only port 443 is exposed to the internet from web and app servers, and SQL Server runs on a non-default port, accessible only by the app server. To mitigate denial-of-service attacks, request body length is restricted, and all data model operations are strongly typed to prevent SQL injections.

AgEnterprise also employs static code analysis through SonarQube, running nightly on-premises, and OWASP Dependency Check to monitor vulnerabilities. Additional security measures include enforcing a strict Content Security Policy (CSP) to prevent script injection, setting content-type

headers to avoid MIME type sniffing, and using X-Frame Options to prevent clickjacking attacks. Input validation and sanitization ensure protection against cross-site scripting (XSS) attacks, and Cross-Origin Resource Sharing (CORS) settings regulate requests based on specific origins. These comprehensive security strategies ensure AgEnterprise remains resilient against cyber threats.

The AgEnterprise server undergoes daily backups from Monday to Friday. From Monday to Thursday, incremental backups capture updates and changes made that day. Furthermore, a comprehensive backup is performed every Friday, retaining data from the last 30 days. Similarly, the AgEnterprise web server also receives daily backups during the same weekdays, retaining data for 2 weeks.

Looking toward the future, KDA-DAH aims to achieve several IT infrastructure goals, including working with livestock markets to introduce panel readers in strategic locations, investigating the use of UHF backtags, collaborating with the sheep and goat industry to adopt EID tags for a more efficient process of recording official IDs, exploring ways for veterinary clinics to efficiently locate official IDs used for official calfhood vaccination and distributed to clients or recorded on CVIs, and potentially using artificial intelligence (AI) to determine if import CVIs meet Kansas import requirements.

For KDA-DAH to continue providing tools and resources, and to maintain current traceability standards adequate funding for IT infrastructure remains a critical piece. KDA-DAH spends approximately $38,000 annually for the maintenance and support of the AgEnterprise database. Additional IT support hours can be purchased yearly for any enhancements or system upgrades KDA-DAH wishes to achieve.

4.6   Resource requirements

As KDA-DAH continues to enhance current ADT systems in collaboration with Kansas veterinarians and the livestock industry, additional resources will be essential to further develop the traceability system. These resources include low-cost EID tags, user-friendly EID taggers, EID readers, trained personnel for troubleshooting eCVIs, EID readers, and state programs like KDA BACKTAG, as well as covering IT operational and developmental costs.

4.7   Organizational needs

KDA-DAH currently employs a full-time ADT Coordinator focused on enhancing the accuracy, efficiency, and effectiveness of the state's traceability system. Additionally, KDA-DAH leadership, field staff, and

administrative assistants acknowledge the importance of maintaining a functional and efficient traceability system in Kansas. As the submission of paper records decreases and the volume of electronic records rises, there is a recognition that many current job duties may shift from data entry to data management and troubleshooting issues. Many KDA-DAH staff are already proficient in finding errors in the AgEnterprise database and correcting those errors.

4.7.1 Executive Support

The Secretary of Agriculture at the Kansas Department of Agriculture recognizes the importance of a robust Animal Health program and ADT program in Kansas and regularly meets with the Division of Animal Health to be updated on what is going on. KDA-DAH provides monthly indicators to the Office of the Secretary on goals and objectives and provides weekly updates on activities happening within KDA-DAH. Quarterly newsletters are sent to industry stakeholders, all veterinarians licensed in Kansas, and interested parties, KDA-DAH also sends Flash Reports on important timely topics, such as disease impacts, new regulations, and important announcements. KDA-DAH meets quarterly with the Animal Health Board to give updates and receive feedback on current issues impacting the Kansas livestock industry. Accountability for KDA-DAH is also provided by quarterly ADT progress reports to area USDA APHIS VS officials, KDA fiscal personnel, and official livestock industry association meetings.

4.7.2 Coordination and Oversight Procedures

In Kansas, the ADT Coordinator is responsible for overseeing the state's animal disease traceability program. This role involves direct communication and coordination with KDA-DAH members, USDA APHIS VS personnel, accredited veterinarians, livestock markets, producers, and other state officials to ensure the efficient and effective implementation of ADT activities across the state. KDA-DAH engages with livestock industry stakeholders, veterinarians, producers, livestock markets, USDA APHIS VS officials, and the Animal Health Advisory Board to gather feedback on the current ADT system. Responsibilities for implementing this plan are assigned to those working in the program area and are defined by goals and objectives as part of the annual performance evaluation.

The Kansas Department of Agriculture's Emergency Management Division (KDA-EM) is embedded within the Division of Animal Health and maintains active communication with the Kansas Department of Emergency Management (KDEM). KDA-EM and KDA-DAH routinely meet to discuss emergency preparedness plans and procedures.

Additionally, KDA-DAH and KDA-EM host an annual functional FMD exercise to test processes and procedures developed in the previous year.

KDA-DAH staff regularly participate in national meetings and conversations to facilitate communication and compatibility with other states and the USDA. This is further achieved by continually adhering to national policy standards, minimum federal regulation requirements, and standardized reporting requirement

4.7.3   Policy

Existing statute K.S.A. 47-674 outlines the KDA-DAH protocol for registering premises where animals are located, voluntary premises registration, and the development and implementation of an animal identification and tracking system by the animal health commissioner.

Existing regulation K.A.R. 9-7-1 specifies the general requirements for animals to be imported into Kansas and further defines the confidentiality of documents used for animal disease traceability.

Both the statute and regulation have been reviewed and are aligned with the current goals and objectives of the Kansas ADT plan. Additionally, Kansas Animal Health Regulations specify interstate livestock import requirements, which also align with the goals and objectives of the Kansas ADT plan and USDA standards.

4.7.4   Staffing

Full-time support staff is critical to the success of the ADT program in Kansas. Support staff assist in data entry and processing ADT records in AgEnterprise and carry out the objectives laid out in this plan. A lack of current data entry would increase the time, money, and personnel needed in an animal health emergency. Failure to meet federal performance standards could also lead to a loss of critical federal funding. Personnel needed to successfully implement this plan include: one ADT Coordinator who is tasked as the lead in implementing the plan; two administrative assistants, who are tasked with ensuring data accuracy and integrity in AgEnterprise; two part-time students, who are tasked with manual data entry; and one field technician, who is tasked with troubleshooting issues in the field, and training on new technologies. Additionally, three KDA-DAH field veterinarians, are tasked with outreach and education; and two Animal Health Commissioners are tasked with assisting the ADT Coordinator in providing guidance and support for the plan. KDA-DAH will also leverage private veterinarians, livestock producers, livestock

markets, and the livestock industry to implement the plan outlined in this document.

4.7.5 Budget requirements

The KDA-DAH traceability budget is fully funded through annual federal cooperative agreements. However, recent cuts to the federal ADT cooperative agreement have hindered progress in current ADT programs. With the rising costs of living and goods/equipment, the current ADT budget may not suffice in future years. KDA-DAH has proactively implemented innovative and efficient methods for automatic data entry into AgEnterprise and has continuously worked to cross-train staff in various roles. While KDA-DAH continues to explore new and creative funding sources, there are currently no further plans in place for additional funding.

4.7.6 Outreach

4.7.6.1 Accredited veterinarians

KDA-DAH recognizes the vital role licensed and accredited veterinarians play in animal health and disease traceability. To foster engagement, KDA-DAH routinely interacts with veterinarians statewide through in-person visits, email notifications, industry conferences, and phone calls. The Animal Health Flash Report, a mass email sent from KDA-DAH, keeps veterinarians informed about disease status updates, regulatory changes, and other important updates. Additionally, KDA-DAH has a designated person to update the KDA website, specifically the DAH section, where veterinarians and the public can find numerous resources about the state's traceability system.

KDA-DAH also hosts regional animal health meetings to provide veterinarians with current information and updates on statewide issues. In June 2023, KDA-DAH issued a memo to all licensed and accredited veterinarians announcing that paper CVIs would no longer be provided starting January 1, 2024. As a result, the number of paper CVIs has continued to decrease each month. Kansas veterinarians are essential for KDA-DAH in distributing and using the nearly 557,000 low-cost EID tags throughout the state. KDA-DAH maintains a policy that only licensed and accredited Kansas veterinarians and federally approved livestock markets are eligible for USDA-provided low-cost tags.

The Livestock Market Improvement Project represents the culmination of years of dedicated efforts by ADT and KDA-DAH staff. A key focus of this initiative has been the development and deployment of the KDA BACKTAG software program, which is now implemented in 63% of the state's livestock markets. This software enables livestock market veterinarians to electronically capture critical information on sexually intact cattle aged 18 months and older, streamlining the reporting process to KDA-DAH for rapid upload into the AgEnterprise database. As a result, the program has significantly increased the volume and efficiency of electronic data transfers between livestock market veterinarians and KDA-DAH.

To further enhance its functionality, KDA-DAH continues to develop an online portal for livestock markets, allowing for real-time access to backtag information and the seamless online remittance of calculated backtag fees. By expanding the use of KDA BACKTAG, this improvement strengthens traceability efforts and enhances data integration within AgEnterprise and the broader livestock market system.

With support from federal cooperative agreement funds, KDA-DAH has advanced the KDA BACKTAG program alongside the no-cost VET-CVI, facilitating electronic submission of both backtag charts and CVIs. These integrated systems enable livestock market veterinarians to efficiently capture and record official ID, backtag numbers, breed, age, and sex in the KDA BACKTAG program while seamlessly exporting necessary data to generate and submit electronic CVIs through VET-CVI.

In addition to technological advancements, KDA-DAH staff conduct routine visits to livestock markets across the state. These in-person engagements provide valuable insights into individual market operations, ensuring that the tools and resources provided by KDA-DAH are effectively meeting industry needs. By prioritizing enhancements based on direct feedback, KDA-DAH ensures that available funding is allocated for maximum impact.

Furthermore, KDA-DAH regularly collaborates with the Kansas Livestock Marketing Association, addressing concerns and exploring opportunities for more efficient, accurate, and effective data capture at Kansas livestock markets. These ongoing discussions drive continuous improvements,

reinforcing the commitment to strengthening livestock traceability and market operations statewide.

4.7.6.3 *Industry as a whole*

Kansas boasts a large and robust livestock industry, serving as one of the state's most significant economic drivers. As the sole entity responsible for protecting this vital sector from both foreign and domestic diseases, KDA-DAH plays a crucial role in safeguarding animal health and market stability.

To fulfill this mission, KDA-DAH regularly engages with livestock industry organizations and producers across the state. A key component of these efforts is the KDA-DAH Advisory Board, which provides critical guidance on animal health initiatives and policy implementation. The board is composed of representatives from all sectors of the livestock industry, including the cow-calf sector, feedlot operations, dairy and swine industries, public livestock markets, private veterinary practice, small animal breeding, and a general at-large public member.

KDA-DAH actively participates in annual meetings of livestock industry organizations, providing updates, addressing concerns, and gathering valuable feedback from stakeholders. To ensure industry professionals stay informed, KDA-DAH also distributes newsletters to producers, veterinarians, livestock markets, and industry organizations, delivering the latest updates on animal health programs and initiatives. Additionally, KDA-DAH maintains a dedicated Animal Health website, which is routinely updated to provide the most current information on regulations, disease prevention efforts, and industry developments. These ongoing communication efforts reinforce KDA-DAH's commitment to collaboration and the continued success of the Kansas livestock industry.

4.8 Monitoring and reporting interstate movement activity

KDA-DAH administrative staff monitor all CVIs to ensure they are complete, submitted on time, and compliant with Kansas import requirements. Paper CVIs are reviewed and entered into the AgEnterprise system. eCVIs are reviewed as they arrive and are automatically uploaded into AgEnterprise for immediate access.

If a CVI is incomplete, non-compliant, or submitted late, it is forwarded to the originating state for follow-up on deficiencies. Additionally, KDA-DAH and Kansas USDA APHIS VS personnel conduct biannual reviews of livestock market records to verify that out-of-state buyers obtain the necessary CVIs before leaving Kansas. If a buyer is found without a required CVI, their information is forwarded to the ADT Coordinator, who notifies the intended destination state of the potential non-compliant movement and any potential enforcement action.

To support regulatory oversight, KDA-DAH compiles monthly internal reports detailing the import and export CVI data by species, including total head counts for both paper and electronic submissions. Additionally, KDA-DAH maintains official ID distribution records and compiles monthly internal reports to ensure compliance and track industry trends.

V.   ADVANCING TRACEABILITY

5.1   Ranking of priorities for advancement

For Kansas to successfully implement this three-year strategic roadmap, it is essential to prioritize key actions that will drive progress. KDA-DAH will phase in various components of this plan while establishing internal goals and objectives to measure success.

- Fully transition all existing ADT data from USAHerds to AgEnterprise
- Update outdated movement regulations to align with current industry needs
- Expand electronic record collection, focusing on OCV charts, TB test charts, and tag distribution records
- Increase the distribution and adoption of EID tags within the beef industry
- Pilot innovative movement documents to improve traceability and efficiency
- Update and maintain accurate Premises Identification Number (PIN) records
- Eliminate paper and PDF-exported CVIs, targeting zero submissions by the end of FY27
- Enhance outreach and education efforts to support industry needs

While not an exhaustive list, these priorities represent the most critical focus areas for KDA-DAH over the next three years. By addressing these objectives, we will strengthen animal disease traceability, regulatory compliance, and data management across the state.

5.2   Implementation of Objectives

The objectives outlined in this document and further defined in the Programmatic Goals in this document are for the next three fiscal years (FY25, FY26, and FY27). These objectives focus on improving animal disease traceability through electronic recordkeeping, regulatory updates, and industry collaboration. Below is a summary of the key objectives for each fiscal year:

FY 25 Objectives:

- **Transition to AgEnterprise** – Migrate from USAHERDS and clean up existing data.
- **Expand KDABACKTAG Program** – Increase participation among Kansas livestock markets.
- **Reduce Paper and PDF Export CVIs** – Begin to shift veterinarians to fully electronic CVIs that meet USAHA XML data standards.
- **Increase VET-CVI Records** – Improve electronic submission rates for OCV and TB test charts.
- **Boost Tag Distribution Records** – Encourage veterinarians to submit EID tag distribution records.
- **Develop Dairy Movement Portal** – Begin to pilot a system for tracking dairy calf movements via EID tagging from the origin state to Kansas without CVIs.
- **Enhance Education and Outreach** – Conduct presentations, webinars, and industry meetings.
- **Distribute No-Cost EID Tags** – Continue providing EID tags to veterinarians and markets.
- **Provide Affordable EID Tags and Readers** – Secure low-cost contracts for industry use.
- **Collaboration on Alternative Movement Documents** – Work with stakeholders to enhance movement documentation for feeder animals.
- **Verify and Update Premises Information** – Develop a process to maintain accurate PIN records.

FY 26 Objectives:

- **Expand AgEnterprise Collaboration** – Work with other states to improve data storage and useability.
- **Finalize KDABACKTAG Implementation** – Complete onboarding for all Kansas livestock markets.
- **Near-Zero Paper and PDF Export CVIs** – Further transition veterinarians away from paper-based and PDF based CVIs.

- **Increase VET-CVI Use** – Ensure over 50% of OCV and TB test records are submitted electronically through VET-CVI.
- **Enhance Dairy Movement Portal** – Expand participation to 25% of incoming dairy calves.
- **Improve Tag Distribution Reporting** – Develop a more efficient submission process.
- **Strengthen Alternative Movement Documentation** – Implement solutions at select livestock markets.
- **Continue Premises Information Updates** – Regularly verify and update premises registration data.

FY 27 Objectives:
- **Enhance AgEnterprise Data Integrity** – Implement new tools for database accuracy and compliance.
- **Broaden KDABACKTAG Functionality** – Explore expanding the program to include other species.
- **Fully Eliminate Paper and PDF Export CVIs** – Ensure 100% of export CVIs are compliant with eCVI XML data standards.
- **Increase VET-CVI Records** – Boost the percentage of electronic OCV and TB test records submitted electronically through VET-CVI to 75%.
- **Expand Dairy Movement Portal** – Expand participation to 50% of incoming dairy calves.
- **Improve Tag Distribution Management** – Automate tag reporting processes.
- **Refine Alternative Movement Documents** – Expand pilot programs at additional markets.
- **Sustain Premises Information Updates** – Maintain routine updates for accuracy.

These objectives aim to modernize traceability, improve data accuracy, and enhance regulatory compliance in the Kansas livestock industry. Accepting that each year's federal cooperative agreement work plan will likely be the collection of complete and full objectives, KDA-DAH will continue to work towards fulfilling the objectives outlined in this three-year strategic plan and will modify the plan at appropriate times.