

Executive Summary

Oklahoma Department of Transportation (ODOT) has developed a Digital Delivery Program (DDP) based on a [Gap Assessment](#) and [Strategic Plan](#) that is funded through an Advanced Digital Construction Management Systems (ADCMS) Grant. The DDP includes key components that define certain foundational changes within the agency to be able to adapt to technological industry advancements. The strategic plan outlines these components into three tactical and five strategic goals to guide the development of the program and focuses on adapting current processes for digital delivery and lifecycle data exchanges. The tactical goals are achievable within one to three years, depending on the level of resources available. These are activities with low barriers to entry that can be done in conjunction with current project development and are listed first in this document. Following the tactical goals are the strategic goals that are achievable within three to seven years. These are high value activities that have prerequisites established in the tactical goals. The implementation plan defines the phased approach to these goals and the steps necessary to meet the targeted digital maturity levels outlined in the ODOT gap assessment. The plan contains an overall implementation approach for each task along with key progress metrics and methods for aligning with industry standards such as openBIM and BIM model use cases.

Implementing the program will take numerous stakeholders and a holistic approach to meet the maturity goals by the end of 2027. Establishing the program requires incorporating low barrier to entry tasks, prerequisite model use cases, and industry standards for faster adoption of model-based design deliverables. Foundational guidance documents will be developed first, prior to the initial phase of the pilot program and initiation of construction phase programs. As part of this approach, special consideration is given to the following:

- Identification of roles and responsibilities of key stakeholders to provide clarity and accountability from the start.
- Establish and prioritize BIM model use cases for the pilot program.
- Monitor the advancement of industry standards that will be implemented throughout the program, such as open data standards and openBIM.
- Conduct additional organizational activities that are foundational for the program.

The plan contains specific implementation task descriptions and guidance for the tactical and strategic goals. One of the key success factors of the plan is empowering the workforce through workforce development. As such, each task has a breakdown of education and training activities as well as potential procurement needs. Each task also has prerequisite and corequisite tasks, along with an approximate starting schedule based on a quarterly calendar formatted into a summary table, as shown below. The list of individual tasks for the tactical and strategic goals within the implementation plan is also provided.



Prerequisite Tasks	Corequisite Tasks	Timing Start
Any tasks that serve as dependencies	Tasks developed in tandem due to overlapping material and potential efficiencies. (Tasks developed simultaneously are not necessarily corequisite)	Approximate Quarter & Year task begins

Deliverables	Workforce Development		
	Education	Training	Procurement
Files such as documents, memos, reports, educational materials, and PowerPoint slides	Educational sessions that provide information and background to better inform stakeholders	Training sessions held that provide instruction on using workflows, software/hardware, etc.	Software and hardware required for task



Tactical Goal 1

Establishing Change Management, Communication and Engagement Plans

This goal focuses on the development of multiple foundational plans necessary for the implementation of digital delivery throughout the agency. The tasks included in this goal include:

- TG-1.1 Implementation Plan
- TG-1.2 Change Management Plan
- TG-1.3 Communication Plan
- TG-1.4 Engagement Plan
- TG-1.5 Risk Registry

workflows. The tasks included in this goal include:

- TG-2.1 Information Management Improvement Plan
- TG-2.2 Develop and Implement Common Data Environment (CDE)
- TG-2.3 Guidance for CDE
- TG-2.4 ISO 19650 Training and Education Development
- TG-2.5 Digital Delivery Guidelines
- TG-2.6 Modeling Standards Manual
- TG-2.7 Quality Management for Digital Delivery Guidelines
- TG-2.8 Pilot Project Criteria



Tactical Goal 2

Establish Process Standardization Aligning to Industry Standards for Data Exchanges

This goal focuses on the development of processes and guidance to implement digital delivery following industry standards including ISO 19650 and digital delivery



Tactical Goal 3

Establish Workforce Development Education and Training Programs

This goal focuses on the development of training and education plans as well as materials that will be implemented under the strategic goals. The tasks included in this goal include:



- TG-3.1 Software Training Manuals and Guidance Documents
- TG-3.2 Construction and Inspection Guidelines
- TG-3.3 Training and Education Plan
- TG-3.4 Technology Criteria



Strategic Goal 1

Implementation of Outreach and Training Programs

This goal focuses on training programs for inspectors and contractors, along with industry outreach and education with multiple stakeholder areas. The tasks included in this goal include:

- SG-1.1 DBE Contractor Needs Assessment
- SG-1.2 Inspector Training Program
- SG-1.3 Contractor Training Program
- SG-1.4 Mock Lettings
- SG-1.5 Hardware Procurement
- SG-1.6 College and Career Tech Program
- SG-1.7 STEM K-12 Initiative
- SG-1.8 Local Agency Outreach
- SG-1.9 Industry Education and Training



Strategic Goal 2

Strategy and Risk Calibration

This goal focuses on the continual monitoring and alignment of strategy and risk management throughout the program. The tasks that are included in this goal are:

- SG-2.1 Strategic Plan Updates
- SG-2.2 Risk Registry

Strategic Goal 3



Championing change through leadership empowerment

This goal focuses on implementing the change management and communication plans through empowering champions. The tasks included in this goal include:

- SG-3.1 Identify Champions and Stakeholders
- SG-3.2 Implement Change Management through Communication



Strategic Goal 4

Lifecycle Data Exchanges

This goal focuses on a phased approach to implementing data exchanges for the entire asset lifecycle through a pilot project program. The tasks included in this goal include:

- SG-4.1 Pilot Project Program
- SG-4.2 Industry Peer Exchanges
- SG-4.3 After Action Reviews



Strategic Goal 5

Lifecycle data processes for operations and maintenance

This goal focuses on developing lifecycle data processes for data collection and exchanges for operations and maintenance. Special attention will be given to e-ticketing and data exchanges with AASHTOWare Project (AWP). The tasks included in this goal include:

- SG-5.1 Asset Management Assessment
- SG-5.2 Digital As-builts with Ancillary Assets

