

Cradle-to-Career Data System Update to the Legislature

April 2021

Executive Summary

In 2019, the California Legislature authorized an 18-month planning process for the statewide Cradle-to-Career Data System, with the goal of creating detailed implementation recommendations for linking existing education, workforce, financial aid, and social service information to address disparities in opportunities and improve outcomes for all students across California. These recommendations are being developed through an extensive planning process that has included more than 200 people to date, drawn from both the partner entities — state agencies and stakeholders identified in the legislation — and the intended users of the data system (see the Appendix for a full list of planning process participants).

In December 2020, the Cradle-to-Career Data System workgroup submitted a report to the Governor's Office and the Legislature that addressed the majority of the requested topics (see the Appendix for a crosswalk and links to core documents). This update describes work done in the first quarter of 2021, which aimed to document technical requirements and community engagement features that will be necessary to implement the proposed model.

Between January and March 2021, the workgroup developed recommendations on:

- Privacy and security policies
- Definitions and data quality recommendations

Each of these sets of recommendations will allow the data system to be developed more efficiently in the first five years of implementation.

In addition, the Community Engagement Subcommittee made progress on a framework for communications and professional development.

Finally, several of the entities participating in the planning process have begun work on a proposed proof-of-concept dashboard related to teacher retention. Although the Legislature has not yet determined whether to release previously appropriated funding to create this resource, embarking on initial planning will help to clarify considerations necessary to implement the proposed project as well as the broader data system.

A few items, such as more granular security and procedural documentation, and further refinements to the budget, cannot be definitively addressed until work begins on the data system. However, in partnership with the California Department of Technology, the planning process has yielded recommendations that reflect the evolving thinking of experts on the best means for implementing data infrastructure projects.

As the bulk of planning concludes, the workgroup has reaffirmed its recommendations in the December 2020 Legislative Report. These recommendations are reflected in the Governor's 2021–22 Budget Proposal and accompanying trailer bill language. The remaining planning tasks in 2021 will serve to speed the implementation of the data system, provided that the Legislature enacts the statute and appropriates funds. These planning tasks do not change the proposed model and structure; rather, they are intended to enhance and speed implementation.

Data providers and the public are united in support of this approach because they need and deserve insights about how factors such as health, social services, and apprenticeships relate to access to and success in education and the workforce. Funding the proposed data system will help California design strategies for recovering from the pandemic in ways that can address the widening disparities in the state.

> The proposed data system would allow California to leapfrog other states in providing useful information to policy-makers, practitioners, and the public that would address pressing needs.

It can be implemented affordably because it links existing data using widely available and proven technology tools, rather than building the system from scratch or requiring the collection of new information.



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Section 1: Privacy and Security Policies

The Cradle-to-Career Data System Act stresses the importance of ensuring that information will be kept secure and that the data system will protect individual privacy. To fulfil this vision, representatives from the proposed data providers worked with national experts, the California Department of Technology (CDT), and the California Department of General Services (DGS) to recommend a set of core policies and plans. These items were vetted first in subcommittees made up of legal, technology, and security representatives from the partner entities and then by the full workgroup.¹

The recommendations fall into three general areas:

- Policies for protecting sensitive information
- Requirements for security
- Descriptions of policies for the public

Each of these recommendations serves to clarify the level of rigor that will be used to protect the data that would be in the Cradle-to-Career Data System. Some of these recommendations represent first drafts of policies that would be finalized when the state enters the procurement process and selects the vendors and tools that would be used to create the data infrastructure. Other items that will be necessary to implement the data system, such as protocols for uploading data, data quality management, and correcting data are also dependent on the selection of the data tools. Once the data system is under development, the managing entity would work with data providers and other experts to refine and extend these recommended policies and procedures.

Policies for Protecting Sensitive Information

The workgroup recommends taking a very conservative approach to identifying **personally identifiable information** — data that should be subject to protections to maintain individual privacy. This recommendation is based on examining data types

¹ See the appendix for members of the subcommittees and the workgroup.

that are considered sensitive in the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as well as state regulations laid out in the California Information Practices Act.² When these three frameworks are combined, any information that is about a person would be considered sensitive. This would include characteristics (such as gender or disability status), education experiences (such as enrolling in a college or graduating), and participating in social services (such as receiving state-sponsored health care or food assistance).

Based on this definition for personally identifiable information, the workgroup recommended a simple **data classification scheme**. If information pertains to an individual, it will be considered *personal*, and other items that are about institutions, such as the address for a high school, will be classified as *public* data points. Each of the data points that have been identified for inclusion in the Cradle-to-Career Data System (referred to as the P20W data set)³ have been evaluated, and the data providers have noted the appropriate privacy flag.

To ensure that sensitive information such as students' race can be displayed in publicfacing tools while ensuring the privacy of data on individuals, results will be masked by using a **deidentification protocol**. A preliminary draft of this protocol was discussed at advisory group and workgroup meetings and will be refined over the spring.

Requirements for Security

The workgroup's proposals are based on a **data security framework** that reflects federal recommendations and aligns with requirements from CDT and DGS. The framework provides a set of criteria that would be used by the Government Operations Agency (GovOps) in its recommended role as the managing entity for the data system. For example, GovOps would refer to these criteria when developing requests for proposals or in legal agreements with subcontractors regarding security requirements for the cloud repository and data warehouse. The framework also defines critical requirements, such as a security authentication methodology that ensures an individual accessing sensitive information in the data system is in fact the one who was granted that

² The California Information Practices Act is located in the Civil Code, Section 1798 et seq.: <u>https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=CIV&divisio</u> <u>n=3.&title=1.8.&part=4.&chapter=1.&article=</u>

³ View the "Data points in the P20W data set" document: <u>https://cadatasystem.wested.org/recommendations</u>.

permission. This framework will need to be reviewed and revised once development of the data system is underway, given frequent changes to federal and state guidelines.

The data security framework was used to create first drafts of several foundational documents. For example, it guides a preliminary **permissions protocol**, which determines who would be able to access the data system and the granularity of the information that each individual would be able to see. The framework was also used to craft an initial draft of an **incident response plan** to spell out how GovOps would address any security breaches. Both of these documents will be further refined as part of the data system development process.

Finally, the framework was used to evaluate the existing security and privacy policies in place for **CaliforniaColleges.edu**. Strong security protocols are important because this tool displays information on specific individuals, such as progress on completing high school course requirements, financial aid applications, and college applications. As part of the workgroup vetting of whether to scale CaliforniaColleges.edu across the state, experts within DGS and from the partner entities confirmed that the existing CaliforniaColleges.edu policies are sufficient.

Documentation for the Public

Many of the privacy and security documents are written at a highly technical level. To ensure that members of the public would be able to understand the protections that are in place, the workgroup has recommended language that makes these policies more understandable.

First, the workgroup has recommended a **privacy policy** that describes core concepts such as data system components, information types, and information providers. It also lists relevant statutes and resources. As with some of the security requirements, this document cannot be completed until the vendors and tools are selected. However, the policy was cross-referenced against both federal and state statutes to ensure that it either addresses or has placeholders for all privacy requirements for public documentation.

Second, to ensure that individuals have a voice about whether their information is included in the Cradle-to-Career Data System, simple language was developed for the website on how to **opt out** of the merged analytical data set. This policy would be applicable to both minors and adults and would be used to instruct GovOps to remove information on specific individuals. The policy also clarifies that the opt-out request will

not cause the individual's information to be removed from the source data sets, such as information collected by the California Department of Education (CDE), postsecondary institutions, or social service agencies.

Finally, the workgroup recommended a **system disclaimer** that describes some of the limitations of the data system, such as noting that data may not be complete and clarifying how frequently it is refreshed. This document, which would be posted on the Cradle-to-Career Data System website, also notes ways to provide feedback on the information in the data system and establishes terms and conditions for using information made available through the public tools.

Recommended Privacy and Security Documents

- Personally identifiable information definition
- Data classification scheme
- Data security framework
- Privacy policy
- Opt-out language
- System disclaimer

View the recommended privacy and security documents: <u>https://cadatasystem.wested.org/recommendations</u>.

Section 2: Definitions and Data Quality Recommendations for Public-Facing Information

The Cradle-to-Career Data System Act requests that the workgroup identify a mechanism for aligning data definitions and ensuring data quality. The planning process went a step further by examining each of the 160 data points identified in the December 2020 Legislative Report to refine each definition, determine how each data provider documents that concept, determine whether each data point should be calculated by GovOps or provided by the source agency, document the years of

available data, provide a preliminary assessment of the quality of available information, and recommend how each data point should be displayed.

As a result of the review process, additional data points were identified, bringing the total to over 200 public data points. In some cases, a single item was broken into multiple data points to reflect the difference in how data providers capture these concepts. For example, the data point on completing college was paired with three additional measures that clarify the types of awards offered by community colleges, private colleges, and four-year institutions. In other cases, the partner entities volunteered to provide additional data points to expand information on student outcomes, such as including K–12 science assessment results or expanding information on community college English as a Second Language (ESL) students to include the subject matter of the ESL course (see the box for other examples).

Examples of Additions to the P20W Data Set

- Age when first enrolled in subsidized early learning and care
- Completed K-12 leadership/military science coursework
- Highest K–12 math course completed
- Completed a distance learning or education course
- Earned the State Seal of Biliteracy
- Eligible for Medi-Cal, CalFresh, CalWORKS, and state financial aid
- Amount of financial aid received
- Number of transferrable units completed at community college
- Time to transfer after exiting community college
- Type of private college award
- Undergraduate/graduate student status
- Proportion of students who completed a-g requirements
- Proportion of students who are homeless
- Proportion of students who are first in their family to attend college
- Proportion of students who are eligible for state financial aid

As part of this examination, the data providers determined whether data points should be freely available in the query builder or, due to concerns about complexity, be available by request only through the formal data request process. These data points include complex assessment profiles for children in early learning and care, underlying data points used to calculate chronic absenteeism, titles for middle school math courses, a career and technical education accountability measure that is no longer used, and the location of an employer's administrative headquarters.

The examination of each data point led to ten items being removed from the P20W data set because they are not collected by the data providers, cannot be shared, or are of insufficient data quality.

Four data points were removed because they currently are not collected or calculated. These include if a college waived general education requirements due to a student's Advanced Placement/International Baccalaureate test scores; if a student attained satisfactory academic progress in their first year of college; if a student participated in support services, such a writing center or a food bank; and, grade point averages.

One data point—employment outside of California—cannot be included because the federal data sharing agreement that governs the use of this information requires that all other states must agree before the data could be used in the Cradle-to-Career Data System.

The remaining data points were deferred for future inclusion due to concerns about data quality. For example, data collection has just begun on participation in preapprenticeship programs and information is incomplete. Other data points could become the focus of improvement efforts in close collaboration with the Cradle-to-Career Data System governing and advisory boards.

For example, work is already underway to improve this data point for quality ratings for early learning and care providers. In the case of student-counselor ratios, the CDE could develop a more refined taxonomy for staff roles that would distinguish between a college counselor and a school nurse or psychologist. Finally, grade point averages, the number of a-g courses completed by students, and eligibility for California State University and the University of California could be validated and calculated for K–12 students when the K–12 data system is updated to support the scaling of CaliforniaColleges.edu. Based on these changes and additions, the workgroup recommended edits to the proposed content for the dashboard visualizations and the query builder. The updated documentation on **publicly available data** has been posted to the project website.

One area of concern flagged by the workgroup is financial aid data. Guidance released by the federal government in 2017 implies that there are certain limitations for displaying deidentified financial aid information in tools such as dashboards and query builders.⁴ During 2020, the planning facilitators at WestEd made three inquiries to the U.S. Department of Education for clarification. The Newsom Administration will engage with federal partners to address this matter as soon as possible.

Another issue raised by the workgroup is the need to clarify requirements related to providing P20W data elements to the managing entity. For example, some private and independent colleges do not capture all of the data points listed for postsecondary institutions. Similarly, information on early learning and care is still limited. The data points listed in the P20W data set come from the CDE and focus on preschool, distinct from daycare information that will become available from the California Department of Social Services. In other cases, the quality of a data point from one particular provider may be very low, which could reduce the perceived value of higher-quality information available from other data providers.

To address these concerns, the data providers are now engaged in vetting the updated P20W list, with a focus on affirming which entities can provide each data point. Partner entities are also developing suggested language for the trailer bill and a memorandum of understanding with the managing entity that address the scope and allowable use of the information provided, in alignment with the model proposed in the December 2020 Legislative Report.

Read the updated list of P20W data points, review a summary of changes, see the description and public display options for each data point, and view the updated contents of the dashboards and query builder: <u>https://cadatasystem.wested.org/recommendations</u>.

⁴ <u>https://studentprivacy.ed.gov/sites/default/files/resource_document/file/FSA_final.pdf</u>

Section 3: A Framework for Communications and Professional Development

In January 2021, an additional subcommittee was convened to develop community engagement recommendations.⁵ In its first three meetings, the Community Engagement Subcommittee developed more than 20 personas that represent the likely types of people who will use the data system, including their motivations, challenges, and what they would need to successfully use information from the Cradle-to-Career Data System. As the data system is developed, the personas can be used to tailor tools, communication, and support for specific audiences.

These personas were grouped into four broad categories:

- **Analyzers**: people looking at trends and comparisons to evaluate systemic problems and opportunities (examples: legislative staff, research analysts, reporters)
- **Planners**: people seeking to improve outcomes and implementation of interventions at the institutional or system level (examples: school district staff, community-based organization leaders, state agency program monitors)
- **Practitioners**: people seeking to improve outcomes and individual implementation of interventions (examples: teachers, counselors)
- Individuals: people seeking to improve outcomes for themselves or someone they know (examples: students, parents, families)

The personas were then used to create a communication matrix that identifies which Cradle-to-Career Data System tools would be most appropriate for each role, clarifies appropriate messaging for each audience, and spells out optimal ways to reach each group. The personas and communication matrix are now being vetted with representatives from the intended audiences.

Next, the subcommittee heard from experts about design considerations and professional development that would help members of the public use the data system in ways that advance the vision of empowering individuals to reach their full potential and fostering evidence-based decision-making to help California build a more equitable future.

⁵ See the appendix for a list of Community Engagement Subcommittee members.

Between April and June 2021, the subcommittee will generate recommendations about specific supports that should be made available for each of the proposed Cradle-to-Career Data System tools, implementation considerations for the governance structure to ensure meaningful community voice, and recommended action steps for community engagement in the first year of data system development.

See the personas and review the communication matrix: <u>https://cadatasystem.wested.org/meeting-information/community-engagement-subcommittee</u>.

Section 4: Proof-of-Concept Proposal

In the December 2020 Legislative Report, the workgroup requested that funds appropriated in July 2019 as part of the implementing legislation be released to allow the data-sharing model to be tested through several proof-of-concept activities.⁶ These include:

- Creating a dashboard on teacher retention that would test the proposed legal and technical framework on a small scale
- Improving underlying infrastructure in the CDE's CALPADS data system that would support both scaling CaliforniaColleges.edu and improving the quality of K-12 data elements in the data system
- Providing support to rural regions so they can use CaliforniaColleges.edu

The Legislature has indicated that the request will be held until this April 2021 Update Report is submitted in order to allow legislators and staff more time to review the proposed model for the data system.

In the meantime, a number of the partner entities have begun to plan for the proposed teacher retention dashboard. Given the need for more information to respond to the impact of the pandemic on an already-strained teacher workforce, this dashboard

⁶ See Education Code Section 10850 et seq.: <u>https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=EDC&division=1.&title=1.& part=7.&chapter=8.5.&article=.</u>

would help state policymakers better understand and address teacher shortages, which are being exacerbated by the pandemic, in an equitable manner.

Working from the proposed data set, an advisory group has identified priority audiences, key questions that can be answered, and supplemental information that would help to contextualize results. These considerations are now being translated into sketches of potential visualizations that will be shared with priority audiences. If the proof of concept or data system is funded, this pre-work would enable the dashboard to be implemented within a short time frame.

Section 5: Budget and Procurement Process

The workgroup continues to recommend:

- Leveraging \$6 million of funds remaining from the planning phase in the current year: These dollars are necessary to modernize the CDE's CALPADS data system and pilot the proposed technology solution as a proof of concept, which will provide additional insights into future technology and staffing costs. Other costs include improving the data infrastructure between CaliforniaColleges.edu and postsecondary partners and initial scaling to some rural regions.
- Appropriating \$15–20 million annually, beginning in fiscal year 2021–22: As proposed in the Governor's Budget, these funds will cover staffing costs for the managing entity, a limited number of positions for key data providers, scaling CaliforniaColleges.edu (and, in future years, eTranscript California), one-time setup costs, and ongoing expenses for data system infrastructure.
- **Refining ongoing cost estimates during fiscal year 2021–22**: The implementation costs can be adjusted based on progress in the first year.

CDT has affirmed that, absent the technology and cost-related information that will be gleaned from the proof-of-concept projects, it is not possible for the workgroup to provide more granular budget details for the analytical data set. However, future year budgets for scaling CaliforniaColleges.edu and eTranscript California have been documented as part of the planning process.⁷

⁷ An operational tool assessment summary that includes the costs of scaling eTranscript California and CaliforniaColleges.edu is available in the "Operational Tools" section at <u>https://cadatasystem.wested.org/recommendations</u>.

It is important to note that the budget estimates developed by the workgroup and included in the Governor's Budget are in alignment with the implementation costs for similar systems in other states. Based on recent experiences, such as the development of the Homeless Data Integration System, California should be able to achieve a larger scale at a comparable cost to other states because the Cradle-to-Career Data System would leverage common and affordable technology tools to link existing data sets, rather than building a system from scratch.

The proposed development process also aligns with state policies such as the Project Approval Lifecycle (PAL), which CDT created to improve the planning, quality, value, and likelihood of successful information technology projects, and to assist state agencies in aligning project phases with planning for resource requests in the state budget cycle. The PAL framework consists of four phases, including business analysis, alternatives analysis, solution development, and project readiness and approval. The planning process undertaken for the Cradle-to-Career Data System has utilized a structured approach that encompasses the analysis required by the PAL and has been further supported by CDT's participation in the workgroup and other planning meetings.

In the future, costs could increase if the scope of the data system is changed dramatically. Those expansions would be addressed through the annual state budget process. This iterative approach will decrease overall risk by ensuring that the managing entity modifies its approach based on what is discerned from smaller, more rapid deliverables. Any lessons learned about the cost of development and implementation would be used to inform future budget requests. Furthermore, any proposed expansion could be thoroughly reviewed by the Legislature before the allocation of additional funds. This type of incremental development process has already been used successfully for the development of tools such as the CDE's California School Dashboard.

Conclusion

The December 2020 Legislative Report laid out a comprehensive model for a data system that addresses the priorities laid out in the Cradle-to-Career Data System Act. This model has subsequently been reflected in both the Governor's January 2021 budget⁸ and in the trailer bill⁹ for fiscal year 2021–22.

In the first months of 2021, the workgroup and the various committees supporting their work have continued to affirm the recommended approach and have completed many of the additional items specified in the planning legislation, including establishing key privacy and security documentation and refining the list of data points that will be included. In the remaining months of the planning process, the partner entities will complete the development of the legal agreements, finalize the deidentification protocol, clarify which partner entities will provide specific P20W data elements, and work with community members to provide recommendations regarding training, support, and data visualization.

The extensive, evidence-based planning conducted over the past 15 months, which included broad participation from data providers, community members, and longitudinal data system experts, has yielded a model that would produce one of the most extensive, public, and secure longitudinal data systems in the country. The need for this type of information was clear before planning began and has become even more acute as the state addresses the impact of the pandemic, reopens schools, and supports people who must seek new types of work. Moving forward with these recommendations can help the state recover and identify proactive solutions to the deepening gaps in opportunity for many Californians.

⁸ http://www.ebudget.ca.gov/2021-22/pdf/BudgetSummary/K-12Education.pdf

⁹ <u>https://esd.dof.ca.gov/trailer-bill/public/trailerBill/pdf/282</u>

Appendix

Location of Legislative Requirements in the December 2020 Legislative Report¹⁰ and April 2021 Update

Note: items in gray rows indicate new information included in the April 2021 Update. Items in orange rows will be addressed in the final report, due in June 2021.

Requirement	Code Section	Legislative Report Location
First Legislative Report Requirements ¹¹		
A planning facilitator that contracts with the Office of Planning and Research pursuant to subdivision (b) of Section 10855 shall report to the Department of Finance and the Legislature by July 1, 2020, on the proposed structure of the data system, including, but not limited to, the entity charged with managing the data system, the architecture of the data system, and the information that will be available on the data system ¹²		
Entity: Entity charged with managing the data system	Education Code Section 10856 (a)	December 2020 Report Section 5: Governance Managing Entity, pages 28–30 and <u>https://cadatasystem.wested.</u> <u>org/recommendations</u>
Architecture: Architecture of the data system	Education Code Section 10856 (a)	December 2020 Report Section 4: Technical Structure Analytical Tools pages 14–15 and https://cadatasystem.wested. org/recommendations

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¹⁰ https://cadatasystem.wested.org/recommendations

http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=EDC&division=1.&title=1.& part=7.&chapter=8.5.&article=

¹² Due to the planning process starting late, the Governor's Office of Planning and Research requested six-month delays for each of the required legislative reports.

Requirement	Code Section	Legislative Report Location
Available Data: The information that will be available on the data system	Education Code Section 10856 (a)	December 2020 Report Section 3: Purpose and Available Data Proposed Information for Phase One, pages 12–13 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
Disaggregation: How the system could have the capacity to disaggregate: race, ethnicity, region, gender, military status, parents' education, and age	Education Code Section 10856 (b)(1)	December 2020 Report Section 7: Privacy, Security, and Data Definitions Data Definitions and Data Quality, pages 36–38 and https://cadatasystem.wested. org/meeting- information/definitions- subcommittee
Transferring Educational Records: How to transfer high school pupil educational records to postsecondary educational institutions	Education Code Section 10856 (b)(2)	December 2020 Report Section 4: Technical Structure Operational Data, pages 20–23 and https://cadatasystem.wested. org/recommendations
Early Education: The impact of early education on student success and achievement as the student progresses through education segments and the workforce	Education Code Section 10856 (c)(1)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7

Requirement	Code Section	Legislative Report Location
Primary Education: The long-term effect of state intervention programs and targeted resource allocations in primary education	Education Code Section 10856 (c)(2)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
College and Career Readiness: How prepared high school pupils are to succeed in college	Education Code Section 10856 (c)(3)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
Transfer Outcomes: How long it takes students who transfer from community college to the University of California, the California State University, or another four-year postsecondary educational institution to graduate with a baccalaureate degree	Education Code Section 10856 (c)(4)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
Financial Aid: College access, completion, and long-term effects of access to state financial aid	Education Code Section 10856 (c)(5)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7

Requirement	Code Section	Legislative Report Location
Workforce: The workforce effect of graduation from high school, community college, and four-year postsecondary educational institutions	Education Code Section 10856 (c)(6)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
Prior Efforts: It is the intent of the Legislature that the workgroup review and build upon prior reports, including those produced pursuant to Senate Bill 1298 of the 2007–08 Regular Session (Chapter 561 of the Statutes of 2008), and review and build upon existing data systems and best practices, as appropriate and relevant	Education Code Section 10856 (d)	December 2020 Report Section 2: The Planning Process Background Research, page 2 and <u>https://cadatasystem.wested.</u> <u>org/resources-page</u>
Second Legislative Report Requirements A planning facilitator that contracts with the Office of Planning and Research pursuant to subdivision (b) of Section 10855 shall report to the Department of Finance and the Legislature by January 1, 2021, its recommendations on all of the following:		
Data Access: How access to data will be controlled and authorized	Education Code Section 10857 (a)(1)	December 2020 Report Section 6: Linking and Accessing Data Data Request Process, pages 31–33 and https://cadatasystem.wested. org/meeting- information/technology- security-subcommittee and April 2021 Report Section 1: Privacy and Security, pages 1–4

Requirement	Code Section	Legislative Report Location
Common Data Definitions: A means of developing common data definitions	Education Code Section 10857 (a)(2)	December 2020 Report Section 7: Privacy, Security, and Data Definitions Data Definitions and Data Quality, pages 36–38 and https://cadatasystem.wested. org/meeting- information/definitions- subcommittee and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
Additional Data Elements: Additional data elements necessary for partner entities to collect for future linkage to the data system	Education Code Section 10857 (a)(3)	December 2020 Report Section 4: Technical Structure Data for Analytical Purposes, page 16 and <u>https://cadatasystem.wested.</u> <u>org/recommendations</u>
Statutory Changes: Any specific changes to state law that may be necessary for implementation	Education Code Section 10857 (a)(4)	For scaling of the California College Guidance Initiative, <u>https://cadatasystem.wested.</u> <u>org/recommendations</u> Other items were sent by partner entities to the Department of Finance in response to the 2021 Trailer Bill
Training and Support: Plans for training and support of users	Education Code Section 10857 (a)(5)	April 2021 Report Section 3: Community Engagement, pages 7–8 Additional recommendations will be addressed in final Legislative Report
System Access: How users will be able to access the data system	Education Code Section 10857 (a)(6)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations

Requirement	Code Section	Legislative Report Location
Data Entry and Correction: How authorized users will enter and correct data	Education Code Section 10857 (a)(7)	This process cannot be finalized until the vendor is selected
Data Quality: How to ensure data quality from each component of the education system and participating entities	Education Code Section 10857 (a)(8)	April 2021 Report Section 2: Updated List of Data Points, pages 4–7 This process cannot be finalized until the vendor is selected
Security and Data Privacy: How to address security and data privacy considerations, including compliance with existing state and federal data privacy and use laws, and standard elements that will be included in agreements necessary to share data among partner entities	Education Code Section 10857 (a)(9)	December 2020 Report Section 7: Privacy, Security, and Data Definitions Security Framework, pages 35–36, https://cadatasystem.wested. org/recommendations, and April 2021 Report Section 1: Privacy and Security, pages 1–4
Memoranda of Understanding: How to connect data in a manner that limits the number of memoranda of understanding necessary and maximizes efficiencies	Education Code Section 10857 (a)(10)	December 2020 Report Section 7: Privacy, Security, and Data Definitions Legal Framework, pages 34–35, https://cadatasystem.wested. org/meeting- information/legal- subcommittee Additional recommendations will be addressed in final Legislative Report
Data Request Process: How to respond to requests from researchers to access data	Education Code Section 10857 (a)(11)	December 2020 Report Section 6: Linking and Accessing Data Data Request Process, pages 31–33 and https://cadatasystem.wested. org/recommendations

Requirement	Code Section	Legislative Report Location
Data Expansion: How the data system should be expanded to incorporate childcare, early education, workforce, financial aid, and health and human services data	Education Code Section 10857 (a)(12)	December 2020 Report Section 9: Implementation Sequencing and Timeline, pages 41–48
Implementation Timeline: An implementation timeline, including key project milestones and sequencing for functionality expansions and enhancements	Education Code Section 10857 (a)(13)	December 2020 Report Section 9: Implementation Sequencing and Timeline, pages 41–48
Fiscal Estimate: The estimated fiscal impact of developing the data system and the cost of recommended expansions and enhancements, including the ongoing management costs	Education Code Section 10857 (a)(14)	December 2020 Report Section 9: Implementation Estimated Costs, pages 49–51 and April 2021 Report Section 5: Budget and Procurement Process, pages 10–11
Prioritization of Key Components: A prioritization of key components needed to best enhance and expand the data system if available funding is insufficient to address all desirable elements	Education Code Section 10857 (a)(15)	December 2020 Report Executive Summary, pages i–vi
Public Interface: How to create a public-facing interface to share information with the public that can help inform decisions	Education Code Section 10857 (a)(16)	December 2020 Report Section 4: Technical Structure Accessing Analytical Data, pages 17–20 and https://cadatasystem.wested. org/recommendations and April 2021 Report Section 2: Updated List of Data Points, pages 4–7
Statewide Student Identifier (SSID): How to identify and track students who do not have a preexisting statewide student identifier from the State Department of Education	Education Code Section 10857 (a)(17)	December 2020 Report Section 6: Linking and Accessing Data Record Linking, pages 30–31

Requirement	Code Section	Legislative Report Location
Prioritization for Implementation: To the extent practicable, the workgroup shall prioritize the implementation of the data system in the following order: (A) Phase 1: K–12 and higher	Education Code Section 10857 (b)(1)	December 2020 Report Section 3: Purpose and Available Data Proposed Information for Phase One, pages 12–13 and
(B) Phase 2: Workforce		https://cadatasystem.wested. org/recommendations
(C) Phase 3: Early care and education		
(D) Phase 4: Health and human services and other data connections		

Documentation Referenced in the Report

Privacy and Security (Page 4)

https://cadatasystem.wested.org/recommendations

- Personally identifiable information definition
- Data classification scheme
- Data security framework
- Privacy policy
- Opt-out language
- System disclaimer

Updated List of Data Points (Page 7)

https://cadatasystem.wested.org/recommendations

- Updated list of P20W data points
- Updated description of publicly available data
- Summary of changes to the P20W data points
- Data dictionary for public display items

Community Engagement (Page 9)

https://cadatasystem.wested.org/meeting-information/community-engagementsubcommittee

- Personas for intended users
- Communication matrix

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