2025
Advancing Animal Disease Traceability (ADT) Road Map for Oregon

A Three-Year Plan

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I. EXECUTIVE SUMMARY

The Oregon Department of Agriculture (ODA) has the responsibility to prevent, control, and eradicate contagious and communicable diseases in livestock in Oregon. To accomplish this goal, ODA must be able to locate infected and possibly exposed animals as quickly as possible. Having accurate animal identification and epidemiological information is key to a successful resolution to a disease outbreak. Oregon has efficient animal disease traceability (ADT) systems in place. However, continual upgrades and improvements must be made to stay current with evolving technologies, capabilities, and regulatory expectations. ODA's systems include both electronically generated and digitized paper-based form data. Continued expansion of ODA's electronic based forms and electronically based data entry capabilities assists in meeting the goal of tracing animals at the speed of commerce.

Our functional traceability system includes databases that contain certain animal health related information as well as change of animal ownership transactions associated with livestock brand inspection requirements. Our program has the physical addresses for thousands of livestock operations as well as owner contact and animal species information for each transaction.

Oregon currently uses the following systems to aid in disease traceability:

- Animal health import permits and Interstate Certificate of Inspection (ICVI) are required for entry into Oregon and their data are stored in a state database. This information is searchable by our staff and can be exported in various formats to communicate with other federal or state database systems if needed.
- Brucellosis Official Calfhood Vaccinate (OCV) ear tags, official USDA bright tags, and official RFID identification information are recorded in our state database. This information is searchable by our staff and can be exported in other formats if needed, and official ID device numbers are uploaded into the USDA Animal Health Event Repository nightly. This activity is heavily supported by APHIS funds.
- Key information on outgoing ICVI's is recorded in our state database. This information is searchable by our staff and can be exported in other formats if needed. All outgoing ICVI's, including paper-based certificates are sent to other states in a digital format compliant with the USAHA eCVI Data Standard. This activity is heavily supported by APHIS funds.
- Oregon has developed an online database which allows accredited veterinarians to generate ICVIs, Brucellosis Vaccination Records, Tuberculosis Test Reports, Brucellosis Test Reports, Equine Infectious Anemia Reports, and Official ID Reports electronically, free of charge. This database is also shared with Washington State allowing Washington Accredited Veterinarians access to the system.

Oregon's long-term plan is to continually review our current systems and determine how they can be improved to increase our ability to meet traceability goals established in USDA'S framework for animal disease traceability. It is our goal to reduce the amount of paper-based data we must process. Oregon's data systems can accept RFID data, and ODA

has been working with accredited veterinarians and producers to support adoption of RFID by providing free RFID ear tags and cost-free RFID reader loans. APHIS funding has been used to purchase RFID readers for use at livestock markets, as well as long-term loans to accredited veterinarians.

Oregon currently relies on APHIS funding to pay for personnel for data input and data maintenance for the ADT program. Without this funding, Oregon would not be able to accomplish our goals with current personnel.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

The Animal Health Program (AHP) activities are an integral part of the Food Safety and Animal Health Program Area located within the Oregon Department of Agriculture (ODA). Our stakeholders include livestock producers as well as the public. Livestock based industries continue to be a top contributor to the state of Oregon's economy. Additionally, we strive to partner closely with other states to enhance trade and movement of livestock and their products. We provide the assurance that healthy animals and wholesome products are in commerce channels. We use our animal traceability capabilities to quickly trace and investigate reports of disease to source locations as well as any high-risk contacts. Our livestock traceability system is also used to assist food safety related trace backs and investigations.

2.2 Where are we now?

The work to build an efficient animal traceability system began over ten years ago with the implementation of an electronic brand inspection database for use at approved markets in Oregon. The Livestock Identification program decided to design its system around commercially available software rather than spending undue amount of time and money developing an in-house system. Ft. Supply Technologies was the company used to supply the on-line data management services. Data transfer hubs were installed in all of Oregon's livestock markets. Markets are the sites of most of the change of ownerships for cattle and brand inspection protocols at those sites were already in place. A brand inspection for cattle is mandatory in Oregon when there is a change of ownership, when animals leave the state, and at slaughter. Handheld electronic data loggers are used by agency brand inspectors in conjunction with paper records to record all change of ownership transactions during market sales. The data collected during each sale is uploaded into our database by the attending brand inspector within 48 hours of the sale ending. Private party brand inspections are still paper based although records are stored electronically with searchable owner and location information fields.

Building on the success of our brand inspection databases, the AHP began developing an animal health traceability database in 2015. For over 10 years now, ODA has been

digitizing all paper traceability records, including CVIs, Brucellosis Vaccination records, Official Identification reports, and Tuberculosis Test Records, and storing them in our searchable database. This database captures location information as well as all official identification into searchable fields within the database. Historically approximately 500,000 individual official identification devices were recorded annually. For the 2024 year approximately 360,000 identification devices were recorded, due to the removed of the Brucellosis vaccination requirement. All paper CVIs that are digitized through our database are shared electronically with receiving states with an XML data file, allowing Oregon to share 100% of Oregon-origin export CVIs as electronic CVIs, regardless of the original format of the CVI.

In 2018, ODA continued our efforts to advance the implementation of electronic traceability records by developing and releasing the Oregon Veterinarian Information System, an online system developed by ODA to provide Oregon accredited veterinarians cost-free access to electronic CVIs, as well as test and vaccine records. In 2019, this system was expanded to provide cost-free access to Washington accredited veterinarians. Oregon veterinarians have also adopted other providers of electronic regulatory documents. In 2023 and 2024 ODA supported three of Oregon's seven auction yards in implementing the veterinarian module for the SaleTime system. ODA currently receives over 75 percent of all Oregon-origin traceability documents electronically.

In September 2020, Oregon became one of the first states in the nation to begin automatically sharing all animal health events with the USDA's Animal Health Event Repository (AHER). Animal health events (official identification device, encounter type, encounter date) are automatically shared each night with USDA, and historic records dating back to 2018 have been uploaded to AHER.

Beginning in January 2020, ODA began distributing free RFID ear tags to Oregon accredited veterinarians as well as Oregon livestock producers. To date, ODA has distributed approximately 610,000 free RFID ear tags. To support the adoption of RFID devices, ODA created an RFID tag reader loan program for veterinarians as well as Oregon livestock producers. ODA maintains several sets of RFID readers and handheld PDA devices which are loaned free-of-charge to accredited veterinarians and Oregon livestock producers to allow evaluation of several different RFID reader models in their operations.

Beginning in February 2021, the Animal Health Program hired a Traceability Coordinator to provide full time support to ADT implementation and outreach. ODA's Traceability Coordinator provides outreach to Oregon accredited veterinarians and livestock producers about ADT related regulations, along with supporting OVIS and RFID ear tag and reader use.

2.3 Strengths and Weaknesses

The first and foremost strength of our ADT program is the quality and knowledge base of our personnel. ODA's State Veterinarian, District Veterinarians and Traceability Coordinator provide extensive knowledge of the statewide ADT system. ODA's Animal Health traceability databases were designed and developed in-house by our now Oregon State Veterinarian, allowing those systems to be developed to meet the exact needs of Oregon, while meeting the goals of the national ADT system. Animal Health staff are able to collaborate with the Brands program when needed, utilizing the extensive community knowledge of an area's brand inspector and capitalizing on that inspector's connection to the animal industry in the area to further advance ADT goals.

Among the challenges for the AHP is a lack of funding for personnel to do data entry, and funding to continue supporting the modernization of the traceability infrastructure among accredited veterinarians and livestock markets.

2.4 Opportunities and Threats

Following USDA's updates to the ADT rule in 2024, ODA has seen significant opportunities for increases in EID utilization, and corresponding increases in interest among veterinarians in electronic regulatory documents. This increase in interest has also presented a significant threat due to the difficulty in obtaining RFID tags through USDA. ODA has historically distributed 100% of the state's tag allotments each year; when tag allotments are delayed or reduced, it places significant strain on ODA's ability to distribute tags, pushing producers and veterinarians to seek alternatives to RFID for identification of cattle.

2.5 Inventory of existing infrastructure and suitability assessment

Human Resources

The Animal Health Program currently consists of one and a half office staff, one Traceability Coordinator, four District Veterinarians, and one State Veterinarian.

One and a half Animal Health office personnel are tasked with digitizing paper documents received from Accredited Veterinarians. These documents include Certificates of Veterinary Inspection, Brucellosis vaccination and TB test reports, as well as state Official Identification reports.

The Traceability Coordinator provides coordination of ADT outreach and resources to ensure accredited veterinarians and livestock producers in Oregon have access to resources and information to support the continued modernization of Oregon's ADT system.

The State Veterinarian and the District Veterinarians work closely with Animal Health and other ODA program staff to provide oversight and support for the ADT program.

Space Availability
ODA has adequate space.

Connectivity Resources
The Oregon Department of Agriculture follows the State of Oregon protocol for connectivity of our systems.

Using the OVIS online system, ODA can capture interstate movement of animals as well as official identification in near real-time from private accredited veterinarians in the field. 100% of the data entered by veterinarians in the OVIS system is available within the Animal Health traceability databases within 15 minutes of document issuance.

Access to USDA ADT and State Animal Health Program Resources
ODA has worked to ensure connectivity to several APHIS databases. The Animal Health Program uploads all animal health events into the APHIS Animal Health Events Repository (AHER), in many cases less than 48 hours from the time that an event occurs in the field.

ODA utilizes the APHIS premises allocator though our Animal Health traceability database, allowing AHP staff to generate premises ID numbers (PINs) in near real-time as a part of normal business processes.

ODA tracks the allocation of all official ID devices (metal tags and RFID tags), as well as all paper regulatory forms, including bulk receipt at our storage warehouse, receipt of items in our office for distribution, and the final distribution of items. This system provides real-time tracking of all devices and forms in our inventory, as well as the final allocation to veterinarians. These records are correlated with animal health events in the ADT database to ensure that distribution records are returned in any official identification searches performed.

Organization of all Paper Records Used to Access ADT Information
All paper Animal Health ADT records have been scanned and stored digitally in the Animal Health ADT database since prior to 2017. Key information including document information (type, date, document number, etc.), location information, and official identification are transcribed into the database to ensure searchability.

Computerized Data Management Capability

The Animal Health Program relies on the IT infrastructure of the Oregon Department of Agriculture. This infrastructure meets the requirements set forth by the State of Oregon. ODA's ADT databases are housed on a virtual server within ODA's in-house server farm. This provides scalability to meet increasing storage and processing capabilities as needed. Data is backed up nightly, with the maintenance of the three most recent daily, weekly, monthly and yearly backups. Monthly and yearly backups are stored off- site on physical tape media to ensure complete backup of all data in the event of a catastrophic failure.

Automated Data Capture Capability

ODA utilizes several automated data capture technologies within the office, as well as in the field. The OVIS system allows veterinarians to enter all traceability through an online interface (including upload of RFID tag data), enabling the data to be utilized to create traceability documents. This data is automatically transferred to the Animal Health traceability databases and forwarded to receiving states following the USAHA XML data standard.

Paper documents are scanned using automatic document scanners which digitize documents. OCR technology allows some documents to be digitized to allow semi-automated capture of data including typewritten official ID lists.

ODA has also made RFID readers available to accredited veterinarians free of charge. Oregon currently has 76 RFID readers loaned out to veterinarians and livestock auction staff. There are also an additional 12 RFID reader kits loaned out to veterinarians working in Oregon, including all seven of Oregon's livestock auctions. To date, all of Oregon's seven livestock markets are utilizing RFID and electronic documents.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 Vision Statement

A resilient tomorrow for generations to come.

3.2 Mission Statement

Protect. Promote. Prosper. We safeguard Oregon's agriculture, natural resources, working lands, economies, and communities through assistance, compliance, and market support.

IV. TRACEABILITY REQUIREMENTS

The following categories must be described in the Road Map:

4.1 Strategic goal(s)

To develop/build upon and implement a statewide infrastructure for advancing animal disease traceability compatible with State and USDA standards while providing support to Oregon accredited veterinarians and livestock producers.

4.2 Programmatic goals (objectives)

- Encourage electronic based traceability document utilization by Oregon accredited veterinarians.
- Support the utilization of electronic based animal identification by Oregon accredited veterinarians and livestock producers.
- Continue to have personnel enter crucial data into our database systems.
- Provide outreach to Oregon accredited veterinarians and livestock producers about the utilization of electronic ID devices and electronic document platforms.
- Utilize the Traceability Coordinator to audit data entry quality

4.3 ADT Trace Performance Measures (TPMs)

ODA has consistently met or exceeding all four traceability performance measures. The combination of ODA's Animal Health databases provides the ability to rapidly trace animals in interstate and intrastate commerce.

ODA currently maintains 100% of the traceability documents received by Animal Health (CVIs, Brucellosis Vaccination, Tuberculosis Test, and Official ID Application records) and 100% of auction market brand inspection records, and most field brand inspection records in searchable databases. In real- world examples, this has allowed for rapid traces of livestock in disease situations, interstate movement violations, and estray livestock cases. ODA also exceeded all 4 National Priority Trace exercises assigned as a part of the FY2023 cooperative agreement cycle.

ODA also maintains electronic official tag distribution records dating back to the early 1990's. In many cases, for any given NUES9 identification number, we have 2-3 records of distribution as tag numbers are recycled every 10-12 years. In 2020, our distribution records database was updated to support the use of barcode scanners to reduce error rates in manual data entry and speed data collection of official identification devices received and distributed to veterinarians and producers.

4.4 Data requirements

Location Information Standards

ODA has integrated the ability to issue Premises Identification Numbers (PIN) through the USDA PIN Allocator within the Animal Health ADT database. This has allowed PINs to be integrated into numerous business processes, as well as simplifying the processes of issuing and searching PINs. This system also allows the validation of PINs when distributing official identification devices to veterinarians and producers.

When entering scanned paper traceability documents, ODA staff record the city, state, and zip code of the document to allow for searching by locations. In practice, this has shown to provide sufficient granularity for searching, while also balancing the time and error rate associated with entering full street addresses.

Will the State be using official identification ear tags beyond only accredited veterinarians as part of regulatory work?

No, Oregon historically provided NUES9 "bright" tags to Oregon livestock producers for several years to use as official identification. Beginning in 2020, ODA has also provided livestock producers free white RFID ear tags for use as official identification in their livestock. As of 2023, ODA did not receive enough RFID tags from USDA to continue to provide them to Oregon producers. As of November 5th, 2024, ODA has not provided NUES9 tags to Oregon producers, as nearly all livestock tagged with NUES tags were cattle.

What volume of official identification tags is expected for use?

In 2024, ODA distributed approximately 4,600 NUES9 "Bangs" tags, 11,000 NUES9 "Bright" tags, 300 orange RFID "Bangs" tags, and 116,300 white RFID tags. Our distribution of NUES9 tags has dropped over the last 2 years due to increasing use of RFID tags and the removal of state laws that required the use of NUES9 "Bangs" tags. Based on veterinarian demand, we estimate that if tags were available, we could likely distribute 50-100% more RFID tags than our current allotment allows

What data requirements exist for commuter herd agreements?

ODA requires physical addresses for the origin and destination locations on all commuter herd agreements, as well as a name and contact phone number for owner and manager at the destination. ODA requires that official identification be present on all animals as applicable under 9 CFR Part 86.

How and when will data be shared with other States, Tribes, Territories, and USDA?

ODA currently shares all Oregon origin CVIs with destination states along with all data included in the Animal Health ADT database associated with the CVI as required by 9 CFR Part 86. Additionally, ODA shares events (Official ID, date, event type) with the Animal Health Event Repository daily.

Additional data will be shared as needed or on a case-by-case bases when requested by a State Animal Health Official. The same policy applies to sharing data with tribes, territories and USDA.

4.5 Information technology plan

FY2025

It may be necessary to replace some old equipment used for data input and printing. Equipment was originally purchased with APHIS funds. ODA plans to implement the veterinarian module for the SaleTime eCVI system at additional Oregon auctions yards.

FY2026

As in FY2025, it may be necessary to replace some old equipment used for data input and printing. Additional handheld RFID readers for long-term loans and fixed RFID systems for livestock markets may be purchased depending on availability of funds and demand.

FY2027

Similar to FY2026.

4.6 Resource requirements

ODA does not anticipate significant new physical resource needs in the near future. Our focus is primarily on providing outreach to veterinarians and livestock producers, as well as supporting the use of RFID through distribution of RFID tags as well as RFID reader loans.

4.7 Organizational needs

The State of Oregon has structured the Animal Health program to fall within the Oregon Department of Agriculture. Within this structure, all organizational needs are met.

4.7.1 Executive support

ODA has a clear and open chain of command that culminates with the Oregon Director of Agriculture. In reference to this plan, the State Veterinarian is the primary executive and the Director supports the vision and mission of this plan.

4.7.2 Coordination and oversight procedures

The Oregon Department of Agriculture has utilized an informal ADT advisory group when decisions about the direction of our ADT program have been needed. The Advisory Group that we have brought together includes cattle producers from the beef industry, dairy industry, feedlot industry and auction yard association. This group will be brought together when ODA needs input on how to proceed with goals. This group will also be asked to assist in informing producers in our state of issues concerning animal disease traceability.

ODA's State Veterinarian oversees the ADT program in Oregon. As systems are developed, emphasis is given to being able to share data across standard platforms.

4.7.3 Policy

ODA has a clear and open chain of command that culminates with the Oregon Director of Agriculture. In reference to this plan, the State Veterinarian is the primary executive and the Director supports the vision and mission of this plan.

4.7.4 Staffing

See section 2.5, Human Resources section.

4.7.5 Budget requirements

Currently, Oregon relies on our current APHIS funding to pay for 1.0 FTE traceability coordinator position. Without this funding, Oregon would not be able to accomplish our goals with current personnel.

Projected three-year ADT Roadmap costs are based on static USDA cooperative agreement allocations. Funding expectations are as follows:

FY2025 – Approximately $143,259
FY2026 – Approximately $143,259
FY2027 – Approximately $143,259

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

In 2021, ODA added a 1.0 FTE traceability program coordinator to the Animal Health Program funded by ADT funds. This position is tasked with serving as a primary point of contact for the Oregon livestock industry on ADT questions, as well as providing assistance to accredited veterinarians, livestock markets, and livestock producers on ADT related topics. A future goal is for the Traceability Coordinator position is to begin distributing a quarterly newsletter to Animal Health Program customers, including veterinarians, producers, and partners.

4.7.6.1 Accredited veterinarians

ODA continues to work closely with Accredited Veterinarians to keep them apprised of current USDA ADT expectations/ requirements. Outreach messages are provided on our website, meetings/conferences and email.

ODA will provide practitioners with the latest information about the use of electronic ICVIs. ODA requires ICVIs for all imported livestock and monitors export ICVIs for accuracy and timely submission.

4.7.6.2 Slaughter plants

Currently, all Oregon auction yards utilize electronic CVI systems to collecting data. The data collected at these facilities has added thousands of addresses to the states data system, not to mention individual animal tracking data on every animal that passes through the markets.

ODA will conduct extensive outreach with livestock markets to educate them about the requirements of the law and steps that they need to take to be in compliance. Outreach on ADT related subjects are commonly discussed during quarterly market inspections.

4.7.6.3 Industry as a whole

The State Veterinarian, District Veterinarians, and other ODA staff meet regularly with our livestock industry through regional and statewide meetings and inform these groups of our progress. We also take this opportunity to gather input and direction from the industry.

ADT related articles have been submitted to industry publications when the need arises, and the traceability coordinator will continue this work with regular outreach to livestock producers in Oregon.

4.8 Monitoring and reporting interstate movement activity

Oregon currently uses the following systems to aid in disease traceability:

- Animal Health import permits and ICVIs are required for entry into Oregon and stored in state database. Data is searchable by our staff and can be exported in various formats if needed. This task is heavily supported by APHIS funds.
- Brucellosis OCV ear tag and bright tag information is recorded in the state database. Individual animal identification from TB test forms are also entered into our database. All 840 RFID tag numbers reported on any regulatory document is recorded in our database. The information is searchable by our staff and can be exported in other formats if needed. This task is heavily supported by APHIS funds.
- Outgoing CVI's are recorded in the state database. Most data are searchable by our staff and can be exported in other formats if needed. This task is solely supported by APHIS funds.

V. ADVANCING TRACEABILITY

5.1 Ranking of priorities for advancement

ODA's ADT road map will build on previous accomplishments. The following activities are necessary to meet our objectives and that of USDA's framework for ADT.

Fiscal Year 2025 Goals

- Expand use of electronic based forms.

- Continue the digitizing of key paper-based forms so data can be stored and searched electronically.
- Education the cattle industry about the requirement for electronic based animal identification in cattle and bison.
- Expand promotion of using electronic based animal identification to the livestock industry.
- Support the implementation of RFID and electronic forms at Auction Markets in Oregon.

Fiscal Year 2026-2027 Goals

- Expand use of electronic based forms.
- Continue the digitizing of key paper-based forms so data can be stored and searched electronically.
- Education the cattle industry about the requirement for electronic based animal identification in cattle and bison.
- Expand promotion of using electronic based animal identification to the livestock industry.
- Support the implementation of RFID and electronic forms at Auction Markets in Oregon.

5.2 Implementation of objectives

Resources Needed to meet 2025 Goals

Personnel:

- Continue to utilize up to 1.5 FTE office staff to digitize paper-based documents. Paper based forms with important individual animal identification information to be recorded include: 1) brucellosis vaccination, brucellosis test reports, and TB test reports; 2) ICVIs, both Oregon origin and out of state; 3) private party brand inspections; and 4) official identification (i.e., NUES bright tag) usage reports from private practitioners.
- Continue to utilize 1.0 FTE program analyst 1 (Program Disease and Traceability Coordinator) to provide coordination of ADT-related activities as well as outreach to livestock producers and accredited veterinarians

ADT related travel:

- Travel for ADT program staff will be within the state.
- Travel for regional or national meetings may be required for the State Veterinarian. All travel related expenses will be as per protocols set by Oregon Department of Administrative Services and directly follow the federally approved rates.

Equipment and Supplies:

- It may be necessary to replace some old equipment used for data input and printing.
- Equipment was originally purchased with APHIS funds and includes desktop computers or laptops, scanners, and printers.
- Purchase of additional veterinarian modules for the SaleTime system for Oregon auction yards.
- Purchase of additional handheld RFID readers for long-term loans to accredited veterinarians.

Resources needed to meet FY2026-2027 Goals

Similar to FY2025 (see above).

Depending on livestock market interest, ODA may begin working with livestock markets to assist in purchase of fixed RFID reader systems to increase the utilization of RFID technologies in the livestock markets.