IT Strategic Plan 2024–2027



DECEMBER 2023

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MESSAGE FROM THE CIO

I am very pleased to present this IT strategic plan for the Oregon Department of Transportation (ODOT). This document has been developed in close consultation with ODOT's Technology and Data Council and professionals throughout the agency. This plan charts a course that promises to transform ODOT's IT landscape, making it more efficient, secure, and agile while enhancing our ability to fulfill our mission.

In today's dynamic and ever-evolving IT landscape, complexity is a constant companion. Our agency's diverse operations, combined with traditional IT practices, have given rise to a current state of hundreds of technical systems and services, of varying degrees of significance and age, residing on an abundance of technical platforms. This complexity imposes the familiar challenges to IT of high resource allocation to maintenance, mounting technical debt, reduced workforce agility, lengthy project backlogs, and ever-expanding security demands.

To a degree, complexity is an inherent part of IT operations for any organization. We cannot eliminate it. But the strategies outlined in this plan, if adopted as a guide to shaping both our business and technical architecture, will empower us to build an IT landscape that is sustainable, easier to secure, features greater speed of solution delivery, and promises workforce agility and satisfaction.

This plan is not just a document; it is a call to action. The path forward is not without its challenges, but it is one filled with potential and the promise of innovation. We extend our heartfelt thanks to all who have contributed to this plan and to those who will play a crucial role in bringing its goals to fruition.

Thomas Amato

ODOT Chief Information Officer

1 INTRODUCTION

ODOT Information Systems presents this IT Strategic Plan for 2024 – 2027. This plan aligns with the Governor's vision and priorities, ODOT's Strategic Action Plan, the Oregon Transportation Plan, and the Enterprise Information Services (EIS) Strategic Framework. It addresses current agency priorities, operational needs, and both short and long-term business strategies.

The purpose of the IT Strategic Plan is to promote a common understanding of the IT strategies, objectives and initiatives planned to support agency and enterprise goals, align IT investments to achieve successful business outcomes, and enable ODOT to achieve its vision for transportation in Oregon.

The following pages outline the current business context, Information Systems' mission and vision, and the guiding principles that inform our strategic priorities and approach. From this foundation, we introduce a set of strategic goals and objectives to guide future IT investments. Key initiatives are highlighted, along with a roadmap for the 2023-25 and 2025-27 biennia.

2 DEVELOPMENT PROCESS

The IT Strategic Plan was developed over the course of several months, using a variety of techniques to confirm primary considerations and gather insights to inform the guiding principles, strategic goals, and objectives in this plan. The process included:

- **Business Context Interviews**: Conducting interviews with ODOT executive leadership, business unit managers, and other management personnel
- **PESTLE Analysis**: Performing analysis on the primary external factors (Political, Economic, Social, Technological, Legal and Environmental) influencing the organization
- **SWOT Analysis**: Conducting a SWOT (Strengths, Weaknesses, Opportunities and Threats) session and analysis, with a specific focus on IT
- Documentation Review: Reviewing relevant strategic documents for guidance and alignment
- **Portfolio Analysis:** Reviewing current and pending projects and programs
- Industry Guidance: Assessing industry trends and IT strategic planning resources
- **Collaborative Evaluation**: Evaluating the resulting business context information with the ODOT Technology and Data Council, executive leadership, and EIS personnel

This process provided unique insights and opportunities to learn from diverse perspectives, obtain leadership support, and create a more inclusive strategic plan.

3 BUSINESS CONTEXT

ODOT's IT strategies and priorities for 2024-27 are informed by several influencing factors. Principal strategic planning guidance includes:

- Governor's Vision and Priorities
- ODOT Strategic Action Plan
- Oregon Transportation Plan
- EIS Strategic Framework 2023-26

Additional detail on related guidance and documents is provided in <u>Appendix 9.1 – Business Context Information</u>.

Alignment with agency and enterprise strategies and desired outcomes was foundational to the development of this plan. A few examples of required alignment include:

- Providing modern technology solutions for sustained revenue growth, efficient delivery of services for a modern transportation system, and safe and secure transmission, storage, and protection of data assets
- Focusing on accountability, breaking down silos, effectively sharing data assets, and enhancing relevant services for all Oregonians
- Strengthening governance and delivery mechanisms to support agency, business unit, and enterprise priorities

BUSINESS DRIVERS

In addition to these foundational expectations, ODOT faces other significant internal and external business drivers informing IT strategic priorities. Primary drivers include:

Economic

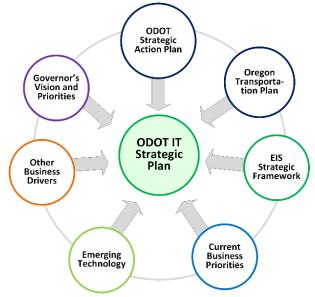
• **Funding:** ODOT faces significant funding gaps due to a structural deficiency in how transportation is funded by the state, as well as rising operating costs

Environmental

- Electrification and Fossil Fuels: Growing electrification and reduced fossil fuel dependence has wide-ranging agency implications
- Climate Resilience: Increasing extreme weather events, driven by climate change, place added strains on Oregon's transportation system, essential ODOT operations, and related IT services.

Technology

- **Technical Debt**: Urgent need to tackle significant technical debt and redundancy within ODOT's application portfolio (i.e., critical business functions relying on outdated systems and lacking modern business capabilities, IS support overhead maintaining legacy solutions)
- Mainframe Risk Mitigation: Modernizing business functions necessitates the transition of IT services from the State of Oregon mainframe system in line with efforts to address technical debt



- Cybersecurity Risk Mitigation: Cybersecurity risks, threats, and demands continue to grow in importance, especially given IT's pivotal role in agency operations
- Federal Cybersecurity Guidance: Federal cybersecurity guidance and requirements driving the transition to a Zero Trust Architecture
- Data Modernization: Opportunities to modernize ODOT's enterprise data ecosystem, adopting new technologies and methods for data management, governance, accessibility, and security
- Emerging Technology: Opportunities to leverage emerging technologies such as connected vehicle technology, AI, automation, and low-code applications, enable new ways to meet business needs, but also require a commitment to workforce knowledge and skill development
- Enterprise IT Services: Opportunities and expectations to leverage enterprise IT services and standards, including DAS ERP (Enterprise Resource Planning) modernization and EIS cybersecurity services

Legal

- Data Privacy: Emerging regulations and expectations regarding data privacy and protection
- **Regulatory Compliance**: Navigating ongoing compliance updates, including Payment Card Industry and transportation industry requirements
- Vehicle Requirements: 90% zero-emission requirement for new vehicle sales by 2035 (SB 1044) brings change dynamics to related business services

Social

- Equity: Addressing impacts on underrepresented or historically marginalized citizens is a priority and presents unique challenges from a technology perspective
- Workforce Succession: A large segment of ODOT's workforce (including IS resources) are eligible for retirement, requiring an increased focus on succession planning
- **Remote Work Continuity**: In the post-COVID era, a substantial portion of the ODOT workforce continues to operate remotely, impacting user experience and cybersecurity requirements
- Evolving Customer Expectations: Citizen expectations for online services, self-service, and customer experience based on private sector interactions

4 IS MISSION, VISION, AND GUIDING PRINCIPLES

Informed by the current business context, the following **Guiding Principles** establish and communicate core values and philosophies, informing the organization's approach to achieving its goals and objectives.

1 - Business Alignment We collaborate with business partners to:

- Understand critical business requirements
- Identify and deliver the target capabilities required to achieve business outcomes

Information Systems – Mission

Deliver business tailored information technology services and capabilities that align with industry standards and practices and directly contribute to fulfilling the mission and priorities of ODOT

Information Systems – Vision

Enable excellence throughout ODOT by creating an environment where technology's full potential transforms the way we solve problems and deliver services and products

	 Identify and assess opportunities, risks, and dependencies, incorporating these insights into IT strategy and governance processes Prioritize IT investments
2 - Accountability	• In alignment with the agency's mission, and the Governor's focus on accountability, prioritize ODOT IT investments related to transportation services, within financial and staffing constraints
	 As public servants, we are accountable to the citizens of Oregon for our decisions, actions, and business outcomes
3 – Digital Transformation	 Incorporate digital technologies into all aspects of transportation business services to enhance customer-facing services, accessibility, and citizen engagement
	 Leverage emerging technologies (e.g., connected vehicles, IoT, artificial intelligence, automation) to drive innovation and operational efficiencies
	 Partner with business technologists across the agency and support common platforms for enabling business outcomes
4 – Address	 Proactively address technical debt and reduce redundancy through business and IT modernization initiatives
Technical Debt	• Replace legacy applications and improve business processes; transition to technology solutions that are easier to update and manage, enabling a more agile and cost-effective IT environment
	 Seek to maximize long-term business benefits and value for the agency
5 – Enterprise Value	• Leverage common application platforms and IT services to provide key capabilities across ODOT business units, streamlining operations and reducing costs
	 Manage technological diversity by prioritizing the adoption of standardized technology solutions where possible, reducing complexity, and minimizing resources and cost associated with managing disparate IT solutions
6 – Cost Optimization	 Prioritize cost optimization to maximize use of limited funding and resources
optimization	 Continuously evaluate IT investments, resource allocation, vendor partnerships, and procurement practices to ensure investments align with the agency's strategic objectives
7 – Cloud	• In alignment with the State of Oregon: Cloud Forward Strategic
Adoption	 Framework, embrace cloud as the preferred platform for IT services Prioritize the adoption of cloud-based application services and infrastructure whenever feasible to enhance scalability, flexibility, security, and east antimization
	and cost optimizationAlign with enterprise strategy, architecture, standards, and best practices
	for cloud services

8 – Leverage External Partnerships	 Seek opportunities to partner with other agencies, states, and industry experts to drive innovation in transportation services delivery In alignment with State of Oregon enterprise strategies and IT standards for statewide administrative and utility services: 					
	 Leverage ERP services undergoing modernization by DAS including Human Resources, Procurement, Inventory and Financial Management Leverage enterprise utility IT services provided by EIS, including cybersecurity 					
9 – Data Sharing and Interoperability	 Enable secure and efficient data sharing to promote optimal use of enterprise information assets and informed decision-making, in alignment with ODOT's <i>Strategic Data Business Plan</i> goals and strategies Enable secure application and data integration across business functions, application platforms and external partners within the transportation ecosystem 					
10 – Continuous	 Promote a culture of continuous learning and adaptability among IT 					
Learning	professionals, aligning individual growth with organizational capabilitie drive improvements in service delivery and operational efficiency					
	 Foster a commitment to workforce training to support adoption of new technologies through the project delivery process 					

5 IT STRATEGIES AND OBJECTIVES

The business context and guiding principles inform the IT strategic goals presented below. Accompanying these goals are specific objectives that assist in prioritizing the initiatives and activities supporting each goal. These strategic goals and objectives aim to provide clear direction for IT investments, guide operational improvements, ensure alignment with business priorities, and encourage collaboration with business partners and within Information Systems.

Information on related initiatives is included in <u>Section 6 – Initiatives and Roadmap</u>.

5.1 STRATEGIC GOAL #1 – ENABLE TRANSFORMATIONAL INITIATIVES

Strategic Goal #1 – Enable Transformation Initiatives: Enable and support ODOT's transformational initiatives, supporting reliable funding and a modern transportation system

This strategic goal is directly aligned with supporting the transformational initiatives highlighted in the ODOT Strategic Action Plan. Related objectives include:

- **Objective 1.1:** Prioritize and deliver technology services for key programs and projects, aligning with an open architecture model for these transportation services:
 - Oregon Toll Program Implementation
 - Road Usage Charging (RUC) Enhancements
 - Connected Vehicle Ecosystem (CVE) Implementation Program

- **Objective 1.2:** Leverage new business capabilities for Tolling and CVE to support RUC enhancements
- **Objective 1.3:** Integrate CVE data with other data sets to automate transportation asset and service management, and support strategic decision making

5.2 STRATEGIC GOAL #2 – CUSTOMER FOCUS

Strategic Goal #2 – Customer Focus: Improve equitable access to ODOT services with a focus on customer priorities and experience

Related objectives:

- **Objective 2.1:** Ensure that customer requirements and customer experience improvements prioritize accessibility, inclusivity, and equity, and are a primary consideration for all business modernization projects and IT services
- **Objective 2.2:** Develop a foundational strategy for delivering Customer Relationship Management business capabilities to support all ODOT customer-facing services

5.3 STRATEGIC GOAL #3 – MODERNIZATION AND SUSTAINABILITY

Strategic Goal #3 – Modernization and Sustainability: Modernize critical ODOT business functions and IT applications to deliver priority business outcomes and address technical debt

Related objectives:

- **Objective 3.1:** Support priority business and IT modernization initiatives through effective planning and architecture, application, and project delivery methodologies
- **Objective 3.2:** Leverage technologies and approaches that provide for increased business agility, continuous improvement, and ongoing compliance
- **Objective 3.3**: Complete a Mainframe Applications Current State Architecture initiative to inform and support planning for related business modernization projects

5.4 STRATEGIC GOAL #4 – COMMON / ENTERPRISE SERVICES

Strategic Goal #4 – Common / Enterprise Services: Establish and leverage common IT services across ODOT to effectively deliver business outcomes, achieve efficiencies, and eliminate redundancy

Related objectives:

- **Objective 4.1:** Integrate Enterprise Identity Management to secure access to ODOT application services for employees, partners, and customers
- **Objective 4.2:** Establish cloud-native Enterprise Integration Services to support secure application and data integration

- **Objective 4.3:** Support ODOT's Enterprise Data Management modernization, enabling proactive sharing and use of key information assets to achieve efficiencies and improve organizational decision-making
- **Objective 4.4:** Finalize deployment of Enterprise Digital Workplace services, leveraging Microsoft 365 communication, collaboration, and content management services; pursue automation and low-code applications to achieve specific business goals
- **Objective 4.5**: Leverage Cloud Infrastructure and Platform Services to provide operational efficiencies and cost savings where appropriate
- **Objective 4.6**: Partner with DAS on continued modernization of State of Oregon ERP functions including Human Resources, Procurement, Inventory, and Financial Management

5.5 STRATEGIC GOAL #5 – EFFECTIVE PLANNING AND GOVERNANCE

Strategic Goal #5 – Effective Planning and Governance: Mature project portfolio management and governance to support effective decision-making, prioritization, and successful delivery of intended business outcomes

Related objectives:

- **Objective 5.1:** Establish foundational project portfolio management capabilities and processes, including resource management, within the ODOT Project and Portfolio Management Office
- **Objective 5.2:** Improve ODOT governance processes to align with project portfolio management and governance best practices
- **Objective 5.3**: Establish initial Enterprise Architecture principles and roadmaps to improve project and application portfolio governance and strategic alignment

5.6 STRATEGIC GOAL #6 – CYBERSECURITY AND BUSINESS CONTINUITY

Strategic Goal #6 – Cybersecurity and Business Continuity: Improve ODOT's cybersecurity posture and address Business Continuity priorities

Related objectives:

- **Objective 6.1:** Modernize cybersecurity capabilities and mitigate related risks to critical ODOT business services
- **Objective 6.2:** Enable secure application access for employees, contractors, partners, and customers, independent of location and device
- **Objective 6.3**: Complete deployment of enterprise Microsoft 365 security and data protection services for ODOT information assets
- **Objective 6.4**: Implement priority ODOT Information Security Program enhancements
- **Objective 6.5**: Establish Disaster Recovery (DR) capabilities meeting Recovery Time Objectives for specific mission-critical applications to reduce business risk

• **Objective 6.6**: Ensure critical business continuity and DR objectives are included in ODOT's project delivery process for all major business and IT modernization initiatives

5.7 STRATEGIC GOAL #7 – IT SERVICE MANAGEMENT EXCELLENCE

Strategic Goal #7 – IT Service Management Excellence: Improve IT effectiveness by optimizing processes, enhancing service delivery, and leveraging technology to drive customer satisfaction, business value and operational efficiency

Related objectives:

- **Objective 7.1:** Improve business relationship and service delivery model in coordination with continued IT organizational flexibility
- Objective 7.2: Develop an initial IT Services Catalog
- **Objective 7.3:** Complete IT Service Management (ITSM) consolidation and service improvements
- **Objective 7.4:** Establish IT standards and mature processes (Application Delivery, Project Management, Cloud Platform Management, Cybersecurity, Network Administration)
- **Objective 7.5:** Provide IT training and workforce development opportunities (Cloud services, automation, low code development, AI, project management, etc.)
- **Objective 7.6:** Prioritize ongoing IT platform and infrastructure optimization to enhance performance, reduce costs and align with evolving organizational needs

6 INITIATIVES AND ROADMAP

ODOT is actively engaged in implementing or planning for a variety of initiatives that are aligned with the strategic goals and objectives outlined in this plan. These include the transformational implementation programs, establishing new and diversified revenue sources, and many projects modernizing critical business functions and associated IT services. Other initiatives are focused on expanding customer services and improving the customer experience.

The major projects and programs continuing or planned for the 2023-25 or 2025-27 biennium are listed in <u>Appendix 9.2 – Project Information</u>.

The attached roadmap includes current and anticipated initiatives for the 2023-25 and 2025-27 biennia. Alignment with specific IT strategic objectives is indicated where applicable.

7 CHALLENGES AND CONSTRAINTS

ODOT faces multiple challenges and constraints as it undertakes the initiatives outlined in this plan. Some notable challenges include:

- Funding: Significant structural funding constraints will exist for the foreseeable future
- Resource constraints and contention:
 - Persistent gaps stemming from overall demand for IS resources to support business and IT modernization endeavors
 - Contention between operational demands supporting core ODOT business functions and transformative change initiatives

- **Portfolio management and governance maturity:** Foundational practices and capabilities needed to improve governance and execute areas of this plan are not as mature as required
- Business strategy alignment: ODOT business lines can bring competing priorities and competing solutions to common problems divergent business architecture stresses technical architecture
- Workforce skill management amidst demand evolution: Across its workforce, ODOT must maintain capabilities for supporting legacy systems while developing skills for new platforms and services
- Enterprise dependencies: A significant portion of ODOT's modernization initiatives are dependent on capabilities delivered through enterprise initiatives sponsored by EIS or DAS, requiring dependence tracking, prioritization, and managing foreseen operational transitions

8 PLAN GOVERNANCE, MAINTENANCE AND MEASUREMENT

The ODOT Technology and Data Council is the strategic governing body for technology and data initiatives within ODOT. This council functions under the executive authority of the Agency Leadership Team (ALT) and is responsible for prioritizing and aligning initiatives through informed and collaborative decision-making.

The ODOT Technology and Data Council reviews the IT Strategic Plan, with final approval given by the ALT. Progress on related initiatives will primarily be communicated through the ODOT project portfolio governance process.

To ensure relevance and applicability, ODOT will review and update the IT Strategic Plan biannually, with a target completion date of December 31 each odd-numbered year. Any significant changes in the agency's business strategies, context, or IT landscape, such as new legislative mandates, enterprise IT directives, or major technological advancements, will be reflected in the updated plan.

The primary metric for plan progress will be progress on the major projects and programs as listed in <u>Appendix 9.2 – Project Information</u>. Additionally, the advancement of enterprise portfolio management and governance is a core focus of this plan. Actions focused on those improvements over the next 18 month are listed below. Additional actions and metrics, reflecting improved governance and portfolio management maturity, will be added to this plan during planed biennial revisions.

Year	Implementing Actions
H-1 2024	 Create and publish IT sub-portfolio roadmap to support strategic objectives Establish initial EA principles and roadmaps to support governance Conduct IT scorecard assessment and develop IT project sub-portfolio Develop PPM maturity to enable portfolio analysis for governance decision making
H-2 2024	 Begin using PPM portfolio analysis for governance and decision making Develop model for business aligned roadmaps that account for the agency application portfolio
H-1 2025	 Develop comprehensive and standardized business aligned technical roadmaps that incorporate the agency application portfolio

9 APPENDIX

9.1 BUSINESS CONTEXT INFORMATION

As referenced in the Business Context section, ODOT's IT Strategic Plan is informed by various strategic guidance artifacts. Each are summarized below, including key factors influencing IT strategic priorities. Review the referenced documents for more detailed information.

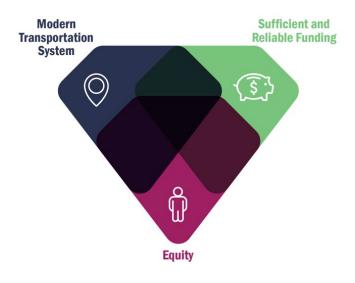
GOVERNOR'S VISION AND PRIORITIES

Governor Kotek emphasized several statewide priorities, including Housing and Homelessness, Behavioral Health, and Education. Additionally, she established a vision to enhance customer service for Oregonians with an increased focus on agency accountability, ensuring that mission-specific services are delivered consistently and meet citizens' daily needs.

These priorities, along with the expectation to break-down organizational silos and make systemic improvements to better serve all Oregonians across the state, resonate and align with ODOT's mission and the IT strategic goals detailed in this plan.

ODOT STRATEGIC ACTION PLAN

The *ODOT Strategic Action Plan (SAP)*, currently being updated for 2024 – 2028, describes ODOT's strategic priorities including specific outcome areas to inform agency work and guide decision making. The SAP establishes three overarching and overlapping priorities:



- Sufficient and Reliable Funding: Seek sufficient and reliable funding to support a modern transportation system and a fiscally sound ODOT
- Equity: Prioritize diversity, equity, and inclusion by identifying and addressing systemic barriers to ensure all Oregonians benefit from transportation services and investments
- Modern Transportation System: Build, maintain and operate a modern, multimodal transportation system to serve all Oregonians, address climate change, and help Oregon communities and economies thrive.

These priorities inform the direction of the IT Strategic Plan, ensuring technology investments and efforts are aligned with ODOT's broader mission and priority business outcomes. Specifically, the Strategic Action Plan:

• Drives the transformational initiatives, providing sufficient and reliable funding and incorporating emerging technology to enable a modern transportation system (i.e., Oregon Toll Program Implementation, Connected Vehicle Ecosystem, and Road Usage Charging Enhancements)

- Supports modernization of critical ODOT business functions and IT systems, such as Commerce and Compliance Over Dimension Permitting, to increase efficiency and enhance online services for customers
- Prioritizes modern transportation infrastructure needs such as broadband expansion and traffic signal technology upgrades
- Requires modern data management technology and processes to govern and manage data assets and maximize their value throughout their lifecycle
- Requires business initiatives to focus on accessibility and inclusivity in design and delivery, supporting diverse customer requirements

OREGON TRANSPORTATION PLAN

The Oregon Transportation Plan defines the long-range transportation policy through the year 2050 for the

movement of people and goods across the state and directs the work of ODOT. A major update to the plan was recently adopted by the Oregon Transportation Commission in July 2023. The OTP includes policies, strategies, and implementing actions that direct ODOT and partners to leverage transportation data and emerging technologies while ensuring cybersecurity and data privacy. A few examples of specific IT strategy guidance include:

- Leverage emerging data and technology through strategic partnerships and targeted investments that advance road user charging, electric vehicle charging and sustainable fuels infrastructure, vehicle-to-infrastructure and vehicle-to-vehicle technologies, broadband, on-demand transportation option platforms (e.g., mobility as a service and mobility hubs), and open data standards
- Make strategic investments in analytics and data science capacity to support safety improvements for transportation-vulnerable people (paying particular attention to systemically excluded or underserved populations), improve overall safety outcomes, and enhance reporting processes
- Provide technical support to ensure cybersecurity and data privacy throughout the system

EIS STRATEGIC FRAMEWORK

The EIS Strategic Framework for 2023-2026 identifies strategic objectives for EIS in supporting the state's continued digital transformation journey. ODOT Information Systems strives to align IT strategies, modernization plans, and service delivery with enterprise IT strategies, architecture and emerging standards including:

- *Cloud Forward Strategic Framework* and Cloud Infrastructure and Platform Services requirements and standards
- Oregon's Data Strategy and associated data sharing and governance initiatives
- Enterprise cybersecurity services and standards, in alignment with the NIST Cybersecurity Framework, federal requirements, and guidance

Related EIS and DAS enterprise initiatives are considered key business drivers and dependencies, impacting ODOT's <u>Initiatives and Roadmap</u>.





9.2 PROJECT INFORMATION

Major ODOT initiatives continuing or anticipated within the 2023-25 or 2025-27 biennium are listed below. This list is not in priority order, nor does it include every initiative required to achieve ODOT's business objectives.

Project / Program	Description	Status
Oregon Toll Program Implementation	Planning and implementation of the Oregon Toll Program, a comprehensive program to support revenue collection and traffic congestion management. Component projects include establishing managed services and implementation for the back-office systems and Customer Service Center (CSC), and the Roadside Tolling System (RTS) implementation.	Active
Connected Vehicle Ecosystem: Ideation, Planning, Design (CVE Implementation Program)	ODOT is collaborating with private sector experts and industry partners to establish a Connected Vehicle Ecosystem (CVE), enabling solutions to fund, manage, and operate a modern transportation system by allowing access to diverse information services from many providers. CVE data is intended to support Road Usage Charging (RUC) enhancements and ITS safety and mobility applications. The pre-implementation phase of this program includes strategic planning and design for the implementation projects.	Active
Connected Vehicle Ecosystem: Foundational Services (CVE Implementation Program)	Implement foundational business and IT capabilities to enable priority CVE use cases.	Pending
Connected Vehicle Ecosystem: RUC Proof-of-concept (CVE Implementation Program)	Demonstrate priority use case for CVE, including the collection of road usage data that can be shared with ODOT's business partners.	Pending
Connected Vehicle Ecosystem: ITS Integration Projects (CVE Implementation Program)	Implement priority ITS use cases for CVE, supporting transportation asset and service management and related safety improvements.	Pending
Road Usage Charging (RUC) Sustainability	Implement enhancements to the Road Usage Charging Administrative System (RUCAS) to support system resiliency prior to OReGO program expansion.	Active
Road Usage Charging (RUC) Enhancements	Planning and implementation of system enhancements to support OReGO Road Usage Charging (RUC) program expansion, including legislative changes, vehicle transfers and other deliverables.	Pending
Transportation Operations Center System (TOCS) Home Screen Enhancements	Complete critical application enhancements to improve Transportation Operations Center efficiency.	Active
ODOT/PDCC (Portland Dispatch Centers) CAD Interconnect	Integrate the message exchange supported by the Portland Dispatch Centers Consortium with the Transportation Operations Center System (TOCS) application so ODOT can send and receive "call for service" messages with other member agencies.	Active
Kinetic Signals Upgrade (Traffic Signal Management)	Upgrade the Traffic Signal Management application (Kinetic Signals) to provide traffic engineers additional functionality.	Active
Mobile Road Weather Forecasting Application	Implement mobile version of "Pikalert" application used by ODOT maintenance crews for road weather forecasting.	Active
ITS Infrastructure Virtualization	Complete implementation of new virtualized systems and storage infrastructure to replace end-of-life components and improve resiliency for ODOT's Intelligent Transportation System (ITS).	Active
Forsecom Replacement (Towing Background Checks)	Planning and integration of a new background check service to replace end-of-life application supporting critical ODOT dispatch operations.	Active

Project / Program	Description	Status
Capital Asset Management Module (CAM)	Implement fleet management Capital Asset Module (CAM), providing capabilities and analytical tools to better manage vehicle	Active
ITS Resiliency Enhancements	preventative maintenance and replacement. Complete planning and implementation of priority cybersecurity	Pending
	and business continuity enhancements for the ODOT ITS network. Maintenance and Operations modernization initiative focused on	
ITS MicroMain System Replacement	replacement of the ITS Micromain application used to maintain	Pending
	roadside devices such as traffic signals, variable message signs and cameras, addressing significant technical debt impacting ODOT Maintenance and Operations services.	
Transportation Operations	Maintenance and Operations modernization initiative focused on	Pending
Center System (TOCS) System Replacement	replacement of the Transportation and Operations Center System (TOCS) supporting critical ODOT dispatching functions, addressing system reliability and performance issues.	
Electric Vehicle (EV) Charging	Integrate electric vehicle usage data from a vendor-supported	Pending
Stations	charging station system with other ODOT systems to support fleet management.	
Active Traffic Management	Replacement of the legacy Active Traffic Management (ATM) application with a new commercial application. ATM uses roadside	Pending
(ATM) Replacement	data to generate congestion, weather, and variable speed limit	
	messages that are displayed on roadside signs.	D
Work Zone Alerts	Collect and publish work zone alerts to inform travelers of active maintenance work and improve worker safety	Pending
ITS Camera Services	Replacement of the legacy Camera Services application with a new	Pending
	commercial application. Camera Services pulls images and overlays information such as elevation and temperature for publishing to	
	downstream applications such as TripCheck.	
Mission Critical Management	Replacement of the legacy Mission Critical Management (MCM) application, used to manage maintenance of ODOT's wireless	Pending
(MCM) Replacement	system devices, with a new commercial application.	
Maintenance Management	Complete strategic planning to support modernizing critical work	Pending
Strategic Planning	order and maintenance management functions and replace the legacy Maintenance Management System (MMS).	
CHAMPS Replacement (AMES)	Replace the CHAMPS application used to manage issuance of	Active
	highway access permits, approach data, and related documents with a new commercial application to meet current legislative and business requirements and address technical debt.	
AASHTOWare Project One	Implementation of the AASHTOWare Project (AWP) Construction &	Active
Source of Truth (APOST)	Materials (C&M) and Civil Rights & Labor (CRL) modules to enable continued e-Construction program modernization and comply with	
	the Federal Highway Administration Everyday Counts initiative.	
CQCR Solution	Enhance the current solution for handling Complaints, Questions,	Active
(Customer Case Management)	Concerns and Requests (CQCR) submitted through the Office of Civil Rights, addressing related ADA compliance tracking requirements .	
Integrated Collaboration and	Modernize ODOT's Environmental Programs review through	Active
Environmental Review Tool	implementation of an integrated information management system, consolidating environmental program data. Supports a connected	
(iCERT)	approach to statewide project delivery for environmental	
	disciplines and improves delivery of transportation infrastructure projects.	
AIM (Accelerated Innovative	Public Transportation is partnering with Washington and California	Active
Mobility)	to implement a new system providing expanded GTFS (General Transit Feed Specification) data and improved capabilities for	
	planning large scale multi-agency transit networks for ODOT and	
	external partners. The new system will replace the existing TNExT application.	
Crash Data Management	Replace legacy Crash Data System application with a commercial	Active
(System Replacement)	application platform to help meet crash data timeliness goals and	

Project / Program	Description	Status
Network Analysis and Software Assessment	Transportation Data Section initiative planning for changes to ODOT's network / LRS data management practices to reduce duplication, resolve incongruent practices and clarify requirements and roles. Includes evaluation of software options with capabilities and services to support updated approach to network data management.	Active
Network / LRS Management Migration	Planning, implementation, and migration to a new Network / LRS (Linear Referencing System) Management software platform including procurement, software platform deployment, business process changes, asset migration, and decommissioning of the current TransInfo (AssetWorks) system.	Pending
ArcGIS Platform Upgrade	Complete planning and migration to an updated ArcGIS platform and environment to support critical ODOT GIS (Geographic Information System) data management and analysis functions.	Pending
Hydraulic Engineering Section (HES) Stormwater Asset Management	Department of Environmental Quality (DEQ) has mandated local and state agencies develop a database of stormwater assets that can be made available to DEQ and the public. To accomplish this mandate, a GIS database will be developed for ongoing management of Hydraulic Engineering Section (HES) stormwater assets.	Pending
Transportation Infrastructure Management – Strategic Planning (BIM, 3D Design, Digital Twins)	Strategic planning initiative for modernizing transportation infrastructure management including BIM (Building Information Modeling), 3D design, and digital twins capabilities. As applied to highway infrastructure, BIM is a collaborative work method for structuring, managing, and using data and information about transportation assets throughout their lifecycle (i.e., design and construction to operations and maintenance).	Pending
Trucking Parking Information Management System	As part of a tri-state federal grant request, Oregon has agreed to partner with Washington and California to install a Truck Parking Information Management System (TPIMS) for the I-5 corridor in public rest areas. TPIMS is a technology solution that can sense when a truck space is empty and communicate that information in real time to truck operators to help inform them of parking opportunities.	Pending
Weigh-in-Motion Infrastructure	Upgrade networking infrastructure to support weigh-in-motion services for Motor Carrier scale locations across the state.	Active
Over Dimension Permit System Replacement	Commerce and Compliance modernization initiative implementing a new statewide automated routing and permitting system for single- trip permit issuance. The new platform will replace legacy mainframe applications, integrating with other ODOT business functions and partners to minimize risk of damage to critical highway infrastructure.	Active
Commercial Vehicle Registration Replacement	Commerce and Compliance modernization initiative implementing a new enterprise-class system supporting commercial vehicle registration, federal International Registration Plan (IRP), and International Fuel Tax Agreement (IFTA) reporting functions for motor carriers. The new platform will replace legacy mainframe applications and integrate with other Commerce and Compliance services.	Active
Rail Safety SSO (State Safety Oversight) Process Management	Implementation of a web-based application to support SSO (State Safety Oversight) process workflows for tracking and reporting rail safety hazards, incidents, and investigations.	Active
DMV Voter Registration Interfaces	Revise DMV's current voter registration and verification interfaces with Secretary of State to support phase I of their systems modernization program.	Active
DMV AIC Satellite Call Centers	Implement technical solutions to address several needs at the DMV satellite call centers to improve quality and efficiency of Adults-In-Custody (AIC)-delivered services to DMV customers.	Active

Project / Program	Description	Status
DMV Lobby Management / Queueing	Implement new DMV lobby queuing services to provide improved customer support for the public at DMV field offices.	Active
DMV Automated Testing Devices (ATD)	Replace current automated testing device (ATD) solution to administer multi-language driver license knowledge tests both online and via kiosks located in field offices throughout the state.	Active
DMV Self-Service Kiosks	Implementation of self-service kiosks within grocery stores, DMV field offices and other locations, enabling customers to perform online service transactions from multiple locations.	Active
DMV Field Offices Wi-Fi	Deploy Wi-Fi access points in each of the 60 DMV field offices to provide secure network access for employees.	Active
DMV Remittance Processor Replacement	Implement a new remittance processor service to deposit all checks mailed to DMV headquarters.	Active
DMV Electronic Vehicle Registration (EVR) Expansion	Expand the Electronic Vehicle Registration (EVR) program including implementation of a vendor-provided system to support submission of vehicle registration data from in-state dealers. Additional functionality will assist out-of-state dealers, financial institutions, insurance companies and other entities eligible to participate.	Active
DMV eSignature / eCertification	Implement a defined set of eSignature and eCertification solutions for both vehicles and drivers-related forms in addition to solutions to electronically receive eSigned forms from dealers and other business entities such as insurance providers.	Active
Safety Grants Management System	Replace the current Safety Grants Management System with a new platform that will be able to use the mandatory Federal Grant Management Solution Suite (GMSS) when applying for, tracking, and reporting on projects funded by NHTSA, providing efficiencies, and maintaining records for Oregon's Transportation Safety Division.	Active
DMV SPEXS/S2S Upgrade Implementation	Update the DMV AAMVA (American Association of Motor Vehicle Administrator) SPEXS/S2S Interface, adding Driver History Record functionality and the ability to exchange non-CDLIS convictions / withdrawals electronically with other jurisdictions.	Pending
DMV Disaster Recovery Enhancements	Implement Disaster Recovery enhancements to meet DMV Recovery Time Objectives (RTOs) for critical business services.	Pending
DMV Electronic Lien System	Implementation of legislation enacting a new program allowing ODOT and financial institutions to exchange vehicle ownership information electronically for vehicles that are financed. Ownership information will be sent and stored electronically instead of a paper title.	Pending
ODOT Customer Relationship Management – Strategic Planning	Develop a strategy for delivering foundational Customer Relationship Management business capabilities to support all ODOT customer-facing services.	Pending
ODOT Public Records Requests Management System	Implementation of the GovQA Public Records Request Management System (PRRMS) to provide a modern and centralized repository for ODOT's public records requests.	Active
ODOT PCI DSS Version 4.0 Compliance	Review new Payment Card Industry Data Security Standard (PCI DSS) version 4.0 security compliance requirements to identify initiatives and/or projects required to attain Agency PCI compliance and track related initiatives to achieve the compliance goals.	Active
TAMS Replacement Strategic Planning	Support for the Workforce Central application providing ODOT's Time and Attendance Management services is ending December 2025. The focus of this initiative is to complete strategic planning, analysis. and business case development to support the subsequent project to transition the Human Resources time tracking and absence management functions, tentatively to the state's enterprise HR platform (Workday).	Active
Time and Attendance Migration	Following completion of the TAMS Replacement Strategic Planning, ODOT intends to initiative a project to migrate from the Workforce	Pending

Project / Program	Description	Status
	Central Time and Attendance application, tentatively to the State's	
UD Anglighting and Date	enterprise HR platform (Workday). Implement various application and data integration enhancements	Develop
HR Application and Data	to support decommissioning the legacy ODOT Human Resources	Pending
Integration	applications still in use following migration to the enterprise	
	Workday platform in 2019, improving operational efficiency,	
	records management, and reporting.	
Financial Management	Complete pre-planning work, including identification of critical	Pending
Modernization: Pre-Planning	financial management business capabilities, prior to participating in Enterprise Financial Management System Planning project	
	Dependency: Mainframe Applications – Current State Architecture.	
Enterprise Data Lakehouse /	Complete planning and implementation of pilot projects for an	Active
Data Catalog – Pilot	enterprise cloud data lakehouse platform and data catalog to	
	support improved data management, governance, sharing and	
	data-informed decision-making In support of current ODOT data management modernization	Densliter
ODOT Enterprise Data	initiatives for data asset lifecycle management and governance,	Pending
Lakehouse Implementation	complete implementation of a scalable, secure, cloud-agnostic data	
	lakehouse as the primary online analytical processing (OLAP) data	
	repository for data analytics and reporting to support data-	
	informed, evidence-based decision-making	D
ODOT Enterprise Data Catalog	In support of current ODOT data management modernization for holistic data governance, proactive data management, and data	Pending
	stewardship processes, complete implementation of a SaaS solution	
	for data cataloging and metadata management, providing a central	
	location for identifying, cataloging, defining, and making findable all	
	crucial data assets at ODOT.	
ODOT Information Security	Complete priority enhancements for ODOT's Information Security Program for 2023-25 to mitigate risks and improve the agency's	Active
Program Enhancements 2023-25	overall cybersecurity posture.	
Security Certificate	Migrate ODOT's PKI security certificate management services to a	Active
Management: Cloud Migration	cloud platform (PKIaaS), leveraging the existing software provider.	
IT Service Management (ITSM)	Complete priority IT Service Management (ITSM) enhancements for	Active
Enhancements 2023-25	the 2023-25 biennium to improve service delivery, customer	
	satisfaction, and operational efficiency. Enhancements include	
	Remedy ITSM upgrades, standardizing service request processes and eliminating technical debt associated with legacy applications.	
	In addition, we plan to develop and publish an initial IT Services	
	Catalog.	
IT Infrastructure Lifecycle	Complete planning and implementation of priority infrastructure	Active
Management and Optimization	lifecycle management upgrades and optimization objectives for the	
2023-25	2023-25 biennium	
Mainframe Applications:	In support of related ODOT and enterprise business and IT	Pending
Current State Architecture	modernization initiatives, complete current state (baseline) architecture development for the ODOT applications and associated	
	business functions hosted on the State of Oregon mainframe	
	system.	
Enterprise PPM and Governance	Complete critical people, process, and technology enhancements to	Pending
Enhancements	improve Project Portfolio Management (PPM) capabilities and	
Microsoft 26E Contont Microtion	related governance processes. Complete migration of enterprise content (unstructured file	Donding
Microsoft 365 Content Migration	services data) to Microsoft 365, the state's Enterprise Digital	Pending
	Workplace / content management platform, to improve efficiency	
	and collaboration, and optimize cost, resulting in elimination of the	
	related IT infrastructure at the State Data Center	

Enterprise Projects and Programs

In addition to ODOT's priority projects, the agency's modernization initiatives are dependent on critical business capabilities delivered through enterprise projects and programs, sponsored by either EIS or DAS. This list is not inclusive of all programs and projects contemplated by EIS or DAS. Related initiatives continuing or initiating within the 2023-25 or 2025-27 biennium:

Project / Program	Status
EIS Microsoft 365 Security Enhancements Program	Active
EIS Network and Security Modernization Program	Active
EIS Enterprise Data Center Services - Resilient Site Phase 2	Pending (2023-25)
EIS Project and Portfolio Management (PPM) Upgrade	Pending (2023-25)
DAS Business Modernization (ERP): OregonBuys Enterprise	Active
DAS Business Modernization (ERP): HR Enhancements	Pending (2023-25)
DAS Business Modernization (ERP): Financial	Pending (2025-27)
Management System Planning	

In support of the strategy to establish Effective Planning and Governance (Strategic Goal #5), the Project and Portfolio Management Office will begin to track dependencies and manage resource allocation associated with these critical enterprise initiatives.

9.3 STRATEGIC ALIGNMENT

The following matrix depicts alignment between the <u>IT Strategic Goals</u> and some of the major projects and programs within the ODOT portfolio, identifying alignment with these strategies and / or delivery of related objectives:

	IT Strategic Goals						
	#1	#2	#3	#4	#5	#6	#7
Project / Programs (Sample initiatives)	Enable Strategic Initiatives	Customer Focus	Modernization and Sustainability		Effective Planning and Governance	Cybersecurity and Business Continuity	IT Service Management Excellence
Oregon Toll Program Implementation	~	✓		✓			\checkmark
Connected Vehicle Ecosystem (CVE) Implementation Program	~	~					
Road Usage Charging (RUC) Enhancements	 ✓ 	~	✓			~	
ITS MicroMain System Replacement			~			✓	
Transportation Operations Center System (TOCS) Replacement		~	~			~	
AASHTOWare Project One Source of Truth			~				
Over Dimension Permit System Replacement		\checkmark	✓			✓	
Commercial Vehicle Registration		\checkmark	\checkmark			~	
DMV: Lobby Management/Queueing		\checkmark	\checkmark				
DMV: Automated Testing Devices		\checkmark	\checkmark				
DMV: Self-Service Kiosks		~	\checkmark				
ODOT Customer Relationship Management – Strategic Planning		\checkmark	\checkmark	\checkmark		\checkmark	
Time and Attendance Migration			✓	\checkmark		~	
Enterprise Data Lakehouse / Catalog Pilot			\checkmark	✓		✓	
Enterprise PPM and Governance Enhancements			\checkmark	\checkmark	~		✓
Information Security Program Enhancements					✓	✓	\checkmark
Microsoft 365 Content Migration			\checkmark	✓		\checkmark	\checkmark