



The California Cradle-to-Career Data System

Feasibility Report on Operational Tools

MAY 2026

Summary

The [California education code](#) requires the Office of Cradle-to-Career (C2C) to be responsible for “scaling, expanding, operating and maintaining operational tools.” Among the required duties of the C2C Office include “assessing the feasibility of subsuming the operations of operational tools that are currently administered by other agencies, and reporting findings to the governing board, the Legislature, and the Governor.”

The Office recommends that C2C should focus on incubating new or revamped operational tools. The future of the operational tools workstream at C2C should be based primarily on partnerships with other entities who operate the tools. C2C can leverage its strengths in breaking down silos to create space for imagining possibilities and utilize specific expertise in data linkages, privacy enhancing approaches, user centered design and data visualizations to support agencies looking to develop tools.

For challenges that align with C2C’s mission and where C2C is uniquely qualified to support, C2C can develop and run tools that can be shared with another agency as a service. A functional example of an in-house tool developed and owned by C2C is the CalKIDS project with the Scholarshare Investment Board (SIB) and California Community College Chancellor’s Office (CCCCO) that unlocked resources for community college students (see below). C2C will be most effective by focusing on building tools that directly leverage the P20W data system and the data linkages that result.

Background

Statute charges C2C both with building a longitudinal data set and with bringing operational tools for students to scale. [Education Code Section 10862\(b\)\(3\)](#) directs the Office to serve as a neutral administrative body to “scale operational tools to better serve educators, students, and families.” [Education Code Section 10861\(k\)](#) defines operational tools to include, but are not limited to, the California College Guidance Initiative (CCGI) and eTranscript California. The

Office uses the term "practical tools" on its public-facing documents and websites to refer to operational tools; however, both terms are used interchangeably. These tools use student-specific data to support college planning and education transitions and enable students, families and educators to make better informed decisions. Currently, both named operational tools are operated by entities other than C2C.

Although operational tools and longitudinal data systems serve different purposes, the legislation contemplated them as complements to prioritize the needs of students. Both the 2019 Act and the 2021 legislation aimed to prioritize the needs of students and ensure the data system is not geared only toward serving the needs of researchers but also linking data for practical purposes. By requiring the Office to scale operational tools, Education Code recognizes the important role these tools play in serving students and in helping individuals maximize their educational and career opportunities.

Operational tools aim to reduce administrative burden as students navigate across siloed education institutions and other state services. Operational tools, including the two named in statute, aim to solve the problems that arise when educational institutions operate in silos, making it hard for students to navigate across them. For example, in the original 2019 legislation, the State prioritized operational tools that make it easier for students to apply to college and financial aid, and the 2021 legislation reflected the desire to streamline the transfer process by creating one unified higher education transcript. The tools help by breaking down data barriers to share data across educational entities and improving data quality.

Operational Tools

Education Code contemplates possible future operational tools and lists two specific tools by name: a) [CaliforniaColleges.edu](https://californiacolleges.edu) operated by CCGI to support college planning and transitions and b) eTranscript California operated by the CCCCO to deliver electronic college transcripts. A third operational tool, Career

Passport, was established in 2025 to help people store academic and non-academic credentials and find good jobs.

All three operational tools are funded via Proposition 98 funding and are run by entities other than C2C¹.

Statute charges the Office with assessing the feasibility of subsuming eTranscript California and CCGI. Statute does not define the details of subsuming the operations tools. The Office defines it as directly receiving funding for implementation of the tools and absorbing the entity that operates the tool into the state government structure, including employing existing employees as state employees.

Background on CCGI:

[CCGI](#) manages CaliforniaColleges.edu, the state's college and career planning platform and provides resources for students, educators and families to smooth the path to college and career. Since 2013, CCGI has operated as a [collaborative impact partner](#) of the Foundation for California Community Colleges (FCCC). FCCC is a 501(c)3 non-profit organization codified in Education Code Section 72670.5 as a support organization to the California Community Colleges. CCGI's purpose is to smooth the path to college and career for California students. As a legislatively authorized service provider to all local educational agencies through Education Code Section 60900.5, CCGI has school official status in accordance with the requirements of FERPA and operates as a contractor for the educational institutions with which it partners. Since the C2C Statute in 2021, the tool is free to districts and CCGI's core operations are entirely state funded. In FY 25-26, it received \$23.5M in Proposition 98 funding. Currently, CCGI has a staff size of 85 employees who secure and manage student data, operate CaliforniaColleges.edu, provide technical assistance to districts to ensure data quality, and train educators statewide on

¹ California voters enacted Proposition 98 in 1988 as an amendment to the State Constitution. This measure, which was later amended by Proposition 111, establishes a minimum annual funding level for K-14 schools (K-12 schools and community colleges). Proposition 98 provides K-14 schools with a guaranteed funding source that grows each year with the economy and the number of students. (Source: California Legislative Analyst's Office, "Proposition 98 Primer," 2005, https://lao.ca.gov/2005/prop_98_primer/prop_98_primer_020805.htm)

supporting students' college and career knowledge development and interventions to drive access. Funding flows from the State to the California Department of Education (CDE) to Riverside County Office of Education (RCOE), which contracts with the Foundation for California Community Colleges/CCGI for the management of CaliforniaColleges.edu and all related services.

Background on eTranscript California:

eTranscript California is managed by the CCCCCO, and has served as a transcript exchange for transmitting electronic transcripts between higher education institutions. CCCCCO has historically expended approximately \$1.8M per year out of their technology budget in Proposition 98 funding to operate eTranscript California. Across FY 24-25 and FY 25-26, CCCCCO received \$12M in one-time funding to revamp eTranscript California, building on the work of the C2C eTranscript California Task Force (see below). The CCCCCO issues contracts through local partners such as Butte-Glenn Community College District and the California Community College Technology Center (Tech Center) as well as the Digital Center for Innovation, Transformation and Equity (Digital Center) at Foothill–De Anza Community College District to operate eTranscript California and manage the procurement process for a revamped eTranscript California in partnership with CCCCCO.

Background on Career Passport:

The Governor's Master Plan for Career Education proposed the creation of Career Passport as a new tool to support skills-based hiring. It is not named in statute as one of the operational tools that the Office is required to scale because its development happened after 2021, however since early 2024, C2C has convened interest holders across education, labor and workforce as well as government operations to share research and develop a strategy for its advancement. The FY 25-26 budget provided the CCCCCO with \$25M to implement the Career Passport based on the recommendations from the eTranscript California Task Force (see below), along with \$750,000 for the Chancellor's Office to support statewide administration through a community

college district/districts. The Digital Center is tasked with carrying out implementation of the Career Passport at the direction of and on behalf of the CCCCCO. The Career Passport would build on eTranscript California and other tools already run by CCCCCO.

Table 1: State Funding for Operational Tools

	C2C	CCGI	eTranscript California @CCCCCO	Career Passport @CCCCCO
Annual state funding, FY 25-26	\$15.2M ongoing, plus \$500K one-time	\$23.5M ongoing	\$1.8M ongoing costs paid via CCCCCO's technology budget, plus \$12M one-time across FYs 24-26	\$25M one-time, plus \$750K (General Fund) to support statewide administration
Source	General Fund	Proposition 98	Proposition 98	Primarily Proposition 98

Office Support for Operational Tools

The C2C Office has collaborated with the entities running these operational tools in different ways. C2C integrates data from all of the K-12 and higher education entities in the state to create the longitudinal data set for the purpose of providing insights into critical milestones in the pipeline from early care to K-12 to higher education, skills training, and employment. These are the same entities whose collaboration is necessary for creating operational tools for students.

How C2C has worked with CCGI:

The Office has worked to accelerate CCGI's work with C2C's data partners and enabled CCGI to extend their reach. For example:

- When C2C was established in 2021, changes to Education Code included authorization for CCGI to provide its services to all local educational

agencies (LEAs) and established the purpose of CCGI to provide a free college and career planning curriculum and internet website for grades 6 to 12 (Section 60900.5). Initially, participation by LEAs was voluntary.

- In 2022, funding for the Regional K-16 Education Collaboratives Grant Program required applicants to “participate in the C2C Data System” by adopting CCGI’s tools. This incentive significantly increased the number of LEAs working with CCGI.
- In 2024, C2C convened the eTranscript California Task Force, which identified ways that the CCC, CSU, and UC systems could expand and revise data that CCGI has access to, in ways that strengthened CaliforniaColleges.edu advising tools, as part of a broader examination of topics like dual enrollment.
- Changes to the Education Code in Summer 2024 required all LEAs who serve grades 9-12 to enter into a data sharing agreement with CCGI by January 1, 2026 to provide transcript-informed accounts for students. While this change was implemented by the legislature, it built on the successful scaling that had occurred by 2024, the collaboration among C2C’s partners, and CCGI’s efforts on the ground across the state.

C2C has championed CCGI’s scaling over the past four years, and the increase in reach is significant:

- Prior to FY 2021-2022, CCGI partnered with fewer than 100 LEAs.
- As of April 2026, CCGI partners with 627 LEAs enrolling 2.8 million 6th-12th grade public school students including 97% of California public 9th-12th grade high school students.

How C2C has worked with CCCCCO:

The Office has partnered with the CCCCCO by hosting a user-centered design process for adapting eTranscript California to reduce the administrative burden on students. Concrete adjustments that can improve outcomes for students include transmitting information on courses taken through dual enrollment, providing credit for prior learning, and supporting hiring practices based on skills in addition to academic credentials.

- The cross-agency C2C-hosted eTranscript California Task Force developed 80+ actionable [recommendations](#). These insights focused on ways to better use many existing datasets and advising tools to create an interconnected ecosystem that can address multiple points of transition in students' journeys through education and into jobs.
- C2C's role as a neutral convenor for the task force supported agency representatives to better understand each others' challenges, so that the solutions would better serve the needs of students and advisors in multiple education segments.
- After the task force concluded, C2C provided technical assistance to support the CCCCCO in its eTranscript California request for proposals (RFP) process in 2025. The RFP was co-designed with representatives from other agencies, to ensure that it would address the specific needs of each education segment.
- The eTranscript California RFP was reissued in March 2026 through the Digital Center and was informed by the task force report and RFP review from the intersegmental group that C2C convened.

In addition, C2C has supported CCCCCO with early planning for the Career Passport.

- While the CCCCCO is responsible for building the Career Passport, C2C is supporting the CCCCCO with convening agency and employer representatives to identify technical and policy considerations for the tool.
- C2C has convened weekly interagency meetings to develop a shared vision for the new tool.
- C2C has identified ways to engage future users of the Career Passport, such as employers.
- C2C conducted a national scan of skills based hiring technology ecosystems to identify themes from early adopters and options for implementation that can inform the California Career Passport.
- The background research and published report on how other states have developed similar tools will help agencies work together to design a solution that is informed by evidence-based practices.

- The Career Passport RFP was issued in April 2026 by the CCCCCO in collaboration with the Digital Center with input from the cross agency work group that C2C convened.

Key Concerns about Subsuming Operational Tools

Legal Authority and Infrastructure

The operational tools serve a different purpose than the linked longitudinal data set. A longitudinal data set (like the C2C P20W data set) uses probabilistic matching to connect data across many different entities, creating a retrospective picture of pathways over time. The purpose is to share insights for groups of students, and to keep the underlying data de-identified. In contrast, the operational tools share identified student-level data, in compliance with relevant privacy laws, across entities that serve those students to improve data alignment and coordination in better serving those students.

The different purposes of longitudinal data systems and operational tools mean that they rely on different legal authority and different IT infrastructure. The legal framework and the technological infrastructure of the data system create a clear separation between the longitudinal data system and operational tools. The Participation Agreement establishes the legal framework for the transfer of data from Data Providers into the longitudinal data system. In contrast, CCGI and eTranscript California maintain separate legal agreements with all of their data partners, including provisions for compliance with FERPA that differ from the Participation Agreement.

According to the Participation Agreement, confidential data received from data providers cannot be disclosed except with authorization from the data provider, or for the release of public dashboards, reports, or tools after the data has been de-identified and data suppression protocols have been applied. The public dashboards use historical data that is updated once per year to report deidentified and aggregated information.

This differs from the data used for operational tools, which updates frequently and requires near real-time data sharing of identifiable data between educational institutions or other actors. The data used to drive operational tools is kept separate from information used for analytical tools and has not been shared with the longitudinal data system.

Governance and Funding

C2C Statue charges the C2C Board with directing the overall data system's work, which includes the scaling of operational tools; however, the board does not have fiscal or governance authority over the entities who run the operational tools.

- The Governing Board is responsible for “adopting a timeline for phasing in the data system, including a timeline for the development of analytical tools, operational tools, and offering professional development and technical assistance.” as well as “creating new operational tools that would help the public interact with data” ([Education Code Section 10866\(b\)\(1\)& \(5\)](#))
- The Governing Board is responsible for providing oversight of the data system and the office by reviewing and approving “an operational tools implementation plan, as developed by the managing entity” ([Education Code Section 10866\(d\)\(4\)\(b\)\)](#)
- The managing entity is responsible for “Scaling, expanding, operating, and maintaining operational tools...” ([Education Code Section 10867\(b\)\(5\)](#))

The named operational tools have different governance structures. The C2C Governing Board has the statutory authority to direct the activities of the Office of Cradle-to-Career Data, including having the appointing authority of the Executive Director of the Office.

CCGI operates with the support of a non-profit organization and its core operations are entirely funded by the State. CCGI operates under the legal and fiscal oversight of the board of the Foundation for California Community

Colleges. The CCGI executive reports to the Senior Director, Intersegmental Student Success at FCCC. Funding for CCGI does not go through C2C (it is a line item under CDE's budget), and the executive is not appointed by the C2C executive or C2C's governing board. CCGI's work is informed by an advisory board, composed of leaders from notable student-serving systems and organizations. Although CCGI has an advisory board, that advisory board has no decision-making authority over CCGI. CCGI submits an annual report to the legislature via the Riverside County Office of Education, which is collaboratively developed with CDE, as required in Education Code Section 60900.5 (i).

eTranscript California is funded by the State and operated via a contract that CCCCCO issues. Any current or future vendors report to the CCCCCO, which has the decision making authority on issuing contracts and directing the work of the vendors. An intersegmental eTranscript California steering committee provides guidance on broad operational issues related to the system.

Given that governance, the C2C Office has worked to scale operational tools via collaboration and convening stakeholders to support user-centered design, ensure opportunities for input, and foster shared ownership. The Office does not engage in work directly to expand the reach of the tools, request amendments to statute regarding their operations, or implement their data and technology components.

C2C's governing board does not exercise authority over the entities operating the tools and does not have oversight of their work. The Office uses the annual work plan, a document that C2C's governing board reviews, to highlight collaborative work with partners. The public document has been used to drive the support and scaling of operational tools. The governing board directs the work of the C2C Office by directing the C2C Executive Director.

Subsuming operational tools would require changing the way the tools are funded. Proposition 98 funding is less prone to fluctuations from year to year due to an existence of a minimum guarantee. It adjusts based on economic conditions and attendance during prosperous years but also protects against

drastic changes in poor budget years. This makes Proposition 98 funding a stable and reliable source of funding. However, only K-12 schools and community colleges can access this type of funding. Accessing Proposition 98 funds to operate practical tools has been effective for CCGI and CCCCCO. Shifting funding to flow through C2C instead of CDE or CCCCCO to operate practical tools would require either switching from Proposition 98 to General Fund as the source, or potentially working with a local K-12 or community college district as a fiscal agent.

Precedent

The Office has not found a precedent for the state to subsume independent organizations and its workforce. The Office has not found any examples of technology products developed by independent organizations being converted into a state entity and where the employees were absorbed into the state governance structure to become state employees.

Alternative Approach

An incubation model adapted from the private sector can be applied to government contexts to effectively drive social impact. During the incubation period, when products/tools are in their early stages, they will be given support and resources to encourage growth and scaling of operations. Support will vary depending on the needs of the organization and could include financial support, technical assistance, infrastructure, and/or facilitation of partnerships and collaboration. Incubators typically nurture and develop ideas or products towards growth but do not take on the ongoing operations of the innovation. As an incubator, C2C can spark innovation and enable collaboration for example, by providing neutral space for entities to imagine possibilities and working in a consultative capacity.

There are several notable digital service teams that leverage technology and design to improve public service delivery. While they vary in their focus and areas of expertise, they all adopt a consultancy approach to provide support in time bound or time limited, project-based engagements and share results as a

case study for others to learn from. Key hallmarks of successful incubators include leveraging strengths and providing expertise then stepping away to allow implementers to carry the project forward and continue to scale.

- **California Office of Data and Innovation (ODI)** is a state incubator. They offer services as a data science accelerator and modern data stack accelerator to drive innovation across state government. ODI provides technical assistance and partners with state departments on short term projects ranging from several weeks to one year and uses data, human centered design and technology to provide better services to Californians.
 - An example of their work includes partnering with the California Department of Human Resources (CalHR) to unlock state hiring insights. Over the course of four months, ODI improved CalHR's data infrastructure to improve data access and staff capacity. They accelerated the work and enabled CalHR to accomplish something that would have taken much longer if they had tried to attempt it on their own. Program staff at CalHR now have self-service access to hiring data, and are able to better extract insights from the Examination & Certification Online System (ECOS) about the state recruitment process and make data driven decisions.
- **United States Digital Service (USDS)**'s mission was to deliver better government services to the American people through technology and design. It brought in talent with expertise in engineering, product, design, procurement, data science, operations, talent and communications to work on short term projects, lasting no more than four years, that improve critical government services. Between 2014 and 2024, it focused on work that produced the greatest impact including urgent rescue projects like [healthcare.gov](https://www.healthcare.gov) website and the Covid-19 vaccine finder tools.
 - [Healthcare.gov](https://www.healthcare.gov) is a health insurance marketplace designed to help users find affordable health insurance. It was launched in 2013 with technical challenges that prevented people from using the service.

Private sector tech teams joined the project and worked around the clock to identify and solve problems with the service. Using agile processes and private sector best practices, they were able to improve site reliability, increase complete applications, and build new systems with industry standard open source software. This enabled 8 million Americans to sign up for health insurance in the first enrollment period alone. Another example involves the COVID-19 pandemic response. In early 2021, there was high demand for Covid-19 vaccines however, there were no national vaccine search solutions that existed. Leveraging an existing tool, USDS made updates to improve accessibility and support up to 100 million users simultaneously. Their efforts made information and access widely available to the entire country.

- **18F** was a digital services agency within the Technology Transformation Services department of the Federal General Services Administration (GSA). It operated as a consultancy and provided paid advisory services to federal and state agencies to improve how government services are delivered. It focused specifically on improving hiring and software development processes and formalizing solutions to make it repeatable for the rest of the federal government. Its goals were to build user centered design digital services and demonstrate that the government can operate in an iterative, agile manner. By transforming how the government builds and buys digital services, and integrating 18F's style of software development, they were able to, in cases, reduce time to hire by 70% and time to deploy software by 80%.
 - 18F developed tools including DirectFile, a free direct file service offered by IRS, and government websites like cloud.gov and login.gov which are replicable and available for every agency to use.

Recommendation

Subsuming eTranscript California and CCGI is infeasible for C2C. As the Governing Board prioritizes how to allocate time and resources, the Office

recommends that C2C should focus on incubating new or revamped operational tools.

Incubation is a mechanism by which operational tools can be scaled. C2C's work with CCGI and the CCCCCO have shown that the role of convening, building trust and ownership, and supporting agencies to see things through the eyes of students and practitioners has been invaluable. This role leverages the Office's core strengths including innovation, neutrality, breaking down silos, user-centered design, linking and visualizing data, and implementing privacy-enhancing strategies. To date, C2C has acted as an incubator for eTranscript California, Career Passport, and [Californiacolleges.edu](https://californiacolleges.edu).

Going forward this role could be codified through agreements with agencies that are seeking to develop tools and practical solutions in two scenarios.

- **Supporting the Creation of Operational Tools Hosted by Other Agencies.** A memorandum of understanding (MOU) between C2C and the host of an operational tool could clarify C2C's role as a convenor, specify the types of public or collaborative processes the Office would lead, identify what types of documentation would be created, indicate the project duration and list the intended outcomes of the joint work. For example, C2C hosted a planning committee that established a shared vision for the Career Passport. The agreement with CCCCCO specified that C2C will provide technical assistance to the CCCCCO on user centered design and stakeholder engagement during the procurement and build phase of the Career Passport.
- **Supporting the Linking of Data to Address a Practical Need.** The current Participation Agreement establishes a mechanism for the Office to develop a simple tool that provides a service to another agency and could be managed internally. For example, C2C helped the ScholarShare Investment Board identify postsecondary students in California Community Colleges (CCC) who have unused CalKIDS accounts, so that colleges could reach out to those individuals to ensure they are maximizing their financial aid. Similarly to how ODI leverages their

strengths in data science and engineering best-practices as an incubator, C2C could support other partners by producing similar tools that leverage C2C's strengths in linking data to address other challenges.

CalKIDS Project Example:

The CalKIDS scholarship program provides eligible students money for college. It was designed to reduce financial barriers to postsecondary education and training. However, many students do not know it is available and ScholarShare Investment Board (SIB) which administers the CalKIDS accounts do not have a way of contacting current students. SIB knows which students have accounts but do not know where students go to college. Individual colleges know which students are enrolled but not which students have unclaimed accounts. Each data provider on their own does not have enough information to address the challenge.

C2C enabled three previously siloed data providers to efficient partner on a data sharing solution. By linking CDE, CCC and SIB data, C2C was able to bridge a information gap. This is a use case where the legal agreements for the data system itself were used including the participation agreement and the master data exchange agreement. The initial data linking found forty thousand community college students with over \$20M in unclaimed scholarships. The result of this data sharing solution is that there will be targeted outreach to students with unclaimed funds and tens of thousands of community college students can now claim their scholarships to help pay for school. The effort is further supported by CCGI to reach even more students. CCGI provides educational resources and added CALKIDS information to their financial aid lessons so high school students are aware of this source of funding and know how to find the state identifier needed to access their scholarship account.

The key to successful incubation will include pre-determined, time-limited engagements by which specified outcomes or scale will be achieved. A

memorandum of understanding can define roles and requirements for operations and reporting, as well as the expectations for scale. The agreement would clarify goals for the extent of reach or impact the engagement will bring. C2C could conclude each engagement with a report on C2C's website. The story of incubation can describe the results, lessons learned as well as guiding principles for the scope and objective of the operational tool for how other entities can carry it forward. This approach provides the benefit of being able to expand the impact of the C2C team and apply C2C's strengths and expertise to new challenges in service of students, families and educators.

Serving as an incubator preserves C2C's neutrality. When supporting the design of tools that are hosted by other entities, C2C would not be involved in their management once the tools are scaled and it can be demonstrated that they are addressing administrative burdens. Rather than providing oversight to other entities about the tools they develop, the Office can help state entities develop shared approaches for connecting individuals and organizations with trusted information and resources. Existing state mechanisms, such as the annual budgeting and legislative process, can be leveraged to ensure accountability. If C2C proceeds in an incubator role, oversight by the Board would focus on providing input on which operational tools the Office should support, outlining the Office's role through the annual workplan, and receiving periodic reports on the development of operational tools.

Once the data system has additional staff capacity and larger operations, C2C can consider directly operating or subsuming an operational tool in the future. If circumstances change and a small but efficient team could run a tool that strategically advances C2C's mission, there can be opportunities to reconsider the role for C2C.