

Modernizing Workforce Intelligence on an Accelerated Timeline

How the Colorado Department of Labor and Employment modernized workforce intelligence in six months

The Colorado Department of Labor and Employment (CDLE) relied on workforce program data housed across multiple disparate systems and reporting processes.

In one instance, local workforce areas across Colorado submitted data monthly through Google Forms. CDLE staff then compiled the information into spreadsheets and manually developed reports and visualizations for leadership.

That was the most visible symptom of a bigger challenge, highlighting a broader opportunity to modernize and streamline workforce data reporting. Case management data lived in one system, labor exchange data in another, and unemployment insurance and legacy records in a third, with limited integration among them. Building stronger workforce intelligence required a consolidated view of that information. State leaders needed a clear picture of program performance, return on investment, and where training investments were having an impact, but no single system provided that consolidated view.



CDLE sought to develop a platform that could pull all of it together by a hard funding deadline of June 30, 2026.

ADAPTING AS THE PROJECT EVOLVED

When CDLE and Resultant scoped the engagement, both teams anticipated that much of the source data would be available to move into a modern analytics platform. As implementation began, the team identified additional dependencies involving third-party vendors: data sources weren't consistently available, extraction methods hadn't been established, and some datasets were not yet positioned to support the use cases originally planned.

The team identified what CDLE and its vendors needed to provide, set deadlines for those decisions, and reprioritized work as new information came in. When one use case wasn't ready to advance, the team shifted resources to another. That same approach carried over to Colorado's Office of Information Technology (OIT), whose approval process governed several technical aspects of the project without derailing the schedule.

OUTCOMES

- **Centralized workforce data** across multiple systems for more consistent reporting and analysis
- **Launched 14 dashboards** supporting workforce reporting and analysis
- **Reduced manual reporting** through automated dashboard updates and self-service access
- **Delivered the Workforce Intelligence Platform** by the June 30 funding deadline

ARCHITECTURE

The implementation introduced Snowflake, running on AWS, as CDLE's centralized data platform, with Looker as its business intelligence layer. While CDLE waited on Looker provisioning and approval, the team kept building the underlying data platform, deliberately separating the data layer from the reporting layer.

Resultant used an Extract-Load-Transform (ELT) approach to centralize business logic inside Snowflake. A single Looker semantic layer gave all 14 dashboards the same underlying business definitions, so numbers meant the same thing no matter which dashboard someone was looking at. Row-level security and data masking protected sensitive information across workforce programs.

FOURTEEN DASHBOARDS, ONE PLATFORM

By project close, Resultant delivered 14 dashboards supporting distinct workforce reporting and analysis use cases. These included a training provider scorecard, a training investment vs. in-demand skills report, a program ROI visualization, a RAPIDS apprenticeship programs report, and employment and training grant-monitoring dashboards designed to streamline previously manual reporting processes.



Some of those dashboards measure program performance and inform policy and investment decisions. Others were built purely for internal efficiency (the grant-monitoring rebuild chief among them). Instead of manually recreating reports each month, CDLE staff now update the underlying data, and dashboards refresh automatically: teams can explore trends, filter information, and export current reports without building charts and presentations from scratch.

CDLE expanded the engagement three separate times, adding new use cases, additional reporting capabilities, and expanded training to meet evolving project needs.

DELIVERED ON SCHEDULE



Despite the data challenges, the state technology approvals, and the shifting priorities, Resultant delivered the Workforce Intelligence Platform by the June 30 deadline.

CDLE now has a centralized platform designed to bring workforce information together, improving access to governed, reliable data for reporting and analysis. It reduces time spent preparing reports and supports greater use of information for data-informed decision-making. Leaders can use the platform to better understand program performance, workforce trends, grant activity, and investment outcomes across multiple workforce systems.