



# Saving Money, Increasing Flexibility: Colorado's Approach to Streamlining Data Collection and Improving Use

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# Current Periodic Data Collection

19 Periodic  
Collections  
from 178  
LEAs

Monitor compliance with federal and State law, regulations and standards.

Preparation of federal reporting requirements.

Respond to State legislative and board of education data requests.

Produce annual statewide summary publications.

Determine if classes are receiving instruction from Highly Qualified Teachers

# SchoolView – Pipeline Project

## Flexibility

Support the transition from periodic to transactional

- Provide a consolidated platform that can support a variety of data collection formats: flat file, csv, XML, web forms, etc.
- Support sophisticated LEAs move to transactional data submissions in near real-time using web services; while also
- Support less-sophisticated LEAs continue with periodic file based-submissions in the near term

## Optimization

Reduce the data collection burden on LEAs

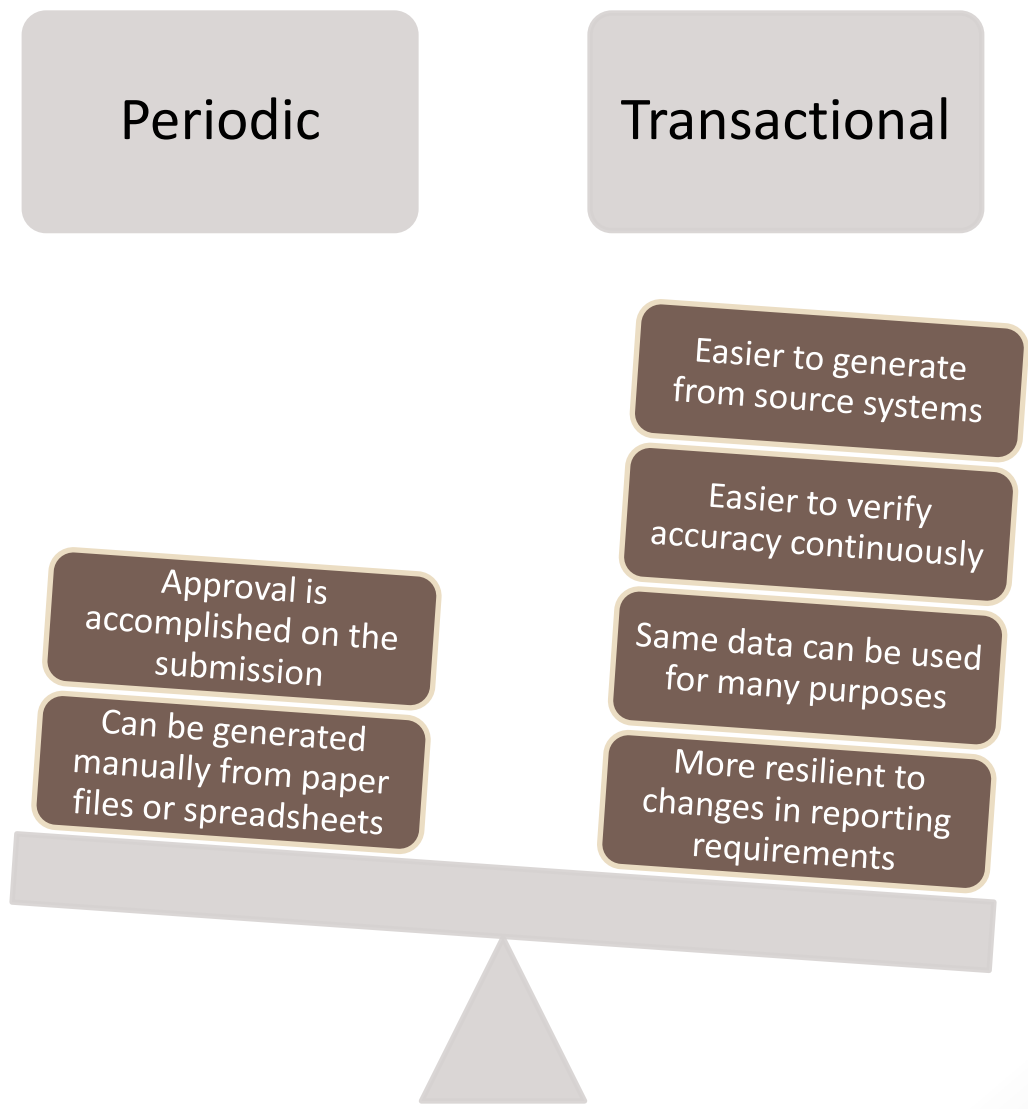
- Reduce data redundancies – reduce number of data elements collected by 20%.
- Reduce overall number of collections by 20%.
- Reduce number of resubmissions by an LEA by 50%.

## Extensibility

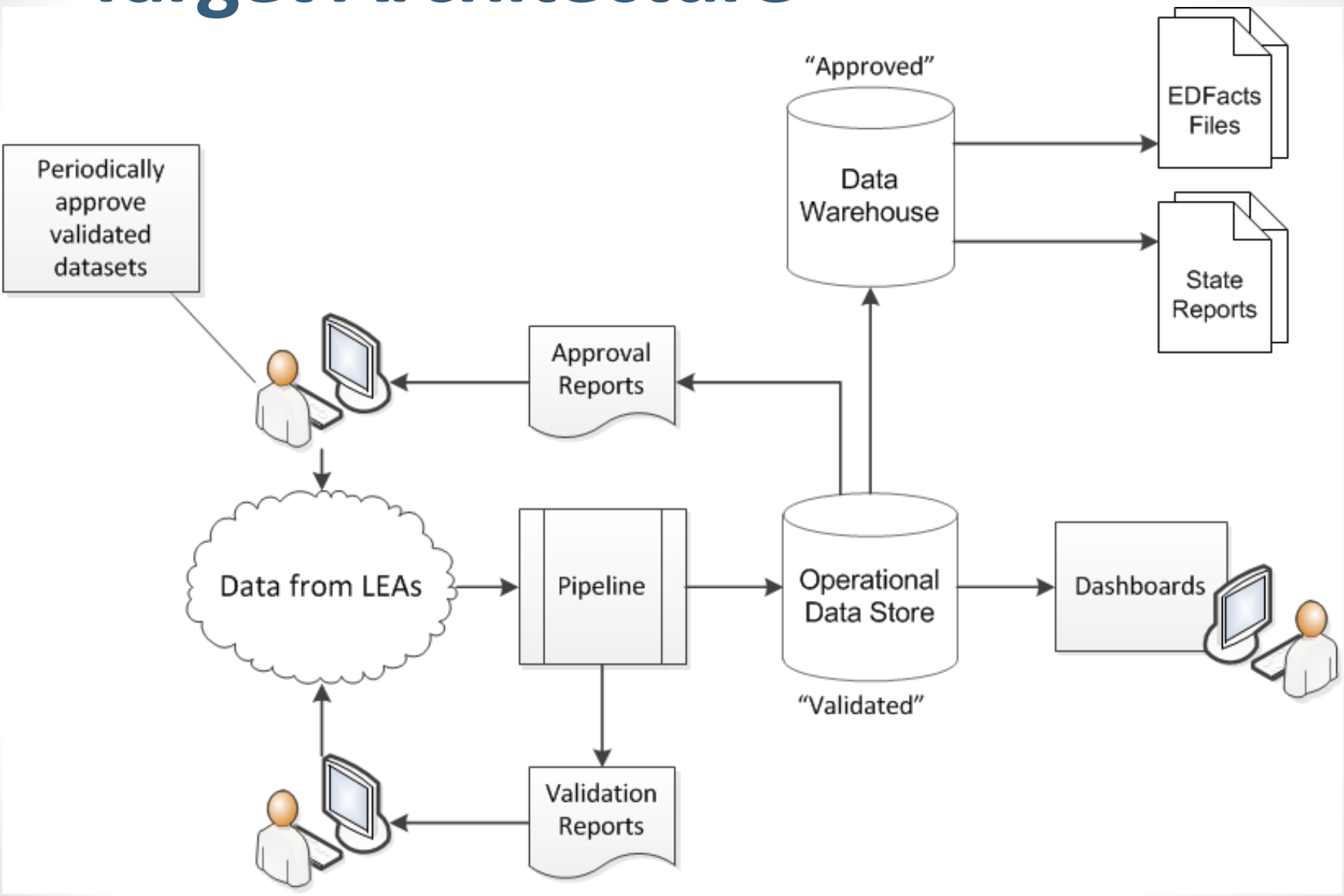
Grow beyond mandated data collections

- Easily accommodates new data elements, business rules, and workflows
- Grow to accommodate larger sets of transactional data to provide data back to the classroom

# Transactional data collection of fine-grained source data is better than periodic collections



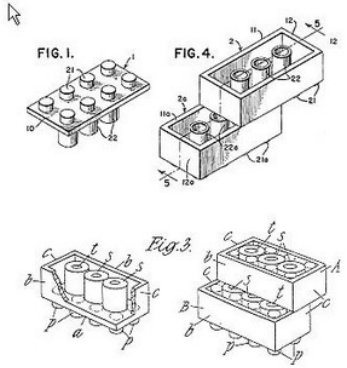
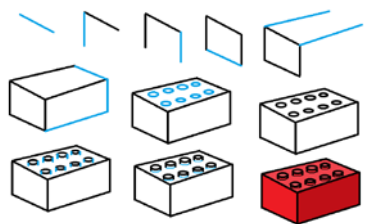
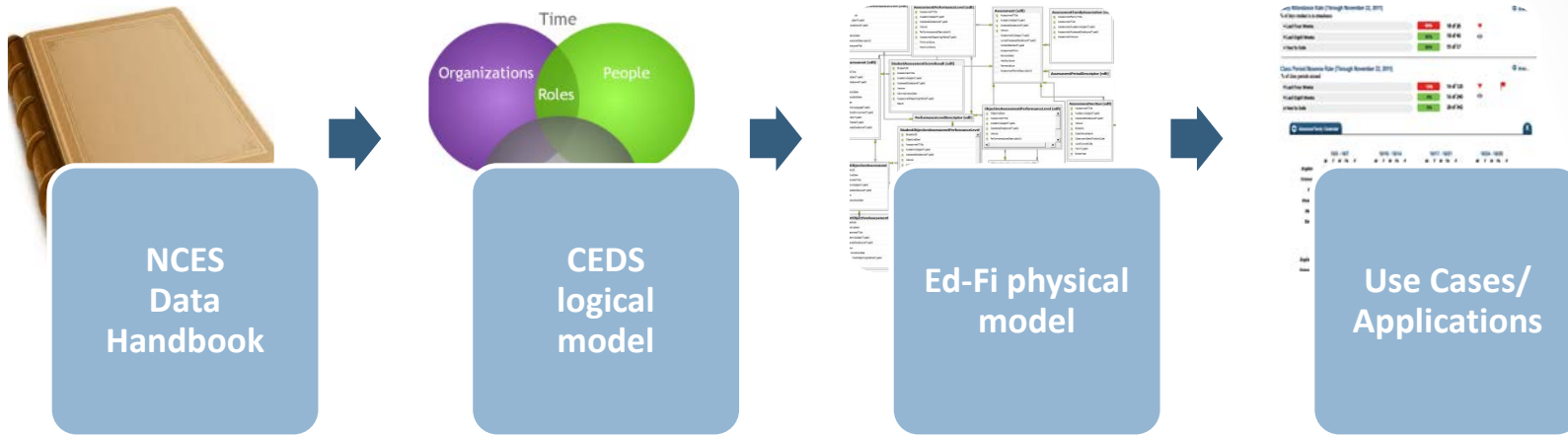
# Target Architecture





- **Ed-Fi Use Case**
  - Consolidate fine-grained, operational K-12 data from complex heterogeneous information sources for SEA's/LEA's
- **Standards-based**
  - CEDS-aligned
  - Vendor-neutral
- **Proven and ready to use**
  - Deployed in multiple SEAs and LEAs
  - Artifacts for XML data interchanges and operational data store
  - Defined process for extension
- **Dashboards available to plug in and customize**

# Ed-Fi Provides the Concrete Basis for Implementation



Dashboards



Other Apps

# 19 collections to 8 interchanges



Colorado English Language Assessment (CELA) Proficiency, SBD
Financial
Human Resources
Student October
Report Card March Collection
Record Integration Tracking System (RITS)
Educator Identifier System (EDIS)
Safety & Discipline Indicator Collection
Student Biographical Data for TCAP
Student Biographical Data for ACT
11th Grade Alternate Assessment
Directory
Pre-coded Labels
Student End of Year
Colorado Basic Literacy Assessment
Mathematics and Science Partnerships
Special Education December Count
Special Education End Of Year
Special Education Discipline

Student Profile & Enrollments	Fine grained, transactional
Staff Profile & Assignments	Fine grained, transactional
School Offerings	Fine grained, periodic
Discipline Summary	Aggregates, periodic
Special Education	Fine grained, transactional
Student Discipline (Special Ed)	Fine-grained, transactional
Math & Science Student-Teacher Link	Fine grained, periodic
Finance	Fine grained, periodic

- Student data from 12 to 1
- Staff data from 3 to 1
- 113 redundant data elements eliminated
- Complexity of business rules reduced by 28%



# Summary

- CDE has successfully taken an important first step toward fine-grained, transactional data collections from LEAs
- Optimization and captured benefits/value has exceeded goals
- Ed-Fi has proven to be a solid foundation for collection optimization
- Stakeholder acceptance to moving from periodic to a transactional approach has largely been positive
- Providing a long “runway” for LEA implementation to allow LEAs the necessary time to migrate