

ADVANCING ANIMAL DISEASE TRACEABILITY ROAD MAP FOR COMMONWEALTH OF KENTUCKY

**A Three-Year Plan
Submitted by:**

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KENTUCKY DEPARTMENT OF AGRICULTURE**

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I. EXECUTIVE SUMMARY

Kentucky is a predominantly agricultural state bordered by seven neighboring states with extensive interstate movement of animals. 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 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 producer and other stakeholder groups on disease traceability, official ID, and the benefits of electronic ID systems. The results of these actions will be an increase in Kentucky's ability to electronically search individual animal ID, decreased search time, and increased response to livestock disease capability.

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 will encourage increased use of electronic movement documents such as eCVI, Vet Sentry, VSPS and Global Vet Link by accredited veterinarians. These types of documents support import of animal data into USAHERDS. Additionally, Kentucky utilizes electronic 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 hand written document. Historically, Kentucky has relied on written animal identification reports from markets to trace animal movement. The hand written 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 hand written date. Migration to all electronic forms with importable data, coupled with RFID technology, will decrease inaccuracies and provide increased searchable data fields.

Kentucky currently has 36 licensed livestock markets and 4 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 allow 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 to cattle. Education to producer groups on Animal Disease Traceability is critical to success of the ADT program. KDA will embark on a program to engage Cattleman'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 ID's.

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 for FY2021, FY2022, and FY2023, and benefits?

- Estimation is difficult due to the unknown cost of RFIDs and electronic reader equipment. Additionally, as database systems develop stronger capabilities yearly maintenance costs may increase making projection of cost difficult.
- Additional funding will be needed to increase RFID read capability at markets. As progress is made in outreach and RFID distribution, additional reader technology will need to be installed. Currently, the markets cannot bear the full cost of infrastructure modernization.
 - 2021 - \$275,000
 - 2022 - \$300,000
 - 2023 - \$350,000

Proposed Timeline and Key Objectives for This plan

- FY 2021
 - Continue evaluation of the utilization of electronic market forms and adapt electronic technology in markets.
 - Develop and implement outreach programs to commodity groups, for Animal Disease Traceability, focusing on electronic identification device use.
- FY 2022
 - Increase use of eCVI's by category II accredited veterinarians, while providing training opportunities on approved software.
- FY 2023
 - Decrease use of NUES tags.
 - Expand official ID and premises ID in non-bovine species in accordance with state and federal regulations.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

- Who are the primary constituents?
 - 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 mean?
 - Statewide is inclusive of activities within all 120 Kentucky counties.
- How is traceability data used internally and 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 animal disease traceability system?
 - Kentucky is guided by its mission to protect and improve the animal health status of the states livestock.
- What is the make-up of the animal disease traceability advisory group? How, and how often are they engaged?
 - The Advisory Committee includes representatives from the following entities:
 - KDA- State Veterinarian, Deputy State Veterinarian, Director of Animal Health, ADT Program Coordinator, Programs Branch Manager.
 - Kentucky Cattlemen’s Association
 - Kentucky Pork Producers Association
 - Kentucky Alternative Livestock 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
 - The Jockey Club
 - Kentucky Farm Bureau
 - USDA APHIS VS
 - Kentucky Dairy Development Council

- Kentucky Technology Representative

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 animal disease traceability 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?
 - Animal ID - official ID number, sex, age, species/breed.
 - Premise information
 - 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 currently being achieved?
 - 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 insure 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 premise 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/department 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 occur. Continual improvements are made through our contract to increase system usefulness, and animal traceability needs.
 - GXI scanning technology was used for sharing CVI's with other states prior to 2018.
 - 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.
- 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 for personnel, supplies, technology, equipment, travel, and outreach.

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.
 - Due to extensive collaboration and communication, KDA has developed strong working relationships with livestock markets, producer commodity organizations, exhibitors and veterinarians.
 - The USAHERDS system, which 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, and 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.

2.4 Opportunities and Threats

- Does this plan enable or avoid consequences of potential threats?
 - Prior to this plan Kentucky had made decisions to store more information electronically on servers that the State maintains that should survive all conceivable threats. State server backups are off site.

- Does this plan provide for better use of available resources than past approaches?
 - This plan enhances the states 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 allowing 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 allows for 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, will others be tasked with doing so?
 - It is unlikely that others outside of the Kentucky State Veterinarians Office will be able to promote and implement ADT at the level KDA is working to attain through this agreement.
 - Previous experience with NAIS indicates that industry will not voluntarily support animal identification sufficiently.
- 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 complicated by unclear and changing guidance from USDA, especially relating to the NUES and RFID tag guidelines.
 - Previous experience with NAIS indicates that industry will not voluntarily support animal USDA official identification sufficiently. Mainly due to premise ID requirements to purchase USDA official ear tags.

2.5 Inventory of Existing Infrastructure and Suitability Assessment

- Human Resources
 - Supervisors, inspectors, and investigators in the field – 17
 - Office- 3 veterinarians, 1 program manager, 1 ADT program coordinator and 3 support staff.
 - No dedicated technology person for the ADT program.
 - 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 needs 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 have DSL or broadband (not available in their areas). 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 animal disease traceability and animal health information resources
 - Adequate resources available for office personnel are sometimes more difficult for field staff to access
 - USDA website can be confusing to navigate for staff as well as producers and practitioners.
 - VSPS is not as user friendly as other eCVI software systems.
- Organization of all existing paper record systems used to access animal disease traceability or animal health information
 - Paper copies, that were received prior to 2018, are stored in a large file room.
 - 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.
 - 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 is using 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 send 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 for the Office of the State Veterinarian (OSV)

- 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

4.1 Strategic Goals

- Preserve and promote the economic viability of Kentucky animal agriculture.
- Official identification and electronic data collection, storage and retrieval to improve traceability within Kentucky livestock populations.
- Exercise Kentucky's capability to respond to traceability requests as outlined in ADT Performance Standards.
- Implement the standards inherent to the ADT rule.
- Capture and maintain traceability data in an efficient system for response to a disease incident.

4.2 Programmatic Goals (objectives)

First Year Goals – 2021

- Continue to evaluate electronic data forms and adaptation of technology at Kentucky stockyards, including development of plans for handling markets without electronic data capabilities.
- Develop and implement outreach program to commodity groups and stakeholders focusing on use of electronic identification devices and electronic data capture technologies.

Second Year Goals - 2022

- Increase use of electronic certificates of veterinary inspection by accredited veterinarians.

Third Year Goals – 2023

- Decrease use of NUES tags and expand use of official identification devices and premises identification numbers for all non-bovine animals.

4.3 Animal Disease Traceability Performance Measures

Recommended Performance Measures will be used:

- a) Time to report to the State/Tribe the official tagging/identifying of an animal in question that has moved interstate.

- b) Time to report to the State/Tribe information regarding where an animal in question has moved interstate was first officially tagged/identified to provide a record of the official tag distribution.
- c) Time to report to the State/Tribe information related to origin of the animal in question which has moved interstate, and
- d) Time for the State/Tribe from which an animal in question has moved interstate to provide the location and contact information from which the animal was moved interstate.

How has performance been measured to date?

- This has been measured using the ADT performance standards received after completing USDA National Priority Traces.
- A self-review is also done in office after trace requests are made from other states, personnel, etc., to find where information can be improved.

What is the current baseline?

- There is no real current baseline. Kentucky tries to improve constantly, and find ways to make improvements happen. We always try to be on par, or better with the USDA TPM ratings for traces.
- The KDA ADT Program Coordinator works closely with the USDA AVIC to improve TPM response time and to make recommendations to improve traceability.

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 acts as an official RFID and NUES tag manager
 - OSV requires premises information from markets and accredited veterinarians for RFID and NUES tags provided
 - OSV issues USDA PIN through USAHERDS, DMC, 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

- 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 USDA tags, information must include animal sex, age, species/breed, to increase the traceability information of the animal.
- Will the State/Tribe/Territory be using official metal ear tags and USDA RFID ear tags beyond the current system involving accredited veterinarians only applying the tags at the time of performing regulatory animal disease work?
 - Yes. Ear tags will be used in stockyards, animal vaccinations, exhibitions, and producer replacement animals. KDA staff will ensure official identification is utilized for all regulatory disease testing and investigations.
- What formats?
 - Kentucky is using metal NUES tags, “61xxx1111” series, in some livestock markets, and providing to producers on request.
 - Kentucky is using RFID ear tags for stockyard head cows, brucellosis vaccinations, replacement animals, and special heifer sales.
 - White RFID tags are currently being distributed free of charge to cattle producers, beef and dairy, to increase the number of animals officially identified.
- What volume is expected for use?
 - NUES tags
 - 2021 – 40,000
 - 2022 – 30,000
 - 2023 – 15,000
 - RFID tags
 - 2021 – 75,000
 - 2022 – 120,000
 - 2023 – 175,000
- How will they be distributed?
 - NUES tags are distributed by the OSV. All tag numbers, name, and addresses are maintained in a searchable database.
 - RFID tags are distributed by the OSV. All tag numbers, name and addresses are maintained in a searchable database.
 - White RFID tags get allocated to the Kentucky Beef Network, who are AIN tag managers, to help with distribution to beef cattle producers, for tagging breeding cattle. Tag numbers, name and addresses are maintained in USAHERDS.
 - Producers requesting tags are required to sign an acknowledgement form stating that they will comply with sending OSV necessary information in a

timely manner. A cover letter is provided with tags which outlines the program, the reason behind it, and the requirements.

- What is the plan for distributing taggers?
 - VS Guidance 10000.1 is used for reference guidelines.
 - Kentucky provides universal tagger only to KY OSV field staff. All others are advised to purchase their own.
 - With cooperative agreement funding, specialty taggers (Datamars Z2 Tagger) will be purchased, to be distributed to category II accredited veterinarians, who receive orange or white RFID tags made by Datamars. They will only receive 1 for free, and must purchase additional ones themselves.

- What tag distribution record keeping systems will be used?
 - All producers and veterinarians are required to fill out and return tags applied forms to OSV for all official identification devices.
 - These forms include the premise information, the tag series, the animal sex, age, and species/breed.
 - Current AIN tag managers are allocated tags from OSV. They keep distribution records, and send them into OSV.
 - All tag distribution information is uploaded into USAHERDS for animal traceability records.

- What forms are approved for interstate movement in addition to ICVI's?
 - Owner-Shipper Statements
 - NPIP VS Form 9-3

- How and when will data be shared with other States, Tribes, Territories, and USDA?
 - Data will be shared electronically, by email, and/or upon the request by other States and the USDA.

- How will group/lot official numbers be handled within the system?
 - Groups and lots are not routinely captured in Kentucky as most eligible animals are sold individually. Any groups sold will have all individual animals tagged, that are eligible.

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, UHF panel readers) to be distributed/utilized as needed for field staff
- Utilization of federal funds allow for the purchase of UHF panel readers at stockyards across the state to read RFID tags in animals. Previous federal funds purchased 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 is done regularly, and by request of the State or State user group as needed.

4.6 Resource Requirements

- 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 trainings 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?
 - 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?
 - No current plan is in place.
- Are automated data capture resources needed?
 - Yes.
 - Currently we use eCVI programs VetSentry, GVL, 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, panel readers, PDAs 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 application of electronic identification devices of all species.
 - Continued cooperative agreement ADT funds for the purchase of EID technology will be needed to support producer transition to EID.
- Will additional or new space be required?
 - Not at this time.

4.7 Organizational Needs

- Does a need for organizational change exist?
 - Not at this time.
- Can additional resources be leveraged within the current administrative structure?
 - Additional resources are dependent on budgetary and personnel resources.

4.7.1 Executive Support

- 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)
 - Overall ADT work is monitored by the State Veterinarian, Deputy State Veterinarian, Director of Animal Health, Branch Manager, and Program Manager.
 - Weekly supervisor meetings conducted by the division director ensures field accountability to the priorities of the ADT.
 - 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

- What is the makeup of the Kentucky Animal Disease Traceability Advisory Group?
 - Please refer to section 2.1.
- How are emergency preparedness resources engaged or responded to when necessary?
 - OSV Emergency Response Coordinator works directly with Kentucky Emergency Management and the affected area to assess agricultural needs and resources.
 - Communication and coordination with USDA APHIS VS, Assistant Director (AD).
- 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 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.
 - ADT program coordinator is appointed with oversight provided by Program Branch Manager
 - ICS may be used to organize if warranted for emergency response.
- 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?
 - Current state Veterinarian strives to train deputy state veterinarian, staff veterinarians, and merit administrative staff thoroughly on all programs and policies to assist with transitions.

4.7.3 Policy

- How do existing mandates assist, limit, or modify what is intended to be achieved?
 - A statute passed as a result of NAIS limit some state activities to standards within ADT rule.
 - Some regulations are being modified for clarity and consistency.
 - Producer commodity groups provide feedback on regulatory changes to assist in a unified advancement of ADT program.
- Is there a need to address any specific mandates and act to modify them to align them with current goals and objectives?
 - Specific mandates are modified as needed to align with current goals and objectives.

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?
 - State Veterinarian
 - Deputy State Veterinarian
 - Director of Animal Health
 - Branch Manager
 - ADT Program Coordinator
 - Area supervisors
 - Area Inspectors
 - Investigators/Law enforcement
 - Office data entry personnel (Administrative assistants)
- Can other human resources be leveraged to assist in implementing the plan?
 - Yes with approval of Commissioner, 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.
 - Division Director Veterinarian is FADD certified.
- Are job descriptions for the roles needed provided?
 - Yes.
- Is animal disease traceability 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 animal disease traceability? State, Tribe, Territory versus Federal?
 - Primarily state funding for merit employees.
 - USDA C.A. funds support Full Time Equivalent Veterinarian salary.
 - USDA C.A. funds support some education and outreach activities.
 - USDA C.A. funds support key staff personnel salaries.
 - USDA C.A funds support equipment purchases such as wands, readers, EID, etc.
- What are the funding requirements projected by year for implementing this plan?
 - State funding for current employees, not available for additional needed personnel
 - Federal cooperative grant 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.
 - **FY2021 - \$275,000**
 - **FY2022 - \$300,000**
 - **FY2023 - \$350,000**
- How is cost sharing achieved?
 - The larger portions of salaries for the KDA veterinarians, field staff and office staff, plus the expense of the vehicles are State 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.
 - Enhance use of technology for efficiency.
- Can other funding sources be leveraged to support this plan?
 - There are none available to OSV at this time. However, 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

Accredited veterinarians are instrumental to the new framework focusing on interstate movement of livestock and poultry.

- What is the plan for informing accredited veterinarians of the new framework and the specific three-year plan for implementation?
 - Utilization of the Kentucky Veterinary Medical Association (KVMA) newsletter.
 - Presentations and booths at regional and state veterinary meetings.
 - “One on one” discussions at Livestock Markets and in the workplace.
 - Attendance at producer commodity association meetings.
 - Participation in Kentucky Farm Bureau (KFB) Advisory Committee 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 trainings 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.
- What is the plan for enhancing the use of eCVI’s, if any?
 - This plan will be focused around our goals and timeline in 2022.
 - Kentucky accepts eCVI’s from GVL, Vet-Sentry, and VSPS.
 - New eCVI software is researched, and trainings are conducted with office staff (Program Manager/Branch Manager) to become familiar with the programs and their specific benefits, before the software is accepted for use within the state.

- Kentucky will only accept eCVI vendors which meet the USAHA XML standards, specifically to allow for data import to USAHERDS.
 - Kentucky utilizes USAHERDS, which provides enhancements for uploading eCVI's.
 - KDA is cooperating with livestock markets to demonstrate eCVI usage to accredited veterinarians.
 - OSV will set up either in person, or virtual training sessions with small group accredited veterinarians. These will be used to demonstrate the software, teach its uses, benefits, and help veterinarians pick which software will be most beneficial for personal use.
- 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 Livestock Markets

- What continuing education efforts are being planned for addressing the concerns of the livestock markets in the jurisdiction?
 - The State Veterinarian presents ADT information at the annual meeting of KY Livestock Marketers Assoc.
 - The bulk of this education will be done one on one in the market place by KDA field staff.
 - KDA staff will train on new technology, eCVI programs, ADT standards, and other information as needed.
- What is the plan for accessing or requesting traceability information from livestock markets?
 - The OSV licenses livestock markets and within that agreement the markets are required by statute to maintain records on livestock transactions (ID, seller, and buyer) to provide such to KDA upon request.
 - Stockyards send OSV “recap sheets” of head cows processed on sale days. This information includes official ID number, test results, color, age, sex, and consignor information to trace to a premise of origin. The goal is for the stockyards to send electronic versions of this document which can be uploaded into USAHERDs.
 - Stockyards provide sellers information upon request.

4.7.6.3 Industry as a Whole

- How is industry being informed of the implementation plan?
 - University Extension meetings with producers.
 - State personnel with producer groups, attending producer conferences and field days.
 - ADT Advisory Committee.
 - KFB Advisory Committee meetings.

- Outreach at trade shows, exhibitions, producer group meetings, and website information.
- 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 resources are available for industry outreach?
 - Extension KFB Agriculture publications.
 - Annual meeting of Kentucky Cattleman’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?
 - Producer operations, feed/supply stores, veterinarians, markets, retail sales and related operations.
- What species are involved?
 - All species included in the USDA ADT final rule.
 - Bovine, caprine, porcine, ovine, poultry, and equine.
- How are under-represented and under-served communities being included in the outreach plan?
 - Both UK and KSU extension will be the primary source of information. An extension office is located in each one of Kentucky’s 120 counties.
 - OSV field staff are located across the state to help with outreach.
 - Also farm publications, such as “Farmers Pride” and “Cow Country News”.

4.8 Monitoring and Reporting Interstate Movement Activity

- How will the number of animals and the number of shipments be monitored that move interstate?
 - Through receipt of electronic CVI
 - Emailed, faxed and mailed CVI’s
 - Owner shipper statements collected at markets
- How will the data be verified or validated?
 - Every document is reviewed by office staff.
 - Change of ownership (sale) movements require permitting before the movement occurs.
 - Permitted moves are documented in USAHERDS.
 - All eCVI’s and Paper CVI’s are uploaded into USAHERDS for imports and exports to/from Kentucky.

V. TRACEABILITY IMPLEMENTATION

5.1 Ranking of Priorities for Advancement

- What specific steps are needed to advance from where the initiative currently resides?
 - Increase the application of RFID at markets and on farms by producers.
 - Conduct outreach education to increase awareness of RFID tags, technology, and electronic form benefits.
 - Increase the use of electronic animal health and movement documents that support searchable data upload.
 - Conduct trainings with accredited veterinarians on the accepted eCVI programs, and benefits of each.
 - Increase market and accredited veterinarian ability to capture RFID data and use electronic documents.
 - Increase the number of USDA official RFID tags allocated to identify animals of all species.
 - Capture, enter, and store data for timely retrieval.
 - Evaluate the use of both our trace forward and trace back through National Training Exercise and address areas of weakness from the “after action report.”

- Is a phased-in approach appropriate over the three-year period?
 - Yes.
 - Year 1 will focus on increasing the number of stockyards utilizing RFID technology, and increasing the number of bovine animals utilizing USDA official RFID tags.
 - Year 2 will focus on increasing the number of veterinarians utilizing eCVI software programs.
 - Year 3 will focus on increasing the number of animals, of all species, utilizing USDA official ear tags.
 - The basic plan has been implemented across the board. Each year will see increasing numbers of compliant movements and enhanced understanding by participants.
 - Data management will improve with technology enhancements.

- Are various components dependent upon measurable successes rather than defined time periods?
 - Yes – success with achieve-able projects must precede progression to more challenging goals.

5.2 Implementation of Objectives

- 2021 – Requested budget \$275,000.
 - Objective 1: Continue to evaluate electronic data forms and adaptation of technology at Kentucky stockyards, including development of plans for handling markets without electronic data capabilities.
 - Objective 2: Develop and implement outreach program to commodity groups and stakeholders focusing on use of electronic identification devices and data capture technologies.
 - Action: KDA will target cow-calf operations, special cattle sales, and calfhood vaccination eligible calves for distribution of RFID. KDA

will also work with cooperating agencies to provide RFID for special cattle projects.

- Action: 31 of Kentucky’s 36 livestock markets will be reporting electronically by the end of FY2021.
 - Action: Determine what methodologies will be used for the 5 livestock markets that are currently incapable of reporting electronically.
- 2022 – Requested budget \$300,000.
 - Objective 1: Increase use of electronic certificates of veterinary inspection.
 - Objective 2: Implement outreach for the decreased use of NUES tags in 2023.
 - Action: Implement outreach education on requirements of the ADT rule and KDA movement regulations and the benefits of electronic CVI and animal identification use.
 - Action: Coordinate demos with field staff to educate them on the different eCVI software that is accepted by OSV. This will allow them to speak with veterinarians in the field about the benefits of different eCVI programs.
 - Action: Coordinate demos with accredited veterinarians, allowing them to choose which eCVI software would work best for their practice, and implement the use of it.
- 2023 – Requested budget \$350,000
 - Objective 1: Decrease use of NUES tags and expand use of official identification devices and premises identification numbers for all non-bovine producers.
 - Objective 2: Implement plan for methodologies to be used for the 5 stockyards incapable of reporting electronically.
 - Action: Develop educational materials for producers. These will cover what RFID tags are, and what they aren’t, proper use of official identification devices, and demonstration videos on proper application.
 - Action: Work with USDA and Kentucky Extension to target educational outreach to “backyard producers” in order to develop compliance with the ADT standards.
 - Action: Work with religious group’s leadership on developing ways to advance RFID technology within their groups, which benefit both ADT traceability and their religious producers.
 - Action: increase of funding will be used for 5 specific markets, in getting them equipped, or hiring personnel to maintain reporting to OSV.
- KDA will continue improve its capabilities to trace animal movements both interstate and intrastate in support of the ADT Rule. KDA will evaluate its traceability improvement through Trace Performance Measurement exercises designed to meet the performance standards established by USDA APHIS VS. KDA will monitor and enforce producer compliance with interstate movement requirements as outlined in ADT Rule.