The California Cradle-to-Career Data System Workgroup, which is comprised of partner entities named in the authorizing legislation, provides recommendations to the Governor’s Office regarding data system development.

This document provides a summary of the key points that emerged from substantive discussion over the course of the February 2020 workgroup meeting. More information about the meeting, including support materials and the PowerPoint, are available at https://cadatasystem.wested.org/meeting-information/workgroup (click on “Meeting Materials”).

The following workgroup representatives attended the meeting:

Thomas Vu, Association of Independent California Colleges & Universities; Michael Marion, Bureau for Private Postsecondary Education; Cindy Kazanis, Sarah Neville-Morgan, and Mary Nicely, California Department of Education; Natasha Nicolai, California Department of Social Services; Brenda Bridges Cruz, California Department of Technology; Elaine Scordakis, California Office of Health and Human Services; Jeanne Wolfe, California Labor and Workforce Development Agency; Amy Fong, California School Information Services; Ed Sullivan, California State University, Office of the Chancellor; Patrick Perry, California Student Aid Commission; Barney Gomez, California Community College Chancellor’s Office; Sara Pietrowski, California State Board of Education; Teri Clark, Commission on Teacher Credentialing; Amy Faulkner, Employment Development Department; and Chris Furgiuele, University of California, Office of the President.

Review Framing Documents

The group began by reviewing a set of draft talking points that can be used to answer questions about why California is building a state data system. The facilitator requested that the workgroup members read the document and provide comments by email, particularly regarding any additional information they would like in such a resource.

Next, the subcommittee reviewed a draft vision statement for the state data system. Working from text that reflected discussion at the January meeting and input provided using a Google document after the last meeting, the group offered suggestions for how to best reflect the intended outcomes of the project. First, the group recommended that two statements be developed: a single sentence that establishes the overall goal of the project and a longer paragraph that provides more information on how that goal will be accomplished. Second, the group reflected on which of the possible statements they found most compelling and offered a number of edits to the language. The facilitator noted that technical assistance will be provided to the project by Collaborative Communications to finalize core documents such as the vision and mission statements. Amy Fong, Cindy Kazanis, Mary Nicely, Michael Marion, and Ed Sullivan volunteered to support work on refining the communications documents.

Finally, the workgroup reviewed the rubric that will be used to evaluate recommendations and possible options related to state data system development. Workgroup members had offered edits to a draft rubric via a Google document after the January meeting. A number of additional changes were suggested to help clarify items in the document and to ensure only one concept is included in each item.
A revised version will be sent out in advance of the March meeting reflecting these changes. The workgroup will briefly review the rubric at the beginning of each meeting and make minor tweaks, to ensure the document continues to guide their deliberations as the project evolves.

Subcommittee Reports
The facilitator summarized the discussions and recommendations from the four subcommittee meetings held in February.

Common Identifier Subcommittee
The February meeting focused on how the state should construct a common identifier that would allow individual records to matched and linked across data systems. Most subcommittee participants felt strongly that it would not be appropriate to use a single identifier like the K-12 state identifier (SSID) as the state’s common identifier. Instead, they recommended that the state data system use a match process that pairs the identifiers used by individual partner entities (like SSID) with additional elements such as name, date of birth, and address. The subcommittee has begun to compile and rate available data points that could be part of a match process as part of a homework assignment.

The workgroup discussed this recommendation. A California Department of Education representative clarified that the agency is moving to a master index approach for tagging individual records. One member emphasized the importance of creating a master data management strategy. Some workgroup members suggested that California could build its own match system rather than contract with a vendor for this service, particularly given that several state agencies have already created similar processes.

Then, each workgroup member was polled to determine whether they support, support with reservations, or do not support the recommendation to pursue a match strategy rather than having all partner entities use a single existing identifier. All members agreed, with the California State University (CSU) representative expressed agreement subject to further discussion of data quality issues in which a match process would be affected by older data that may not be as complete as newer data.

The complete Common Identifier Subcommittee meeting notes are available at: [https://cadatasystem.wested.org/meeting-information/common-identifier-sub-committee](https://cadatasystem.wested.org/meeting-information/common-identifier-sub-committee)

Technology and Security Subcommittee
The February meeting focused on whether the state should adopt a centralized, federated, or hybrid approach to structuring information. Based on a high-level proposal put forward by some of the partner entities, the subcommittee recommended that data should be structured in a hybrid way, where the primary approach is a centralized data set but the system also allows for some types of data to be accessed using a federated model. They also recommended that the state data system should use the state’s cloud-first policy.

To better safeguard data, the subcommittee recommended that the P20W system that will be used to create dashboards and query tools should include a curated sub-set of information that addresses shared goals, rather than including all information held by the partner entities. They also suggested that different data structures may be needed for each of the use cases, such as primarily centralized systems for dashboards and federated systems for research requests. Finally, the subcommittee noted that it is very difficult to develop more specific recommendations until the scope and purpose of the data system is more specifically articulated.
The workgroup asked clarifying questions about how the recommendations from the Technology and Security Subcommittee would be informed by decisions made by the Common Identifier Subcommittee. One member described the value of creating use cases to support technical discussions.

The workgroup discussed the role that data lakes might play in constructing the data system, as individual partner entities move toward cloud storage solutions. Two members asked for clarification about the implication of using data lakes, such as whether the approach was suggested in the context of using machine learning and artificial intelligence to conduct analyses on priority issues.

The workgroup expressed confusion about the meaning of a cloud-first policy, asking for clarification about whether the subcommittee meant that the information should be housed at the State Data Center or simply that it should be stored on a cloud server.

There was some discussion of how much information would be stored in a centralized system and whether it would exist in a matched state or would only be matched at the time that a query is made. One member noted that it would be important for the Research Agenda Subcommittee to review the recommendations of the Technology and Security Subcommittee about which data elements would be in the P20W data set to ensure there is sufficient information to answer key policy questions.

Then, each workgroup member was polled about the recommendations, which were modified to reflect the workgroup discussion. All members agreed that the subcommittee should: 1) determine what types of information should be centralized and federated using specific use cases; 2) provide clarification on what was meant regarding a cloud-first policy, and 3) identify what subset of information would be in the P20W portion of the state data system. However, some members agreed with reservations. The Department of Social Services representative asked that the discussion be grounded in clearly articulated use cases so that recommendations are not based on generalizations. Both the Department of Labor and University of California representatives noted that recommendations about narrowing the P20W data set should balance the core principles of sharing data and addressing the research agenda with ensuring data security and privacy.

The complete Technology and Security Subcommittee meeting notes are available at: https://cadatasystem.wested.org/meeting-information/techsecurity-sub-committee

Legal Subcommittee

The February meeting focused on whether the Interagency Data Exchange Agreement (IDEA) framework being advanced by the Governor’s Office could be expanded to serve the purposes of the state data system. The subcommittee recommended that IDEA be used as a possible framework for the state data system, but noted that it would need to be edited to address FERPA and suggested using language that is already in place for bilateral data-sharing agreements. A small group is currently reviewing and suggesting edits to the language.

Subcommittee participants also recommended that legislation be passed to create a clear requirement for partner entities to contribute data to the state system for the purpose of advancing the common good, and raised the possibility of legislation or specific protocols regarding Public Records Act (PRA) requests. Similar to the Technology and Security Subcommittee, the Legal Subcommittee noted that it is difficult to come up with specific recommendations without greater specificity about what the data
system will include and how information will be used. However, it is likely that there will need to be several types of data sharing agreements developed. For example, IDEA cannot be used for outside parties requesting data for a research project because it is constructed as an agreement between state agencies.

The workgroup discussed the recommendations. Some members noted that the IDEA acronym is confusing because many educators associate it with the Individuals with Disabilities Education Act. Another expressed enthusiasm for the types of flexibility built into the IDEA approach. One member sought confirmation that IDEA would not preempt existing agreements (it would not) and encouraged the group to think of IDEA as one of many tools to support data exchanges.

The workgroup expressed concern that existing PRA laws could compel one partner entity to release information originating from another entity or could result in an individual receiving a copy of the entire state data system. One member wondered how other states handle this type of concern. Baron Rodriguez, a national expert supporting the project, noted that other states such as Florida have regulations that ensure personally identifiable information cannot be shared as part of a record request. Another member noted that if legislation on PRA requests cannot be passed, this would most likely result in adopting an entirely federated model. One person stressed the importance of ensuring that any amendments to PRA should not remove the primary principle of transparency and worried that changes could be misconstrued as a desire to be less responsive rather than as an effort to protect sensitive data. Another member felt that concern over PRA requests should not overly influence the design of the state data system, as requests will occur regardless of system design and should not limit the usefulness of the system.

Then, each workgroup member was polled about the recommendations. All members agreed that 1) the subcommittee should proceed with amending IDEA to meet the needs of the state data system and 2) the subcommittee should further explore the PRA concerns and bring forward a specific recommendation for legislative changes. However, several members agreed with reservations. The CSU representative requested that the work on IDEA should specifically address how data would be shared with third parties and how PRA requests would be handled, which was supported by the Department of Labor representative. The Department of Social Services representative expressed concern about possible perceptions of lack of transparency regarding PRA requests. A California Department of Education representative wanted more information from the Legal Subcommittee about how well the IDEA framework addressed education exchanges.

The complete Legal Subcommittee meeting notes are available at: https://cadatasystem.wested.org/meeting-information/legal-sub-committee

Research Agenda Subcommittee
The subcommittee developed a suite of priority questions related to post-transfer outcomes for community college students. These questions will not be finalized until all six topics in the legislation have been discussed. Over the course of the subcommittee conversation, several concepts emerged including:

• Because early experiences have such a strong impact on long-term outcomes and individuals don’t follow a linear path from cradle to career, it will be important not to take a reductive approach that examines discrete transitions between education segments or into employment
While it is vital to examine equity gaps, information must be presented in a manner that clarifies the role of societal and institutional structures in education and employment outcomes, rather than blaming individuals or focusing on demographic characteristics to explain access and success.

It will be important to create a data catalog and list of metric methodologies to ensure research projects reflect similar underlying definitions—this same observation was made by the Technology and Security Subcommittee.

In reflecting on this report out, one workgroup member encouraged that, for dashboard purposes, information should focus on what is empirically known—such as how many and what types of people received specific education or services. Issues that are more subjective should be kept in the domain of research. Another noted the value of sorting information by assembly district.

A question came in through public comment from Monica Malhotra from the California State University Chancellor’s Office, regarding what would happen if a research request is made but only some partner entities agree to conduct that research. The facilitator clarified that this question will be addressed as part of the governance discussions that will be held in May-September 2020. One member noted that in various subcommittee discussions, and particularly in the Legal Subcommittee, the emphasis has been on getting to yes, rather than restricting information. Finally, one member noted that it would be helpful for the Research Agenda Subcommittee to identify where there are data gaps, in addition to identifying questions that can be answered using available data.

The complete Research Agenda Subcommittee meeting notes are available at: https://cadatasystem.wested.org/meeting-information/research-agenda-sub-committee

### Setting a Direction for Practitioner and Individual Tools in Phase One

At the January 2020 workgroup meeting, members requested more information on possible tools that could be developed to serve practitioners (teachers, counselors, service providers, institution-level administrators) and individuals (students and families). The background paper laid out four possible approaches, based on tools that have already been built in California or other states. These include:

- Integrate data into existing tools for single education segments
- Focus on transitions between education segments
- Emphasize linkages between education and health and social services
- Provide information that connects education and jobs

For each of the four types of tools, two specific options were provided. After reviewing the eight possibilities, and responding to clarifying questions, workgroup members were invited to suggest other options. CDE proposed expanding work already underway to display information on college-going rates to postsecondary institutions.

Rigel Spencer Massaro from Public Advocates made a public comment urging workgroup members to collaborate with constituents and stakeholders to ensure their input is reflected in deliberations. She also noted that information on linkages between education segments is the most important to implement first and encouraged the workgroup to focus on options that show the public the value of sharing information that supports policy discussions.
Next, the workgroup broke out into small groups to discuss the possible tools and were charged with evaluating each option using the rubric and summary documents about the types of information that each tool contains. After the discussion, each workgroup member voted on their three highest priority tools.

The three most popular options were: 1) provide electronic transcripts; 2) give information to K-12 schools on the college-going rates and postsecondary outcomes of their students; and 3) create tools that link individual records to provide contextual information about whether students are receiving social services to authorized education and social service providers.

The workgroup discussed each concept in turn. When discussing electronic transcripts, the workgroup noted that transcripts should be provided for all levels of education, not just for K-12 students. One member clarified that data must come directly from the education institution, not from state agencies, if an official transcript is needed. Another member noted that electronic transcripts could support the evaluation of minimum qualifications reviews for state hiring practices, although a third noted that this might be more relevant for general government handling than for specific use cases like teacher certification. Many members expressed enthusiasm about this option, noting that it could make the pipeline of students eligible for college more transparent, reduce the burden of effort for both students and education institutions, ensure that postsecondary institutions have students’ SSID to improve matches, and strengthen data quality regarding course attributes.

For tools that inform K-12 providers about their students’ postsecondary outcomes, the group focused on the format in which information could be provided. Some felt that the distinction between dashboards and reports was not helpful and focused on the importance of providing information that would motivate practitioners to take action to improve student success. For example, it might be more impactful to do a research project to evaluate predictors of college and career readiness using empirical data. Another member suggested it might be helpful to create visualizations showing how many high school students are fulfilling a-g requirements and where they end up going on to college. Practitioners could be prompted to think about which students are not reaching a-g eligibility and how the school could support students in reaching this milestone. Several members stressed the importance of including private and independent colleges in addition to public institutions.

For linking of individual records, the group reflected on the type of model to scale. Three ideas include: 1) provide information on existing sharing efforts that could be scaled with a state data system, particularly in the realm of early care; 2) determine if some information could be linked to an electronic transcript record, such as foster youth status; and 3) learn more about how regional examples could be replicated in other parts of the state to create a decentralized structure for sharing information.

Finally, the group weighed in on whether the prioritized options provide an appropriate balance of tools. One member suggested that workforce outcomes are critical, but perhaps these could be displayed in public dashboards that will be created using the P20W data set. Another noted that it was vital to restore information previously provided by the California Postsecondary Education Commission that can help higher education leadership with enrollment planning. This could also potentially be part of the tools associated with the P20W data set.

Next Steps
Workgroup members have the following action items:
• Review the meeting summary notes by March 4
• Review the draft talking points by March 5, to inform work with Collaborative Communications
• Set up times to discuss options with colleagues within each partner entity in advance of the next meeting—materials will be provided seven days in advance

The March 26 meeting will focus on demonstrations of tangible tools for all prioritized use cases including: dashboards and query tools for P20W data sets, research request processes, electronic transcript services, regional approaches to providing health and social service data to educators, existing agency collaborations regarding sharing social service data on individuals that can be scaled, and K-12 to postsecondary transition reports and dashboards.