Oregon DOT Data Integrity Review Expert Review Team

Summary

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1. Introduction

Background

In September 2024, as a result of concerns regarding voter registration eligibility, Oregon Governor Tina Kotek directed the Oregon Department of Transportation (ODOT) to conduct a data integrity review (DIR) of its Driver and Motor Vehicle Services (DMV), to be overseen by a panel of external data experts. In response:

- ODOT engaged Deloitte to perform an in-depth review of DMV collection, verification, documentation, extraction, and transmission of driver identity data.
- ODOT assembled an Expert Review Team (ERT) to provide input and feedback to the ODOT Project Team during the DIR process.
- ODOT hired Spy Pond Partners, LLC (SPP) to conduct a baseline data quality maturity assessment for the DIR and to facilitate and document the ERT's engagement.

Deloitte started work in late November 2024, produced a preliminary report in December 2024 and a final report at the end of February 2025. The ERT met five times between November 15, 2024 and July 25, 2025. The first two meetings provided context on the DIR and an opportunity for ERT members to share relevant practices from their agencies. Subsequent meetings focused on review and feedback on DIR products and ODOT's response.

In addition, Governor Kotek and Secretary of State Griffin-Valade directed Oregon's Department of Administrative Services (DAS) to initiate an independent audit of the Oregon Motor Voter (OMV) processes in December 2024, which was completed in July 2025. While this audit is independent from ODOT's DIR, ODOT planned its schedule for ERT engagement and developing a DIR response plan to integrate the DAS audit findings.

Figure 1 shows the timeline for the DIR process and ERT meetings.

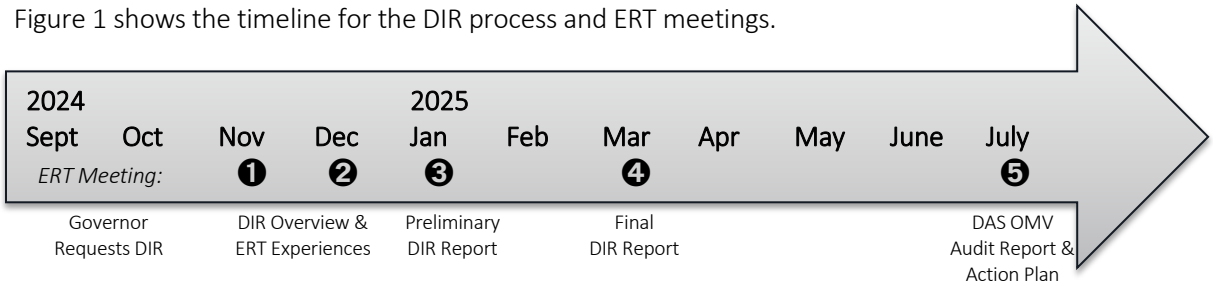

Figure 1. DIR Milestones and ERT Meetings

Report Overview

This report documents the ERT's activities between November 2024 and July 2025. It provides information on the ERT's members and their backgrounds, the scope of the five meetings that were held, and, most importantly, the key insights offered by ERT members based on their expertise and experiences. Additional details are provided in an Appendix.

2. The Expert Review Team

Membership

ODOT reached out to Oregon's Chief Data Officer (CDO) and leaders in other state DMVs with strong data governance and quality programs, requesting their participation on the ERT. Table 1 provides background on the individuals who agreed to participate.

Table 1. ERT Members

Member and Affiliation	Relevant Background
Kathryn Helms, Oregon CDO	Responsible for statewide data management and governance policies and activities.
Anne Ferro, former American Association of Motor Vehicle Administrators (AAMVA) CEO/Federal Motor Carrier Safety Administration (FMCSA) Administrator (retired)	Served as the administrator of the Maryland Motor Vehicle Administration (MVA) when they were rolling out the Motor Voter Act; brings a wealth of relevant experience with both management and operations of data-centric functions with multiple entry/access points and transfers.
Will Saunders, Washington State Department of Licensing (WS DOL)	Serves as DOLs data stewardship and privacy administrator; chairs DOLs Data Governance Committee which tackles similar types of data quality problems as those addressed by the DIR.
Rosalie Johnson, former Deputy Senior Director for Motor Services, Colorado DMV	Brings 10 years of experience implementing automatic voter registration (AVR), including creating the interagency agreement with the Colorado Secretary of State (SOS) and ensuring security of data transfers. She is currently a Senior Analyst at the Institute for Responsive Government and has supported scoping, chartering and process development for the Colorado data integrity group.
Chrissy Nizer, Administrator, Maryland MVA	Brings lessons learned from experience with similar challenges related to data transmission with the Maryland State Board of Elections. Her agency created a CDO role and a team of analysts, processes for reviewing data changes and collaborating with a range of partners with varying needs for the same type of information.

Member and Affiliation	Relevant Background
John Lindback, Institute for Responsive Government	Brings 30 years of experience in elections administration, including positions in Alaska and Oregon. He also served as the first director of the Electronic Registration Information Center (ERIC), a non-profit organization that provides its members with reports that identify inaccurate or out-of-date voter registration records, deceased voters, individuals who appear to be eligible to vote but who are not yet registered, and possible cases of illegal voting.

ODOT staff members who participated in the ERT meetings are listed in Table 2.

Table 2. ODOT Staff Participating in ERT Meetings

ODOT Staff Member	Role
Travis Brouwer	ODOT Assistant Director for Revenue, Budget and Compliance (co-Executive Sponsor)
Amy Joyce	ODOT DMV Administrator (co-Executive Sponsor)
Thomas Amato	ODOT Chief Information Officer (CIO)
Mike Woodford	ODOT CDO (responsible for agency-wide data governance, data lifecycle management, data literacy, analytical data extraction from transactional systems, data analytics & analytics repositories, data products development, data quality controls and standards, etc.)
Ben Kahn	ODOT DMV's Innovation & Planning Manager (supported DMV's system modernization effort)
Shamus Hannan	ODOT Information Systems Senior Business Relationship Manager for DMV. Prior to joining ODOT, he was project director at the Oregon SOS for the OMV AVR implementation in 2015-16.
Lisa Martinez	ODOT DMVs Change & Engagement Team Manager
Kelly Bruce	ODOT Organizational Change and Improvement Leader (and DIR Project Manager)
Kat Schwartz	ODOT Voter Registration Integrity Analyst (starting in February 2025; subject matter expert)

Meetings

The ERT met (remotely) five times. The primary topics covered in each meeting are shown in Table 3.

Table 3. ERT Meetings

Meeting Date	Primary Topic(s)
November 15, 2024	ERT Member and ODOT Team Introductions; briefings on the DIR context, objectives and anticipated products
December 18, 2024	Briefing on the SPP Data Quality Maturity Assessment Results; ERT Member presentations on their relevant experience
January 24, 2025	Discussion of the Draft DIR Report
March 19, 2025	Discussion of the Final DIR Report
July 25, 2025	Discussion of ODOT's response to DIR and DAS OMV Audit Findings

Reference Materials

ERT members were provided with reference materials throughout their engagement to maximize their contributions during the five 2-hour meetings.

Prior to the first ERT meeting, members were provided with the following documents:

- Background document describing the DIR scope, objectives, desired outcomes, and timeline, the ERT's membership and role, and a preliminary meeting schedule.
- ODOT's After Action Report describing the agency's response to the identification of OMV issues
- The 2024 Oregon SOS System Audit Report on ODOT DMV's Oregon License Issuance and Vehicle Registration system (OLIVR)

Prior to the third ERT meeting, members received:

- SPPs DMV Data Quality Assessment
- Deloitte's Preliminary DIR Report

Prior to the fourth ERT meeting, members received:

- Deloitte's Final DIR Report

Prior to the fifth ERT meeting, members received:

- The 2025 Oregon DAS OMV Program Audit Report
- ODOT's draft DIR Action Plan
- SPP's Draft ERT Summary Report

3. Summary of ERT Contributions

Overview

The ERT's participation strengthened the DIR process by:

- Providing independent oversight from a highly knowledgeable group of individuals representing a range of agencies and organizations. Several ERT members had direct experience with managing data issues associated with motor voter registration programs.
- Providing detailed review of the preliminary Deloitte DIR report – and offering comments on areas for future clarification and exploration.
- Confirming that the final version of the Deloitte report contained a comprehensive set of solid recommendations for ODOT's consideration.
- Providing advice on prioritization and sequencing of actions to be taken in response to the DIR.
- Sharing relevant best practices and lessons learned with ODOT participants and providing supplemental resources and information that will enable ODOT to move forward with data improvements with the benefit of this experience.

Key Takeaways

ERT Members recognized the need for a multi-faceted approach to data integrity issues involving people, process and technology elements. They asked about ODOT's efforts related to risk management, data governance and management, staff training, auditing, and both human and automated aspects of driver identity verification.

They supported ODOT's initial response to the identified data issues, and had the following additional suggestions for actions that ODOT could consider. Most of these were reflected in the final DIR report from Deloitte:

- Continue to investigate options for addressing field staff capacity limitations and high turnover.
- Expand auditing both for data quality control and adherence to established procedures.
- Formalize and integrate roles and processes for data governance and proactive risk management at DMV, in alignment with existing agency frameworks.
- Establish or strengthen data and system change management processes.
- Establish periodic review of data sharing agreements and protocols to eliminate outdated and low priority data exchanges.
- Establish a dedicated DMV data team with data management and analysis skills.
- Build a data analytics capability to enable more responsive, reliable, and efficient reporting based on FAST/OLIVR data.

ERT members were particularly struck by two aspects of ODOT DMV's operating environment that present challenges for the agency's data integrity improvement efforts:

- Low field agent staffing levels: ODOT has 350 field agents handling customer transactions for a state population of 4.2 million. In contrast, Idaho has 450 field agents and half of Oregon's population (though counties provide some services); Colorado has 350 agents performing driver credentialing and 1,200 for vehicle services, with a population of 5 million. Maryland has 1,000 agents with 5 million driver licenses/ID cards and 6 million vehicles (population of 6.2 million). ERT members supported further benchmarking and analysis of ODOT's field agent position descriptions, compensation, and overall staffing levels – in addition to exploring automation options to reduce the burden on field staff.
- Lack of ability to scan identity documents for non-Real ID licenses: The lack of ability to scan customer identity documents forecloses options to automate identity verification transactions and enable post transaction identity verification auditing. This results in increased pressure on the field agents. While the scope of the DIR specifically excluded legislative changes, ERT members suggested exploring the possibility of allowing documents to be scanned but not retained (given privacy concerns), and (in the longer term), requiring that all eligible individuals obtain Real ID licenses.

Further details on the specific practices that ERT members have put into place and their observations, lessons and advice are provided in the Appendix.

List of Acronyms

AAMVA – American Association of Motor Vehicle Administrators

API – Application Programming Interface

AVR – Automatic Voter Registration

CDL – Commercial Driver License

CDO – Chief Data Officer

CIO – Chief Information Officer

DAS – Department of Administrative Services

DIAE - Digital Image Access Exchange

DIR – Data Integrity Review

DMV – Driver and Motor Vehicle Services

ERIC – Electronic Registration Information Center

ERT – Expert Review Team

FMCSA – Federal Motor Carrier Safety Administration

KPI – Key Performance Indicators

MVA – Motor Vehicle Administration

NAPHSIS – National Association for Public Health Statistics and Information Systems

ODOT – Oregon Department of Transportation

OLIVR – Oregon License Issuance and Vehicle Registration system

OMV – Oregon Motor Voter

PII – Personally Identifiable Information

SOS – Secretary of State

SPP – Spy Pond Partners, LLC

WS DOL – Washington State Department of Licensing

Appendix - Summary of ERT Feedback and Insights

Table 4 summarizes the feedback and insights offered by ERT members over the course of the five meetings. It is organized by topic area and includes key observations, practices and lessons learned or advice offered for each topic area.

Table 4. ERT Input Summary

Topic	Practices	Observations, Lessons and Advice
Policy	**Real ID Requirements (CO DMV):** Colorado pursued legislative changes that required anyone eligible for a Real ID to obtain one. People who are temporarily lawfully present and non-lawfully present can continue to get standard IDs. This had many benefits, but was a long process.	■ Examine the legislative intent around limiting document scanning for US citizens obtaining a non-Real ID driver license to see if there's an opportunity to allow scanning (without retention of the image). ■ Recognize risks associated with retaining identity documentation longer than necessary as well as limitations in technology used by DMVs with regard to purging of records.
Data Governance and Risk Management	■ **Data Governance and Management (WA DOL):** Established a Data Privacy Officer position, a Data Governance Committee, and an 18 person Data Management Office with teams for data sharing, events, stewardship, and compliance & audits. They also have a set of data-related policies covering data privacy, security and ethics; collection and storage of structured data; requests for information; and data classification. ■ **Data Governance and Management (CO DMV):** Established an internal data group led by a Data Office Manager (internal hire) with the data integrity skills to oversee and guide the other data subject matter experts (SME's) as well as align reporting and create DMV data standards. They also designated	**Leadership and Communication** ■ Active leadership support is needed to communicate the value of data, data sharing, and data governance to managers, information technology staff, and data stewards. ■ Adopt a philosophy of managing data as an asset. ■ Recognize that strong data governance is needed for data interoperability. – Work towards the goal of "1 driver, 1 license, 1 record" – quality data isolated to an individual. **Data Governance Groups** ■ ODOT as an agency has invested in data governance and in frameworks to support governance through the CDO and Data Solutions Office, so roles or structures developed within DMV should be complementary to where ODOT has already built

Topic	Practices	Observations, Lessons and Advice
	dedicated data stewards in each DMV section (driver licensing, vehicle services, etc.). These were existing data-focused positions, but their job descriptions were rewritten to reflect their responsibilities (% time on stewardship activities) and their classifications were reconsidered. Note: the DMV is under the Department of Revenue and fits within their data governance structure. ■ **Data Governance and Management (MD MVA):** Established a 10-person, centralized data team, led by a CDO who focuses on integrity of operational data. The CDO was a newly created position, funded through federal highway safety grant funds. MD MVA also created a Chief Privacy Officer position, who signs off on all FAST change requests to make sure that they aren't collecting any more data than they need. The data team staff have specific areas of responsibility (e.g., field operations or center operations) but they are also cross trained. They have emphasized outreach to business users on what the data means and how to use it in day-to-day operations. They also meet monthly with all senior leaders to review critical data elements. The data team pulls together presentation materials for this meeting, but the business owners present their own data – and own the responsibility for any changes that need to be made. Note: Maryland DMV is under the Maryland DOT. They feed data up to the Secretary of Transportation's office.	maturity. ■ Data governance needs to include both business and data/IT representatives. ■ Having a dedicated data review team or data integrity group (that is part of the permanent structure, not a temporary group set up to investigate issues) is beneficial ■ It is important to have a DMV-specific group with a strong understanding of the data that can feed issues (as appropriate) up to the agency-level data governance groups. **Processes and Roles** ■ Develop and promulgate a standard data governance approach that clarifies roles and responsibilities for data sharing and processes for managing data across the life cycle. ■ Agree on governance controls for data based on security classifications and use cases. Make state data open by default, discoverable by the public as long as there aren't privacy or security constraints. This will save your team time. ■ Use audits across the system to ensure that processes are functioning as expected. ■ Establish a formal process for review and approval of data and system changes. ■ Inventory and document your data assets so that you understand where data are stored, and what the sources are. You can't manage what you can't measure. **Risk Management** ■ Adopt an enterprise risk management approach that encompasses

Topic	Practices	Observations, Lessons and Advice
	■ **Data Change Process (MD MVA):** Established a formal approval process for any change in data, even minor ones – including sign off from the State Board of Elections and testing to make sure the change doesn't break anything. ■ **Risk Management (WS DOL):** Established a proactive risk management approach – they have a risk management team that identifies and rates risks and establishes risk tolerance. They monitor changes on a quarterly basis through outreach to individuals who are assigned responsibility for each risk. There is also a third party annual review involving a group of experts who evaluate the totality of risk and assess if it is within the established risk tolerance.	data risks in addition to financial, technology and other risks. ■ Define risk tolerance levels in a proactive fashion – in advance of any adverse data events. ■ Assess your risk tolerance and adjust the level of investment on risk mitigation accordingly. ■ Risk assessment should be an annual process, with participation from internal audit to conduct outreach to business stakeholders. It should involve individuals who can look into the system of record to detect unusual patterns. Actions identified by the audit should be tracked through monthly follow ups. ■ Integrate data governance and data risk management roles and processes.
Customer Transactions: People (Staffing and Training)	■ **Staff Compensation Review (MD MVA)**: Conducted a staff compensation review and were able to obtain a 12% increase in pay for frontline staff based on identifying comparable positions in the state.	■ ODOT's front line customer service staffing levels appear low relative to other states. – High turnover rates among DMV customer service representatives (30+ percent) are common nationally, due to pay and other factors. ■ Motor vehicle agencies in many other states make use of third party agents for transaction processing. See the AAMVA third party agent administration best practices report on this. ■ There are opportunities to further enhance DMV staff training on OMV – John Lindback offered assistance on this. ■ Benchmarking of responsibilities and pay scales for front line customer service staff provides an important foundation for exploring adjustments to staffing models and compensation. Some

Topic	Practices	Observations, Lessons and Advice
		resources for this are available from AAMVA: https://aamva.org/membership/surveys-and-data ■ Ensure that staff training covers sufficient context on the motor voter program to provide an understanding of the purpose for driver identity verification processes. ■ Consider using Key Performance Indicators (KPIs) related to customer transaction wait and processing times as part of making a business case for adjusting staffing levels and salaries.
Customer Transactions: Process	■ **Initiate Transaction with Question about Citizenship Status (ID DMV):** Modified their process from using documents (e.g., a US Passport) to determine citizenship status to having their customer service reps begin by asking about citizenship first. They found that their agents made a pretty significant shift in understanding the value of Identifying someone being a citizen when this was the first question they had to ask.	■ Examine processes for changes to driver license records such as name changes, address changes, upgrades or downgrades. Consider validation of these changes against other sources and methods for updating information that has already been transmitted to the SOS. ■ Continue to work with the SOS on measures to ensure swift communication when fraudulent licensing transactions are detected.
Customer Transactions: Technology	■ **Use of AAMVA Validation Service (ID DMV):** Validate passports using the AAMVA validation service for both Real ID and non-Real ID transactions.	■ There are short term opportunities to use machine learning within FAST to insert citizenship filtering at the front end. This type of change could benefit multiple DMVs that use the FAST product. ■ Explore use of the AAMVA digital image access exchange (DIAE) program to exchange images of individuals during the process of issuing a license, permit, or an identification card and during the process of driver records duplicate resolution. (Given concerns about data privacy, this service can be used with a scanned image that is not saved following the transaction.) ■ Explore SOS use of the US Department of Homeland Security SAVE database to verify immigration status and naturalized/acquired U.S.

Topic	Practices	Observations, Lessons and Advice
		citizenship of applicants seeking benefits or licenses. ■ Implement purging of records beyond their retention period if allowed in future versions of FAST. ■ Be cautious about adoption of artificial intelligence technologies to further automate identity verification transactions, and be sure to avoid sacrificing accuracy for speed.
Data Quality Management	■ **Transaction Audits (MD MVA)**: Conduct independent checks of 5% of the Real ID transactions. If the right documents aren't present, the customer receives a letter and their credential is cancelled after a period of time if they don't provide the required documents. MD MVA also conducts biweekly random audits of transactions sent to the Board of Elections. ■ **Real ID and Commercial Driver License (CDL) Transaction Audits (ID DMV):** Conduct an audit on 30% of their Real ID transactions, and a second level review for CDL transactions. Information from these reviews is used to identify which offices to target for further reviews. • **Use of Vital Records Data (MD MVA):** Use National Association for Public Health Statistics and Information Systems (NAPHSIS) vital records data to identify out of state deaths of drivers licensed in MD.	■ Take advantage of available external sources of driver information to provide independent data validation. One opportunity that might be pursued further is making use of the Electronic Registration Information Center (ERIC)'s data and matching algorithms to improve the accuracy of DMV driver data. Currently ERIC's primary focus is on accuracy of voter registration information. (For example, Washington State used ERIC to identify thousands of deaths that they hadn't caught through existing processes.) ■ There is a new working group on data integrity and analytics for automated voter registration being kicked off in April by the Institute for Responsive Government. FAST and AAMVA are participating in this group. This group provides an opportunity to identify/refine best practices.
Data Sharing/ Transmission	■ **Review of Data Sharing Agreements (MD MVA):** Hired an auditor to review all data sharing contracts to ensure there are active points of contact and discontinue any inactive data feeds.	■ Use standard protocols for data sharing to set clear expectations for shared data. Use Application Programming Interfaces (APIs) where possible for efficiency and protection of Personally Identifiable Information (PII). ■ Establish a proactive review process of data sharing agreements

Topic	Practices	Observations, Lessons and Advice
		and interfaces, using agreement age as a trigger for review. ■ Check in with senior leadership to see if reports are still needed - eliminating low value reports frees up time to focus on more important information. ■ Encourage staff who work with the data or code related to data transmission to "if you see something, say something." (WS DOL has been able to catch some data issues proactively by encouraging staff to flag issues without worrying about blame.) ■ Apply a privacy lens when considering expansion of data sharing services.
Data Analytics and Reporting: Process and Technology	■ **Data Analytics Capability (WS DOL):** Established an analytical data repository with data extracted from FAST. This capability has enabled WS DOL to overcome the limitations of databases that are designed to manage transactions and gain insights from combining data across different sources (business licenses, fuel taxes). They have also successfully reduced the volume of external data requests by transitioning standard reports including confidential data to aggregate open data reports that are available for public consumption. ■ **Business Intelligence Team (MD MVA):** Implemented a Business Intelligence capability to empower people with data. There are 800 users. They use a Microsoft BI tool for dashboards and queries against the FAST data. They have begun to make a few of the data elements available online on a real-time basis.	■ Canned reporting capabilities within FAST are limited. ■ Having a separate analytics system (outside of FAST) has advantages over enhancing reporting directly from FAST: FAST is optimized to be a transactional system and isn't well-suited for analysis. ■ Establishing a FAST data extraction capability is an important step – though not an easy one. Maintaining a separate analytical data repository based on FAST requires keeping up with software updates that occur with minimal notice. Further, there is limited documentation on the FAST database, which means there is a learning curve for staff who create and manage analytical data. ■ There is room for collaboration across different FAST jurisdictions to explore how to best meet common reporting needs.
Data Analytics	■ **Data Capability Building (ID DMV):** Expanded data query	■ It is helpful to have a distributed group of data experts when there

Topic	Practices	Observations, Lessons and Advice
and Reporting: People	capabilities to support data-informed decision making, through designating roles with both technical and business expertise. ■ **Data Team (WS DOL):** Originally established a centralized integrated research and analytics function for the whole agency, which worked well. Fairly recently they shifted to a hub and spokes model to have data analysts closer to the agency decision makers. There is still a strong core group and centralized standards and conventions. Individual data analysts embedded in different business units around the agency can draw on that core and collaborate with the central data team. ■ **Self-Service Reporting (CO DMV):** Set up an internal self-service approach to support data queries, through a data office staffed with a data engineer with access to FAST and their data lake. This allowed them to handle special data requests in an efficient and accurate manner. Any new or modified reports/queries are still managed via SQRs, but their internal data team does that work (rather than the FAST team).	are peak loads (e.g., during legislative session). ■ Establishing a data team requires an upfront investment to build the necessary skills.
Path Forward		■ Establish priorities for focused implementation planning based on their likely impact with respect to the problems that initiated the DIR. ■ An initiative around workforce – to update positions and provide needed capacity for both operations and integrated data governance seems to be one of the higher priorities. ■ It will be important to manage expectations – implementation is a

Topic	Practices	Observations, Lessons and Advice
		big lift and will not happen overnight. While ODOT's record of zero errors over the past five months is laudable, it may be difficult to keep to that standard moving forward without additional resourcing. ■ Clarify the responsibility and accountability of DMV versus ODOT's CIO and CDO in data governance and standards development. ■ Continue to draw on ERT members to support future decisions and initiatives.