

JOINT TECHNOLOGY COMMITTEE RESPONSES AUGUST 23, 2023

Colorado Electronic Birth System Replacement (VESCO)

1. Which elements of the project are currently underway? Which elements have been completed since the department last updated the JTC? Is the project on schedule with initial plans?

Response: The Health Informatics Data System (HIDS) portal is currently undergoing a modernization effort to upgrade the portal to a cloud-based solution that will operate in Amazon Web Services (AWS) and is expected to be functional by the close of December 2023.

The backend database structure that will support the new Marriage and Dissolution application has begun. The team identified areas of the current structure that need to be modified in order to promote the long-term life of the application. The team also identified two system integrations that will require additional solutions planning for implementation in the cloud-based environment. This work is still scheduled to be completed by March 2024.

The contract with the vendor to add the fetal death module to COVES was executed on December 1. This module has an anticipated go-live at the end of Quarter 1 2024. We are researching the best solution for the Induced Terminations of Pregnancy application and plan to have a decision by the end of 2023.

The new Colorado Vital Events System (COVES) project, which includes the upgrade of both birth and death registration systems, continues and is on schedule to to be deployed January 2024. This project will resolve outstanding technical debt for both systems and include a single sign-on for all users who need to register, modify, or issue birth and death certificates.

2. How much money has been obligated and spent at this point? Please break down amounts and spent separately.

Response: \$1,410,064 was appropriated from the Capital IT fund for the Vital Event System of Colorado (VESCO) system for FY 2023-24 through FY 2025-26. As of December 5, 2023:

\$632,697.85 is encumbered or obligated. Expenses include OIT support for system development and costs for the COVES vendor to add 2-factor authentication and the fetal death module to the current system.

\$92,434.69 expended. This figure reflects OIT work performed through September and agency personal services expenses through October.

3. What is anticipated to be completed by the next quarterly update?

Response: By the next quarterly update, the program expects to complete:

- HIDS portal will be complete. This portal is the platform upon which the marriage and dissolution system will eventually sit once complete.
- New COVES system will be live.
- Development of the marriage and dissolution systems will be near complete.
- New Electronic Death Registration system will launch, resolving all outstanding technical debt.
- Fetal Death System implementation will be near completion.
- Solution for an ITOP system upgrade will be identified and in process of implementation.

4. When does the department/institution anticipate that the project will be complete?

Response: The department anticipates that the systems involved with this project will be completed in the following order:

- COVES Birth/EDR: January 2024
- Marriage & Dissolution: March 2024
- Fetal Death: March/April 2024
- ITOPS: July 2024

5. Are there any important concerns or updates you wish to share with the committee?

Response: There are no additional updates to share with the committee at this time.

6. For multi-phase projects, has there been any insight gained through this phase of the project that will cause changes in the next requested phase of the project?

Response: There are no changes to the project at this time.

Air Pollution Control Division Stationary Sources Data Modernization

1. Which elements of the project are currently underway? Which elements have been completed since the department last updated the JTC? Is the project on schedule with initial plans?

Response: The Stationary Sources database is the primary technology tool used by CDPHE’s Air Pollution Control Division to manage permitting, inspections, enforcement, compliance, billing, emissions, and data reporting associated with stationary sources. This system supports regulatory actions associated with 2,500 companies with 14,000 emission facilities and 43,000 emission sources (like oil and gas, power utilities, manufacturing, construction, landfills, agriculture, and mining) while informing communities and individual constituents interested in industry performance.

There are multiple aspects of the Stationary Sources Project currently underway. For example, efforts to better understand the legacy system environment and processes, while researching and building the initial permit application processing component and infrastructure of Salesforce continue. This includes a user portal, complex process flows, rules and automation logic, object creation, user profiles setup, record model, and user interface design.

Regarding the new data warehouse, the team has completed the build of new views based on the legacy database used for permits, completed the foundational setup of Amazon Web Service's database hub where data is stored, established a data pipeline, and successfully consumed a snapshot of data to prove that it could be queried and visualized using tools such as Tableau and ArcGIS.

We are pleased the project is still on schedule with initial plans. Various technical updates include:

- The Salesforce Proof of Concept is complete and successful utilizing a low/no code setup.
- The initial build of Title V permitting components and workflow processes for the Title V team is complete in Salesforce.
- A customer web portal was created.
- Two of the 35 electronic forms that will be available for the Title V Stationary Sources process are complete.
- A new scope of work was created and is expected to be used to continue the build of the Title V Stationary Sources process and digitized intake.
- The Salesforce Land Development work (proof of concept) is being migrated into a production environment.
- Two new processes (Environmental Justice Summary Form and Modeling Determination Form) began development. These two processes were made a priority based on demand and efficiency gains. The build for Gasoline Service Station, Surface Coating, and Crushers Applications and Permitting also began.
- The AWS data pipeline is moving toward production.
- The data visualization was shared with the public, feedback was received, and updates were incorporated into the visualization. The tool was published on the department's website along with the instruction manual, FAQ document, and other data resources.
- Work began for nine more processes in Salesforce. Initial design starting with OIT includes:
 - Relocation Notices
 - Notice of Start Up
 - Gasoline Service Station Application and Permitting
 - Surface Coating Application and Permitting
 - Crushers/Screens Application and Permitting
 - Crematory Incinerators Application and Permitting
 - Oil and Gas Well Completion Application and Permitting
 - EJ Summary
 - Permit Modeling

2. How much money has been obligated and spent at this point? Please break down amounts and spent separately.

Response: The following funds were spent through November 2023.

Project Area	Cost
Smart Comment Software	\$ 36,000
Conga Software	\$ 1,987
Salesforce Licenses, annual commitment	\$ 209,000
Land Development Proof of Concept Build	\$ 120,000
Resources for Amazon Warehouse Services (AWS) setup/build	\$ 219,150
Storage (AWS)	\$ 6,723
Development of 9 additional work processes	\$ 278,000
Integration resources (Salesforce/Onbase)	\$ 171,150
Resources for Initial Title V process build	\$ 300,000
Resources for Additional Title V process build	\$ 1,527,625
Data Pipeline resources (Salesforce/AWS)	\$ 99,960
Total	\$ 2,969,595

3. What is anticipated to be completed by the next quarterly update?

Response: By the next quarterly update, the program expects to complete:

- Continued build of the permitting process for Title V.
- Additional ingestion of data into the Data Lake from the primary legacy system.
- Launch of Land Development flow into production environment and availability on the website.
- Further development of Salesforce to begin to build seven additional processes (See list in Question #1).
- Completion of three additional processes (Environmental Justice Summary, Modeling Determination, and Gasoline Service Stations)
- Further development of Salesforce to begin to build six additional processes (See list in Question 1).
- Refinement of data visualization tool.

4. When does the department/institution anticipate that the project will be complete?

Response: The department anticipates it will take approximately three years to complete most components and business processes with additional elements and functionality to be phased-in over a five-year period.

5. Are there any important concerns or updates you wish to share with the committee?

Response: The project is progressing as planned for the initial year of implementation, which focused on overall project planning and scoping, platform and tool selection processes, proof of concepts, finalizing licensing and distribution of future work between OIT and contractors.

6. For multi-phase projects, has there been any insight gained through this phase of the project that will cause changes in the next requested phase of the project?

Response: Through this phase of the project, the division learned more about the approval processes with all the different teams. But, there are no changes to the project at this time.