

## A User-Centered Approach for New York's Statewide Longitudinal Data System

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## **Executive Summary**

In May and June 2025, 65 representatives from key service sectors met to develop a collaborative roadmap for building a statewide longitudinal data system (SLDS). This user-driven planning process brought together leaders from education, workforce development, social services, healthcare, criminal justice, technology, and the Governor's Office to address a critical challenge: how to better serve New Yorkers by securely connecting information across government systems.

#### Why New York Needs an SLDS

A statewide longitudinal data system would bring together information from different sectors to provide a complete picture of how people's lives unfold over time. This comprehensive view enables evidence-based policymaking, identifies service gaps, and measures the true impact of public investments across multiple agencies. Rather than requiring agencies to approach each data linkage opportunity independently, an SLDS provides consistent, secure data access that improves coordination and efficiency across state government.

#### Key Stakeholder Recommendations

#### Primary Function

Participants overwhelmingly recommended that New York prioritize research and analytical capabilities for the first phase of SLDS development. This approach allows the state to conduct detailed analyses while establishing strong data access safeguards, keeping information secure while generating public benefit through rigorous research that serves key user groups.

#### Governance Structure

Participants recommended that New Yorks's SLDS be designed through a collaborative process that includes representatives from both data providers and data users including:

- a steering committee with representatives from all data-contributing entities, the Governor's Office, legislature, and data users to provide overall direction; and
- specialized task forces addressing topics like legal frameworks, data security standards, research priorities, and data definitions.

#### **Early Opportunities**

Participants identified immediate applications for an SLDS including evaluating college program value through earnings outcomes, strengthening teacher credential pathways, evaluating mental health support programs, assessing impacts of specific programs, and measuring the state's economic development investments.



#### **Building on Existing Data Exchanges**

New York is well-positioned to build an effective SLDS, having already established secure mechanisms for linking data, including sharing health information to support coordination among providers, streamlining connections between New York City schools and the City University of New York, and evaluating prison reentry programs. The federal SLDS grant awarded to the New York State Education Department in 2023 provided essential funding to develop a proof of concept to demonstrate success, and the Department's 2024 explorative project connecting high school, nursing, and licensure data shows the possibility to use linked data to support career pathway development.

#### Next Steps for New York

The planning meetings held in 2025 both demonstrated cross-agency consensus about the value of linking data, as well as generated a roadmap for collaboratively designing an SLDS that will meet the needs of many different New Yorkers. By agreeing upon the core audiences and functions for the data system, providing input on ways that multiple agencies could inform the design of the system, and brainstorming early wins, New York has established a clear vision for how to take the next steps to build an SLDS that advances multiple agency needs while preserving data privacy and building public trust.

Creating an SLDS is fundamentally about serving people, not simply a technology project.



## Introduction

In May and June 2025, 65 New Yorkers from across the state's key service sectors met to collaboratively address a critical challenge: how to better serve New Yorkers by securely connecting information across systems. These participants – representing K-12 and postsecondary education, workforce development, social services, healthcare and mental health, early childhood, criminal justice, technology, and the Governor's Office<sup>1</sup> —brought diverse perspectives and expertise to envision data-driven solutions to pressing statewide issues.

Through this collaborative process, participants identified significant opportunities to improve outcomes for New Yorkers. These ranged from evaluating major state investments in financial aid, economic development, and mental health services, to enhancing specific programs like teacher training programs and targeted engagement strategies for boys and young men. The discussions revealed how strategic data sharing could inform more effective policies, identify service gaps, and measure the true impact of public investments across multiple agencies and sectors. Beyond identifying opportunities, participants developed a comprehensive roadmap for building the agreements and infrastructure necessary to make those ideas a reality.

This report documents the outcomes of this stakeholder-driven process, outlining why states choose to link information across systems, and presenting the participants' recommendations for New York's approach to jointly design and manage a statewide longitudinal data system.

## What is an SLDS?

A statewide longitudinal data system (SLDS)<sup>2</sup> brings together information from different sectors into one system—such as early childhood, K-12, postsecondary education, and employment—to provide a more complete picture of the pathways that people follow over time.

By securely linking information about the same people across different systems, an SLDS provides a longitudinal view that can reveal important insights: how individuals progress in their education, the impact of social services and healthcare on their progress, their economic outcomes, and differences in outcomes for various populations, institutions, and regions.<sup>3</sup>

As SLDSs have evolved beyond their original K-12 focus, there are four important characteristics that remain constant.

<sup>&</sup>lt;sup>1</sup> See Appendix A for a list of convening participants

<sup>&</sup>lt;sup>2</sup> This type of linked information may also be referred to as an integrated data system (IDS).

Data Quality Campaign, What Now? States Must Act to Meet People's Data Access Needs



- The system connects existing data for all individuals: Most states choose to securely link data that has already been collected by state agencies for their regular operations, rather than requiring new data collections from schools, employers, or service providers.
- Data are linked at the individual level while protecting privacy: Rather than sharing counts of people who attained a specific milestone, the SLDS creates records for individuals and adds information from each data source, allowing comprehensive analysis while maintaining strict privacy safeguards.
- **Data follows people over time**: Because information is connected at the individual level, it becomes possible to understand how people's circumstances and outcomes change over time, revealing which pathways and interventions are most effective.
- **Data security and privacy are fundamental requirements:** SLDSs employ sophisticated technical and policy safeguards that protect information about specific people and respect individual privacy while enabling research that benefits entire communities.

## What are the primary functions of an SLDS?

States develop more effective and useful SLDSs when they clearly understand how the data will be used from the very beginning. **Creating an SLDS is fundamentally about serving people, not simply a technology project.** Before selecting software or compiling information, states need to identify the primary function of their data system – specifically, who will use the information and how they will use it to improve outcomes for people. This requires a user-centered design process that puts the needs of data users and the communities they serve at the center of system development. SLDSs typically serve one or more of three core functions<sup>4</sup>:

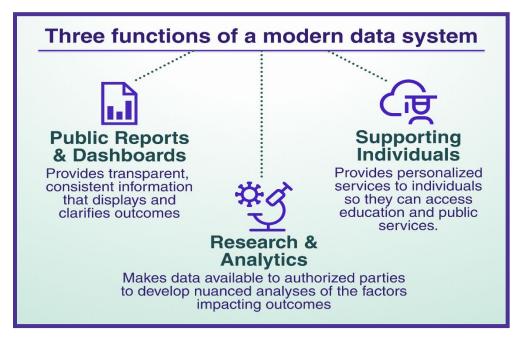
- **Public Reports & Dashboards:** Provides transparent information that helps communities, families, and policymakers understand outcomes through easily accessible formats.
- Research & Analytics: Supports nuanced analyses by making data available to authorized researchers, evaluators, and analysts who can explore the factors impacting outcomes and inform policy decisions, by understanding what works for various populations.
- Supporting Individuals: Uses data to provide personalized services that help people
  navigate education and public services more effectively ensuring that supports reach those
  who need them most.

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<sup>&</sup>lt;sup>4</sup> Adapted from AISP's Examples and Models - Core Purpose



Figure 1: Three Core Functions of an SLDS



# What information is made available by SLDSs in other states?

While states across the country have developed different approaches to compiling and sharing information through their SLDSs, strong examples exist for all three functions providing New York with models to adapt based on the state's unique priorities and needs. Most states have prioritized the Public Reports & Dashboards and Research & Analytics functions, which share similar underlying legal, technical, and policy structures. Fewer states have built tools for Supporting Individuals, which require different legal, technical, and policy frameworks. The key to success lies in ensuring that an SLDS both integrates data sources effectively and provides information in formats that serve intended users.

- Minnesota's <u>Statewide Longitudinal Data System</u>'s features public dashboards showing high school graduates college enrollment and employment and earnings outcomes, demonstrating transparent accountability for families and communities.
- Kentucky's <u>Center for Statistics</u> offers interactive visualizations helping employers and educators identify career and technical education programs and enrollment —to better coordinate workforce development.
- Texas' <u>Education Research Centers</u> provide researchers with secure access for approved research studies on topics like dual credit impacts on college success and the financial aid effectiveness on graduation rates.
- Maryland's <u>Longitudinal Data System Center</u> partners with universities on research priorities established by its governing board, focusing on education-to-employment pathways.



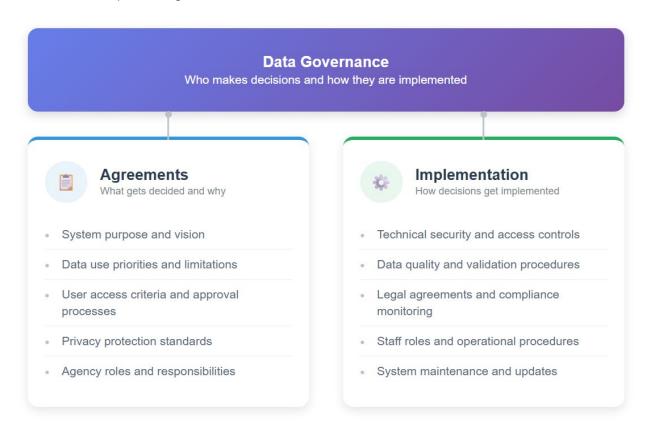
California's <u>Cradle to Career Data System</u> provides students with personalized college and
career options and eligibility for the state's public four-year colleges based on their high
school courses streamlining enrollment and financial aid applications.

These examples demonstrate that states can successfully implement multiple SLDS functions while maintaining privacy and public trust providing New York with concrete models for implementation strategies.

Please see Appendix B for detailed state SLDS case studies.

# How does the SLDS function shape data governance?

Data governance describes both the decision making and specific technical or legal requirements that guide system operations. It includes formal agreements (like legal frameworks and policies) and practical implementation procedures (like security protocols and data access controls) that must work together to create effective oversight. Data governance is essential because it builds trust among data providers and the public, ensures legal compliance, and enables effective use of information while preventing misuse.





Each SLDS function requires different governance approaches based on how the data will be used:

#### Public Reports & Dashboards

- **Agreements:** Policies determining what data gets displayed publicly and how data will be presented to ensure transparency while protecting privacy.
- **Implementation:** Suppression procedures that establish minimum numbers of people in public reports, technical review processes before data goes live, and security measures preventing unauthorized changes to public reports.

#### Research & Analytics

- Agreements: Comprehensive policies governing how research requests are reviewed and approved by data-contributing agencies, including criteria for evaluating proposed studies and procedures for ensuring research serves public benefit.
- **Implementation:** Data sharing agreements that provide authorized researchers with secure access to information and research standards throughout the process.

#### Supporting Individuals

- Agreements: Clear responsibilities for sharing data to service providers including policies for appropriate access and use of individuals' data.
- **Implementation:** Procedures to allow individuals provide permission and preferences, and staff training on privacy and security standards.

Understanding these governance requirements from the beginning helps states build SLDS systems that function effectively while maintaining public trust and legal compliance. New York's planning process can use these distinctions to ensure that governance structures align with the state's chosen priorities and function.

## How will New York build an SLDS?

New York is building on collaborative groundwork to develop a comprehensive approach to linking data across state systems in an SLDS.

#### **Building on Previous Work**

2019 – Educator Priorities: The Boards of Cooperative Educational Services (BOCES)
gathered input from educators identifying priorities for New York's SLDS including more
consistent and equitable data access, greater transparency about data use, and centralized
access across systems.<sup>5</sup>

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<sup>&</sup>lt;sup>5</sup> Statewide Data Conversations: Stakeholder Report



- 2023 Federal Grant Award: The New York State Education Department (NYSED) won a federal SLDS grant to support infrastructure development and strengthen interoperability.
- 2024 Demonstrating Linkages: NYSED demonstrated the value of linking data by connecting high school, nursing, and licensure data to improve career pathways.
- 2025 Collaborative Planning: The state initiated a collaborative planning process by
  partnering with WestEd's <u>Data Integration Support Center (DISC)</u> and the <u>Data Quality</u>
  <u>Campaign (DQC)</u> to convene stakeholders and identify governance considerations for the
  SLDS.

#### Collaborative Planning

The Spring 2025 stakeholder meetings created a roadmap for responsible SLDS development by:

- learning from successful examples including other states' experiences with different functions of SLDSs, and existing data linkages in New York;
- addressing privacy and implementation concerns by clarifying how the design process will protect individual privacy and build public trust;
- **identifying priority users and functions** to ensure New York's SLDS serves real needs across different communities;
- reviewing data governance requirements necessary for the state's prioritized SLDS function;
- identifying early opportunities for demonstrating value through strategic data linking; and
- providing input on further governance development.

## Collaborative Planning Recommendations

#### Key Users of Linked Data

As the foundation in a user-centered design process, meeting participants reviewed the types of individuals that would benefit from linked data. Four common user types include:

- Analyzers: People looking at trends and comparisons to evaluate systemic problems and opportunities.
- **Planners:** People seeking to improve outcomes and implement interventions at the institutional or system level.



- **Practitioners:** People seeking to improve outcomes and implement interventions at the individual level.
- Individuals and Families: People seeking to improve outcomes for themselves or a family member.

Different types of data users prefer different types of information. For example, analyzers often work with large datasets and examine trends for groups of people over time, whereas practitioners prioritize information about specific students to inform service delivery.

## Recommended Functionality for the First Phase of the SLDS

After reflecting on the types of users who could access New York's SLDS, participants overwhelmingly selected the **Research & Analytics function**, which would allow the state to conduct detailed analyses while establishing strong data access safeguards. This approach maintains security while benefiting the public through research tailored to the specific needs of various communities.

The Research & Analytics function directly serves policymakers who need evidence for budget and policy decisions, researchers and evaluators conducting program assessments, educators seeking to understand student pathways, and state agencies working to improve services. By starting with this function, New York can demonstrate value to key user groups while building the governance foundation to support additional functions as the system matures.

## **Developing Data Governance**

Understanding how different users will apply linked data makes it much easier to design appropriate governance structures. Since participants chose the Research & Analytics function, New York needs governance that supports secure researcher access while maintaining strong privacy protections and ensuring public benefit.

The Research & Analytics function requires both agreements about policies and practical implementation procedures in key areas including:

- technical infrastructure with secure data access;
- legal frameworks for researcher access and use;

#### Examples of Different Ways that Different Data Users Make Use of Linked Data

While many types of data users might want linked information on financial aid, they would use the information in different ways.

Analyzers might assess state financial aid policies and use data to evaluate an intervention to support increasing financial aid applications.

Planners could compare college and financial aid application rates to other districts to identify possible effective strategies or identify gaps in college and financial aid application rates to clarity areas for focused interventions.

Practitioners could identify students who have not completed college or financial aid applications and provide targeted support or share information about the cost of training for specific jobs.

An **individual** or family member might approve the transmission of high school transcript data to auto-fill college and financial aid applications.



- privacy safeguards and data security protocols;
- research review and approval processes;
- data quality standards; and
- inter-agency coordination mechanisms.

#### Learning from Other States' Approaches

DISC and DQC clarified governance options from states that have successfully developed linked data systems focused on Research & Analytics functions. These examples helped participants understand the specific decisions that need to be made to create a comprehensive data governance program for New York's SLDS.

#### Committee-Based Development Approach

Effective data governance requires input from diverse stakeholders who understand both the technical requirements and the real-world needs of data users. Rather than developing governance policies in isolation, New York can use a collaborative committee structure that brings together the right expertise to create practical, workable agreements. This approach ensures that governance decisions reflect the experiences of people who will actually use the system—from researchers conducting studies to agency staff managing data to policymakers making budget decisions.

Based on proven approaches in other states, DISC and DQC recommended that New York use this coordinated committee structure to develop the governance agreements. This committee approach ensures that all stakeholders have input in creating the formal agreements that will later guide system implementation.

**Steering Committee:** Representatives from all data-contributing entities, the Governor's Office, legislature, and key data users would provide overall direction and approve recommendations from specialized task forces throughout the entire planning process. This ensures governance decisions reflect the needs of New York's priority users and serves the prioritized function.

Example task forces might include:

- Legal Task Force: Attorneys could draft researcher access agreements, inter-agency data sharing agreements, and ensure both data providers and data users comply with federal and state privacy laws.
- **Technology, Privacy and Security Task Force**: Data security experts could define the security standards, access, appropriate use, and technical protocols for the system.
- Research Priorities Task Force: Researchers, agency staff, and Governor's Office representatives could provide recommendations on top priority questions that could be answered with an SLDS.
- **Governance Task Force**: Representatives from data providers and the Governor's Office could create a decision-making structure that would guide the strategic direction for the data system and establish mechanisms for ongoing system oversight.



### **Early Opportunities**

Meeting participants learned about successful data linking efforts already underway in New York.

Presentations focused on a data system that shares <a href="health information">health information</a> between providers to improve care, a suite of tools that streamline <a href="connections">connections</a> between New York City public schools and the City University of New York, and a <a href="recent study">recent study</a> to evaluate the impact of prison reentry programs. These examples showed that New York has already tackled many common data sharing challenges and demonstrated how an SLDS could expand these successes statewide.

#### Building on New York's Strong Foundation

Participants identified immediate opportunities where a Research & Analytics-focused SLDS could provide valuable insights for state decision making. These early wins would demonstrate the system's value while building stakeholder confidence.

#### Education and Workforce Development:

- Document the Value of Education: analyze outcomes by comparing postsecondary graduate earnings to high school graduate earnings, helping students make informed decisions about education investments.
- Improve Teacher Training: track teaching credential holders to identify where they work, what subjects they teach, and retention patterns, enabling targeted investments in teacher pipeline development.

#### Program Evaluation and Return on Investment:

- Assess Mental Health Investments: evaluate mental health support programs by tracking participants' academic, employment, housing, and criminal justice outcomes.
- Enhance Services for Priority Populations: assess My Brother's Keeper impact on education attainment, employment, and criminal justice involvement for boys and young men of color.
- Maximize Financial Aid: measure college scholarship effectiveness by analyzing employment outcomes and calculating return on investment for state expenditures.

#### Economic Development Assessment:

- Strengthen Business Development: evaluate state investments in high-tech companies by tracking whether they increase enrollment in related college programs and improve graduate earnings.
- Boost Economic Mobility: analyze free community college program outcomes to determine impact on economic advancement and long-term employment success.

#### Strategic Value

These early opportunities align directly with New York's priorities while demonstrating how the Research & Analytics function serves multiple user groups—policymakers seeking evidence for budget decisions, educators improving programs, and agencies evaluating intervention



effectiveness. Success with these analyses would build momentum for broader SLDS development while providing immediate value to state decision making.

#### **Next Steps**

The collaborative process demonstrates remarkable consensus among diverse stakeholders about how linked data can address state and local priorities while improving coordination and efficiency across agencies. This broad agreement—from education leaders to criminal justice agencies and from researchers to direct service providers—provides state leadership with a clear mandate and roadmap for moving forward.

The stakeholder guidance offers New York specific direction: prioritize the Research & Analytics function, establish a committee-based governance development process, and focus on early opportunities that demonstrate value to key user groups. Working across agencies and with continued stakeholder engagement, the state can now design an SLDS that advances multiple agency needs while preserving data privacy and building public trust.

This user-centered approach positions New York to build one of the nation's most comprehensive and effective data systems for improving public services and outcomes for all residents. The Research & Analytics focus allows the state to demonstrate value through rigorous analysis while establishing robust governance structures that could support additional functions as the system matures.



## Appendix A: Convening Participants

- Brian Backstrom, SUNY's Rockefeller Institute of Government
- Leigh Bates, Division of Criminal Justice Services
- Alison Bianchi, Statewide Health Information Network for New York (SHIN-NY)
- Whitney Braunlin, New York State Education Department
- Dale Breault, Boards of Cooperative Education Services (BOCES)
- Scott Budelmann, Boards of Cooperative Education Services (BOCES)
- Odo Butler, Department of Labor
- Bosede Cajuste, New York Higher Education Services Corporation (HESC)
- David Cantaffa, State University of New York (SUNY)
- Rebecca Colman, Office of Children and Family Services (OCFS)
- Adam Dean, Division of Criminal Justice Services
- Maria Fernandez, Governor's Office
- Molly Finnerty, Office of Mental Health
- Alexandra Fitz, Statewide Health Information Network for New York (SHIN-NY)
- Teresa Foster, State University of New York (SUNY)
- Jamie Frank, State University of New York (SUNY)
- Eric Frimpong, Department of Labor
- Thomas Gais, State University of New York (SUNY)
- Jie Gao, New York State Education Department
- Mario Garzia, New York State Education Department
- Laura Glass, New York State Education Department
- Drew Hanchett, Department of Health
- Jason Harmon, New York State Education Department
- Julie Hartley-Moore, State University of New York (SUNY)
- Mary Hayden-Cook, New York Higher Education Services Corporation (HESC)
- Maxwell Herrera, SUNY's Rockefeller Institute of Government
- Stephen Holt, SUNY Rockefeller College of Public Affairs and Policy
- Yufan Huang, New York State Education Department
- Mathan Jebaaraj, Office of Information Technology Services
- Heather Klusendorf, New York State Education Department
- Emily Leckman-Westin, Office of Mental Health
- Cheryl Littman, City University of New York (CUNY)
- Charles Madsen, City University of New York (CUNY)
- Brendan Mapes, State University of New York (SUNY)
- Yvonne Martinez, Department of Labor
- Elana Marton, New York State Council on Children and Families (CCF)
- Maeve McCullough, Governor's Office
- Sara McGrath, Department of Health
- Bob Menga, SUNY's Rockefeller Institute of Government
- Sheridan Miller, Governor's Office



- Prachi Mondaikya, Department of Health
- Lisa Montiel, State University of New York (SUNY)
- Britany Orlebeke, Office of Temporary and Disability Assistance (OTDA)
- Didem Ozler, Higher Education Services Corporation (HESC)
- Michelle Paladino, New York City Public Schools
- Gabe Paley, Governor's Office
- Albert Pulido, Governor's Office
- Quinn Rapp-Ellis, Governor's Office
- Meredith L Ray-LaBatt, Office of Mental Health
- Anabel Reining, New York State Education Department
- Eli Rosenberg, Department of Health
- Sandra Sanduski, Office of Information Technology Services
- Kelly Smyth, Department of Labor
- Andrea Soonachan, City University of New York (CUNY)
- Lucy Sorensen, SUNY Rockefeller College of Public Affairs and Policy
- Tami Springer, Tango Strategy
- Mike St. John, New York State Education Department
- Charissa Townsend, City University of New York (CUNY)
- Emma Vadeha, New York City Public Schools
- Dan Weisberg, New York City Public Schools
- Chris White ,Governor's Workforce Team
- Yan Wu, New York State Council on Children and Families (CCF)
- Rani Yamasani, Office of Information Technology Services
- Xin Zhang, New York State Council on Children and Families (CCF)
- Elizabeth Zurawski, Office of Information Technology Services



## Appendix B: Case Studies

The case studies below showcase SLDSs that have prioritized providing information to the public. However, each state has taken a different approach, with varied governance structures, host agencies, staffing models, and data products. There is no one right way to build an SLDS—it is more important to build on the state's existing infrastructure, agreements, and shared vision to create linked data that address specific needs.

#### California

**Purpose**: California's <u>Cradle-to-Career Data System</u> (C2C) is designed to be the state's "source of actionable data and research on education, economic, and health outcomes for individuals, families, and communities; to expand access to tools and services to navigate the education to employment pipeline."

**Functions**: C2C includes all three SLDS functions, including producing dashboard and query tools, allowing researchers to use the data set to conduct analyses, and providing services to students.

The <u>first dashboards</u> were released in 2025 and the research request process will be launched in 2026. C2C partners with another state project, <u>California College Guidance Initiative</u> to provide college and career planning tools, streamlined application processes, and electronic transcripts to high school students. Work is underway to revamp another public asset—<u>eTranscript California</u>—to become a unified transcript for public postsecondary institutions, with opportunities to include approved academic credit for skills learned outside of the classroom (such as military service or industry certifications). eTranscript California will help to streamline transfer applications, ensure students can apply dual credit once they enroll in college, support advising tools, and power hiring tools.

**Founding Year:** C2C was initiated in 2019 when legislation was passed that clarified the desired scope for an SLDS and launched a public planning process. Implementation began in 2022, using detailed specifications developed through the planning process.

**Data Types:** Although still in development, C2C will include early childhood, K-12, postsecondary education, financial aid, social service, workforce program, employment, and teacher data.

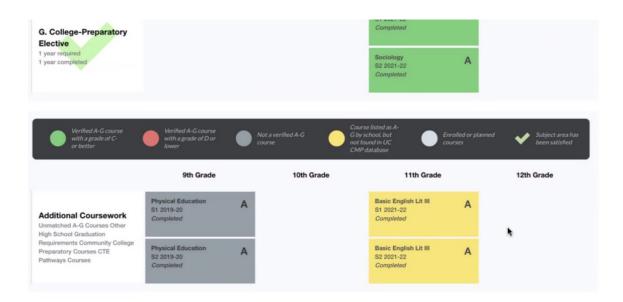
**Managing Entity and Governance Structure**: C2C is hosted by the <u>Government Operations</u> <u>Agency</u>, a California state agency, and has 26 staff.

C2C's Governing Board has 21 members, including data providers, legislators, and members of the public. The 16-member <u>Community Engagement Advisory Board</u> consists of public members who are tasked with providing feedback on ways to support evidence-based decision making, analytical capacity, and equitable access to actionable information. The 16-member <u>Data and Tools Advisory</u> <u>Board</u> also includes public members and ensures that the data tools provide actionable information.



**Examples of Data Visualizations:** California's <u>dashboards</u> are described as "data stories" and will address five major topics: pathways from K-12 to postsecondary and employment; elementary school milestones for children in state-funded early care; the impact of chronic absenteeism on college-going rates; college going rates and early progress for high school students; transfer from community colleges to four-year institutions; education outcomes for financial aid recipients; employment outcomes for postsecondary graduates; and teacher preparation pathways. The first dashboard in the series, the Student Pathways Diagram, was released in 2025. The design includes user-friendly images with opportunities to customize results, such as choosing the year of a graduating class, and shows results for different student populations and geographic regions.

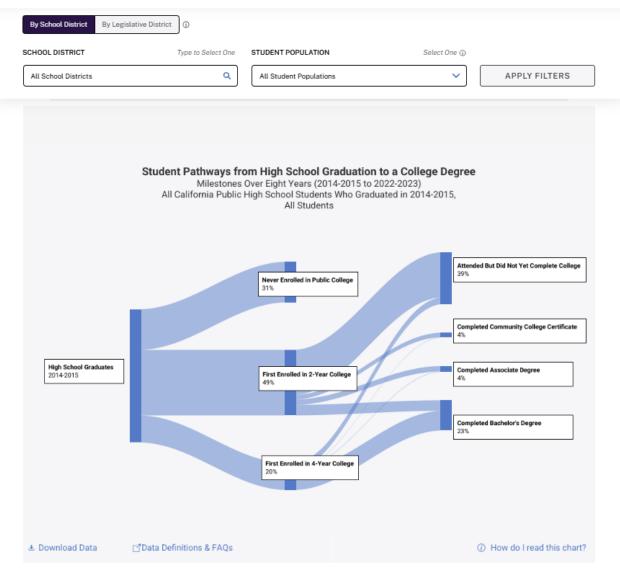
#### California Example of Advising Tools



**Source:** <a href="https://www.californiacolleges.edu/#/">https://c2c.ca.gov/data-stories/pathways-to-college-in-california/</a>



#### California Example of Data Visualizations



Source: https://c2c.ca.gov/data-stories/pathways-to-college-in-california/



#### Kentucky

**Purpose:** The Kentucky Center for Statistics (KYSTATS) "collects and integrates education and workforce data so that policymakers, practitioners, and the public can make the best-informed decisions possible."

**Functions**: KYSTATS provides both the Public Reports & Dashboards and Research & Analytics functions.

KYSTATS develops written reports, hosts webpages that have <u>reports</u> with embedded interactive tables, and provides statistical data to policymakers and state agencies. Dashboards (referred to as reports) cover numerous topics in the areas of early childhood, K-12, postsecondary education, career technical education, adult education, and employment. The <u>data request process</u> allows people to request individual level or aggregate data.

Founding Year: 2012

**Data Types:** KYSTATS includes early childhood, K-12, postsecondary education, adult education, financial aid, employment, and teacher data. It also compiles labor market information.

**Managing Entity and Governance Structure**: KYSTATS is attached to the state's Education and Workforce Development Cabinet and has 48 staff. The 5-member board includes leaders from education, postsecondary education, labor, and health and family services.

**Examples of Data Visualizations**: The KYSTATS interactive reports use color-coded charts, graphs, and maps to display information. Each dashboard has a somewhat different look and feel, and most provide a variety of options for interacting with the data, such as looking at a statewide or district view, or filtering by different years and/or demographic characteristics.



#### Kentucky Examples of Data Visualizations

## **EARLY CHILDHOOD WORKFORCE**







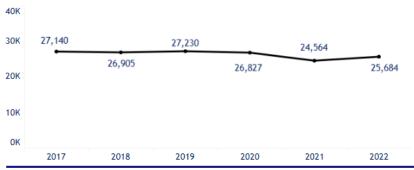
Early Childhood Worker Education

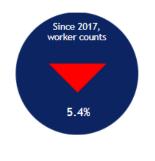
Early Childhood Workforce

This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. Missing or blank data indicates redaction. If you have any questions regarding accessibility, please contact kystats@ky.gov. The Early Childhood Workforce dashboard displays education and workforce traits in Kentucky's early childhood system.

An alternative, accessible format in Excel is available for download here: Technical documentation can be found in PDF form here:

#### Early Childhood Worker Counts





#### Early Childhood Worker Education

For each academic year observed, Non-College Scholarships were the most awarded grant type. Between the 2017 and 2022 academic years, the number of workers who earned a Commonwealth Child Care Credential fell by 9.9% and the number of workers who earned a Director's Credential fell by 6.1%.

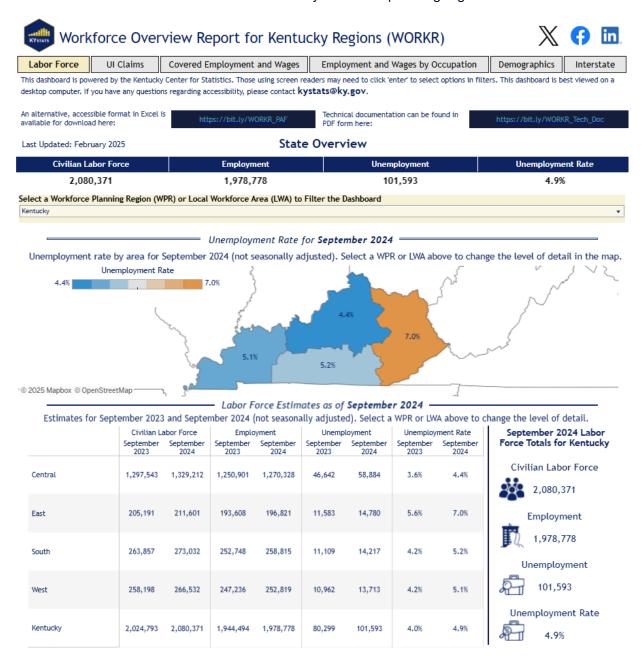


Source: https://kystats.ky.gov/Latest/ECW



#### Kentucky Examples of Data Visualizations

KYSTATS's Labor Market Information (LMI) provides the state's unemployment rates, LMI by workforce area, and LMI occupational projections. Users can also view demographics, UI claims, and can filter the dashboard to see information by workforce planning region and areas.



Source: https://kystats.ky.gov/Reports/Tableau/WORKR



#### Maryland

**Purpose**: The Maryland State Longitudinal Data System (MLDS Center) is designed to "generate timely and accurate information about student performance that can be used to improve the State's education system and guide decision makers at all levels."

**Functions**: The MLDS Center serves both the Public Reports & Dashboards and Research & Analytics functions.

Dashboards cover five topics: college and employment outcomes of high school graduates, teacher workforce pathways, dual credit, postsecondary participation of homeless individuals, and postsecondary participation for foster youth.

The MLDS Center conducts its own research, through a partnership with the University of Maryland, rather than having researchers request access to the data set. Research topics are identified by the governing board through a <u>research agenda</u>. Researchers also fulfill legislatively-mandated reports and provide information requested by education and workforce policymakers. Many findings are shared through <u>public reports</u>. Examples of recent reports include: the effects of dual credit tuition subsidies for low-income students, predicting wages and attrition for public school teachers who are also working another job, the effects of taking career education in high school on college and employment outcomes, and employment outcomes for students who do not attend college.

**Founding Year:** The MLDS Center was established in legislation in 2010 and began implementation in 2013.

**Data Types:** The MLDS Center includes K-12, postsecondary education, financial aid, employment, juvenile justice, social services, and teacher data.

Managing Entity and Governance Structure: The MLDS Center is an independent unit of state government. It has twelve positions that are focused on the SLDS technical infrastructure and partners with the University of Maryland to provide research services. In addition, the state department of education, the higher education commission, and the labor agency each share a staff person with the Center.

The 15-member governing board includes state leadership from K12, postsecondary, labor, juvenile services, and human services agencies; college representatives; and governor's appointees that include a local school superintendent, a data security expert, and a health occupation board representative.

**Examples of Data Visualizations:** MLDS <u>dashboards</u> allow users to select variables such as institutions and student characteristics. Graphics differ depending on the topic, but most use a combination of line and bar charts. In addition, users can view tables and find information on how the metrics were calculated.



#### Maryland Examples of Data Visualizations

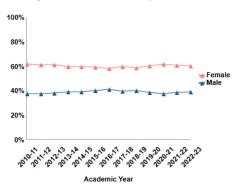
Overview Grade Level Trends Demographic Trends College Enrollment Patterns Dual Enrollment by Course of Study

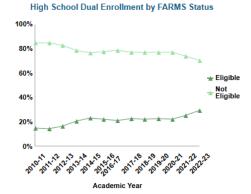
#### Statewide Trends in Dual Enrollment in Maryland Public High Schools

#### What do the data show?

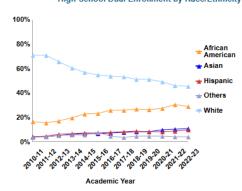
On average, dually enrolled public high schools students in Maryland are predominantly female, white, and were not eligible for the Free and Reduced Price Meals (FARMS) program. Learn more about dual enrollment in Maryland by reading other MLDS Center reports.

High School Dual Enrollment by Gender





High School Dual Enrollment by Race/Ethnicity



How is the percentage calculated? Review the formula for how each percentage has been calculated

We want to hear from you! What else would you like to know about this population? Help us expand this dashboard by sending suggestions to mlds.center@maryland.gov

#### **Data Limitations and Notes:**

Review information on the data used in this dashboard.

#### Research Agenda:

These data fulfill the reporting requirement under Education Article § 24-703.1, Annotated Code of Maryland, to provide the Governor and General Assembly the number of students who are dually enrolled.

The data also inform analysis for the Research Agenda Question:

What are the differences in performance, retention and graduation, including time to degree, of students beginning in dual enrollment programs, at 2-year institutions and 4year institutions?

#### View Data Table

Source: MLDS Center, Center Output, Dashboards, Statewide Dual Enrollment Trends



#### Washington

**Purpose:** Washington's Education Research and Data Center (ERDC) was created to "develop longitudinal information spanning the P-20W system in order to facilitate analyses, provide meaningful reports, collaborate on education research, and share data."

**Functions:** ERDC serves both the Public Reports & Dashboards and Research & Analytics functions.

ERDC hosts a series of <u>dashboards</u> including K-12 outcomes for early learning programs, long term outcomes for high school students with dual credit, college going rates and employment outcomes for high school students, student progress in four-year public college pathways, earnings for college graduates, and information needed by the legislature related to education finance topics. Researchers can request access to either aggregate or individual-level data. ERDC also prepares information for various legislative committees.

Founding Year: 2007

**Data Types:** ERDC includes early childhood, K-12, postsecondary education, financial aid, employment, juvenile and criminal justice, social services, workforce program, and teacher data.

**Managing Entity and Governance Structure:** ERDC is housed within the state's Office of Financial Management (OFM). There are 10 staff specific to ERDC, with an additional six people conducting analyses for OFM.

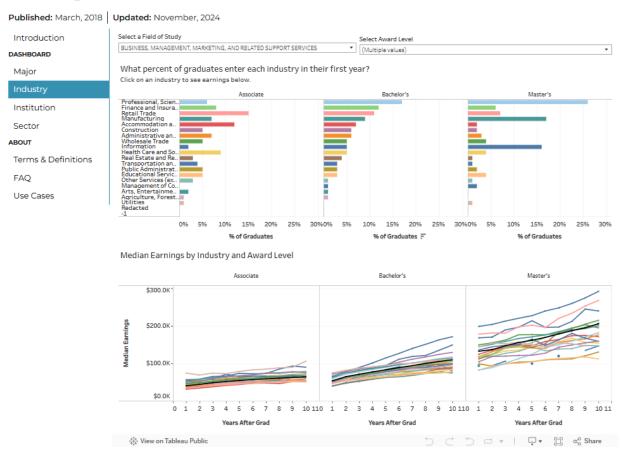
ERDC does not have a formal governing board. Instead, data governance is managed through a governance manual that clearly defines roles through various policies and procedures. In addition, ERDC convenes committees that provide a venue for interest holders to make joint decisions. One set of committees is focused on the entities that provide data to the system and addresses ways to change data collection and use in specific contexts such as educator preparation programs, postsecondary student data collection, and the Public Centralized Higher Education Enrollment System. A second set of committees focuses on research topics and convenes experts on topics such as dual credit and early learning. Finally, ERDC hosts technical committees with data providers to address data quality.

**Examples of Data Visualizations:** ERDC <u>dashboards</u> provide users with the opportunity to filter by different outcomes as well as demographic characteristics. Graphics differ depending on the topic, but most use a combination of line and bar charts. Each dashboard also includes a tab providing additional information on data definitions.



#### Washington Examples of Data Visualizations

## **Earnings for Graduates Dashboard**



Source: https://erdc.wa.gov/publications-and-reports/earnings-graduates-dashboard



Terms & Definitions

FAQ

#### Washington Examples of Data Visualizations

## **Dual Credit Dashboard**

Career and Technical Education (CTE) 548,160

Advanced Placement (AP) 296,600

Ses tohort
All Years

% earned K12 Credit

International Baccalaureate (IB)	41,310	596					96%
Cambridge International (CI)	4,010	0-196					94%
College in the High School (CiHS)	192,800		25%				96%
Running Start (RS)	150,550		2096				96%
Click on a Dual Credit Course Type	(above) to i	filter the Stud	dent Group Charts (below).	To remove the filte	er, click on 'Any Dua	l Credit Course' (abo	ve)
Race/Ethnicity							
American Indian or Alaska Native	7,880				71%		91%
Asian	58,120					96%	99%
Black or African American	31,920					89%	95%
Hispanic or Latino of any race(s)	139,320					86%	95%
Native Hawaiian and Other Pacific Islander	7,250					86%	94%
Two or More Races	45,260					90%	97%
White	383,250					89%	97%
Gender							
Female	333,140					90%	97%
Male	339,710					8796	96%
Gender X	220				78	396	94%
High School Enrollment / Graduation Status	5						
Graduated	597,020					93%	99%
Dropped Out	61,410				66%	,	77%
Enrolled	14,650				67%		85%
Student Characteristics							
Bilingual	50,400					80%	93%
Not Bilingual	622,670					89%	97%
Homeless	43,880				779	96	90%
Not Homeless	629,190					90%	97%
Low Income	331,510					84%	94%
Not Low Income	341,560					93%	99%
Section 504	50,730					90%	96%
Not Section 504	622,340					89%	97%
Title 1 Migrant	16,560					80%	93%
Not Title 1 Migrant	656,510					89%	97%
Students with Disabilities	74,420				75%		93%
Students with no Disabilities	598,650					91%	97%

Source: https://erdc.wa.gov/publications-and-reports/dual-credit-dashboard