ADVANCING ANIMAL DISEASE TRACEABILITY (ADT) ROAD MAP FOR NEW YORK STATE

A Three-Year Plan

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I. EXECUTIVE SUMMARY

New York State's livestock industry is dominated by the dairy cattle sector with milk accounting for half of total agricultural receipts. To protect and promote the dairy industry, the state in the 1960's, and 1970's established aggressive enforcement of laws and rules requiring identification of cattle and recordkeeping. All calves were vaccinated for brucellosis and at the same time permanently identified until 1973. Routine tuberculosis testing of all adult animals in cattle herds was done until 1987. This was to facilitate the eradication of brucellosis and tuberculosis in New York which was achieved during that time period.

That system, initially paper based, still exists today in both paper and electronic format, and is still the primary means to perform livestock traces. Under law, the department has access to the records of livestock markets and dealers, but it occasionally takes time to get the information needed. The 2024 Traceability Rule update limiting official ear tag identification to ear tags which are both electronically and visually readable for interstate movement for all cattle of dairy origin born November 5, 2024 or later has opened up a new opportunity to identify cattle at the premises of origin. Combined with United States Department of Agriculture's provision of limited numbers of these tags at no cost to producers and our road map plan to address barriers to implementation, we have a window to greatly improve efficiency of traceability data collection. It will take some time before the industry, especially small beef producers, fully accepts this practice.

The plan presented here has four major components.

1. Maintenance of the existing traceback capability
2. Increase submission of digital records to continue improvements in efficiency and accuracy of recorded movements in New York's CoreOne database.
3. Promote more effective methods to capture data at livestock markets and dealers which benefit both the livestock industry and traceability efforts
4. Promote use of 840 Electronic Identification (EID) tags at farm of origin.

The primary benefit of this plan is the continued transition from a paper-based system to a more efficient and accurate electronic traceability information pipeline integrating with the technology change of EID ear tags.

- This plan builds upon previous efforts to advance animal disease traceability. New York has spent 20 years and invested heavily in identifying premises data and producing a robust electronic system for recording premises identification. Starting with deer inventories for Chronic Wasting Disease, this system now has the capability to record individual animal identification associated with those premises which is flexible and can be searched easily.

During the Winter and Spring of 2015, we began an intensified effort to update GPS coordinates for premises listed in our CoreOne database. Movement to automatic data capture from Interstate Certificates of Veterinary Inspection (ICVIs), which began in 2018 has been implemented for information received in electronic format. Roadmap 2025 focuses on increasing the receipt of digital information into this fully functional CVICentral-CoreOne pipeline.

- The plan fits within the United States Department of Agriculture (USDA)'s framework for animal disease traceability by adopting and implementing the components of the USDA's framework for animal disease traceability in a manner which will be cost effective over the long term.
- Ultimately, this plan will support animal health information systems within New York by greatly speeding up the retrieval of data used in livestock tracing. It will also make that data available on the internet 365/24/7.
- This plan supports animal health information needs with other States/Tribes/Territories and USDA nationally by improving our rapid tracing abilities and improving our ability to receive and send electronic interstate livestock shipment data.
- New York now employs CVI Central to electronically provide receiving states information on interstate shipments. This assists other states in meeting all their Performance Standards.

Alternatives explored:

- New York has already invested in an electronic record keeping system for animal traceability and cannot long support an infrastructure to maintain both a paper record system and an electronic system.
- The primary alternative to this plan would be to maintain the current system where a large number of paper documents for animal movements are manually entered into our online database. A shift towards more electronic documents will produce benefits in time and economy. Efficient data capture will improve data quality, timeliness of information retrieval and cost savings.
- As other states, private companies and USDA develop animal disease traceability information systems, we intend to adopt the newer and more efficient systems.

Projected costs for FY 2025, FY 2026 and FY2027 will be $521,602, $528,628 and $535,801 respectively.

- The major benefit is that traceability data will be put into retrievable databases and time involved to do traces will continue to decrease, with less immediate need to connect with markets, producers and dealers to perform a trace as we will already have a larger volume of data digitally.
- In 2018, New York began using CVI Central and started scanning all ICVIs and subsequently entered any official identification into CoreOne. This has improved New York's data entry time, data accuracy, and trace times. While there is less time

invested on ICVIs, there is more time spent on entering IDs. If more accredited veterinarians can be encouraged to use electronic ICVIs, especially those that issue high numbers of ICVIs, improvements can continue. Large numbers of hours are still dedicated to data entry for emailed paper ICVI which, while digital, are not true electronic ICVIs.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

- Primary responsibility for the prevention of the introduction and spread of contagious disease of livestock in New York is shared jointly between the New York State Department of Agriculture and Markets, Division of Animal Industry (DAI) and the United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (VS). In addition, these agencies work closely with the New York State Department of Environmental Conservation and USDA/APHIS/Wildlife Services (on diseases affecting wildlife) and the New York State Health Department (on zoonotic diseases).

- There are several statewide livestock groups which we will need to update on the development and implementation of New York's Animal Disease Traceability Road Map:
    - Empire State Meat Goat Producers Association
    - Empire Sheep Producers Association
    - New York Angus Association
    - New York Ayrshire Club
    - New York Beef Producers' Association
    - New York Brown Swiss Association
    - New York Deer and Elk Farmers Association
    - New York Holstein Association
    - New York Pork Producers
    - New York Simmental Association
    - New York State Dairy Goat Breeders Association
    - New York State Guernsey Breeders
    - New York State Horse Council
    - New York State Jersey Cattle Club

- There are also numerous support organizations in New York which have an interest in Animal Disease Traceability:
    - Cornell Cooperative Extension

- Dairylea Cooperative
- DairyOne Cooperative
- Livestock Market owners and Managers
- New York State Veterinary Diagnostic Laboratory
- New York State Veterinary Medical Association
- Pro-Dairy
- Quality Milk Production Services
- Upstate Milk Producers
- Agri-Mark

- This roadmap includes virtually all of the state of New York. Although there is some limited livestock agriculture in lands held by sovereign Native American nations within New York's borders, these are fully integrated with the state's marketing infrastructure. Although they act as independent bodies, they have fully cooperated with USDA initiatives.

- How are traceability data used internally, externally?

    - During an infectious disease investigation, traceability data is used to determine the source of an imported disease and to ascertain any other flocks and herds that might have been exposed due to animal movement. The information is vital to New York State's chronic wasting disease program. It is used in inventory maintenance and for the approval of movement permits.
    - Externally, this data is used to assist food safety agencies determine the source of residues found in food products. Most commonly this is to determine the herd of origin of cattle with drug residues at slaughter. The data is also used to determine ownership of strayed animals.
    - Traceability data allows New York to identify whether beef products are generated from New York animals, thus enhancing our Buy Local state initiatives.
- What values guide the animal disease traceability system?
    - Although large amounts of data are collected, stored, and used, small inaccuracies can reduce the system's usefulness. The primary goal is accurate data entry. Since animals in interstate commerce are the most likely introduction of a disease threat, priority will be given to those animals over livestock which spend their entire lives on one premises.
    - Furthermore, we have learned not to get too far ahead of the industries in this area. We need to allow the demands of commerce and the needs of producers to drive the evolution of identification methods and data capture technology.

2.2 Where are we now?

- How is ADT currently defined? Is it viewed as a cross-cutting component to animal health information systems? Is it viewed as a stand-alone initiative?

New York has traditionally had a robust system of animal identification requiring the permanent identification of all livestock moving through livestock dealers and auction markets including those in slaughter channels. Traceability has been an integral part of NY regulations prior to the federal initiative and continues to be a fundamental-crosscutting component of enhancing the sustainability and productivity of New York agriculture. Traceability is the backbone of our system to prevent incursion of foreign and emerging infectious disease. Traceability has also been the lynchpin to successful eradication of infections of economic importance within the state dairy herd.

- What measures of traceability capability are currently being used? What are the specific values and associated interpretation?

Under previous cooperative programs such as brucellosis, tuberculosis, pseudorabies, and scrapie, accuracy was determined to be much more important than timeliness of trace. Especially in tuberculosis and scrapie, New York typically was asked to trace animals months or years after they had left the state. Most records were held locally by livestock markets and dealers and it generally took a week to get information from those sources. A successful trace back was defined as the identification of all possible premises where an animal may have been infected or spread infection. A successful trace forward was defined as the identification of all possible premises exposed by an animal. While length of time taken to complete a trace is important, it was secondary to accuracy and completeness.

USDA standards for performance trace measures are our current rubric for traceability standards.

- How is coordination being currently achieved within the unit?

Currently, virtually all clerical work including distribution of identification devices is done by the three members of the Division of Animal Industry. The unit is hierarchical with a principal clerk supervising the two other clerks.

When USDA-provided official tags are in stock, all tag ordering except for scrapie tags goes through the state office. All scrapie orders go through the federal office. All field staff are able to view information on tag requests and animal movements through CoreOne software or through interaction with the main office if they are unable to access internet at their field inspection locations.

- How is coordination currently being achieved statewide, tribal-wide, territory-wide?

Record systems maintained by veterinarians, livestock markets and livestock dealers are held on paper or in local computer systems. New York puts into our TraceFirst database all tags issued through this department to veterinarians, dealers, livestock markets, and producers. New York is actively encouraging the use of identification devices in livestock (horses, swine and cervids) which can be read electronically. In recent years, the USDA has been distributing EID 840 official tags to New York, and these have been distributed in turn to producers with priority given to animals which have a higher likelihood of interstate movement. New York was allotted 141,000 EID tags by USDA for FY2024. It is anticipated we may receive a similar volume in FY2025. With updated USDA traceability rules in effect, we are distributing tags to an increased number of producers and to livestock markets and dealers. We have insufficient tags for all animals moved intra and interstate, and the cap per premises will be lowered for FY2025.

- How does the present unit coordinate activities with other existing agencies/units?

We communicate with our federal partners and other states on data requests as required. Inspections of livestock markets in New York which involve evaluation of traceability data recording are often done in tandem with USDA partners.

USDA-VS in New York uses the Animal Identification Number Management System (AINMS) to record small ruminant identification distributed to sheep and goat producers as part of the scrapie program, and electronic tags procured by New York through previous cooperative agreements and for scrapie eradication activities are also distributed to the producer level in AINM.

Slaughter back tags for cattle, sheep and swine are ordered from the USDA warehouse and recorded in CoreOne. Written records as well as digital records and scans of orders are kept on all shipments of official tags to veterinarians, livestock dealers, livestock markets, and livestock producers. Required recordkeeping by veterinarians, markets and dealers has led to the ability to reliably trace back animals to the last premises they were held.

- What standards for traceability are currently being used? Are they appropriate?

Current animal disease traceability standards were designed to identify the last premises an animal was previously housed as well as any movements to dealers, markets, or between states. At best these standards reliably looked back a few

weeks or months. In the case of highly infectious diseases and chemical residues found in meat and milk, this was effective surveillance. However, transmissible spongiform encephalopathy and diseases caused by *Mycobacterium sp.* and lentiviruses have long asymptomatic latent periods. In these cases, an animal must be traced back months to years to find the source of infection.

- What is the state of technology infrastructure? Capability in terms of size? Compatibility within and outside the agency/unit/dept. etc. for sharing data when needed.

The State of New York partnered with Trace First and its predecessor, Via Herd to develop person and premises registration and animal tracking software which has been broadly implemented to capture New York farms, markets, dealerships, veterinary offices and other premises of importance to traceability. The result is a robust database system which is kept updated, backed up, and made available off site. Because the database is held offsite, there are no size restrictions. The database allows for the free exchange of data with AHERS.

Automated links have been developed to both these systems. In the 2018-19 agreement period we improved the efficiency with which data from both paper and electronic records are uploaded to CoreOne. We acquired TraceFirst's CVI Central software which is designed to facilitate data upload. All paper documents received by our office are scanned and loaded into CoreOne, with no paper document backlog currently.

- Are requests for information available 24/7, or only available M-F, 40 hours per week, if authorized personnel are present?

Because the system is web-based, information can be retrieved 24/7/365 by any authorized user who has access to the internet. In the case of an emergency, department members can respond 27/4. In the case where a trace is non-emergent, we are staffed M-F, 40 hours of the week.

- What is the impact of state, tribe, or territory funding on capability? How does Federal funding fit into the plan?

While New York State has invested much to develop and maintain this system, it still requires funding to maintain. Although not a large amount, funding must be found year to year. Roughly a quarter to a third of the cost of our traceability activities are covered by our cooperative agreement.

2.3 Strengths and Weaknesses

- New York developed a comprehensive and robust system of traceability in order to make rapid progress in the tuberculosis and brucellosis eradication programs in the 1950s, 1960s, and 1970s. This program required permanent identification on all cattle handled by dealers and livestock markets even those going direct to slaughter. In addition, complete records are required on almost all cattle handled. While the system is cumbersome, it does permit rapid tracing in most circumstances.

- Although New York requires that calves less than 200 lbs. be officially identified in commerce, documenting such animals back to their birth farm is still difficult sometimes. Because of changes in marketing, these young calves which once were destined to be slaughtered for veal are now being raised for dairy replacement or beef production. The 2024 Traceability Rule Update strengthens traceability on these calves as all calves of dairy origin will receive EID-capable official identification for interstate movement even if moving directly from a source farm to a destination grower. In addition, many of these calves are being moved between premises and livestock markets and dealers several times before they finally enter the dairy string or go to slaughter, amplifying the opportunities for disease propagation and transmission.

- Although an increasing number of dairy herds are utilizing EID tags for management, infrastructure at many livestock handling facilities is inadequate to capture that information. Presently, the visually reading of the small EID tags is a challenge and the recording of 12 or 15 digits correctly is problematic outside of livestock dealers and markets. Some livestock markets have EID panel readers, some of these installed with financial assistance from NYDAM and most have EID handheld readers supplied through USDA cooperative agreement funding. Although this data can be downloaded into computers, manually entering data from paper ICVIs from high volume markets is still a concern. The 2024-2025 cooperative agreement began supplying markets with upgraded handheld EID readers with Bluetooth capacity allowing easy transfer of data from readers to phones or computers. This is a substantial improvement as market veterinarians can utilize digital .csv or .xlsx files of official identification numbers accompanying electronic submission of printed ICVIs and identification lists.

- We currently do not see a large number of animals with multiple official identifications as stakeholders adapted to the regulations. The times when we do see multiple tags, it is often at fairs where dairy cattle have two tags, the older tag not being compatible with the reader in the dairy parlor. We anticipate with the adoption of 840 EIDs universally for animal movements to markets or between states, we will have a period of double tagging as farms decide to take advantage of EID technology and need to add EID-capable 840 tags to herd members that currently have other official identification present.

- The major difficulty in data capture is an electronic ICVI system to compete effectively with the paper-based system. New York has no provision to charge for forms or processing, so the least cost option is the use of state provided forms. There are 6 electronic ICVI applications consistent with NASAHO Standards available for use in New York: Mi-Corporation, Vet Sentry, myVetTech, VetCVI, Equipass and Global Vet Link. We are interested in increasing the use of these electronic ICVI products, placing the labor involved with data entry in the hands of veterinarians and producers. It is difficult to incentivize the shift to these applications as technology uptake requires time to learn and see benefits of adoption.

2.4 Opportunities and Threats

- Does this plan create an opportunity in ability to respond?
  The elements of this plan allow us to have a rapid response to movement of animals with potential infectious nature through the common movement pathways in New York. It moves us from being reliant on immediate access to paperwork held outside of our office to being able to trace these animals digitally. It also enhances accuracy of traces by reducing opportunity for introduction of human error.

- Does this plan enable or avoid consequences of potential threats?
  Before routine sampling of all of the dairy herds in New York for Brucellosis ceased, the department could maintain lists of all herds producing milk in New York. Although recording distribution of official identification and interstate movements cannot replace that information, it will give the state a better idea where the more active farms are.

- Does this plan provide for better use of available resources than current approaches?
  By emphasizing inputting identification data prior to a trace back, this plan is much more personnel intensive but vastly quicker than poring through paper records after an outbreak. In addition, this plan may produce trace outs from unrelated premises which could never be found through the paper-based system.

- Does this plan enhance networking opportunities?
  As standardized ways to store and transmit data develop, the time it takes to retrieve and transmit vital information will be reduced from days to minutes.

- If this plan is not implemented, what are the threats?
  Failure to implement this plan will greatly reduce New York's ability to trace animals. The reduction of funding for tuberculosis and brucellosis programs has reduced staff available to keep current the CoreOne database.

- If this plan is not implemented, will others be tasked with doing so?
  The animal identification and traceability program help support other functions such as food safety, producer payment security, and the identification of stray and stolen animals. In the absence of the Division of Animal Industry coordinating this effort, there is no other entity that can do so.

- 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?
  Prior to implementation of full electronic ear tag identification in revised USDA Traceability regulations, traceability of ear tags depended fully on manual entry of ear tag identification by veterinarians into Certificates of Veterinary Inspection and often subsequent translation of those identification numbers by hand into CVI Central. This slowed down processing substantially and increased errors. We have had outreach when veterinarians misrecorded official identification on both incoming ICVIs and outgoing ICVIs. This requires us to manually search through CVIs or reach out to producers to verify that errors have been made in identification transcription.

2.5 Inventory of existing infrastructure and suitability assessment

- Human resources
  Currently, the Division of Animal Industry employs 10 veterinarians and twenty-one licensed veterinary technicians in the field throughout New York State. In the central office, there are 8 veterinarians, 2 licensed technicians and 5 clerical positions.

- Space availability
  As our department has economized in both staffing and real estate, we are currently short on storage space.

- Connectivity resources, both in office and in the field
  Because the current traceability database is housed by a commercial concern and available through the internet, there are no connectivity problems except in the limited areas where high speed internet is unavailable.

- Access to USDA ADT and animal health information resources
  Due to security constraints, and changes in the system, the USDA IT applications are often challenging to access in our state IT environment.

- Organization of all existing paper record systems used to access ADT or animal health information.
  We do not utilize paper recordkeeping systems except in the case of back up records for tag allocation. All our ICVIs are scanned and kept digitally. All state permits and forms received in paper are scanned and maintained electronically in our database.

- Computerized data management capability, including present storage size, speed, security, etc.
  Because all information is maintained on a commercial contract server, there are no constraints in data management capability, storage size, speed or security. CoreOne is accessible to all authorized personnel with a laptop, PC, or smart phone.

- Automated data capture capability
  Due to the nature of carbonless forms, ICVIs and original test and vaccination charts are frequently hand-written and cannot be adequately captured in an automated system. Our New York State Veterinary Diagnostic Laboratory transmits electronic results in

addition to scans of test submissions. We receive digital Equine Infectious Anemia (EIA) certificates from multiple sources.

• VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 Vision Statement

The Division of Animal Industry intends to maintain its achievements in animal disease traceability, improve traceability wherever practical, and accomplish these intentions with minimal burden to our livestock industries.

3.2 Mission Statement

The Department of Agriculture and Markets' (AGM) mission is to promote New York State agriculture and its high-quality and diverse products, foster agricultural environmental stewardship, and safeguard the state's food supply, land, and livestock to ensure the viability and growth of New York's agriculture industries.

• TRACEABILITY REQUIREMENTS

The following categories must be described in the Road Map:

4.1 Strategic goal(s)

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

4.2 Programmatic goals (objectives)

Objective 1: Stakeholder outreach

- Target, develop, and implement outreach messaging regarding data quality and processing for animal health information forms

One of the most effective outreach methods is to keep local food animal practitioners informed of the importance and traceability. The department keeps in contact with this essential group through e-mail, mailings, attendance at veterinary meetings, and conferences and one-on-one with veterinary practices.

New York has a large dairy cattle industry which accounts for most of the livestock in the state. New York does not have any state-wide livestock commodity groups that can influence a majority of their respective industries. The most influential group representing livestock in New York is the New York Farm Bureau which through its county grassroots organization represents more livestock producers than any other organization. New York will continue to work with the Farm Bureau and specialty livestock groups to keep stakeholders to stress the importance of traceability. In addition, outreach can be made to producers at venues such as the New York Farm Show and Empire Farm Days and through Cornell Cooperative Extension.

New York has done extensive outreach to markets and dealers in the past three-year road map period to communicate changes in New York laws as well as the 2024 USDA Traceability Update. We have provided training and access to EID readers and free electronic ICVI for the FY2024-2025. This initial outreach, combined with current outreach surrounding new EID requirements for cattle eartags provides ongoing contacts between the division and industry. Development and promotion of traceability outreach materials will be a priority for Roadmap.

Objective 2 Continue data capture and preservation of currently available data into a retrievable database.

- Monitor ICVI data quality
- Input data into appropriate systems
- Integrate surveillance and traceability data

Each paper ICVI is already reviewed for completeness and compliance with applicable regulations. All identification on animals moving in interstate commerce and other associated information should be entered into a database for instant retrieval in case of a disease outbreak. The challenge is the manual entering of all this information. All

available data is captured. New York makes no differentiation between surveillance and traceability data.

As noted elsewhere, New York has an established traceability database, CoreOne, provided by TraceFirst, an international leader in the industry. All identification information is entered into New York's CoreOne database. The CoreOne system is a system that facilitates retrieval of any animal identification and movement information.

The goal is to capture identification and premises information from all test and vaccination charts, and all incoming and outgoing ICVIs for cattle and cervids.

Objective 3 Improve retrieval of available traceability information

Transitioning from paper or hand-written documents to digital or electronic CVIs is critical to this objective. Uptake of EID reader usage by markets and dealers as well as accredited category 2 veterinarians is important in making this transition. Integration of EID reader usage and reduction to barriers for application of EID tags at markets and dealers will contribute to this transition.

4.3 ADT Trace Performance Measures (TPMs)

- Measurement to date:

  The traditional method of measuring traceability has been "successful traces", that is the ability to trace a disease animal back to the premises where the animal was exposed to the disease. Because New York has used tamper-proof tags in all cattle, even slaughter cattle, and required the recording of this information by markets and dealers, virtually all traces are successful traces. With the 2024 Traceability Rule, we are seeing more animals move through markets on only a back tag (sold slaughter-only). We will assess the impact on traceability in the upcoming three year cycle.

- Current Baseline
  - The current baseline is trace back to the herd of origin of any animal based on the identification devices it bore when it left New York.
- At the current time, New York can determine the following in real time primarily through digital database search, written logbooks and digitized identification on ICVIs:

- **Performance standard 1**: Determination of the state of origin and dates of movements
- **Performance standard 2**: Confirmation of tag distribution within New York for all National Uniform Eartagging System (NUES) tagged animals.
- **Performance standard 3:** is more difficult to meet under short time constraints. The ability to trace 95% of the animals moved into New York in 3 business days necessitates pre-loading of the identification numbers of all imports. As noted elsewhere, automated data transfer is impossible with the current system and the alternative, hand entry of individual identification numbers, is costly.
- **Performance standard 4:** Determination of the premises in New York which shipped an animal when the receiving state can document the shipment.

4.4 Data requirements

- 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
  Our standards for animal identification are specified by state statute. We require official identification for all livestock entering New York which are not moving in a slaughter pathway or specifically part of a commuter agreement.
- What tag distribution record keeping systems are being used?
  New York currently keeps written logs which are then entered into a TraceFirst database which is kept offsite at a commercial server farm. Trace outs can be easily done either from the logbooks or through the database. All tag requests fulfilled by our office are uploaded directly to the premises identification in our CoreOne database with the tag numbers written on the original request.

- What data requirements exist for commuter herd agreements?
  All cattle must be individually identified with 840-series EID tags or USDA-issued metal tags or ear tattoo with PIN number on the home farm location identified above prior to movement. Swine may enter on a premises-specific slap tattoo.

- What forms are approved for interstate movement in addition to ICVIs?

In addition to state issued ICVIs, New York accepts electronic ICVI from all approved vendors. We accept extended electronic ICVIs for equines. Owner-Shipper Statements (aka "waybills" or Owner Hauler Statements) are permitted for livestock moving to slaughter and for calves less than 200 pounds or less than 14 days old, if we have an agreement with the origin state's veterinary authority.

- How and when will data be shared with other States, Tribes, Territories, and USDA?
  New York has no opposition to sharing traceability data with other governments with a valid need which can maintain the security and the privacy of the data. New York needs to be informed whenever its data is being used, however. NYS worked with TraceFirst and NY CoreOne is currently sending animal data through EMS to AHER.

- How will group/lot official numbers be handled within the system?
  Group/lot identification has never been used in New York. If required to do so by federal rule, the system can be easily configured to accept group/lot numbers.

4.5 Information technology plan

The state plans to continue to utilize and upgrade its TraceFirst database, CoreOne. In 2018, we began to integrate TraceFirst's application, CVI Central in order to reduce clerical labor. We have integrated laboratory information into the system. Data is shared from CoreOne to AHER automatically to ensure timely access to animal location data. CVICentral accepts and processes electronic ICVIs from state and commercial providers.

4.6 Resource requirements

- New York has access to the expertise required to meet these goals and objectives.
- Our current working relationship with TraceFirst will be adequate to maintain and expand New York's traceability program.
- A continuity of operation plan (COOP) is in place and our system has inherent continuity due to the servers where CoreOne resides being located off-site.

  All original (paper) records are scanned to CoreOne from CVICentral. These are considered backup to the digitized animal identification and unique movement data lines which are

maintained by a commercial company in Texas. Because of the thoroughness of this redundancy, the continuity of operation plan has not been tested.

- Are automated data capture resources needed?

As private industry has accepted the use of EID tags, New York has assisted with the installation of several panel readers in livestock markets as well as supplying hand-held EID readers. New York would like to encourage larger livestock markets to computerize this data and use it to improve traceability data for the state. As such, part of our plan includes providing resources which reduce barriers for implementation of automatic data transmission, including readers with advanced Bluetooth capacity.

4.7 Organizational needs

- The present staff is cross trained in all of the important surveillance and tracking systems.

4.7.1 Executive support

- Is additional support from executive management needed?

New York Department of Agriculture executive management supports our on-going efforts.

- How is accountability provided?

There is a staff veterinarian responsible for overseeing day to day operations to ensure traceability standards are being met.

The state veterinarian is consulted when decisions are required, resources needed, or other significant matters come up. The commissioner's suite is kept fully briefed on matters influencing policy and public relations.

4.7.2 Coordination and oversight procedures

- What is the make-up of the applicant's ADT advisory group? How frequently are they engaged?

The Department routinely communicates with Farm Bureau and other stakeholder groups regarding animal disease traceability

program updates. Feedback, comments, and concerns are solicited and addressed to the best of our ability.

- How are emergency preparedness resources engaged or responded to when necessary?

The Department of Agriculture and Markets and the Division of Animal Industry are integral components of the New York State Comprehensive Emergency Management Plan. In the case of disaster or large-scale emergency, resource allocation is coordinated through the NYS Division of Homeland Security and Emergency Services. There is an Emergency Coordinator at the department-wide level and also within the Division of Animal Industry.

- How is compatibility with other States, Tribes, Territories, and USDA monitored?

One of the priorities of New York's traceability program is to send staff working on the traceability to program to the United States Animal Health Association and Northeast United States Animal Health Association meetings to interact with personnel from other states and USDA on traceability. The State Veterinarian is active in the National Assembly of State Animal Health Officials and the US Animal Health Association.

- How are responsibilities assigned for implementing the plan?

Since traceability is the backbone of the effort to protect New York's livestock from introduced diseases, it has a top priority in the central office. One Veterinarian 2 position, reporting directly to the state veterinarian, is responsible for the planning and reporting of the program. The same staff veterinarian 2 in the central office is responsible for direct implementation of the program including attendance at national meetings, preparation of outreach materials, and coordinating field activities. Field veterinarians are responsible for outreach to local veterinarian and farm groups in their assigned territories.

- How are disputes arbitrated?

The state veterinarian is ultimately responsible for the success of the traceability program and would, with the advice and consensus of the

Assistant District Director, have authority to arbitrate any disputes that might occur.

- How is feedback obtained relative to perception of successful implementation above and below the administrative authority?

With responsibilities spread over several levels from the state veterinarian down to the field veterinarian, there is ample opportunity to receive feedback from those directly and indirectly affected by the program. In addition, feedback will be obtained at outreach events. The state veterinarian frequently solicits direct input for affected farms and businesses.

- How is transition achieved when administrators are replaced?

We manage transitions through the team effort involved with the traceability program and we are confident this ensures continuity in case administrators leave or are assigned to other tasks. We successfully transitioned ADT program managers in each of the last three-year road map periods.

4.7.3 Policy

- How do the applicant's policies align with the ADT Official Animal Identification Device Standards (OAIDS) and achievement of traceability goals?

The largest obstacles to achieving that mandate are lack of adequate funding and ability to insure privacy of the regulated parties. The latter issue was largely addressed by 7 USC 8791, which exempted data voluntarily submitted by producers to participate in a USDA funded program.

- Is there a need to address or change a state policy to align with 9CFR part 86 or the ADT OAIDS?

The Department of Agriculture and Markets has sufficient legal mandate to require identification and tracking of animals for disease control purposes.

4.7.4 Staffing

- How is full-time, paid support staff justified?

Existing support staff is viewed as essential to the division's disease control efforts. We anticipate being able to maintain our current staffing level for the duration of this Road Map. Much of the justification for the fulltime support staff comes from the need to fulfill work supported by cooperative agreements.

- What qualifications are needed?

Existing staff have been hired and promoted through the state's merit-based civil service system.

- What personnel are needed to implement the plan?
- Can other human resources be leveraged to assist in implementing the plan?

While the number of clerical people required to work in large cooperative agreement programs such as Brucellosis and Tuberculosis have declined, many new responsibilities such as emergency preparedness, animal health assurance programs, animal welfare, captive wildlife, live bird markets, and on farm food safety have emerged. Commensurate with this increasing diversity, the state now employs eight veterinarians in the central office, several with advanced training in epidemiology. In addition, the state has 10 field veterinarians and 21 licensed veterinary technicians working throughout the state.

- Are professional credentials and certification an issue?

The current group of administrative veterinarians is highly trained, most with advance education in epidemiology and disease control and some with advanced degrees and specialty certifications.

- Are job descriptions for the roles needed provided?

Each person working in traceability has a civil service job description which can be found at http://www.cs.ny.gov/cc/tsplan.cfm.

- Is ADT information a distinct function within the unit or an add-on "coordinated by committee" versus an individually coordinated, stand-alone sub-unit?

With the success of the cooperative disease eradication program, disease-specific program responsibilities have declined greatly. The New York Division of Animal Industry now employs 3 clerks who primarily support traceability efforts. These are surveillance, premises identification, and animal tracing programs.

4.7.5 Budget requirements

- How are you funded for ADT? State, Tribe, Territory versus Federal?

Funding for traceability comes from the cooperative agreement and the state budget. Money used from the state budget is allocated to the Department of Agriculture and Markets and discretionarily allocated to the Division of Animal Industry. The annual budget for this plan is estimated to be $521,602 in FY 2025. Included in the annual budget is $401,118 of current discretionary spending and $127, 510 from the current traceability agreement.

- What are the funding requirements projected by year for first, second and third year for implementing this plan?

Estimated costs for this plan by year:

FY2025:

Total: $521,602

NYS Discretionary Funding: $401,118

Federal Funding: $127,510

FY2026

Total: $528,628

NYS Discretionary Funding: $401,118

Federal Funding $127,510

FY2027:

Total: $535,841

NYS Discretionary Funding: $408,331

Federal Funding: $127,500

- How is cost sharing achieved?

In general, personnel expenses and some computer maintenance expenses are paid by the state and non-personnel expenses such as outreach, travel, meetings, and development of computer program to interface with USDA and private systems are expenses paid for with outside i.e. cooperative agreement monies.

- How can the applicant insulate against budget cuts and shortfalls?

Most of this plan is scalable; reductions may delay but not preclude the eventual accomplishment of the objectives and goals. That is, data entry and outreach can be reduced, and the system will still be operable but at a reduced capacity.

- Can other funding sources be leveraged to support this plan?

There is no other available funding at the present time other than use of the discretionary money from the Department of Agriculture and Markets or through a cooperative agreement with USDA-APHIS.

4.7.6 Outreach (required to be addressed within the Road Map)

4.7.6.1 Accredited veterinarians

- What is the plan for informing accredited veterinarians of the new guidelines for official identification and the specific three-year plan for implementation?

Accredited veterinarians receive periodic mailings from our office as significant events happen or opportunities are available. We use these mailing to send out traceability information, including access to tags, EID tag readers, and 2024 Traceability Rule updates. We will continue to utilize this outreach method for changes in the future.

- 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?

Multiple CE opportunities were offered on traceability throughout the state in the 2022 Roadmap Timeframe. These are regional CE meetings hosted by our field staff inviting Traceability staff to come and speak. We will continue to offer CE which includes traceability updates and refreshers in the 2025 Roadmap Timeframe.

- What is the plan for enhancing the use of electronic ICVIs, if any?

In Roadmap 2022 we offered free use of electronic ICVI for all production animals originating in NY through cooperative agreement funding. We intend to continue to engage veterinarians about the benefits of electronic ICVI. We are providing updated readers which easily integrate with phones and computers through Bluetooth allowing easy transfer to animal identification to electronic ICVI inputs. We also provide these readers to high volume markets and buying stations to provide smoother integration between market veterinarians and markets on sale days.

- What role, if any, does the accredited veterinarian have in providing low-cost, official identification tags/devices to producers?

We provide free EID and taggers to all accredited category 2 veterinarians from the supply provided to our office through USDA. Veterinarians may provide these to their clients as needed.

4.7.6.2 Slaughter plants

The livestock markets that supply our slaughter plants are an integral link in traceability. The National Association of State Animal Health Officials Owner-Hauler Statement forms which are emailed to destination state offices provide us an additional level of visibility to movements into and out of NY in slaughter pathways. Each of New York's approximately 30 livestock markets has several federal and state employees assigned to it. Our inspectors and veterinarians have the authority to review and copy dealer and market records and all transactions must be recorded.

4.7.6.3 Industry as a whole

New York's commercial livestock industry is dominated by the large number of dairy cattle in the state. New York is currently the fifth leading producer of milk

in the US. Farm consolidation has greatly reduced the number but increased the size of the average dairy farm in New York.

Traceability outreach to livestock industries is multifocal. We use our website to put out new traceability information specifically for producers. Order requests to our office all receive traceability information. We visit swine feeders annually and are able to provide them with information on traceability as needed. We have a pronounced increase in direct communication with cattle premises as producers learn more about the 2024 Traceability update. We provide a FAQ, answer questions, and have direct line communication to the traceability manager at the main office. We participate in species-specific meetings, including Swine 101 meetings this year which catered towards new producers, the NY State Farm Show, which caters towards all farms in NY, and beef producers' meetings which reach our small-scale beef farms. Direct outreach to Cornell Cooperative Extension leaders on equine traceability allowed us to disseminate information to trusted sources throughout the state. We anticipate continuing direct outreach throughout the 2025 Roadmap period.

4.8 Monitoring and reporting interstate movement activity

- How will the number of animals and the number of shipments be monitored that move interstate?

ICVIs with information about permit identification (when applicable), dates, origin and destination premises, species, age, sex, and official identification flow into CVI Central, and then into CoreOne. Official identification information is digitized for all cattle ICVIs. All federally required data values concerning numbers of animals, number of ICVIs and animal destinations are available through CoreOne data analyses.

- How will the data be verified or validated?

Data are verified or validated by our clerical staff. CoreOne data entry fields only permit identification numbers to be entered in the correct format for the type of identification selected, so the system is somewhat self-validating for the format of the tag numbers.

• ADVANCING TRACEABILITY

5.1 Ranking of priorities for advancement

1. The traceability system framework in New York is already in place. The one overarching need remains to be recording data in a timelier and less expensive manner. This will require developing automated data capture and transfer systems while maintaining the current system. Our priority is getting consistent submission of digital records, whether through electronic ICVIs or through digital identification lists accompanying emailed ICVIs to increase efficiency and accuracy of data capture. This will require a phased in approach as it is individual veterinarian and facility dependent.
2. Implementation of official 840 EID ear tags to support the 2024 traceability update. The challenge continues to be identifying animals on the premises of birth. The beef industry in New York consists of many small producers, most of which do not commonly sell animals in interstate commerce. There is also a large industry of beef-cross calves from dairy farms. Markets and dealers are both supportive of getting tags out to farms to increase compliance without increasing time required for processing animals at intake at markets. Provided we continue to receive 840-EID from USDA free of cost, we would like to see increased outreach from our office to distribute these tags to a larger number of farms annually. If USDA no longer supplies free tags, this will be only an educational element rather than a tag distribution element of our road map. This is not a phased in approach, but rather a total metric. It could be assessed by looking at proportion of cattle arriving at markets with 840 EID (by age class) and number of Premises identification requests received at our main office.
3. The CoreOne database is fully functional for New York's traceability needs. Pairing this system with the recording and transmission of electronic identification from interstate movements enhances rapid response capacity for tracebacks. Tags read on a EID reader rather than visually are submitted to our office digitally or on electronic ICVI. This vastly decreases chance of inaccurate data transmission.
4. Decreasing barriers for implementation electronic identification at livestock markets and buying stations, where a large portion of our cattle movements out of state originate, is a priority for smooth implementation of traceability regulations. The increased effort for application of EID tags relative to NUES tags impacts intake at markets across New York. Evaluation of non-compliance will probably be our best measure of whether needs are being met. This is not a phased in objective, as it is already a requirement.

5.2 Implementation of objectives

1. Maintenance of the current CVICentral system and outreach concerning digital ICVI submission.

   New York has spent 17 years developing database system to track premises with livestock. With the addition of individual animal identification, it is essential that the premises data be constantly updated. We need continued outreach through CE, producer and veterinary-specific event participation and direct communications about how to transition to electronic submission of ICVI data. Continued development of step-by-step outreach materials and communications to market veterinarians and markets directly will further this priority.

2. Promotion of the traceability program to increase 840 EID uptake on NY farms

   Getting EID tags out to small producers in New York remains a priority with the implementation of the 2024 USDA traceability update. Reaching out to those who have requested NUES tags in the past to inform them of changes will help small farms know when we have 840 EID available through USDA. Stakeholders must accept and see benefits to the program in order to get buy-in. Outreach can be directly to producers and indirectly through trusted sources of information such as veterinarians and cooperative extension. We participate in producer trade shows and producer meetings, do outreach at fairs at time of animal check-in, and participate in veterinary meetings for livestock veterinarians. We will continue to provide information on official identification requirements as well as directing folks to USDA-approved EID manufacturer lists. Our clerks will continue to generate PINs and direct folks to resources rapidly to decrease barriers to compliance.

3. Use of automated EID readers.

   We supply readers to veterinarians who write 30 or more out of state ICVIs a year and intend to submit those to the state digitally. We also supply at least one blue-tooth capable reader per market or buying station to help with electronic ICVI generation and EID reading. An integrated system which imports directly from a reader into an electronic ICVI would be an asset to aid in automatic electronic ICVI generation. Electronic data capture systems that are compatible with ours are needed. Livestock markets still generate receipts that go to consignors and but are not electronically sent to us. We are missing opportunities to record animal tags and movements. When we need to perform a trace to a market, we contact them or go to their premise to search their records. We either need

to come up with some incentive or education for them to switch to, or help them obtain funding to purchase, systems that would get us this information in a faster, more convenient, more cost efficient, accurate, fashion. As we move toward more/most cows moving through the markets with EID-capable IDs, we will see greater movement towards electronic ICVIs and electronic OSSes as they will at that point be more efficient. Within year one, where only calves will be required to carry EID official identification, the markets will see less benefit to electronic data transmittal as many cows will need hand-entered NUES tag information. The option to switch to plate readers and automatic ICVI generation will be one to look towards in year three or in Roadmap 2028.

4) Increased application of 840 tags at livestock markets. In year one, we will be distributing more efficient taggers (spring-pin or electronic models) to markets for use at dock in stations. We will continue doing so in years two and three based on feedback from markets, vets and dealers.