# Joint Technology Committee

## December 12, 2023

# Agenda

- **Introductions**

- **FY24 Project Updates**
  - **Vital Event System of Colorado Replacement**
  - **Air Stationary Sources Data Modernization**

- **FY25 Budget Requests**
  - **Women, Infants and Children (WIC) Modernization**
  - **Health Facilities COHFI and ASPEN Modernization**

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# Presenters

- Erick Scheminske, *Chief Operating Officer*

- Alex Quintana, *State Registrar and Director of Vital Records, Center for Health and Environmental Data*

- Adam Wozniak, *Stationary Sources Product Owner, Air Pollution Control Division*

- Brett Reeder, *Nutrition Services Branch Director, Prevention Services Division*

# Vital Event System of Colorado (VESCO) Phase II Update

## Alex Quintana, State Registrar and Director of Vital Records

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# Project Update

- ## HIDS Portal

  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.

- ## Marriage and Dissolution

  The backend database structure that will support the new 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.

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# Project Update

- ## Fetal Death

  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.

- ## ITOP

  We are researching the best solution for the Induced Terminations of Pregnancy application and plan to have a decision by the end of 2023.

- ## Electronic Death Registration

  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.

# Finance Update

$1,410,064 was appropriated from the Capital IT fund for the Vital Event System of Colorado (VESCO) system for FY 2023-24 though 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.

# Next Quarter Expectations

**By the next quarter, expectations are that the:**

- 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 near completion.

- Solution for an ITOP system upgrade will be identified and in process of implementation.

# Stationary Sources Data Modernization Update

Adam Wozniak, Stationary Sources Product Owner

# Project Update

- ## Land Development Permit Application

  Work to harmonize the user interface, forms, and object model with the build for the Title V process is complete and the application is in production environment.

- ## Title V (Major Source) Permit Application Foundational Build

  The initial process is built, and two digitized forms, and an authenticated web portal for Title V permits are complete. The remaining form and flow construction is underway with an estimated completion date of June 2024.

# Project Update

- ## Additional Process Build

  The build for nine additional processes is underway. Two new processes were added and prioritized: the Environmental Justice Summary and Modeling Determination. Integration between Salesforce and Hyland OnBase document product is complete.
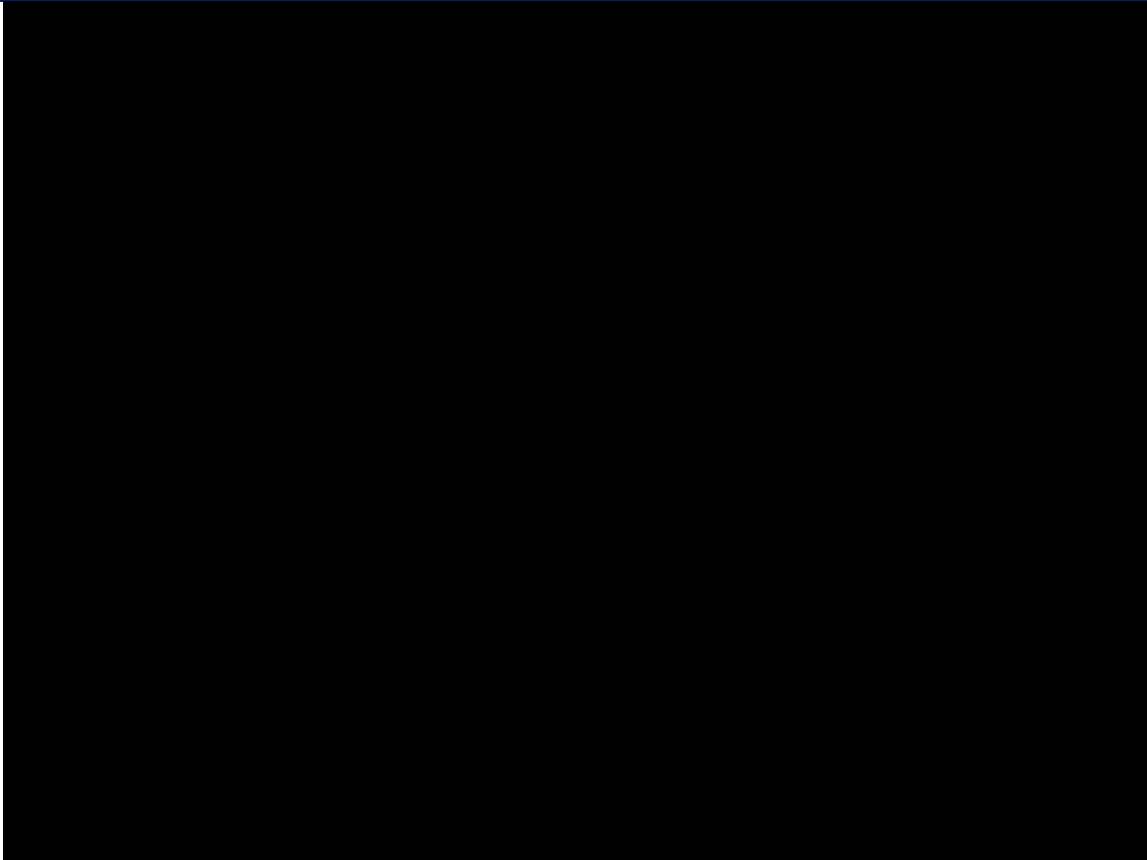
- ## Data Lake Foundational Build

  The data pipeline connection between legacy db and the new storage container is complete.

- ## Data Visualization and Citizen Engagement

  The visualization tool was modified based on feedback received from the public and launched on the Air Pollution Control Division website.

# Project Accomplishments

- Data Modernization Team Created
- Salesforce Proof of Concept Completed and Successful
- Title V Foundation Constructed
- Initial Title V Forms Developed, Tested and Placed into Production
- Land Development Forms Developed, Tested and Placed into Production
- Integration of Salesforce with OnBase
- Development of Guidance Documents and Standard Operating Procedures to Assist with Online Submission Tool
- Contracts Developed and Approved for Continued Salesforce Development
- AWS Cloud Environment Developed
- AWS Cloud Proof of Concept Completed and Successful
- Data Pipeline Completed
- Community Engagement for Data Access
- Beta Release of Data Visualization Tool
- Development of Guidance Documents to Assist with Data Visualization Tool
- Release of Data Visualization Tool for Public Use
- Continued Public Engagement

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# Colorado WIC MIS Modernization

## Brett Reeder, Nutrition Services Branch Director

# Project Overview

- WIC Management Information Systems (MIS) are the primary technology tools used by states and local agencies to manage WIC cases and benefits.

- The current Colorado WIC (COWIC) MIS, "Compass", is outdated, falls short in meeting program requirements, and is not on a development path to adequately address these shortcomings.

- Other states already utilize more advanced MIS options that better align with COWIC's needs.
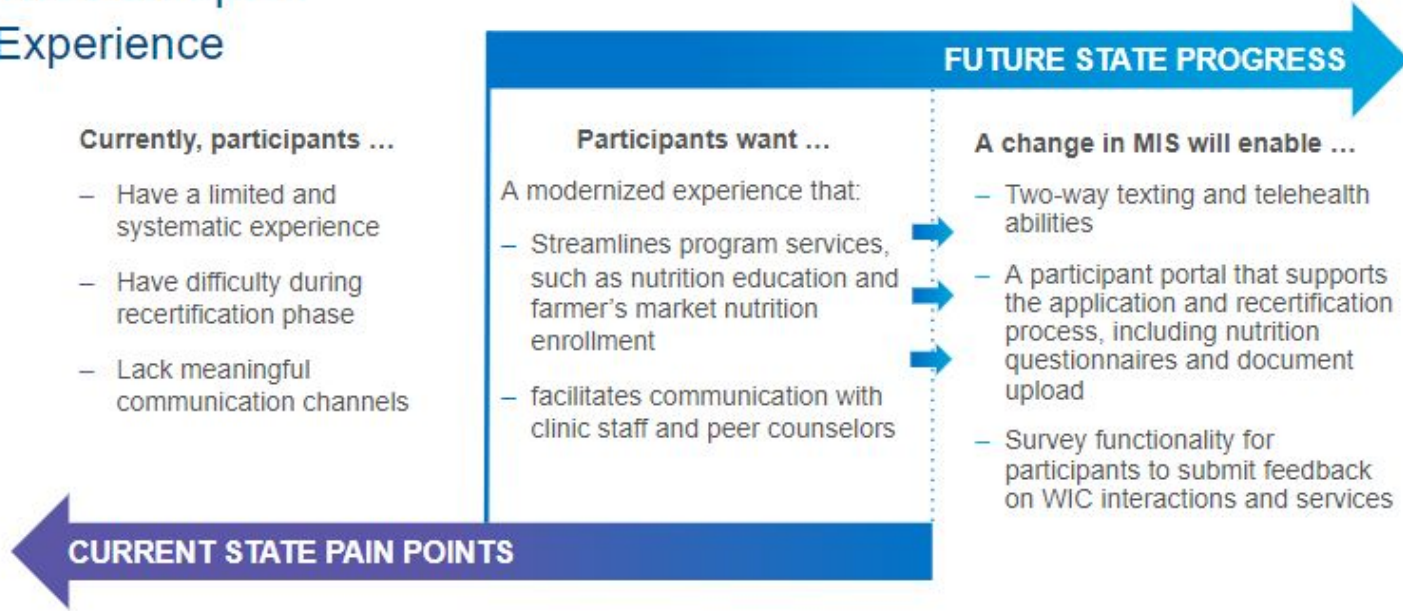
# Project Overview

- This project funds the adoption of a modern WIC MIS system currently utilized by other states.

- Primarily federally funded, this $500K request is part of a $3.5M, four-year (FY2024 – FY2027) capital construction IT project for COWIC to adopt a modern system.

# Vision For Program Participants

## From Pain Points to Progress
### The Participant Experience

**FUTURE STATE PROGRESS** →

**Currently, participants …**

- Have a limited and systematic experience
- Have difficulty during recertification phase
- Lack meaningful communication channels

**Participants want …**

A modernized experience that:

- Streamlines program services, such as nutrition education and farmer's market nutrition enrollment
- facilitates communication with clinic staff and peer counselors

**A change in MIS will enable …**

- Two-way texting and telehealth abilities
- A participant portal that supports the application and recertification process, including nutrition questionnaires and document upload
- Survey functionality for participants to submit feedback on WIC interactions and services

← **CURRENT STATE PAIN POINTS**

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# Vision For Local Agencies

## From Pain Points to Progress
### The Local Agency Experience

**FUTURE STATE PROGRESS**

**Currently, Local Agencies ...**

- Lack appointment scheduling customization and collaboration

- Have duplicative and manual processes, like data entry and information verification

- Are frustrated with the user interface and the limited accessibility

**Local Agencies want ...**

A modernized clinic experience that:

- Minimizes workload on staff to maintain the data between systems

- Enables automation and standardization of routine activities

- Facilitates relationship building with WIC participants

**A change in MIS will enable ...**

- Integration with referral platform and participant portal

- Customized calendar views, appointment templates, and translation options

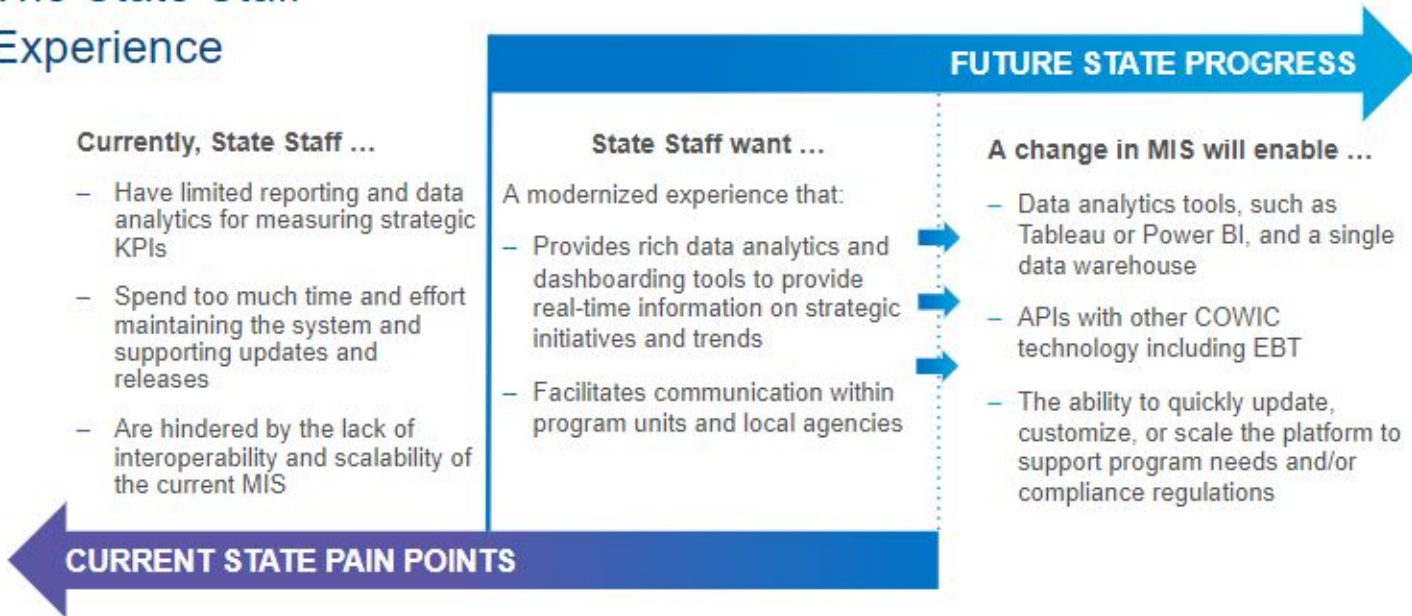- Better navigation and search functionality throughout the MIS modules

**CURRENT STATE PAIN POINTS**

# Vision For State Staff

## From Pain Points to Progress

### The State Staff Experience

**FUTURE STATE PROGRESS**

**Currently, State Staff ...**

- Have limited reporting and data analytics for measuring strategic KPIs

- Spend too much time and effort maintaining the system and supporting updates and releases

- Are hindered by the lack of interoperability and scalability of the current MIS

**State Staff want ...**

A modernized experience that:

- Provides rich data analytics and dashboarding tools to provide real-time information on strategic initiatives and trends

- Facilitates communication within program units and local agencies

**A change in MIS will enable ...**

- Data analytics tools, such as Tableau or Power BI, and a single data warehouse

- APIs with other COWIC technology including EBT

- The ability to quickly update, customize, or scale the platform to support program needs and/or compliance regulations

**CURRENT STATE PAIN POINTS**

# An Improved MIS

- **Improved User Experience:** A sample of improved user experience includes ability to collaborate on a participant record, automation (risk codes, questionnaires, etc.), and ability to prescreen uploaded documents.

- **More Rapid Policy Alignment**: Ability to quickly align to changing USDA regulations and state policy, the Power Platform emphasizes low-code and no-code processes that allow program staff to make quick changes.

- **Client Centered Workflows**: Flexibility to perform activities in parallel or whichever sequence works best for each family.

- **Vendor Portal:** A vendor portal for applications, document management, and electronic signatures.

- **Improved Data Reporting:** Improved data reporting, transparency ,and better public access to information through pre-made dashboards with a capability for analysts and power users to personalize their experience and analyze the available data according to their needs.

- **Cloud Based**: Existing systems are fully cloud based.

- **Reduced Staff Time:** Automation, reduced data entry burden, and low or no code solutions will reduce time required to maintain the system.

# Risk Mitigation

- **Cost Overruns / Insufficient Funding:** Selecting an existing system adopted by other states reduces unforeseen costs, and, as a result, reduces over-run risk. Contracts will protect from cost overruns.

- **Lost System Functionality:** Improved system functionality is anticipated based on existing systems utilized by other states. However, some desired functionality may be lost anytime a new technology system is adopted. The feasibility study performed mitigated this risk and the effort would be continued during the procurement process.

- **Data Loss:** There's always a risk of data loss when transferring systems. Access to the legacy system would be maintained beyond the time the new system is stood up to protect from data loss during initial data transfer.

- **Poor System Adoption:** Changing systems, even when improving them, comes with increased training and support needs. Up to 12 months of more intensive training and support would follow implementation.

# Maximize Federal Funding

- ## Time Bound Federal Funds

  Multiple federal funding streams are used for the project, which have time constraints ranging from September 2024 to September 2027. These funding streams are expended on a first-in-first-out basis.

- ## One-time Federal Investments

  Many of the funds are related to one-time federal investments not available in future years.

# Health Facilities COHFI and ASPEN System Modernization

**Erick Scheminske, Chief Operating Officer**

# Project Overview

- The Health Facilities and Emergency Medical Services Division oversees approximately 3,500 state-licensed and federally certified health facilities. Including:

  - Hospitals
  - Skilled nursing facilities
  - Ambulatory surgical centers
  - Assisted living residences
  - Home care agencies
  - Homes for individuals with intellectual and developmental disabilities

- The division is statutorily required to visit licensed facilities for complaint investigations and to ensure quality of care, health, and safety standards are met at routine intervals.

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# Project Overview

- The division seeks to ensure that health facilities across the state meet minimum health and safety standards regardless of the status, geography, or income of residents and patients.

- Without the division's technical assistance and compliance assurance, seniors and people with disabilities are at greater risk of harm or death.

- The vast majority of licensed facilities serve Medicaid and lower income clients. Many residents in health facilities are seniors, individuals with disabilities, have lower incomes, and limited ability to care for and advocate for themselves.

# Project Overview

- The division's information and data systems serve many customers. Including:

    - Legislators and media (local and national)

    - Staff from approximately 3,500 state-licensed and federally certified health facilities

    - Hundreds of state employees at the Colorado Department of Public Health and Environment, the Colorado Department of Human Services, and the Department of Health Care Policy and Financing

    - Members of the public (more than 70,000 Coloradans reviewed facility inspection results over the past year)

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# Project Overview

- The division's information and data systems perform many functions. Including:
    - Track and store facility license and renewal applications
    - Record and store survey and inspection findings
    - Record and store complaints and investigation outcomes
    - Record and store incident reports that facilities are required to make
    - Track and store enforcement actions

# Project Overview

- Requesting up to $1.5M IT capital project funding to modernize the health facilities programs data system.

- The current custom code Colorado Health Facilities Interactive System (COHFI) would be replaced with a low code, integrated-vendor-supported, and cloud-based solution.

- The federal ASPEN System (Automated Survey Process Environment) lacks functionality and would be upgraded to the new federal iQIES system (internet Quality Indicator Evaluation System).

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# Thank you!