Advancing Animal Disease Traceability (ADT) Road Map for Commonwealth of Kentucky

A Three-Year Plan Submitted by:

OFFICE OF THE STATE VETERINARIAN, KENTUCKY DEPARTMENT OF AGRICULTURE

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January 4, 2024

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I. EXECUTIVE SUMMARY

Kentucky is a predominantly agricultural state bordered by seven neighboring states with extensive interstate movement of animals. These movements can cause inaccurate reporting and non-compliance related issues regarding ADT regulations. Kentucky's intent is to increase our ability to electronically search and trace individual animal identification for disease trace and epidemiologic purposes. To accomplish this goal, we will increase the use of electronic animal movement documents with importable data by market agencies and accredited veterinarians. In order to facilitate use of electronic documents, we will also increase application and electronic data capture of livestock RFID, specifically those that currently require official identification by the ADT Rule. To support these objectives, the Kentucky Department of Agriculture (KDA) will conduct outreach programs designed to educate producers and other stakeholder groups on disease traceability, official ID, and the benefits of electronic ID systems. In addition, KDA plans to develop an app to submit electronically multi-purpose test forms and phase out paper forms. The results of these actions will be an increase in Kentucky's ability to electronically search individual animal ID, decreased search time, and increased capability to livestock disease response.

Kentucky currently uses the USAHERDS livestock database, which provides the ability to search for animals by individual identification number. In order to search for individual animal IDs, these numbers must be manually entered. Kentucky encourages increased use of electronic movement documents, such as eCVI, Vet Sentry, VSPS, VET CVI and GlobalVetLink (GVL), by accredited veterinarians. These types of documents support import of animal data into USAHERDS. Additionally, Kentucky utilizes an electronic Excel market report developed specifically for state stockyards to electronically capture animal identification for subsequent upload into USAHERDS.

Previous to the electronic market report, cattle ID was recorded on a handwritten document. Historically, Kentucky has relied on written animal identification reports from markets to trace animal movement. The handwritten documents are transcribed to electronic format to upload into USAHERDS. Kentucky is in the process of transitioning all markets to the use of electronic market reports at the stockyards to eliminate the transcription of handwritten data. Migration to all electronic forms with importable data, coupled with RFID technology, will decrease inaccuracies, and provide increased searchable data fields. OSV will be developing an app to ensure all multipurpose test forms are submitted in an electronic format and easily uploaded to the USAHERDS database.

Kentucky currently has 32 licensed livestock markets and 5 buying stations that have one or more sales a week. State regulations do not require a Certificate of Veterinary Inspection for the direct movement of livestock from a farm of origin into the market for either in state or out of state cattle. This results in large numbers of Kentucky and out of state cattle arriving at markets without official identification. Although the KDA has a modest field staff of approximately 17 inspectors, KDA works alongside market veterinarians and support staff to identify and record cattle that require identification as they move through the market. KDA will continue to support these markets to apply RFIDs and capture data on electronic reports which enable data import and search. KDA will supply RFIDs to those markets willing to cooperate with USDA VS staff and OSV while Cooperative Agreement funds permit it. KDA will also supply RFIDs to producer groups willing to apply and electronically report data from cattle. Education to producer groups on Animal Disease Traceability is critical to the success of the ADT program.

KDA will embark on a program to engage Cattlemen's, state producer commodity organizations, FFA, 4-H, Extension, and other groups that involve producers who benefit from decreased disease trace times. KDA will address topics, such as what is ADT, why ADT is important, how electronic technology benefits ADT and the producer, etc.

Kentucky has historically provided a fee basis to market veterinarians for application and reading of NUES tags. This system, while successful in applying official ID to cattle, did not prove to decrease animal ID search time, and made accurate reading of the tags very difficult.

Kentucky's plan to increase electronic animal identification search ability supports the ADT rule and benefits Kentucky livestock producers by decreasing disease response time. Increasing use of RFID and data capture equipment increases electronic animal identification. This use of electronic ID supports electronic form use, which ultimately supports Kentucky's intent to increase our ability to electronically search individual animal IDs.

This plan will be consistent with USDA's framework for animal disease traceability and will focus on cattle, sheep, goats, and swine. This plan will support the national animal health information needs of the states, tribes, territories, and USDA.

- What are the projected costs and benefits for the first, second, and third years of the plan?
 - o The current budget of \$262,490.00 or an increased budget would be necessary to maintain the current ADT program for each year. The cost of equipment and database systems are unknown but may increase.
 - The following goals outline the proposed ADT activities for the next 3 years. Objectives and strategic actions will be outlined in detail in later sections.
 - Goal 1: Maintain efficient ADT processes, currently in place, to improve traceability.
 - Goal 2: Increase electronic submission of animal movement and identification records from stockyards, producers, and veterinarians in compatible formats to upload into USAHERDS.
 - Goal 3: Increase accurate electronic CVIs and decrease paper CVI submission.

II. CURRENT TRACEABILITY SITUATION

- 2.1 Who are we?
 - Who are the primary constituents?
 - O The primary constituent is the Kentucky Department of Agriculture (KDA), Office of the State Veterinarian (OSV). KDA staff work in the field, livestock markets, and in the office, to implement official animal identification and traceability programs.
 - Who are the external constituents?
 - External constituents include accredited veterinarians, USDA personnel, livestock market managers, livestock producers, producer commodity organizations, and the ADT Advisory Committee.
 - What does statewide, tribal-wide, territory-wide mean?

- O Statewide is inclusive of activities within all 120 Kentucky counties.
- How is traceability data used internally, externally?
 - Traceability data is used primarily internally for disease investigation and quarantine purposes, specifically to verify animal testing, animal origin, and animal movements.
 - This information is used externally by various state veterinarian offices, or USDA personnel, when conducting animal tracing for animal disease or compliance investigations.
- What values guide the ADT system?
 - Kentucky is guided by its mission to protect and improve the animal health status of the state's livestock.
- What is the makeup of the ADT advisory group?
 - The Advisory Committee includes representatives from the following entities:
 - KDA: State Veterinarian, Deputy State Veterinarian, Director of Regulatory Field Services, ADT Program Coordinator, Programs Branch Manager.
 - Kentucky Cattlemen's Association
 - Kentucky Pork Producers Association
 - Kentucky Veterinary Medical Association
 - Kentucky Sheep and Goat Development Office
 - University of Kentucky Extension Service
 - Kentucky Poultry Federation
 - Kentucky Livestock Market Association
 - Kentucky Horse Council
 - Kentucky Farm Bureau
 - USDA APHIS VS
 - Kentucky Dairy Development Council
 - This group meets face to face, or virtually, at least once a year, with communication by conference call and email as needed.

2.2 Where are we now?

- How is ADT currently defined? Is it viewed as a cross-cutting component to animal health information systems? Is it viewed as a stand-alone initiative?
 - Kentucky views animal disease traceability as a foundational component of our animal health mission to protect the livestock within the state. The databases that capture traceability information also maintain program functions and surveillance statistics.
- What measures of traceability capability are currently being used?
 - ADT Performance Standards are the primary measurement tool used to evaluate traceability capability. Proper components of trace information are captured in stored data.

Time to complete is relative to the quality of information provided. During the routine performance of compliance and animal disease investigations, the system is routinely evaluated to identify deficiencies to be evaluated and corrected.

- What are the specific values and associated interpretation?
 - o Animal ID: official ID number, sex, age, species/breed.
 - o Premises information.
 - o Place and time of activity.
 - Previous movement events: creating a timeline of an animal's movement throughout a specific period of time.
- How is coordination being currently achieved within the unit? How is coordination currently being achieved statewide, tribal-wide, territory-wide?
 - O KDA field staff work based on assignments from Area Supervisors through the Branch Manager and are well coordinated to cover as many markets and events as resources allow. Office staff have designated responsibilities that relate to the capture of traceability information and are cross-trained. Field staff and office often work together at major events, such as the Kentucky State Fair (KSF) and North American International Livestock Exhibition (NAILE).
- How does the present unit coordinate activities with other existing agencies/units?
 - Veterinarians, Branch Manager, Program Manager, and Area Supervisors meet with other agencies or groups as needed to coordinate outreach and surveillance work at markets, sales, trade shows, meetings, and exhibitions.
 - Animal surveillance is routinely done by field staff and animal health inspectors at stockyards, shows and fairs, and sales. Area investigators conduct traffic stops on animals moving interstate to ensure animal movement compliance of the ADT final rule.
- What standards for traceability are currently being used? Are they appropriate?
 - Kentucky currently requires a fully documented CVI, with recorded USDA official ID, for all interstate movement, except those animals moving directly to livestock markets. These provide appropriate traceability when compliant.
 - All species are required to meet the ADT traceability official identification requirements to leave their premises of origin for interstate movement.

- Head cows sold through any Kentucky livestock market without official identification are tagged before leaving the stockyard.
- Traceability standards continue to be approved across the board for all species. Kentucky is working to increase the number of animals with USDA official ID, and veterinarians who use eCVI software, to increase traceability in our state.
- What is the state of technology infrastructure? Capability in terms of size? Compatibility within and outside the agency/unit/dept. etc. for sharing data when needed.
 - Kentucky uses USAHERDS, a web-based animal health surveillance system that is available to all field staff and office staff. To date, it has been adequate in size to meet department needs. The system does have the capability to provide password protected access to other agencies should a need arise. Continual improvements are made through our contract to increase system usefulness, and animal traceability needs.
 - KDA uses a third-party software, namely CIVET, to import data from handwritten movement documents to USAHERDS.
 This increases the search ability of those documents.
- Are requests for information available 24/7, or only available M-F, 40 hours per week, if authorized personnel are present?
 - The capability for 24/7 access is available for the USAHERDS web-based system. However, the state employee would have to be available to retrieve information after the hours of 8-4:30 Eastern Time, M-F.
- What is the impact of state, tribe, or territory funding on capability? How does Federal funding fit into the plan?
 - State funding impacts our personnel level for all aspects of the plan and the ability to keep hardware and software programs current and properly maintained. Currently, state funding is not available to provide identification devices and equipment to stockyards, producers, and accredited veterinarians.
 - Federal funding has been, and will continue to be, the means for advancement to the next level as State funds have been and continue to be cut with reduction of personnel and equipment resources.
 - Federal funding is used in part for personnel, supplies, technology, equipment, travel, and outreach.
 - State regulations do not allow the purchase of electronic devices to be provided to stockyards/veterinarians. This limits accurate electronic records and forces parties to use paper records.

2.3 Strengths and Weaknesses

- What are the strengths of the organization in terms of technology, human resources, personnel capabilities, etc.?
 - KDA has a well-trained field force with knowledge and expertise in official identification device application and electronic data capture. KDA has a full-time animal disease traceability coordinator to oversee all ADT programs.
 - O Due to extensive collaboration and communication, KDA has developed strong working relationships with livestock markets, producer commodity organizations, exhibitors, and veterinarians.
 - The USAHERDS system is well maintained and continues to develop enhancements.
 - Dedicated personnel in the office and field are provided training opportunities with USAHERDS.
- What are the weaknesses in terms of "lack of" technology, human resources, personnel capabilities, etc.?
 - Unpredictable funding affects both the ability to replace personnel, keep trained personnel, and sometimes to upgrade technology needs.
 - The limited use of electronic identification and the lack of standardized electronic identification technology continues to challenge the implementation of ADT.
 - The state is unable to provide electronic devices to outside entities with state funds.

2.4 Opportunities and Threats

- Does this plan create an opportunity in ability to respond?
 - Yes, we have staff located throughout the state who are trained in emergency/animal disease response. Office staff/ traceability staff are available when needed in the event of a response.
- Does this plan enable or avoid consequences of potential threats?
 - At the administrative level, information electronically stored on servers is maintained by the state and should survive all conceivable threats because the backups are stored offsite.
- Does this plan provide for better use of available resources than current approaches?
 - This plan enhances the state's capabilities as progress is made in continuing to electronically capture and access information.
 - Electronic capture of data through electronic forms reduces personnel data entry time enabling other critical duties to be addressed. It also minimizes the prevalence of human error in transferring data by hand.

- Electronic storage of data and documents enables easier access, shorter response times, and more efficient traceability efforts.
- Does this plan enhance networking opportunities?
 - Yes. This plan includes collaboration and networking with various commodity groups as KDA staff travel to trade shows, exhibitions, and producer's premises to enhance our ADT outreach and education across the state.
 - Various trainings will be offered to staff and accredited veterinarians from different electronic CVI software, which will also increase networking with groups across the United States.
- If this plan is not implemented, what are the threats?
 - If this plan is not implemented, the threats could include inaccurate reporting of animal identification, movement, and disease outbreaks which, if unchecked, could be disastrous for Kentucky agriculture in the event of an emergency.
- If this plan is not implemented, will others be tasked with doing so?
 - O It is unlikely that others outside of the Kentucky State Veterinarian's Office will be able to promote and implement ADT at the level KDA is working to attain through this agreement.
- Have previous efforts to coordinate with other entities within the applicant's boundaries, and outside the applicant's boundaries, been complicated or unavailable for not having this plan in place?
 - Previous efforts have been difficult to get other entities to comply with ADT guidance. Current efforts in place, such as networking with these entities, have improved relations regarding ADT rule.

2.5 Inventory of existing infrastructure and suitability assessment

- Human resources
 - o Supervisors, inspectors, and investigators in the field: 22
 - Office: 2 veterinarians, 1 program manager, 1 ADT program coordinator, and 1 support staff.
 - o No dedicated technology person for the ADT program.
 - O All resources listed above have a limited amount of time devoted to ADT based on other priorities and functions assigned to the position. Only the ADT program coordinator has the majority of duties assigned to the ADT program.
- Space availability
 - Space is fully adequate for our needs. A push towards more electronic software systems will help minimize the space needed for storage of paper files.
- Connectivity resources--both in office and in the field

- Office connectivity is adequate. Most field staff have adequate internet; however, some do not. Connectivity in rural Kentucky poses significant challenges for staff to utilize technology.
- Most stockyards in Kentucky are able to support RFID technology in the yards, with the exception of some smaller yards in rural areas that have some connectivity issues. There are a few stockyards in Kentucky without computers and internet which pose a challenge in implementing an electronic traceability system.
- Access to USDA ADT and animal health information resources
 - The adequate resources available for office personnel are sometimes more difficult for field staff to access.
 - o VSPS is not as user friendly as other eCVI software systems.
 - USDA database access will be extended to other employees rather than just ADT coordinator, and other employees will be trained as backups.
- Organization of all existing paper record systems used to access ADT or animal health information.
 - Paper copies, that were received prior to 2018, are stored in a large file room.
 - o Paper records now are all scanned into electronic copies and stored in USAHERDS or the KDA server.
- Computerized data management capability, including present storage size, speed, security, etc.
 - o KDA IT staff indicate the current storage size is adequate and secure. The speed is also adequate for the usage.
- Automated data capture capability
 - KDA uses electronic movement documents with data import capability. We also have increased fielding of RFID reader equipment and RFID applications to support electronic capture and upload of data.
 - Our "electronic stockyards" couple RFID technology with electronic forms for instant upload of electronic recap sheets in USAHERDS for animal information on head cows.
 - Approved eCVI software automatically sends a copy of an eCVI to USAHERDS for viewing and download, if necessary.
 - Electronic data gets uploaded into USAHERDS for quick and easy search capabilities and animal traceability.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

- 3.1 Vision Statement
 - The health and marketability of Kentucky livestock and poultry are enhanced by a fully implemented Animal Disease Traceability (ADT) system.

3.2 Mission Statement

- The mission of the Office of the State Veterinarian is the control of infectious and communicable animal diseases in Kentucky.
- Protect the health and welfare of Kentucky's livestock, poultry, and agriculture industries.
- Promote an environment that enhances the economic and recreational opportunities and prosperity.

IV. TRACEABILITY REQUIREMENTS

The following categories must be described in the Road Map:

4.1 Strategic goal(s) and 4.2 Programmatic goals (objectives)

Goal 1: Maintain efficient ADT processes, currently in place, to improve traceability, including:

- Increase ADT enforcement stops across the state.
- Continue timely animal movement, health records, and identification data entry into USAHERDS.
- Utilize USAHERDS to manage the distribution and allocation of official ID tags through the OSV.
- Distribute RFID taggers and wands to field staff, accredited veterinarians, and stockyards.
- Promote and distribute updated ADT educational media to increase outreach efforts.
- Review and update ADT-related state regulations to align with USDA ADT guidance.
- Cooperate with other Kentucky and federal agencies, as well as all other state ADT programs, to complete joint effort ADT activities.

Goal 2: Increase electronic submission of animal movement and identification records from stockyards, producers, and veterinarians in compatible formats to upload into USAHERDS.

Currently, it is written in Kentucky regulations that stockyards must submit
multipurpose recaps electronically in a form compatible to USAHERDS, but there
are still several submitted via paper, or electronic scans of paper copies, which
must be re-typed and then be uploaded into USAHERDS. This is an inefficient
practice which can impact animal traceability efforts due to a lag in data
processing. To combat this, the ADT program will strive to encourage anyone

submitting a multipurpose recap form to submit them electronically by using a newly developed app using cooperative agreement funding.

- O By the end of 2024, this app will be developed and released, which enables users to use RFID wand readers to scan RFID tags into a multipurpose recap pre-populated form template in the app, which will be compatible with USAHERDS. Other information (animal sex, age, test results, consignor information, and additional identification) will be put in manually before the form is converted into a compatible file to upload into USAHERDS.
- Once the app is built, OSV field staff will be trained on how to use it with their own RFID wands. Then, this information will be shared with stockyards and buying stations and their associated veterinarians, along with a reminder that electronic submission is a state regulation. By the end of year 3, the OSV would consider this goal successful if multipurpose recap forms were submitted electronically through this app. At that time, pre-existing methods of submission (paper copies, scans, and old Excel formats) will be phased out and become obsolete.
- Currently, tags applied must be reported to the ADT coordinator for tags allocated
 and distributed to Kentucky premises. This form is a paper copy mailed or
 scanned and emailed in. In addition, to process premises' ID requests, the ADT
 coordinator typically handles requests over the phone due to a lack of electronic
 application for Kentucky premises' creation.
 - The ADT coordinator will meet with KDA IT staff to discuss the options
 of creating electronic submission forms for both tags applied reporting and
 to request premises registration.
 - Once IT directs how these should be created and published online, the ADT coordinator will follow through with the creation of these electronic forms. From that point forward, all calls relating to premises registration will be directed to the online form. Veterinarians, stockyards, and producers who are allocated tags will be contacted regarding the new electronic submission.
 - By the end of year 3, the OSV would consider this goal successful if tags applied reporting and premises' registration requests were submitted through these electronic forms.
- Currently, most Brucellosis and Tuberculosis test/vaccination records are mailed in. Over the next 3 years, veterinarians will be encouraged to utilize VET CVI to submit this information. The OSV would consider this goal successful if these records were submitted electronically.

Goal 3: Increase accurate electronic CVIs and decrease paper CVI submission.

- Most of the intrastate and interstate movement for all animals is still submitted by mailed-in CVI paper copies. The OSV currently distributes paper CVI books free of charge to veterinarians. Transcribing this data into digital form and importing it into USAHERDS is time consuming. Additionally, non-compliance of submitted paper CVIs is rampant, with missing or incomplete information resulting in frequent and recurring rejection from states of destination and violation notices from Kentucky itself. To mitigate both the inaccuracy of paper CVIs, and improve the efficiency of OSV staff processing them, veterinarians will be encouraged to transition to electronic CVIs in several different ways.
 - First, OSV staff will explore the possibility of charging a fee for paper CVI books, as most other states do. The only free alternative to buying paper CVI books will be to utilize the free electronic VET CVI system (though there are other systems they could pay to use, such as GVL). This should prompt veterinarians to transition to electronic CVIs.
 - The already allocated 50,000 pages will be purchased with cooperative agreement funds by the OSV. Flyers will continue to be sent out to encourage the use of electronic CVIs. If OSV starts charging for paper CVIs, veterinarians will seek an alternative, such as the free option with VET CVI or VSPS. Paper books will still be purchased by OSV, just in a lesser quantity for veterinarians to utilize. After the 50,000 pages run out, OSV will plan to charge for every paper book after.
 - Electronic CVI systems will increase the accuracy of CVI information, and thereby decrease non-compliance enforcement, simply because the system will not let a user continue without filling out all information before moving on to a different section of the CVI.

4.3 ADT Trace Performance Measures (TPMs)

Kentucky completes TPMs as required utilizing the recommended performance measures determined by the USDA. The following questions are answered by Kentucky during TPM exercises.

TPM 1: In what State was an inbound animal officially identified prior to entering your State?

TPM 2: Where in your State was the animal officially identified?

TPM 3: From what State was an inbound animal shipped?

TPM 4: From what location in your State was an outbound animal shipped?

4.4 Data requirements

- Fully describe standards to be used for location identification.
 - CVI and owner-shipper statements require the physical address for the origin of the animals.

- Premises of origin information is required from producers acquiring official identification tags from the State or approved tag manufacturers.
- The USAHERDS database automatically assigns a state premises number for each premises, so all animals added to that premises are associated to a PIN number and geocoding.
- Regulations require specific information to obtain a premises number:
 - Owner name
 - Physical address of premises
 - Mailing address
- OSV issues USDA PIN through USAHERDS, Premises Management, or EMRS.
- Fully describe standards to be used for official animal identification, including arrangements with other States, Tribes, Territories, as well as official identification methods/devices used within the cooperator's jurisdiction.
 - OSV acts an official RFID tag manager.
 - OSV requires premises information from markets and accredited veterinarians for RFID tags provided.
 - Kentucky's regulations recognize the USDA approved AIN electronic 840 tags, NUES tags, brucellosis vaccination tags, Scrapie ear tags, breed registration tattoos with the registration paper accompanying the movement and graphic description for equine and camelids.
 - When reporting back distributed tags, information must include animal sex, age, species/breed, to increase the traceability information of the animal.
- What tag distribution record keeping systems are being used?
 - OSV requires premises information from markets and accredited veterinarians for RFID tags provided.
 - Tags are allocated in USAHERDS to premises when ordered so they correspond easily for traceability purposes. Tags applied forms are reported back once the producers use the tag.
- What data requirements exist for commuter herd agreements?
 - Kentucky currently does not have any commuter herd agreements in place.
- What forms are approved for interstate movement in addition to ICVIs?
 - o 9-3's for avian, VS form 127, and owner-shipper statements.
- How and when will data be shared with other States, Tribes, Territories, and USDA?

- Data will be shared in an electronic format when requested by other states. USDA will receive data when requested, but also in cooperative agreement quarterly and annual reports.
- How will group/lot official numbers be handled within the system?
 - ID type in USAHERDS will be utilized as OTHER or PENLOT

4.5 Information technology plan

- State funds are utilized to purchase computers, phones, and printers. Federal funds are necessary for purchase of automatic data capture equipment (RFID wand readers) to be distributed/utilized as needed for field staff.
- Utilization of federal funds allow for the purchase of RFID wand readers for chute side scanning of RFID ear tags. This information is captured and uploaded into USAHERDS.
- Mapping training is proposed for the program manager to utilize data.
- Upgrades to USAHERDS software are done regularly and at the request of the State or State user group, as needed.
- VET CVI software is updated regularly, as needed.

4.6 Resource requirements

[This section is intended to describe additional resources needed to implement the road map.]

- Is specific expertise needed that is not currently available?
 - No. If any outside expertise is needed, the office staff/ Program Manager/ Branch Manager will reach out to individuals or companies as needed to receive training and informative materials.
 - Ongoing learning of new software, systems, technology, etc. will be obtained by field staff, office staff, accredited veterinarians, and any other individuals deemed necessary.
- Will consultants be needed?
 - o No hired consultant will be needed.
 - We will consult with individuals/corporations that are being utilized to help fulfill our ADT goals and timeline.
- Is a continuity of operation plan (COOP) in place and how frequently is it tested?
 - SOPs are in place and multiple staff are cross trained in ADT.
- Are automated data capture resources needed?
 - o Yes.
 - Currently we use eCVI programs Vet Sentry, GVL, VET CVI and VSPS that are compatible with RFID data capture technology.

- RFID readers are used for automated data capture by field staff and veterinarians across the state for reading RFID ear tags, and transferring into a data spreadsheet that is uploaded into USAHERDS.
- Additional wands and panel readers are needed at the livestock markets to accommodate transition to electronic data capture of official ID.
- Livestock markets will need to upgrade their facilities to accommodate the application of electronic identification devices of all species. They will also need to purchase technology to support RFID data capture.
- Continued cooperative agreement ADT funds for the purchase of EID technology will be needed to support producer transition to EID.

4.7 Organizational needs

- Does a need for organizational change exist? Is it recognized?
 - No changes are needed currently. Changes could be needed depending on budget allowances.
- Can additional resources be leveraged within the current administrative structure?
 - Additional resources are dependent on budgetary and personnel resources.

4.7.1 Executive support

- Is additional support from executive management needed?
 - Current support is adequate enough to have a sound ADT program.
- How is accountability provided?
 - The state veterinarian has primary responsibility for advancing animal disease traceability. ADT coordination and oversight procedures are implemented by the ADT program coordinator in the Office of the State Veterinarian (OSV).
 - All ADT work is monitored by the State Veterinarian, Deputy State Veterinarian, Director of Regulatory Field Services, Branch Manager, and Program Manager.
 - Bi-monthly supervisor meetings conducted by the division director ensure field accountability to the priorities of the ADT coordinator.
 - Routine meetings of the managers and supervisors of the OSV ensure OSV objectives and workload priorities are achieved.

- How are officials briefed on progress and baseline measures of performance?
 - This information is shared with the ADT Advisory Committee, the State Board of Agriculture, and the Kentucky Department of Agriculture's Commissioner as needed.

4.7.2 Coordination and oversight procedures

[This section is intended to describe who is responsible for advancing ADT and how an integrated plan is presented, monitored, and accounted for within the socio-political environment.]

- What is the make-up of the applicant's ADT advisory group? How frequently are they engaged?
 - o Please refer to section 2.1.
- How are emergency preparedness resources engaged or responded to when necessary?
 - The Division of Emergency Preparedness and Response has been established in 2023. This division will work directly with Kentucky Emergency Management and the affected area to assess agricultural needs and resources.
 - Communication and coordination with USDA APHIS VS, Emergency Coordinator, State Veterinarian and ADT Program Coordinator.
- How is compatibility with other States, Tribes, Territories, and USDA monitored?
 - State and federal personnel work jointly on most situations. Compatibility is constantly monitored by the State Veterinarian and Area Veterinarian in Charge.
 - SAHO and NASAHO have regular conference calls and annual meetings.
 - ADT Program Coordinator participates in monthly ADT USDA conference calls and quarterly USDA calls.
- How are responsibilities assigned for implementing the plan?
 - The road map plan will be implemented, and responsibilities assigned by the State Veterinarian.
 - o ADT program coordinator is appointed with oversight provided by Program Branch Manager.
 - ICS will be used to organize if warranted for emergency response. ICS team has previously been established and implemented in emergency responses.

- How are disputes arbitrated?
 - Kentucky and federal regulations are used in the event of a dispute.
- How is feedback obtained relative to perception of successful implementation above and below the administrative authority?
 - Private party input, ADT Advisory Committee, Kentucky Farm Bureau Advisory Committees, Kentucky Livestock Marketing Association, Kentucky Cattlemen's Association, Kentucky Pork Producers, and Kentucky Poultry Federation.
- How is transition achieved when administrators are replaced?
 - The State Veterinarian strives to train deputy state veterinarian, staff veterinarians, and merit administrative staff thoroughly on all programs and policies to assist with transitions. Most staff are cross trained on programs and administrative duties.

4.7.3 Policy

- How do the applicant's policies align with the ADT general standards document and achievement of traceability goals?
 - Kentucky ADT standards align with federal guidance. This provides clear and achievable traceability goals.
- Is there a need to address or change a state policy to align with 9CFR part 86 or the ADT General Standards document?
 - Specific mandates are modified as needed to align with current regulations.

4.7.4 Staffing

- How is full-time, paid support staff justified?
 - State employees implement regulations to support OSV mission.
- What qualifications are needed?
 - Must meet class specifications for specific job title in accordance with state hiring practices.
- What personnel are needed to implement the plan?
 - o State Veterinarian
 - o Deputy State Veterinarian
 - o Director of Regulatory Field Services
 - Branch Manager

- o ADT Program Coordinator
- o Area Supervisors
- Area Inspectors
- o Investigators/Law Enforcement
- o Office data entry personnel (Administrative assistants)
- o Division of Emergency Preparedness and Response
- Can other human resources be leveraged to assist in implementing the plan?
 - Yes, with approval of the Commissioner's Office and budgetary allowance.
- Are professional credentials and certification an issue?
 - State Veterinarian and Deputy State Veterinarian are required to be licensed and accredited. Currently, the Division Director is a full-time employee who is a licensed and accredited veterinarian.
 - o Division Director Veterinarian is FADD certified.
- Are job descriptions for the roles needed provided?
 - o Yes
- Is ADT information a distinct function within the unit or an add-on "coordinated by committee" versus an individually coordinated, stand-alone sub-unit?
 - Distinct function assigned to ADT Program Coordinator.
 - ADT Program Coordinator is supported by other office and field staff.

4.7.5 Budget requirements

- How are you funded for ADT? State, Tribe, Territory versus Federal?
 - ADT Personnel is funded primarily through C.A with 20% funded through state funds. USDA C.A. funds a percentage of key staff salaries with the rest being funded with state funds.
 - o USDA C.A. funds multiple in-state and out-of-state conferences and meetings related to ADT.
 - USDA C.A. funds purchases, such as RFID readers, RFID taggers, and USAHERDS database contract.
- What are the funding requirements projected by year for first, second, and third year for implementing this plan?
 - State funding will support current employees.
 Currently, there is no funding available for additional personnel.
 - Federal cooperative agreement funding will assist with funding of contract purchases, support some of the salaries of the staff coordinating the ADT effort,

- outreach to veterinarians and producers, equipment for the ADT agreement, and supplies needed for the ADT agreement.
- The current budget of \$262,490.00 or higher would be necessary to maintain the current ADT program for each year.
- How is cost sharing achieved?
 - Most salaries are state funded with the ADT coordinator being primarily C.A. funded.
 - Approximately 30 state personnel are involved in the collection, verifying, entering, and storage of data across the livestock markets in the state and from ICVIs.
 - Federal grant money is used to fulfill the supplies, equipment, and IT needs of the cooperative agreement.
- How can the applicant insulate against budget cuts and shortfalls?
 - Continue to train and cross-train staff so that necessary tasks are completed.
 - o Enhance use of technology for efficiency.
- Can other funding sources be leveraged to support this plan?
 - There is currently no additional funding available to OSV.
 - Some commodity groups have access to grants that they are using, which can help aid in the promotion of animal disease traceability and increasing the use of USDA official animal identification across Kentucky.

4.7.6 Outreach

4.7.6.1 Accredited veterinarians

- What is the plan for informing accredited veterinarians of the new guidelines for official ID and the specific three-year plan for implementation?
 - Official ID handouts are posted on the KDA website and are mailed out. Outreach is done at the Kentucky Veterinary Medical Association Conference to network with vets and inform them of current ADT requirements. KDA will staff booths at regional and state veterinary meetings. "One on one" discussions at Livestock Markets and in the

- workplace will be conducted. KDA will provide outreach at producer commodity association meetings.
- What continuing education is being planned for improving data quality relative to animal health information systems being used? Submitting official forms in a timely manner?
 - Continuing education sessions may be utilized at area meetings and at the KVMA annual meeting.
 - Outreach by KDA field staff in cooperation with KDA and USDA VMOs.
 - Emphasis during presentation of accreditation modules.
 - Set up small group veterinarian training via Zoom for new software systems, forms, and any information that needs shared.
 - Producing training/ How-To Videos for livestock market veterinarians on using RFID technology chute side.
 - Non-compliance letters are issued to veterinarians who do not submit forms in a timely manner which could result in a letter of warning and a notice of violation with a fine.
- What is the plan for enhancing the use of eICVIs, if any?
 - Kentucky accepts eCVIs from GVL, Vet Sentry, VSPS, and VET CVI.
 - OSV is going to explore charging for paper copies or phasing out paper forms. Hopefully, this will prompt veterinarians to utilize eCVI software.
 - OSV continues to send out flyers with eCVI information when veterinarians order CVI books and are encouraged to use electronic CVIs.
- What role, if any, does the accredited veterinarian have in providing low-cost, official identification tags/devices to producers?

- The State is providing tags to accredited veterinarians. The veterinarian is considered a tag manager and is responsible for sending information to the OSV on the recipients of tags.
- Information required is the tag number, premises information, animal sex, age, and species/breed.

4.7.6.2 Slaughter plants

- What continuing education efforts are being planned for addressing the concerns of the slaughter plants in the jurisdiction?
 - KDA does not regulate slaughter plants. Any jurisdiction is the responsibility of USDA.
- What is the plan for accessing or requesting traceability information from slaughter plants?
 - Any traceability request will be worked through VMOs in Kentucky.

4.7.6.3 Industry as a whole

- How is industry being informed of the implementation plan?
 - Outreach at producers/industry meetings. Industry partners are represented on the ADT advisory committee and can relay information back to their respective sectors.
- How is the advisory committee being leveraged for this continuing education purpose?
 - Each commodity group represented on the committee will provide input and set up meetings with constituents.
- What other resources are available for industry outreach?
 - Extension, KFB, Agriculture publications.
 - o Annual meeting of Kentucky Cattlemen's Association.
 - UK Extension production meetings.
 - Kentucky farm news publications such as "Farmer's Pride" and "Cow Country News."

- Trade shows
- Livestock exhibitions
- What constitutes industry? What species are involved?
 - Producer operations, feed/supply stores, veterinarians, markets, retail sales and related operations.
 - All species included in the USDA ADT final rule: bovine, caprine, porcine, ovine, poultry, and equine.
- How are under-represented and underserved communities being included in the outreach plan?
 - Both UK and KSU extension will be the primary source of information. An extension office is in each of Kentucky's 120 counties.
 - OSV field staff are located across the state to help with outreach.

4.8 Monitoring and reporting interstate movement activity

[The traceability framework is focused on interstate movement and the accompanying ICVI or similar documentation for that movement.]

- How will the number of animals and the number of shipments be monitored that move interstate?
 - o Through receipt of electronic CVI.
 - o Emailed, faxed, and mailed CVIs.
 - o Owner shipper statements collected at markets and emailed in.
- How will the data be verified or validated?
 - Every document is reviewed by office staff.
 - O Change of ownership (sale) movements require permitting before the movement occurs.
 - o Permitted moves are documented in USAHERDS.
 - All eCVIs and Paper CVIs are uploaded into USAHERDS for imports and exports to/from Kentucky.
- The following data should be tracked and available upon request:
 - Number of ICVIs and other interstate movement documents created within the State/Tribe/Territory on a year-to-date basis for move-out animals.
 - o 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/Tribe/Territory and/or AVIC office, including backtags by market or slaughter facility.
 - All the above is tracked and can be traced in the USAHERDS database and is available upon request.

V. ADVANCING TRACEABILITY

- 5.1 Ranking of priorities for advancement
 - What specific steps are needed to advance from where the initiative currently resides?
 - See section 4.1 and 4.2 for goals and objectives to advance ADT.
 - Is a phased-in approach appropriate over the three-year period?
 - o Yes, it is appropriate over three years.
 - Are various components dependent upon measurable successes rather than defined time periods?
 - Yes, success with achievable projects must precede progression to more challenging goals.

5.2 Implementation of objectives

Goal 1: Maintain efficient ADT processes currently in place, to improve traceability including:

- **Objective 1**: Increase ADT enforcement stops across the state.
- **Objective 2**: Continue timely animal movement, health records, and identification data entry into USAHERDS.
- **Objective 3**: Utilize USAHERDS to manage the distribution and allocation of official ID tags through the OSV.
- **Objective 4**: Distribute RFID taggers and wands to field staff, accredited veterinarians, and stockyards.
- **Objective 5**: Promote and distribute updated ADT educational media to increase outreach efforts.
- **Objective 6**: Review and update ADT related state regulations to align with USDA ADT guidance.
- **Objective 7**: Cooperate with other Kentucky and federal agencies, as well as all other state ADT programs, to complete joint effort ADT activities.

Goal 2: Increase electronic submission of animal movement and identification records from stockyards, producers, and veterinarians in compatible formats to upload into USAHERDS.

- Objective 1: Currently, it is written in Kentucky regulations that stockyards must submit multipurpose recaps electronically in a form compatible to USAHERDS, but there are still several submitted via paper, or electronic scans of paper copies, which must be re-typed and then be uploaded into USAHERDS. This is an inefficient practice which can impact animal traceability efforts due to a lag in data processing.
 - Action: To combat this, the ADT program will strive to encourage anyone submitting a multipurpose recap form to submit them electronically by using a newly developed app using cooperative agreement funding. By the end of 2024, this app will be developed and released, which enables users to use RFID wand readers to scan RFID tags into a multipurpose recap pre-populated form template in the app, which will be compatible with USAHERDS. Other information (animal sex, age, test results, consignor information, and additional identification) will be put in manually before the form is converted into a compatible file to upload into USAHERDS.
 - O Action: Once the app is built, OSV field staff will be trained on how to use it with their own RFID wands. Then, this information will be shared with stockyards and buying stations and their associated veterinarians, along with a reminder that electronic submission is a state regulation. By the end of year 3, the OSV would consider this goal successful if multipurpose recap forms were submitted electronically through this app. At that time, pre-existing methods of submission (paper copies, scans, and old Excel formats) will be phased out and become obsolete.
- Objective 2: Currently, tags applied must be reported to the ADT coordinator for tags allocated and distributed to Kentucky premises. This form is a paper copy mailed or scanned and emailed in. In addition, to process premises ID requests, the ADT coordinator typically handles requests over the phone due to a lack of electronic application for Kentucky premises creation.
 - Action: The ADT coordinator will meet with KDA IT staff to discuss the options of creating electronic submission forms for both tags applied reporting and to request premises registration.
 - Once IT directs how these should be created and published online, the ADT coordinator will follow through with the creation of these electronic forms. From that point forward, all calls relating to premises registration will be directed to the online form. Veterinarians, stockyards and producers who are allocated tags will be contacted regarding the new electronic submission.
 - Action: By the end of year 3, the OSV would consider this goal successful
 if tags applied reporting and premises' registration requests were
 submitted through these electronic forms.
- **Objective 3**: Currently, most Brucellosis and Tuberculosis test/vaccination records are mailed in.

 Action: Over the next 3 years, veterinarians will be encouraged to utilize VET CVI to submit this information. The OSV would consider this goal successful if these records were submitted electronically.

Goal 3: Increase accurate electronic CVIs and decrease paper CVI submission.

- **Objective 1**: Most of the intrastate and interstate movement for all animals is still submitted by mailed-in CVI paper copies. The OSV currently distributes paper CVI books free of charge to veterinarians. Transcribing this data into digital form and importing it into USAHERDS is time consuming. Additionally, non-compliance of submitted paper CVIs is rampant, with missing or incomplete information resulting in frequent and recurring rejection from states of destination and violation notices from Kentucky itself. To mitigate both the inaccuracy of paper CVIs, and improve the efficiency of OSV staff processing them, veterinarians will be encouraged to transition to electronic CVIs in several different ways.
 - O Action: First, OSV staff will explore the possibility of charging a fee for paper CVI books, as most other states do. The only free alternative to buying paper CVI books will be to utilize the free electronic VET CVI system (though there are other systems they could pay to use, such as GVL). This should prompt veterinarians to transition to electronic CVIs.
 - Action: The already allocated 50,000 pages will be purchased with cooperative agreement funds by the OSV. Flyers will continue to be sent out to encourage the use of electronic CVIs. If OSV starts charging for paper CVIs, veterinarians will seek an alternative, free option in VET CVI or VSPS. Paper books will still be purchased by OSV, just in a lesser quantity for veterinarians to utilize. After the 50,000 pages run out, OSV will plan to charge for every paper book.
 - Action: Electronic CVI systems will increase the accuracy of CVI information, and thereby decrease non-compliance enforcement, simply because the system will not let a user continue without filling out all information before moving on to a different section of the CVI.