

# ADVANCING ANIMAL DISEASE TRACEABILITY ROAD MAP FOR TEXAS

**A Three-Year Plan**

**Submitted by:**

**DR. ANDY SCHWARTZ**

**EXECUTIVE DIRECTOR, STATE VETERINARIAN  
TEXAS ANIMAL HEALTH COMMISSION  
2105 KRAMER LANE, AUSTIN, TX 78758  
512-719-0704**

**Submitted to:**

**MICHAEL PRUITT, D.V.M.  
ASSISTANT DISTRICT DIRECTOR FOR TEXAS  
VETERINARY SERVICES  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
UNITED STATES DEPARTMENT OF AGRICULTURE**

**903 SAN JACINTO BLVD., SUITE 220  
AUSTIN, TX 78701  
512-383-2400**

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## I. EXECUTIVE SUMMARY

On January 9, 2013, the U.S. Department of Agriculture (USDA) published a final rule establishing general regulations for improving the traceability of U.S. livestock moving interstate. The rule became effective on March 11, 2013. Under the ADT rule, livestock moving interstate must have official identification and accompanied by an interstate certificate of veterinary inspection (ICVI) or other approved movement documentation, unless specifically exempted.

This three-year plan will outline how Texas plans to continue development and compliance with the Federal ADT Rule. States and Tribes will be the primary administrators of the program under the final rule. This new approach for improving animal disease traceability will allow each State to develop their own systems for tracing animals; designing a plan that works best for their jurisdiction, producers, and livestock industries.

The Texas Animal Health Commission (TAHC) supports the concept of establishing minimum national official identification and documentation requirements for livestock and poultry moving interstate. This plan reflects the continued collaboration and cooperative relationship between TAHC and USDA/APHIS/VS. The process must be supported and funded by USDA to ensure successful compliance by the regulated industries in an equitable and cost effective fashion, and to ensure the successful management and enforcement of the same traceability process by the responsible state animal health agencies.

Texas is currently working toward achievement of an animal disease traceability system that will both accommodate animal industry concerns and satisfy basic ID requirements, state and federal, for intra and interstate animal traceability. During FY 2013, TAHC restructured and adopted new animal disease traceability rules, published as a separate chapter to enhance program transparency and to incorporate elements in the adopted federal ADT rule. Chapter 50: Animal Disease Traceability went into effect on Monday, October 7, 2013.

The primary focus of the Texas traceability system is on cattle, the goal being official identification (compliant with the federal rule) of all adult cattle moving intra and interstate. Central to Texas' plan is efficient distribution and promotion of the use of official identification devices, to producers and those tagging cattle. All adult breeding cattle moving out of state or within 7 days after change of ownership will be required to have some form of official ID. TAHC passed a rule requiring mandatory individual official identification for intrastate movement of all dairy cattle, regardless of age. Tag allocations are documented in a central database using either a Texas-specific location-based identification number (LID) or national premises identification number (PIN), based on the type of official ID and/or producer preference. In order to achieve improvements in traceability, TAHC has placed emphasis on transitioning from a primarily paper based system to electronic capture of regulatory and movement data.

TAHC's projected approach and anticipated timeline may include the following elements:

- April 2021
  - FY2021 cooperative agreement
  - Continue LID/PIN assignments
  - Continue tag distribution process
  - Continue data collection and reporting
  - Continued integration of legacy data
  - Outreach and marketing efforts
  - Continue development of a system for electronic capture of CVI data
  - Promote the use of electronic data capture and electronic records
  - Compliance and enforcement actions
  - Conclude and report findings of UHF RFID Backtag pilot project with Texas Cattle Feeders Association
  - Projected Cost: \$1,750,000
  
- April 2022
  - FY2022 cooperative agreement
  - Continue LID/PIN assignments
  - Continue tag distribution process
  - Continue data collection and reporting
  - Continued integration of legacy data
  - Outreach and marketing efforts
  - Enhancement of an electronic data capture system of CVI data
  - Implementation of transition to electronic identification
  - Compliance and enforcement actions
  - Projected Cost: \$1,825,000
  
- April 2023
  - FY2023 cooperative agreement
  - Continue LID/PIN assignments
  - Continue tag distribution process
  - Continue data collection and reporting
  - Continued integration of legacy data
  - Outreach and marketing efforts
  - Enhancement of an electronic data capture system of CVI data
  - Implementation of advancement activities to support a standardized electronic system for traceability data and uniform official ID
  - Compliance and enforcement actions
  - Projected Cost: \$1,900,000

## II. CURRENT TRACEABILITY SITUATION

### 2.1 Who are we?

The Texas Animal Health Commission (TAHC) was founded in 1893 with a mission to address the fever tick problem within the state of Texas. Today, TAHC works to protect the health of all Texas livestock, including cattle, swine, poultry, sheep, goats, equine, and exotic livestock. The TAHC also works to keep pests from reoccurring as major livestock health hazards. Ultimately, the TAHC mission and role is the assurance of marketability and mobility of Texas livestock. TAHC works to sustain and continue to make a vital contribution to a wholesome and abundant supply of meat, eggs, and dairy products at affordable costs.

TAHC has legislative authority to make and enforce regulations to prevent, control, and eradicate specific infectious animal diseases which endanger livestock. TAHC regulations are made and adopted by 13 governor-appointed commissioners who represent the general public, various livestock industries, and professions. The commissioners serve staggered six-year terms and meet as needed to study the regulatory needs of the agency, review public comments on proposed regulation changes, and adopt new rules when necessary.

Agency headquarters are located in Austin, Texas. Six region offices are strategically located across the state, so the staff can work more effectively with ranchers, livestock market and slaughter plant personnel, and other livestock industry representatives.

Texas has unique risks associated with its size and borders, and a recent CEAH study mentions that Texas has the highest risk of Foot and Mouth Disease introduction. A total of eight states share a border with Texas – four US states and four Mexican states. The Texas-Mexico shared border is approximately 1,248 miles in length. In addition, Texas has multiple land ports, seaports, and international airports. Texas also imports more live animals than any other state, including approximately one million cattle per year from Mexico and approximately two and one half million cattle from other US states. Texas producers maintain within their inventories approximately fifteen percent of the national herd supplying approximately one third of the US supply of beef.

The Texas animal disease traceability working groups are species specific and provide valuable guidance and oversight in the continued development and implementation of traceability efforts in Texas. Originally, the working group was comprised of representatives from all various livestock industries and producers. The formation of species-specific working groups was put in place to provide more effective and focused advancement within their industries. The working groups meet on an as-needed basis.

## 2.2 Where are we now?

The TAHC continues to work with the animal disease traceability cattle working group and other industries to find workable solutions and to help develop short & long-term plans for the future of animal identification and disease traceability in Texas.

Texas has now successfully completed three previous ADT Road Maps. The first Texas ADT Road Map plans established the initial development and implementation of a basic traceability system and rules during FY2012, FY2013, and FY2014. Building on the previous successes the Texas ADT Road Map 2 for FY2015, FY2016, and FY2017, continued implementation of traceability activities and began development of a system for electronic capture of ICVI data. For FY2018, FY2019, and FY2020, the Texas ADT Road Map 3 focused on improving the availability and retrieval of traceability information, as well as the evaluation of visual versus electronic traceability devices and documents.

### **Premises Registration Systems**

TAHC has continued voluntary premises registration to support the administration of location identifiers that adhere to the federal standards. The TAHC ADT staff manages the various premises registration systems, including issuing premises identification numbers (PIN)s, location identification numbers (LID)s, and scrapie flock identification numbers. Each number is nationally unique and recognized.

A national premises identification number (PIN) is a unique number, permanently assigned to a physical address where agricultural animals are located. Texas utilizes the USDA-APHIS provided Standardized Premises Identification System (SPIS) to obtain a PIN from the federal allocator. A PIN consists of seven alphanumeric characters, beginning with two leading zeros. To obtain a PIN, producers may contact the TAHC ADT department. The owner's contact and premises information is entered, maintained, and stored electronically in SPIS and hard copy files on-site.

Texas has a state system and process for issuing a location identification number (LID). A LID is assigned to an owner's contact and operation information, which are stored in a state administered CoreOne database (SCS-TX). Only the LID number itself is reported to the federal repository system as a valid number. All LIDs start with the state postal abbreviation (TX) followed by six random alphanumeric characters, which makes the LIDs nationally unique. In most cases, a LID may be used in lieu of a PIN. To obtain a LID, producers may contact their local TAHC region office or ADT department.

Additionally, TAHC ADT staff administers the Scrapie program for sheep and goats. They collect producer and flock information over the telephone, assign a Scrapie flock identification number, enter the information into SCS-SCR, and maintain a scanned file copy of the registration/order form.

### **Administration of Official Identification Devices**

The proper administration of official identification devices and reporting is key for capturing accurate information needed to achieve successful animal disease traceability. The most commonly used forms of official ID are USDA approved Animal Identification Number (AIN) “840” series Radio Frequency Identification tags (RFID) and National Uniform Eartagging System (NUES) identification metal eartags. Brucellosis calfhood vaccination tags, Swine PIN tags, Scrapie tags, and breed registration tattoos/brands (uniquely identifying the animal and accompanied by the breed registration paperwork) are also acceptable as official ID. A complete list of acceptable official identification devices/methods is posted on the TAHC website and updated regularly. Producers are encouraged to contact their veterinarian or TAHC to determine which method of tagging will be best for their operation.

#### AIN - RFID tags

AIN device manufacturers and managers may distribute approved AIN devices to producers and are responsible for entering tag distribution records into the Animal Identification Management System (AIMS). All recipients of AIN devices must first have a LID or PIN and provide that number to the distributor for proper reporting. TAHC ADT staff are available to register premises, process address exceptions, and issue the allocated PINs and/or LIDs. Additionally, TAHC Region office staff can register premises and issue LIDs. Producers with a valid PIN or LID are encouraged to purchase official identification from an USDA approved tagging manufacturer or supplier. TAHC will provide or direct producers to the complete list of approved AIN devices and tag manufacturers’ information maintained on the USDA traceability website.

TAHC will continue to promote and support the use of electronic identification. By the end of FY2019, TAHC successfully transitioned to only using electronic identification for regulatory and disease program work by all TAHC field personnel. TAHC may use ADT cooperative agreement funds to purchase additional AIN RFID tags and RFID device applicators. In addition, TAHC may supply a very limited amount of AIN RFID tags to producers with a valid PIN or LID, if supplies are available and only on a case-by-case basis. TAHC ADT department is responsible for overseeing the management of all official ID devices distributed and/or applied by the agency. TAHC Region office staff will collect all official ID allocation records from field staff,

enter the data into CoreOne, and report official ID distributions to the TAHC ADT department. Tag distribution records for official AIN devices are entered and maintained in AIMS by TAHC ADT staff.

After RFID tags are applied to the animals, the RFID devices are able to be scanned/read by standard ISO compliant readers. Electronic readers are available for purchase by animal health agencies, markets, operations, and producers from the manufacturers. TAHC field personnel regularly use handheld readers, wands, and stationary readers paired with handheld PDAs and laptops to electronically capture the animal identification numbers and upload the data into the appropriate systems using MIMS; while conducting testing, disease response, trace work, and assisting with livestock identification. Funds will be used to purchase electronic readers with accessories for TAHC field personnel and accredited vets, as part of our technology equipment refresh and to increase infrastructure.

#### Accredited Veterinarians and Cattle Producers

In order to expand the use of RFID devices, USDA announced they will begin offering free AIN-840 low frequency RFID white and orange OCV tags to states for accredited veterinarians and cattle producers for use on replacement breeding cattle. The complimentary RFID tags are to be used as an alternative to silver metal Brite tags and orange metal Official Calhhood Vaccination (OCV) tags. Though the metal clip tags have served a valuable purpose in disease control and eradication programs, RFID devices provide state animal health officials and the cattle industries increased ability to accurately and quickly trace animals exposed to or infected with potentially devastating diseases before they can do substantial damage to the U.S. livestock and consumer markets.

Texas accredited veterinarians and cattle producers interested in receiving a limited number of official RFID tags at no-cost may submit their requests to the TAHC ADT department beginning in January 2021. TAHC will submit the requests for these devices from USDA supply and/or under USDA contracts to be distributed to field offices, accredited vets, producers, markets, or operations that are eligible to receive these official id devices at no-cost. These no-cost official id devices will be shipped directly from USDA supply or contracted tag manufacturers at USDA's expense. The shipping costs for devices redistributed from TAHC will be paid for with cooperative funds, any overages will be covered by state funding.

Accredited Veterinarians are required to maintain records and report all official ID devices distributed and/or applied, using one of the following methods: record and submit identification data on an official animal health record (test record, vaccination chart, or ICVI) for data entry into



CoreOne; vets who are AIN Device Managers may enter AIN distribution records directly into AIMS; or report official ID distribution records to the TAHC ADT department for data entry into AIMS.

#### NUES tags

Although TAHC and USDA are highly encouraging and supporting the transition to electronic identification, official National Uniform Eartagging System (NUES) identification eartags, commonly referred to as “brite” tags are still acceptable and available as a low cost option. Over the years, an extensive tag distribution and reporting process has been established. Producers may obtain NUES tags from the TAHC ADT department, region offices, Accredited Veterinarians, or Approved Tagging Sites.

TAHC personnel in our Region offices and ADT department order NUES tag supplies for Approved Tagging Sites, livestock markets, and for distribution directly to producers. Texas NUES tag orders are emailed to USDA APHIS warehouse supply staff, in increments of 1,000 tags. USDA agrees to ship NUES tags to the TAHC offices and to other tag distribution locations as requested. ADT cooperative agreement funds may be used to deliver or ship tags to producers from these locations.

In accordance with USDA ADT General Standard’s document, TAHC personnel will collect (at least) the minimum data requirements for NUES tag distribution, including but not limited to: The producer’s name, address, identification numbers allocated, date, and person issuing the tags. TAHC personnel will collect tag allocation data for all NUES tags ordered and/or distributed through this agency. NUES tag allocation records are documented in a central database using a Texas-specific location-based identification number (LID) and TAHC uses the CoreOne software for this purpose.

#### Tag Distribution Partners

The TAHC is no longer distributing NUES tags through our Tag Distribution Partners. TAHC has begun the process of contacting Texas NUES tag distribution partners to issue a NUES tag recall, follow up allocations reporting accountability, and provide electronic id transition information. All records of previous NUES tag allocations by our distribution partners are stored electronically in our CoreOne system or in our TAHC Tag Allocation application.

The online Tag Allocation application was created to receive NUES tag allocation reports from tag distribution partners that do not have access to SCS-TX, e.g. accredited veterinarians, county extension agents, and TAHC field personnel. It is accessible with login credentials on the

TAHC ADT webpage and is electronically searchable by TAHC ADT and IT staff. All established ADT tag allocation required data points are collected and compatible. Currently, there are no immediate plans for integrating this data into our primary database.

#### Accredited Veterinarians

Accredited veterinarians may continue to order the metal silver and orange (OCV) NUES tags and pliers from USDA Austin supply department as in the past, or request a supply from the TAHC. Vets will need to email their orders to [d4supplyorders@usda.gov](mailto:d4supplyorders@usda.gov), including: Name, accreditation & license numbers, shipping address, phone number, number and type of tags requested (no minimum, average order is a few hundred).

When a veterinarian issues NUES tags to a producer for identification purposes only (not documented on an official animal health record), they are required to collect the client's name, address, county, phone number, official identification numbers, number of tags, and the tag allocation date in order to submit a tag allocation record. Veterinarians are encouraged to submit tag allocation records electronically into our secure online TAHC Tag Allocation Application on the TAHC website. Alternatively, an Official Tag Allocation paper form may be completed and mailed to TAHC ADT department for data entry into CoreOne.

#### Livestock Marketing Facilities

The TAHC recommends that producers/buyers contact their local livestock market/auction barn to determine current requirements and available options for livestock identification. Some animals may be required to be officially identified prior to or after purchase to comply with the ADT, disease program, or regulatory requirements.

Texas livestock marketing facilities can order metal NUES tags through the TAHC Region offices or ADT department. Facilities will need to provide: Facility name, a contact name, shipping address, phone number, county, and number of tags requested (1,000 minimum, in increments of 1,000). TAHC personnel will submit the tag orders to the USDA Austin supply staff. USDA will ship the tags directly to the facility and is responsible for maintaining their tag allocation records.

Livestock marketing facilities are not required to report tag allocation records. As part of a separate TAHC rule, livestock marketing facilities are required to keep certain dealer records for a minimum of five years and to make the records available for inspection by TAHC representatives. Dealer records are to include records of individual animal identification numbers, plus consignor and consignee contact information for animals sold.

### Approved Tagging Sites

All facilities such as livestock markets receiving certain classes of livestock without official identification must be designated as an approved tagging site by agreement. The purpose of this agreement is to maintain integrity and control of application of official NUES eartags at an approved tagging site, where livestock may be officially identified on behalf of the owner or person in possession, care or control of the animals when they are brought to the facility. Animals requiring official identification may be moved to these sites without prior official identification, provided the site can maintain the individual identity of animals until they are officially identified.

Approved Tagging Sites can order NUES tags increments of 1,000 by contacting the TAHC ADT department. NUES tags will be used to officially identify all animals in accordance with 9 CFR 86 and 4 TAC §50.2, including:

- Officially identify animals required to be identified before commingling with animals from different premises, or use a backtag or other method to accurately maintain the animal's identity until the official ear tag is applied. The official identification can then be correlated to the person responsible for shipping the animal.
- Only apply official eartags to animals not already officially identified, (except as provided in 9 CFR 86.4(c)); and
- Do not remove official identification devices unless authorized by an animal health official.

Approved Tagging Sites must submit records of tag application within 30 days if requested by TAHC personnel. The report must include, at a minimum: The name, physical address, city, state and zip code of the owner or person responsible for animals tagged; the official identification numbers of the tags applied associated with the owner or person responsible for the animals; and the date the official identification eartags were applied.

Approved Tagging Sites must maintain records of official identification eartags received and applied for a minimum of five years. Also, maintain an accurate inventory of official eartags and application records in a secure place accessible only to tag applicator personnel. Any lost or stolen tags must be immediately reported to Texas animal health officials.

### Swine PIN tags

Producers requesting Swine PIN tags must first have a premises ID number (PIN), as the PIN is imprinted on the tags. TAHC ADT staff

will register the premises over the phone and provide the allocated PIN number. The Swine PIN tags are available for purchase from an USDA approved tagging manufacturer or supplier. TAHC will provide or direct producers to the list of official PIN tags for slaughter swine and their approved tag manufacturers' information maintained on the USDA traceability website.

TAHC will use ADT cooperative agreement funds to purchase Swine PIN tags and applicators for animal disease regulatory work. These tags will be registered to and imprinted with the PIN for the TAHC central office. These tags are only distributed to TAHC region offices to be used by TAHC field staff when conducting swine testing. The initial tag distributions from the central office to the region offices are entered and maintained in CoreOne. When applied to the animal, the tag allocations are reported on the swine test charts and submitted to the TAHC region office for data entry.

#### Scrapie tags

USDA-APHIS announced new nationwide identification and recordkeeping requirements for sheep and goats on March 25, 2019 as part of the National Scrapie Eradication Program. USDA-APHIS believes the final rule will result in a more effective disease eradication program. The rule provides a more flexible approach to disease investigations and affected flock management, and more consistent animal identification and recordkeeping requirements between sheep and goats. Under this rule, all sheep and goats must have official identification (I.D.) when moving off their premises of origin, unless specifically exempt.

Acceptable forms of official identification include plastic or metal Scrapie flock ID tags, Scrapie 840 RFID ear tags, and plastic or metal serial tags. Registered tattoos and 840 electronic implants are accepted as official ID with the exception of sheep and goats that are in slaughter channels or moving through a livestock market or buying station.

The national Scrapie Program hotline forwards the phone calls of Texas breeders, dealers, and livestock markets to the TAHC ADT department. TAHC ADT staff will register the flocks/operations for a Scrapie flock identification number or verify their existing Scrapie flock ID number. TAHC will provide the caller with the information on how to purchase the official ID devices. For producers, dealers, and markets eligible to receive free tags, TAHC will place the order into AIMS. Scrapie flock and serial tags ordered through AIMS will be shipped directly to the recipient and the tag allocation entered into AIMS by the tagging manufacturers.

TAHC will order Scrapie serial tags and applicators for the TAHC ADT department and region offices. TAHC may supply a very limited amount of these Scrapie serial tags to producers with a valid Scrapie flock ID number, if supplies are available and on a case-by-case basis. The most common reason for TAHC to issue Scrapie serial tags is for sheep or goats going to a show or out of state within the two weeks, in other words, needed sooner than the time it takes for flock ID tags to be ordered, produced, and shipped. TAHC ADT staff will enter these tag allocations into AIMS.

### **Animal Health and Movement Records**

TAHC maintains various other traceability data sources by continuing to collect and store identification data required for testing, movement, change of ownership, and other applicable animal health disease programs. These include, but are not limited to data collected and/or stored from interstate and intrastate certificates of veterinary inspection (ICVIs), bovine brucellosis and tuberculosis test charts, brucellosis vaccination records, scrapie tag distribution, and interstate permits.

As outlined in the previous Road Maps, TAHC has continued to focus on the electronic data capture, the promotion and transition from paper to electronic documentation. During FY2014, TAHC IT Development Team completed the development of a TAHC eCVI and put a link to a new application on the TAHC website. The application enables Texas veterinarians to purchase eCVIs online. The Health Certificate webpage on the agency's website, displays all the ICVI purchasing options (electronic and paper). The TAHC eCVI online application continues to work as expected and veterinarians are successfully utilizing the tool. TAHC staff is continuing to monitor all CVIs and eCVIs for data quality and compliance. Starting in FY2016, TAHC contracted with Trace First to utilize StateVet.com for the data entry and upload of ICVI data into SCS, for cattle with official identification moving interstate. Additionally at the end of the FY2016 cooperative year, TAHC Program Records and ADT staff started using document management software, Square 9, to begin scanning all paper and electronic interstate CVIs, for all species with or without official identification, into an electronically searchable system. The emphasis placed on transitioning from a primarily paper based system to electronic capture of CVI data has resulted in significant improvements in traceability and completion of trace performance exercises.

During FY2019 and FY2020, TAHC worked with VS and Palantir staff to implement use of DIS-AHER, including establishing access, user training for staff, identification of data sources, verifying compatibility, initiating electronic information sharing of summary data, and pilot testing DIS for FY2020 ADT Cooperative Agreement work plans and quarterly reporting.

ADT data collected in Texas is entered and stored in a mixture of state and USDA maintained standardized animal health systems. Federal systems utilized: AHER for data searches, SCR for Scrapie Flock IDs, EMRS2 for NPTs and Response records, MIMS for electronic data captured in field, SPIS for Premises IDs, AIMS for AIN and Scrapie official ID distributions, and SCS-TX including StateVet for LIDs, official ID distribution, regulatory program and movement records. These systems are already connected to AHER and electronically accessible to TAHC and USDA animal health officials. State systems utilized: TAHC Tag Application for NUES tag field distributions and Square9 for electronic document storage.

During FY2021, TAHC plans to implement our state procured private CoreOne system for Texas, TexCore. TAHC plans to transition from CoreOne-SCS to CoreOne-TexCore as our primary system, including StateVet, for all LIDs, official ID distributions, animal disease programs and movement records. CoreOne is aligned with established data and communication interfaces to ensure continued compatibility. TAHC will continue to share the summary data to AHER through the standard connection between the AHER system and TexCore. Additionally, TAHC is available during normal business hours for sharing of data (not included in AHER) with other state & federal Animal Health Officials, law enforcement, and open records requests.

TAHC is dedicated to data security and the protection of Texas producers' personal information. Therefore, TAHC staff are required to complete information systems and data security training annually.

TAHC will continue to monitor and report on the administration of official identification devices, animal health and movement records in our ADT cooperative agreements, quarterly and final accomplishment reports.

The process must be supported and funded by USDA to ensure successful compliance by the regulated industries in an equitable and cost effective fashion, and to ensure the successful management and enforcement of the same traceability process by the responsible state animal health agencies.

### 2.3 Strengths and Weaknesses

The Texas Animal Health Commission has a long history of working productively with the animal agriculture industries in Texas, and in finding practical solutions and applying pragmatic regulations. As such, the major strength of the TAHC is its existing working relationship with those industries and people who will be affected by traceability regulations. Secondly, the TAHC has a well-trained work force with capable field inspectors, a committed ADT team, and in-house database development IT management personnel. These people are actively working through the best

traceability solution for Texas and are equipped to come up with a workable solution in partnership with animal agriculture and other interested partners.

Regarding challenges, the TAHC faces continuing change in IT solutions in order to gain the ability to electronically capture and upload searchable traceability data. This challenge includes all records of interstate movement, test charts, as well as data migration from existing federal ID databases and integration of extensive state-level data. Another challenge exists in the need to educate the producers and industries of Texas regarding the new disease traceability approach and ID requirements. Due to Texas' large variety of livestock producers and management practices, a major obstacle is to get everyone on the same page and agree to one system. Lastly, the TAHC is experiencing a number of varied animal health issues and recent natural disasters, which has redirected resources and caused personnel to delay or halt regular job duties (including ADT work) to assist with the responses.

#### 2.4 Opportunities and Threats

Texas has a history of significant animal health issues, whether disease or natural disaster related. Until August 2011, the TAHC maintained extensive first point testing ear tag records, and drew on these records routinely for disease tracing purposes, and for linkage of cattle to owners in natural disasters or for law enforcement purposes. There is no doubt that Texas and its partners in animal agriculture commerce need an efficient and reliable animal traceability system. Without a traceability system, disease tracing and natural disaster recovery would become much more difficult and in many cases unreliable or impossible. Assurance of and linkage of animal ID to cases involving animal ownership change and movement are made possible by standardized identification and recordation methods.

There are many opportunities to improve and advance our traceability systems in Texas. Emerging new technologies which allow for a variety of easier, faster, and more effective ways to manage electronically identified animals and animal health records throughout all sectors of the livestock industry. Additionally, we have opportunities to increase the acceptance and use of electronic identification devices, whether it is the availability of no-cost low frequency tags to vets, the use of ultra-high frequency devices at markets, or simply beginning to use electronic official ID tags are all the Cattle Fever Tick dipping vats. TAHC is encouraged to hear that some of the most reluctant members of the industry are showing increased interest in the benefits of traceability.

The TAHC is the state-level organization for foreign animal disease response, a responsibility that is not directly shared with any other state

agency or organization. The Governor added TAHC to the State Emergency Management Council in 2001, to the Homeland Security Council in 2005, and the Critical Infrastructure/Key Resources (CI/KR) Committee in 2006. Because of the agency's expertise in animal health, the chief of the Texas Division of Emergency Management designated TAHC as the state's lead agency for all animal issues in emergencies. With the largest animal agriculture industries in the nation, Texas needs disease traceability to avoid potentially catastrophic animal and economic loss.

## 2.5 Inventory of existing infrastructure and suitability assessment

- Human Resources

FY2020, TAHC employed three (5) full-time employees in the TAHC ADT department: (1) ADT Coordinator, (1) ADT Technical Inspector, and (3) Customer Service Representatives. Benefits will be paid through the cooperative funding. The ADT coordinator will oversee and coordinate all ADT program activities and projects, in the office and in the field. The ADT coordinator is the Signatory Official for the ADT cooperative agreement and quarterly reports. The coordinator will also promote traceability across the state at meetings and conferences. The ADT Technical Inspector will work with field staff and accredited vets for ADT activities to include herd testing, research and pilot project management, disease outbreak and trace work, and training on the use of ADT equipment such as wands, PDAs, RFID tags, etc. The customer service reps will register premises, answer incoming phone calls, answer questions about the ADT program, manage tag allocations, perform official ID traces, conduct the daily business within the office, assist in trainings, equipment demonstrations, and support in the field.

- Technology and Equipment

The Information Technology department manages TAHC's resources for connectivity between the offices and the field, as well as the ability to access USDA animal disease traceability and animal health information databases. TAHC maintains all previously purchased – Hardware: computers (desktops, laptops, & handhelds), printers, scanners, RFID wand readers, cell phones, and wireless internet access; Software: Premises location mapping software, such as ArcGIS and Google Earth software. The IT Department also maintains a robust database development and organization capability, and is able to advise on best practices regarding data handling for the TAHC.

- Animal Health Information Resources

TAHC Program Records staff receive and input data into databases and maintain records necessary to document specific state and federal disease eradication program activities; process documents affecting herd or flock status and documents related to quarantines or releases; perform data entry; and, provide permit support. Program Records



responsibilities include, but are not limited to developing and maintaining data and records systems required for disease program standards; performing data entry so that data may be analyzed to monitor the accuracy and efficiency of the agency's disease management and eradication activities including the Cattle Fever Tick Eradication Program; managing records for the Waste Food Feeder Registration, and Feral Swine Holding program; supporting records management functions for various Herd Status programs that include the Accredited Bovine Tuberculosis Free Herd, Bovine Brucellosis Certified Free Herd, Validated Swine Brucellosis Free Herd, Qualified Pseudorabies Negative Swine Herd programs, CWD Herd Status Plans for Cervidae and Trichomoniasis Free Herd status for cattle; issuing and monitoring Texas entry permit programs for domestic and exotic animals and fowl entering Texas from other states; as well as, entering and/or uploading traceability data such as animal identifications, owner information, health certificates, vaccination records and test charts into CoreOne. TAHC Program Records staff calculate the monthly number of animals and ICVIs for interstate movement, and the number of paper vs electronic ICVIs for ADT quarterly reporting. They also send electronic and/or paper copies of ICVIs to the other receiving states within 7 days, as per ADT requirements.

### III. AGENCY VISION AND MISSION

#### 3.1 Vision Statement

Through the cooperative efforts of the Texas Animal Health Commission, animal producers, and allied industry groups, the animal population of Texas is healthy and secure.

#### 3.2 Mission Statement

The mission of the Texas Animal Health Commission is:

- to protect the animal industry from, and/or mitigate the effects of domestic, foreign and emerging diseases;
- to increase the marketability of Texas livestock commodities at the state, national, and international level;
- to promote and ensure animal health and productivity;
- to protect human health from animal diseases and conditions that are transmissible to people; and
- to prepare for and respond to emergency situations involving animals by conducting agency business in a responsive, cooperative, and transparent manner.

## IV. TRACEABILITY REQUIREMENTS

### 4.1 Strategic goals

USDA's Overarching Goals established in 2018:

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

#### TAHC's ADT Strategic Goals

To develop and implement a statewide infrastructure for advancing animal disease traceability in Texas that complies with the federal minimum standards established by United States Department of Agriculture.

To establish traceability systems for species and industries that do not or no longer have compliant systems in place, for example beef cattle and cervidae.

### 4.2 Programmatic goals (Objectives)

TAHC will work cooperatively with USDA APHIS, to the degree possible, on activities that will support compliance with the aligned federal regulations defined in 9 CFR Part 86 and state regulations 4 TAC Chapter 50. Cooperation and high compliance with traceability regulations are critical to achieve optimum tracing capabilities.

TAHC will follow protocols and achieve assigned quotas, in accordance with USDA provided Guidelines for Administering Traceability Performance Measures document, for the administration and completion of National Priority Traces (NPTs) to maintain eligibility for reimbursements of expenditures. Moreover, TAHC's goal is to improve our traceability capability to earn TPM ratings for % successfully completed and elapsed time of "Excellent".

The proper administration of official identification devices and documents used to help determine interstate movements, in particular Interstate Certificates of Veterinary Inspection (ICVIs), is key for capturing accurate information needed to achieve successful animal disease traceability. TAHC's goal is to continue to place a priority on activities that will make electronic information more readily available, including activities to

support official identification, recordkeeping pertaining to the distribution of official ear tags, promotion of radio frequency identification and electronic interstate movement documentation.

Objectives, to include, but not limited to:

- ❖ Increase number of registered premises
- ❖ Increase number of animal with official ID
- ❖ Increase use of electronic IDs
- ❖ Increase use of electronic CVIs

Sharing information quickly and effectively will help USDA APHIS and state animal health agencies respond to animal disease events and make ADT successful. Information systems must be compatible. Therefore, TAHC will continue to administer the required data elements in accordance with data standards defined in the ADT Technical Specification document. While USDA will not fund information system development, data resulting from funded tracing activities will be compatible so it can be shared with other Animal Health Officials.

#### 4.3 Animal Disease Traceability Performance Measures

ADT, a performance based program, is designed to measure outcomes that will document successful advancement of animal disease traceability. Traceability performance measures have been established to measure and document progress. TAHC, in cooperation with the USDA VS staff, will annually administer National Priority Traces (NPTs) that reflect tracing capabilities based on the defined tracing activities. Compilation of the results across all Recipients will enable APHIS to determine current traceability values for the TPMs to document progress made from the national baseline values and subsequent “comparison years” that were established in prior cooperative agreement periods. The trace activity response times will be reported based on the following four preliminary performance standard measures:

- 1) Time to report to the State/Tribe of official tagging/identifying of an animal in question that has moved interstate.
- 2) Time for the State/Tribe of first officially tagging/identifying an animal in question that has moved interstate to provide a record of the official tag distribution.
- 3) Time to report to the State/Tribe from which an animal in question has moved interstate.
- 4) 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.

TAHC ADT personnel is continuing to work closely with USDA VS staff to successfully administer traces for the National Priority Traces (NPTs) and use Emergency Management Response System-2 (EMRS2) for tracking and reporting trace activities.

These performance trace activities measure the time it takes to answer four specific questions regarding the allocation of official identification and/or interstate movement. The start time is when the State is notified of the official identification number, and the end time is when the State finds the information to answer the question posed by the activity. Activities 2, 3, & 4 are the most important to complete. Traces for Activity 1 will be limited to Animal Identification Number (AIN) tags as the official animal number. Completing trace exercises for cattle is the priority. Trace activities for other species may be reported, but they do not count toward the quota for NPTs.

USDA VS personnel will select the appropriate official identification number(s) to trace and initiate the NPT in EMRS2. The system will automatically send an email notice of NPT creation to the TAHC ADT group email address. TAHC currently has three ADT staff members with eAuthentication Level 2 access assigned to complete the NPTs in the EMRS2 utility. TAHC ADT personnel work together to coordinate the assignment and completion of the NPT activity. TAHC ADT staff will conduct extensive searches in traceability electronic databases; such as AHER, SCS, AIMS, etc. If no clear results are found, they will conduct searches of paper systems and make phone calls to parties involved, if necessary. When the trace is complete, the ADT staff will access EMRS2 to document all steps taken in the Key Actions, enter the trace information found, upload a copy of the record(s), and close out the NPT.

TAHC's goal is to maintain our "Excellent" trace performance measure ratings for % successfully completed and elapsed time. TAHC progress towards achieving our assigned NPT quota, monitoring elapsed time, and percentage of completion status will be included in the quarterly ADT accomplishment reports.

#### 4.4 Data requirements

- A PIN or LID will be assigned to all Texas producers when they provide TAHC staff with current and accurate herd owner contact information, including but not limited to: owner's name, mailing address, and phone number.
- Texas will accept all forms of official ID as outlined by USDA standards. Texas will not accept brands or tattoos as official ID, unless the animal is accompanied with official breed registration documentation.
- TAHC supports the use of official ID tags to identify all adult cattle prior to interstate movement to comply with the federal rule or to be tagged within 7 days for intrastate movement.
- Tags and applicators may be distributed by approved device manufacturers, approved livestock facilities, approved tagging sites, accredited veterinarians, TAHC personnel, or shipped directly to the producers, depending on available funds.

- TAHC plans to fully transition from using our own online tag allocation reporting application to utilizing Trace First's CoreOne system as our primary tag distribution record keeping system for NUES tags.
- TAHC will continue to use USDA's AIMS system for AIN distribution record keeping.
- Data will be shared with AHER, as well as other states and tribes on an as-needed basis for animal disease response and control. This would be a continuation of TAHC practice of epidemiologic management of disease trace-ins and trace-outs.

#### 4.5 Information technology plan

- Maintain and continue integration of legacy data into a CoreOne database.
- Enhancement/Improvements of Texas' electronic certificates of veterinary inspection to allow for reporting and tracing of ADT data.
- Funding to host an additional database instance in a well-supported data center that offers server failover capability and routine backups
- Maintenance funding for datacenter hosting, software licensing, and salaries for up to two dedicated IT specialists.
- Maintenance, upgrade, and replacement of automated data capture equipment, such as computers and hand held devices.
- Continue to pursue improvements of scanning technology to make paper CVIs searchable for tracing.

#### 4.6 Resource requirements

Additional resources needed may include the following:

- Official identification devices
- Tagging pliers
- Additional personnel
- Funding for shipping tags to producers and accredited vets
- IT operations costs
- IT hardware
- Additional space for tag and file storage

#### 4.7 Organizational needs

The TAHC has an organizational structure in place that will support animal disease traceability and all aspects of implementation.

##### 4.7.1 Executive support

The TAHC is an animal health agency administered by licensed veterinarians. As animal health professionals who handle the realities of animal disease on a daily basis, the TAHCs management advocates implementation of a practicable animal disease traceability program.

#### 4.7.2 Coordination and oversight procedures

The Texas animal disease traceability working groups are species specific and provide valuable guidance and oversight in the continued development and implementation of traceability efforts in Texas. Originally, the working group was comprised of representatives from all various livestock industries and producers. The formation of species-specific working groups was put in place to provide more effective and focused advancement within their industries. The working groups meet on an as-needed basis.

The compatibility with other States, Tribes, Territories, and USDA is monitored by the use of policy standards, federal minimum standards, common data collection practices, standardized reporting and program evaluation based off performance measures.

The TAHC Animal Disease Traceability department is responsible for coordination and implementation of the animal disease traceability plan, including coordination of other agency office and field staff. Additional responsibilities and job duties may be assigned by the Executive Director.

#### 4.7.3 Policy

The animal disease traceability program in Texas is governed by the existing mandate in the Texas Agriculture Code, Sec. 161.056. This policy authorizes the TAHC to establish and enforce, by Commission rule, an animal identification program consistent with the Federal program. The rules proposed and adopted by the Commission are legal requirements promulgated by the Commission to carry out their mission to protect animal health in Texas. The rules of the Commission are found in Title 4, Texas Administrative Code, Chapters 31 through 60.

During FY 2013, TAHC adopted new animal disease traceability rules, published as a separate chapter to enhance program transparency and to incorporate elements in the adopted federal ADT rule. Chapter 50: Animal Disease Traceability went into effect on Monday, October 7, 2013. The rule specifically establishes the requirements for approved tagging sites. All facilities such as livestock markets receiving certain classes of livestock without official identification must be designated as an approved tagging site or be affiliated with one.

The Commission adopted a new section in Chapter 50: Animal Disease Traceability, Cattle Identification and became effective on Tuesday, February 4, 2014. This amendment establishes identification requirements for adult cattle being sold within the

state of Texas. The rule states that all adult breeding cattle, except cattle going directly to slaughter, shall be permanently identified within seven days of change of ownership. Untagged adult cattle have seven days after purchase to be delivered to a slaughter facility, resold through a livestock market, or have acceptable permanent official identification applied. Slaughter type cattle that will be put on feed prior to slaughter shall also be permanently identified within seven days of purchase.

Additionally, if any changes are made to the state animal disease traceability rules, they will be structured for seamless compliance with the federal ADT rule.

4.7.4 Staffing

State personnel are needed to perform essential job duties required to carry out program objectives. The animal disease traceability department is solely responsible for administering/overseeing the program.

Personnel needed to implement program are (at minimum):

- Program Coordinator
- Program field support specialist – 1
- Office administrative support staff – 9
- Part-time support from staff veterinarians, field inspectors, region admins, and IT support specialists

4.7.5 Projected Budget requirements

The projected total program costs:

	<b>FY2021</b>	<b>FY2022</b>	<b>FY2023</b>
<b>Personnel</b>	1,053,500	1,095,700	1,139,500
<b>Benefits</b>	352,000	356,300	370,500
<b>Travel</b>	100,000	105,000	108,000
<b>Equipment</b>	-	-	-
<b>Supplies</b>	223,000	245,000	258,000
<b>Contractual</b>	6,500	7,000	7,000
<b>Postage/Freight</b>	15,000	16,000	17,000
<b>Indirect Costs</b>	-	-	-
<b>Total</b>	\$ 1,750,000	\$ 1,825,000	\$ 1,900,000

The agency state budget cannot solely financially support the

program. Animal disease traceability is primarily funded by federal cooperative agreements. The continued reduction and/or lack of



increase in cooperative agreement awarded funding will hinder the potential advancement of animal disease traceability.

#### 4.7.6 Outreach

TAHC will continue to promote and educate Texas livestock industry and stakeholders about advancing animal disease traceability. Outreach efforts are made on a daily basis by our field, office, and communications staff. TAHC ADT Staff is available by phone, email, and in person to answer questions TAHC maintains a detailed ADT webpage that is reviewed and updated quarterly, vital updates are made as needed. TAHC PIO issues news releases, electronic newsletters, handouts, fact sheets, brochures, and regularly posts to social media. TAHC Field staff regularly provide in-person contact at livestock markets, special sales, rodeos, exhibitions, special events, make ADT presentations and work information booths at industry meetings and conferences. Successful implementation of any plan to advance animal disease traceability cannot be achieved without outreach to constituents primarily affected by the plan.

##### 4.7.6.1. Accredited veterinarians

Accredited veterinarians are instrumental to the traceability framework focusing on the identification and interstate movement of livestock, as well as transitioning to electronic data capture and submission of electronic animal health records.

- The plan to inform accredited veterinarians of the ADT program, requirements, plans for implementation and advancement will utilize various forms of media, such as: press releases, electronic newsletters, handouts, fact sheets, brochures, social media, agency website, agency email, mass mail outs, and attend regional conventions and meetings.
- Beginning in FY 2019, TAHC has begun conducting extensive outreach and education efforts to accredited veterinarians to provide information on how to transition to electronic official identification, electronic data capture equipment, and reporting requirements including how to become an AIN device manager.
- TAHC plans to enhance and promote the use of electronic ICVIs, vaccination and test records by educating veterinarians on the ease of use and benefits.

- A continuing education effort will be put in place to ensure all parties responsible for collecting and entering data are sufficiently trained and supported. TAHC's data accuracy monitoring program will continue to provide accountability and data quality assurance.
- The accredited veterinarian will continue to provide and have official identification devices available for producers.

#### 4.7.6.2. Livestock marketing facilities

Livestock marketing facilities continue to be a vital collection point for traceability information.

- In addition to in-person agency representative(s), regular contact and communication, continuing education efforts are being planned to address the concerns of the livestock markets using various forms of media, such as: press releases, electronic newsletters, handouts, fact sheets, brochures, social media, agency website, agency email, mass mail outs, and attend regional conventions and meetings.
- TAHC and UHF pilot project partners plan to provide a report the finding from the project to the livestock market industry, in order to promote the use and benefits of electronic identification.

#### 4.7.6.3. Industry as a whole

Implementation of any plan to advance animal disease traceability impacts a variety of constituents, likely none more so than industry itself.

- The industry will be informed of the ADT program and advancement plan by utilizing various forms of media, such as: press release, electronic newsletter, handouts, fact sheets, brochures, social media, agency website, agency email, mass mail out and attend regional conventions and meetings.
- TAHC plans to promote the ease of use, benefits, and increase acceptance of electronic official identification devices and electronic ICVIs.
- Industry representatives serving on the advisory committee will continue to educate and share plan implementation to their constituents.

#### 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.

- ICVIs will be monitored for data quality and compliance.
- The number of animals and the number of shipments that move interstate will be monitored and verified by a monthly inspection of all paper and electronic ICVIs. The number of documents and animals are calculated at the end of each month by program records and IT staff.
- The number of paper ICVIs, electronic ICVIs, and category II accredited veterinarians using electronic ICVIs are calculated at the end of each month by TAHC staff.
- The volume of official identification devices issued by the State is compiled by TAHC ADT staff and will be reported in cooperative quarterly reports.

#### 4.9 Compliance and enforcement of traceability regulations

TAHC office staff will monitor premises registrations, tag distributions, tag allocation records, disease program documents, movement records, and submitted complaints for potential compliance issues. TAHC field staff will monitor operations, animals, animal movements, documents, and submitted complaints for potential compliance issues. All compliance issues are reported to TAHC Legal Dept to investigate any alleged violations and follow up enforcement actions. Possible enforcement actions include consultations, warning letters, and filing legal action with county courts. TAHC will tally and report the number of investigations and enforcement actions to our AVIC and in the quarterly ADT Enforcement Action reports. Additionally, when TAHC receives returned NUES tags from a distribution partner, we will conduct a comparison of all tags issued, reported, and returned to ensure accountability for all tags. Also, when an accredited vet places multiple orders for RFID tags, TAHC will verify that the tag allocation records for previous orders are being reported properly, prior to placing additional orders.

## V. TRACEABILITY IMPLEMENTATION

### 5.1 Ranking of priorities for advancement

- 1) Improvement and increase of electronic data capture and retrieval of traceability information
- 2) Outreach and marketing efforts
- 3) LID and PIN Assignments
- 4) Tag Distributions
- 5) Data collection and reporting data into appropriate systems
- 6) Data entry of backlogged vaccination and testing records
- 7) Monitor ICVI data quality and compliance
- 8) Pilot projects with industry for testing new technology

### 5.2 Implementation of objectives and planned activities

#### • Year 1

- Continue LID, PIN, and Flock ID assignments
- Continue tag distribution process
- Continue data collection and reporting
- Input data into appropriate systems
- Integrate surveillance and traceability legacy data
- Data entry of backlogged vaccination and testing records
- Enhance IT infrastructure
- Conduct National Priority Trace activities
- Monitor ICVI data quality and compliance
- Continue outreach and marketing efforts
- Continue improvements of a system for electronic capture ADT data
- Promote the use of electronic data capture and electronic records
- Compliance and enforcement actions
- Conclude and report findings of UHF RFID Backtag pilot project with Texas Cattle Feeders Association and project partners

#### • Year 2

- Continue LID, PIN, and Flock ID assignments
- Continue tag distribution process
- Provide approved manufacturers' information for purchasing of official identifications devices to producers and industry
- Implementation of transition to electronic id
- Continue outreach and education efforts
- Promote the use of electronic data capture and electronic records
- Continue data collection and reporting
- Input data into appropriate systems
- Integrate surveillance and traceability legacy data
- Data entry of backlogged vaccination and testing records
- Enhance IT infrastructure
- Improve retrieval of available traceability information

- Conduct National Priority Trace activities
  - Monitor ICVIs for data quality and compliance
  - Enhancement of an electronic data capture system of CVI data
  - Compliance and enforcement actions
- Year 3
    - Continue Flock ID, LID and PIN assignments
    - Continue tag distribution process
    - Continue to provide approved manufacturers' information for purchasing of official identifications devices to producers and industry
    - Continue implementing the transition to electronic id
    - Continue outreach and education efforts
    - Continue data collection and reporting
    - Input data into appropriate systems
    - Integrate surveillance and traceability legacy data
    - Enhance IT infrastructure
    - Improve retrieval of available traceability information
    - Conduct National Priority Trace activities
    - Monitor ICVI data quality and compliance
    - Compliance and enforcement actions
    - Enhancement of an electronic data capture system of CVI data
    - Implementation of advancement activities to support a standardized electronic system for traceability data and uniform official ID