Colorado Department of Public Health and Environment
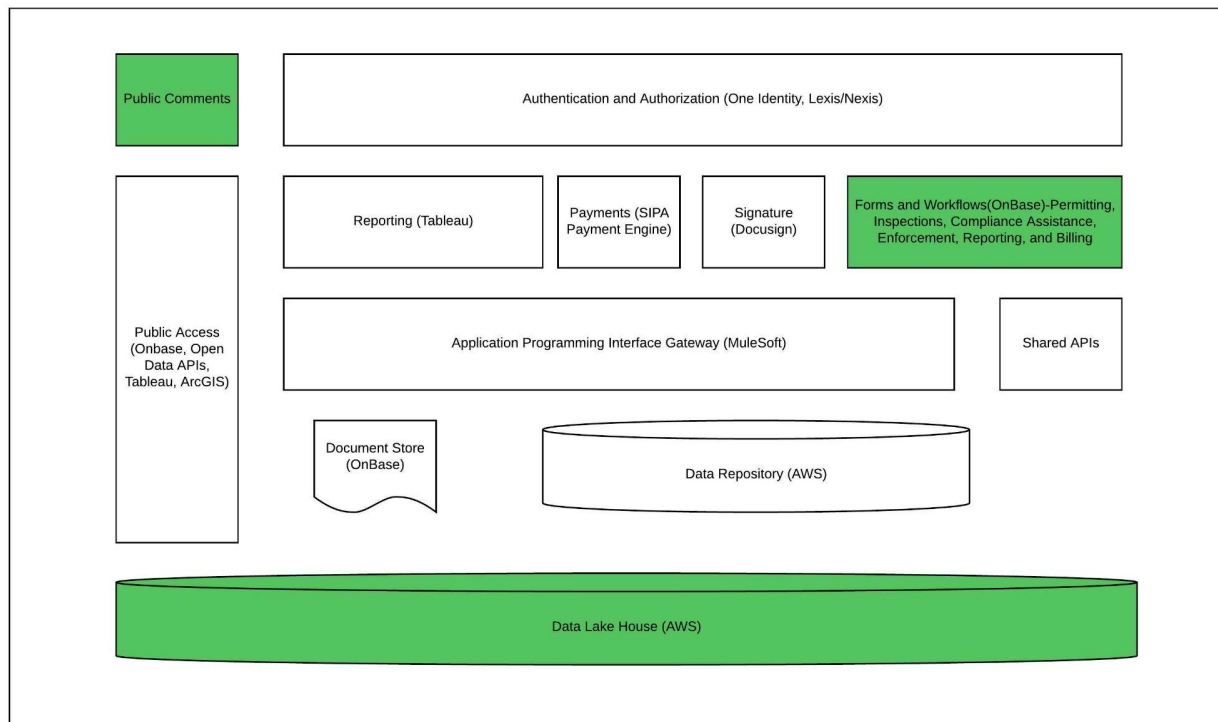
IT Modernization to Support our Air Quality Goals

Joint Technology Committee
October 18th, 2022

COLORADO
Department of Public
Health & Environment

COLORADO

Stationary Sources System Project Summary

- A capital IT project to modernize the outdated stationary sources data system used by CDPHE, Air Pollution Control Division (APCD).
  - FY23: Year 1 of 3, $4.1M
- The Stationary Sources database is the primary technology tool used by APCD to manage permitting, inspections, enforcement, compliance, billing, emissions, and data reporting associated with stationary sources
- The system scope is broad with 2,500 companies and 14,000 facilities
- Stationary source regulated entities include oil and gas, power utilities, manufacturing, construction, landfills, agriculture, mining, and retail (e.g., gas stations, dry cleaners)
- The Stationary Sources Database is an outdated technology – (developed in the mid-1990's)
- The system is paper-based, inefficient, and lacks critical functionality and agility

COLORADO
Department of Public
Health & Environment

Proposed Architecture of the Air Stationary Sources Solution

Green represents areas APCD is actively working on

Public Comments	Authentication and Authorization (One Identity, Lexis/Nexis)

Public Access (Onbase, Open Data APIs, Tableau, ArcGIS)

Reporting (Tableau)

Payments (SIPA Payment Engine)

Signature (Docusign)

Forms and Workflows(OnBase)-Permitting, Inspections, Compliance Assistance, Enforcement, Reporting, and Billing

Application Programming Interface Gateway (MuleSoft)

Shared APIs

Document Store (OnBase)

Data Repository (AWS)

Data Lake House (AWS)

COLORADO
Department of Public
Health & Environment

Project accomplishments since the last update

Hiring- Data Manager, Product Owner, and Data Visualization Specialist hired

CDPHE-OIT Partnership
- Enterprise and Data Architect support has been hired
- Identifying Salesforce licensing costs.
- Salesforce proof of concept topic has been identified
  - Land development application receipt and workflow processing
  - Salesforce is OIT approved, and is a low-code/no-code solution.
- Continued meetings with OIT and AWS on the Data Lakehouse proof of concept

Public Comment Software purchased-SmartComment
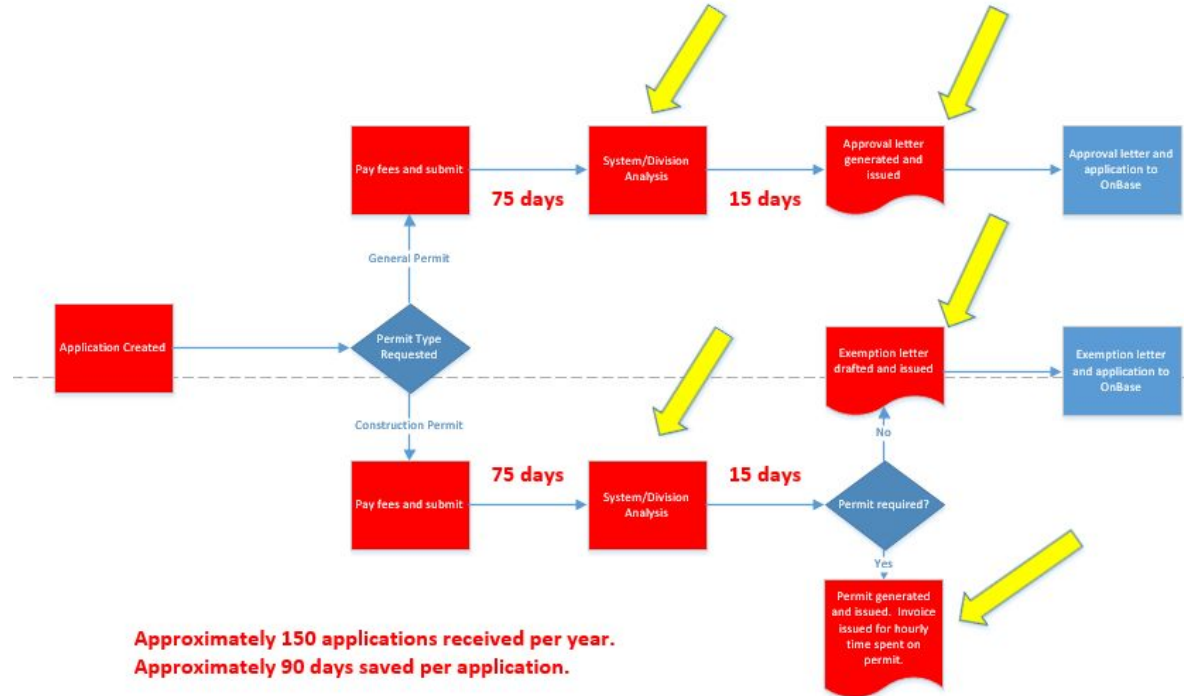- Software is an off-the-shelf tool used and recommended by other states

Project accomplishments: Stakeholder Engagement

Planned Outreach Activities

- Project Overview Fact Sheet

- Prepare Announcement (Distribute directly, use APCD and EJ Listservs, social media, target community groups, NGOs, scientific community and other stakeholders)

- Targeted email, calls and scoping discussions (October - November)

- Convene 2-3 meetings (November - December)

COLORADO
Department of Public
Health & Environment

Deeper Dive: the Proof of Concept Workflow

Land Development Application Process

Any issues/concerns the team has related to the project

- This month we have really focused on developing the most illustrative proofs of concept while wanting to move quickly.

- We are not only looking at off-the-shelf but also trying to understand where we can build off work the executive branch has already done.

- Beyond that and the big questions reviewed previously, no concerns!

COLORADO
Department of Public
Health & Environment

Project plans for the next period (November 2022)

Anticipated updates for the next JTC meeting

      Salesforce proof of concept progress

      Data Lakehouse AWS proof of concept

      Monitor implementation of the Public Comment Software

      Stakeholder engagement updates

Any help that's needed from the JTC/legislature

Please continue to connect your constituents to the upcoming stakeholder engagement and help us identify other opportunities to solicit feedback

COLORADO
Department of Public
Health & Environment

CDPHE

COLORADO

Thank you!

Erick Scheminske, Chief Operating Officer, CDPHE

Kris Kiburz, Senior IT Director, OIT

Andrew Putnam, Environmental Information Manager, CDPHE

Adam Wozniak, Business Product Owner, CDPHE