

Request for Information

RFI #: CDT-CTC-2020

for

Cradle to Career:

Master Data Management System

June 09, 2020

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## 1 Purpose and Overview

### 1.1 Purpose

On behalf of the Governor's Office, the California Department of Technology (CDT) is seeking information from state agencies, postsecondary institutions, and technology respondents with experience in developing and managing master data management (MDM) systems. The objective of this Request for Information (RFI) is to identify and explore capabilities and practices of respondents that may be viable providers of products or services necessary to support the development of solutions related to the use cases identified in this document. Additionally, this RFI process may inform the development of a Request for Proposal (RFP) for an MDM solution. Information given in the RFI will not be used to pre-qualify respondents in the event an RFP is developed.

### 1.2 Disclaimer

Responding to this RFI creates no obligation on the part of any respondent to the state. Conversely, issuing this RFI and considering the responses creates no obligation on the part of the state to any respondent. Submitting a response to this RFI will not qualify an unqualified respondent or enhance the review of that respondents proposal(s) to any future solicitations. Not submitting a response to this RFI will not prohibit a response to any future solicitation, nor disadvantage the evaluation of a response to any future solicitation. By submitting a response to this RFI a respondent is implicitly agreeing with these conditions.

Willing respondents are invited to share non-binding budgetary pricing information for each proposed solution. Pricing is for planning purposes only, and is an attempt to gauge rough-order-of-magnitude (ROM) costs and the relative feasibility of a future MDM solution which the state may or may not choose to deploy. Any pricing provided in a response to this RFI will not be considered an offer on the part of a respondent.

Upon RFI response opening, all documents submitted in response to this RFI will become the property of CDT and will be regarded as a public record under the California Public Records Act (Government Code section 6250 et. Seq.). Said documents shall be subject to review by the public unless it is deemed proprietary trade secret information. This confidential information must be clearly marked and identified as such on each page of the response on which proprietary trade secret information appears. Simply marking the entire response as confidential will not suffice. If a California Public Records Act (PRA) request is received, the marked information will be independently assessed by CDT as to whether the

information is indeed exempt from PRA inspection. If deemed nonexempt, the respondent will be notified of the State's intention to disclose it, giving the respondent an opportunity to intervene.

### 1.3 Background

In 2019, California enacted the Cradle-to-Career Data System Act ([Act](#)), which called for the establishment of a state longitudinal data system to link existing education, social services, and workforce information. The Act also laid out a long-term vision for putting these data to work to improve education, social, and employment outcomes for all Californians, with a focus on identifying disparities in opportunities. By securely linking data that schools, colleges, social service agencies, financial aid providers, and employers already collect, the data system will:

- Enable users to identify the types of supports that help more students learn, stay in school, prepare for college, graduate, and secure a job;
- Provide information that teachers, parents, advisors, and students can use to identify opportunities and make decisions;
- Help agencies plan for and improve education, workforce, and health and human services programs; and
- Provide research that policymakers can use to effectively support individuals from birth through career.

Recognizing that the data system will need to be built in phases, the California Cradle-to-Career Data System Act lays out several priorities. Subsequent work conducted through committees made up of state agencies, advocacy groups, researchers, and practitioners has resulted in the following priority list:

- **Combining and linking existing information.** A centralized data set will combine data from state agencies<sup>1</sup> on early care and K–12 students; public, private and independent college students; financial aid; and employment and earnings. In addition, the system will have the capacity to temporarily link more expansive information from the previously described data sets, plus information on health services, social services, and teacher credentialing.

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<sup>1</sup> Association of Independent California Colleges and Universities, Bureau for Private Postsecondary Education, California Community College Chancellor's Office, California Department of Education, California Student Aid Commission, California State University, Employment Development Department, University of California Office of the President.

- **Guaranteeing privacy and security.** The system must ensure that both centralized and federated information is securely gathered and stored in compliance with federal and state laws and in accordance with privacy best practices, and that the identity of sensitive populations will be protected.
- **Assuring quality.** The system must include mechanisms that can help to improve the quality and reliability of education information, both within the agencies providing the data to the system and at the schools, colleges, and service providers that create the data.
- **Facilitating analyses by researchers, policymakers, and educators.** The system will produce public dashboards, query tools, and analytical tools that address state priorities. In addition, a request process will authorize the construction of custom data sets to answer questions about the impact of state policies and investments.
- **Providing information for students, families, and educators.** In addition to the data system described above, the state will invest in electronic transcript and service eligibility tools that will be separately managed. Ideally, connections could be built between these systems over time to improve data quality and recency of data in the Cradle-to-Career data system.

More information can be found at the California Cradle-to-Career Data System [website](#).

In addition to the Cradle-to-Career data system, the California Department of Education (CDE), in collaboration with its state partners and stakeholders, has begun planning and designing an Early Childhood Integrated Data System (ECIDS). The ECIDS will help integrate data:

- Horizontally from across early learning and care programs and systems for informed statewide decision-making by agencies, policymakers, and other stakeholders and
- Vertically for children prenatal to age five enrolled in early learning and care programs.

To facilitate the tracking and analyses of the educational progress of children from birth through age 5 and the evaluations of early learning and care programs, the ECIDS will be designed to connect with the state longitudinal data system in

partnership with the Cradle-to-Career Data System and Master Plan for early learning and care partners.

Ideally, the California Department of Education, in collaboration with the California Health and Human Services Agency (CHHS), will create the ECIDS by completing these data systems and integrating and/or linking data among them, as appropriate:

- Replacement of Child Development Management Information System (CDMIS), including C-PARIS with an up-to-date management information system;
- Upgrade of Early Education Workforce Registry;
- Construction of a Centralized Quality Rating and Improvement System (QRIS) Database;
- Creation of a Centralized Consumer Education Database and online portal to support parents in making informed choices for childcare as authorized by Assembly Bill 2960, approved by the Governor on September 27, 2018;
- Establishment of an electronic system for the Request For Application process from application through approval and appeals;
- Development of an online system for Continued Funding Applications process for contractors; and
- Creation of a Unique Provider ID system for early learning and care providers to streamline data collection efforts.

The ECIDS will be linked to data for health and human services programs held by other state agencies and departments.

## 2 Submission Information

### 2.1 Key Action Dates and Times

Listed below are the key dates and times within which actions should be taken or completed.

| Key Action                              | Date/Time                     |
|---|-------------------------------|
| Release RFI                             | June 9, 2020                  |
| Last day to submit questions on the RFI | June 23, 2020                 |
| Responses to questions                  | July 1, 2020                  |
| RFI Response Due Date                   | July 14, 2020 (5:00 p.m. PST) |

At the discretion of the state, interviews and demonstrations may be coordinated.

### 2.2 Contact Official and Correspondence

All correspondence and questions related to this RFI shall be directed to:

Amy Snow, Procurement Official  
Statewide Technology Procurement  
California Department of Technology  
Phone: (916) 431-3257

Email: Amy.Snow@state.ca.gov

Organizations responding to this RFI that require clarification or additional information of any kind must contact this individual only. Respondents must not contact CDT staff directly. No representative of CDT except for the contact official is authorized to communicate with respondents with respect to this RFI.

### 2.3 RFI Response and Content Format

The respondent shall take the following action:

- Prepare a cover page to their response that includes the following:
  - Organization name
  - Organization mailing address
  - Authorized point of contact information (name, job title, telephone number, and email address)

- Follow the numbering scheme format provided in each attachment and include responses to:
  - Attachment 1 – Respondent Background
  - Attachment 2 – Questionnaire
  - Attachment 3 – Requirements Set
  - Attachment 4 – Additional Information

Respondents should provide narrative, diagrams, pictures, and any other available means to convey their comments or answer to each specification or question.

## 2.4 Delivery

Submit your response to the following email address: Amy.Snow@state.ca.gov. Responses must be Microsoft Office 2010, or newer, and/or PDF. All text, tables, and drawings must use the Microsoft Office Suite (2010 or later) and be provided in readable formats. RFI responses must be submitted by the deadline identified in Section 2.1, Key Action Dates and Times.

## 2.5 Respondent Questions

Respondents must submit questions regarding this RFI via e-mail by the specified date and time in Section 2.1, Key Action Dates and Times. Questions should be submitted via email to the contact person listed in Section 2.2, Contact Official and Correspondence. The following must be included in the email inquiry:

- On the subject line of the e-mail, include RFI # CDT-CTC-2020 Questions;
- Respondent name, contact person, telephone number, and e-mail address, as part of the sender's contact information;
- A description of the subject or issue in question, or discrepancy found in the RFI;
- RFI section, page number and/or other information useful in identifying the specific problem or issue in question; and
- The respondent's question(s).

At its discretion, the CDT may contact respondents to seek clarification of any inquiry received. CDT may respond to questions directly to the respondent or if deemed necessary, release an addendum or updated RFI.



### 3 Scope of Work

The following information is provided to inform responses to be provided in Attachment 2 - Questionnaire. This RFI is only for items listed in section 3.3.

#### 3.1 Cradle-to-Career Data System Use Cases

##### Centralized P20W Data Set Use Case

The centralized pre-kindergarten through workforce (P20W) data set would provide information that can be used in public dashboards and query tools. Information is intended to help educators, administrators, policymakers, and advocates conduct equity analyses and program planning, while also providing focused information to the community about the cradle-to-career pipeline.

This data set would include information from some of the partners,<sup>2</sup> serving a combined 10 million students each year, with roughly 100 data points covering aspects such as:

- Personally identifiable information for match purposes
- Student characteristics
- Education experiences, milestones, and outcomes
- Financial aid
- Employment and earnings
- Institutional characteristics

Highly sensitive information must be kept segregated from information used for analyses.

Once matched, records should be deidentified, with the ability to generate custom data sets with use-specific identifiers.

The system should be able to generate data marts for specific uses with associated roles, such as information available in public dashboards versus information in firewalled analytical tools.

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<sup>2</sup> Association of Independent California Colleges and Universities, Bureau for Private Postsecondary Education, California Community College Chancellor's Office, California Department of Education, California Health and Human Services, California Student Aid Commission, California State University, Employment Development Department, University of California Office of the President.

### Data Request Process Use Case

The data request process would expand California's research and tool development capacity by creating a secure research environment. Based on approved queries, authorized parties would be able to access unitary, de-identified information provided by any of the 12 partner entities, including data points that are not in the P20W data set. This expanded capacity would be leveraged by researchers to provide information to inform service delivery models, evaluate state investments, conduct equity analyses, and identify effective practices.

### Operational Tool Use Case

The state data system will also include two tools that transmit electronic transcripts, identify eligibility for student supports, and enable planning for college and career. Initially, those tools will not be connected with the master data management system. Over time, the state will examine the feasibility of linking the electronic transcript information with the P20W data set and the secure research environment.

## 3.2 ECIDS Use Cases

Use cases have not yet been developed for the ECIDS system. The ECIDS system is still in the drafting and design stage. When the ECIDS is developed, it could be linked to the P20W data set and a secure research environment.

## 3.3 MDM Solution

The state will be developing an RFP for a cloud-based solution that includes support. At a minimum, the proposed MDM solution should provide the following capabilities:

- SaaS FedRAMP Security Authorization and associated IaaS and PaaS FedRAMP Security Authorization at Moderate level or higher
- Securely controlling data so that it is processed, stored, and accessible only from within the United States
- Maintenance, including responsiveness and minimal downtimes
- Ability to manage the scale of data involved in this proposed system
- Support single sign on and multifactor authentication
- Role-based access and user management
- Product meets all applicable accessibility guidelines

- Data models and organizational relationships for early care, K-12, higher education, employment, social service, and health information
- Flexibility for adding data sets and partners over time
- Data or business dictionary functionality
- Full and incremental data loads
- Batch and real time processes to load data changes
- Survivorship capabilities
- Matching, merging, and unmerging capabilities
- Data quality flags
- Matching analytics and reporting
- Refining matches and identifying mismatches based on new information
- Business process flow that allows for multiple organizations to review potential matches
- Ability to create a master or “golden record”

## Attachment 1: Respondent Background

In this Attachment, respondents are asked to provide background and information.

1. Identify the organization name, address, city, state, and zip code, and telephone number.
2. Identify the name, title, address, and telephone number, and email address of the primary contact person for this RFI response.
3. Provide a brief overview of your organization including number of years in business, number of employees, nature of business, and description of clients.
4. Identify any parent corporation and/or subsidiaries, if applicable.
5. Give a brief description of your products or services. Include the date of the first installed site or first service provided. Describe any planned changes to the scope of your services.
6. List any industry awards/recognition/certifications that you have received.
7. Indicate the total number of system installations completed in the last five years, by the year of installation, client type (industry sector, government, nonprofit), and the total number of users. List the total number of entities by type and scale of the implementation. If the implementation is not the full suite of services offered, what is the scale of the implementation?
8. Provide a summary of your organization's vision.
9. Please provide a copy of your organization's audit or a recent financial statement.
10. Indicate whether your solution will be compliant with HIPAA security requirements and whether your organization is willing to sign onto a business associate agreement.

## Attachment 2: Questionnaire

Please answer as many questions as possible based on your organization's experience. Please be specific and attach supporting documentation (indicate if you have a public demonstration site), if needed.

1. Does the respondent provide a service or solution that fulfills the needs of one or more of the following components?

| Question #             | Module/Component  | Respondent Capabilities (Yes/No) |
|------------------------|---|----------------------------------|
| <b>System/Solution</b> |   |                                  |
| 1.                     | Does your service either SaaS or cloud-based? (Please note that California has a cloud-first policy)  |                                  |
| 2.                     | Does your service meet SaaS FedRAMP Security Authorization at Moderate level or higher?   |                                  |
| 3.                     | Does your solution ensure performance and responsiveness and high availability?   |                                  |
| 4.                     | Can you support the scale of the proposed data system (10 million individuals/year, 100 data points)?   |                                  |
| 5.                     | Do you offer multi-domain master data management that can integrate with data sets that are hosted in different locations and in legacy systems?  |                                  |
| 6.                     | Does your solution provide secure data storage and access (including protecting sensitive or confidential data to comply with industry best practices, certifications, and state and federal laws)? |                                  |
| 7.                     | Does your solution include data backup and disaster recovery configuration and management?  |                                  |
| 8.                     | Does your solution support single sign-on, multi factor authentication, or third-party authentication (such as InCommon or Security Assertion Markup Language)?                                     |                                  |
| 9.                     | Does your solution offer role-based access and user management capability?  |                                  |

| Question #             | Module/Component  | Respondent Capabilities (Yes/No) |
|------------------------|---|----------------------------------|
| 10.                    | Does this extend to making sure one entity cannot see the data from another entity?   |                                  |
| 11.                    | Can clients customize system attributes?  |                                  |
| 12.                    | Is your solution compliant with Section 508 standards (WCAG 2.1 AA Level compliance)?   |                                  |
| 13.                    | Are you already supporting an MDM solution for one of the entities that will contribute data to the state system (see list in Section 3.1)?           |                                  |
| <b>Data Management</b> |   |                                  |
| 14.                    | Do you have an early care data model?   |                                  |
| 15.                    | Do you have a K-12 data model?  |                                  |
| 16.                    | Do you have a postsecondary education data model?   |                                  |
| 17.                    | Do you have a health and social services data model?  |                                  |
| 18.                    | Do you have an employment data model?   |                                  |
| 19.                    | Do you have flexibility for adding or modifying new data elements and entities?   |                                  |
| 20.                    | Do you have the ability to add and match external data sets and keep that data segregated from the primary MDM data sets?                             |                                  |
| 21.                    | Does your solution include data dictionary or business glossary capabilities that support data elements across agencies and track versions over time? |                                  |

| Question #             | Module/Component   | Respondent Capabilities (Yes/No) |
|------------------------|--|----------------------------------|
| 22.                    | Does your system identify and reconcile historical and agency level different data definitions for the same data element?  |                                  |
| <b>Data Processing</b> |  |                                  |
| 23.                    | Does your system provide data receipt/intake/storage (including encrypted files, secure transmission, and secure storage)?   |                                  |
| 24.                    | Does your solution have capabilities to ensure data completeness, quality, and validation (such as validating data against standard reference sources, reasonableness of combinations of elements, valid values, cross-file integrity checks)? |                                  |
| 25.                    | Do you have an address verification/cleansing service or integration?  |                                  |
| 26.                    | Do you have any other verification services, such as social security numbers?  |                                  |
| 27.                    | Does your solution handle incremental and full replacement data loads?   |                                  |
| 28.                    | Does your solution process batch and real time data changes after initial load?  |                                  |
| 29.                    | Does your solution have auditing capabilities (transaction log of data added and processed)?   |                                  |
| 30.                    | Does your solution support data versioning?  |                                  |
| 31.                    | Does your solution have survivorship capabilities related to new information relevant to golden records?   |                                  |
| 32.                    | Does your solution have survivorship capabilities related to prior versions of the data set, for use in research studies?  |                                  |

| Question #           | Module/Component  | Respondent Capabilities (Yes/No) |
|----------------------|---|----------------------------------|
| 33.                  | Do you have the ability to add and match external data sets (such as a cohort of students) and keep that data segregated from the primary MDM data sets?            |                                  |
| <b>Data Matching</b> |   |                                  |
| 34.                  | Does your solution support per-data source, configurable matching rules?  |                                  |
| 35.                  | In its capacity to identify and process duplicates, does your solution refine/reprocess matches and identify mismatches based on new information?                   |                                  |
| 36.                  | Does your solution have the ability to match/unmatch, merge/unmerge, and retire/unretire identifiers?   |                                  |
| 37.                  | Does your solution include methodologies and tools to correct data?   |                                  |
| 38.                  | Does your solution include methodologies and tools to remove a specific individual's records, such as to comply with the General Data Protection Regulation (GDPR)? |                                  |
| 39.                  | Does your solution support analytics and "what if" reporting for testing and reviewing matching rule results?   |                                  |
| 40.                  | Does your solution include a flexible and configurable workflow process that allows for multiple organizations to manually review potential matches?                |                                  |
| 41.                  | Does your solution rate the reliability of each match?  |                                  |
| 42.                  | Does your solution include master data indexes across disparate datasets?   |                                  |
| 43.                  | Does your solution create a master or golden record?  |                                  |
| 44.                  | Does your solution track familial linkages (such as assigning adults and children to the same family)?  |                                  |



| Question #                         | Module/Component   | Respondent Capabilities (Yes/No) |
|------------------------------------|--|----------------------------------|
| 45.                                | Does your solution include methodologies and tools to enrich data?   |                                  |
| 46.                                | Does your solution restrict access and use of personally identifiable data and other information used for matching (e.g., name, date of birth, race/ethnicity, gender, social security number, institutional identifier, address)?                           |                                  |
| 47.                                | Does your solution create a unique identifier for specific uses that can be provided to a researcher in lieu of personal identifying information?  |                                  |
| 48.                                | Can your match solution be audited to see how records were matched?  |                                  |
| 49.                                | Can your solution be audited to see who accessed and used it and when?   |                                  |
| <b>Data Publishing and Release</b> |  |                                  |
| 50.                                | Can your solution create data marts to serve specific analytic purposes, specifically related to data quality?   |                                  |
| 51.                                | Optional Feature: Does your solution include the ability to create custom reports to support ad-hoc analyses?  |                                  |
| 52.                                | Optional Feature: Can your solution fulfill requests from and releases of data for external entities, including special handling for confidential and sensitive data, limited datasets, de-identified data, cell size suppression, custom identifiers, etc.? |                                  |
| 53.                                | Optional Feature: Does your solution have the capacity to apply de-identification protocols to data or reports prior to release (including cell size suppression, perturbation, or other de-identification methodologies)?                                   |                                  |
| 54.                                | Optional Feature: Does your solution include business intelligence, including dashboards, web based interactive reports, etc.?   |                                  |

| Question #   | Module/Component   | Respondent Capabilities (Yes/No) |
|--------------|--|----------------------------------|
| 55.          | Optional Feature: Does your solution include a secure research environment that allows for multiple analytical tools (e.g., R, Stata, SPSS)  |                                  |
| 56.          | Optional Feature: Do you offer consultative analytic support?  |                                  |
| 57.          | Optional Feature: Does your solution include the ability to display data in a graphical format and allow for a sophisticated visual representation of data?  |                                  |
| 58.          | Is the solution supported by a range of training and support options, such as instructor-led training, on demand/online training, community support (such as a forum), or other web-based resources? |                                  |
| <b>Other</b> |  |                                  |
| 59.          | Please specify other modules/components not listed above that should be considered in the implementation of the system.  |                                  |

2. For each domain and module/component marked "Yes" in Question #1, describe the technical solution and services that support the business needs of the state. Describe how your solution might add value to the operation of the state data system and how your solution/services meet challenges inherent to California. Please also note if your solution is stand-alone or can be used with other market solutions, and if your solution can be accessed via an Application Programming Interface (API).
3. Describe your organization's contractual/client experience implementing the solutions or services described in response to Question #2. Describe the following, as applicable:
  - a. Describe client type (i.e., governmental agency, nonprofit, corporation), population size, quantity of data submitters, complexity of engagement, etc.

- b. If the solution or service is currently utilized by a client, describe its use and benefits to the client.
  - c. Describe your experience implementing the solutions or services, including high-level timelines for implementation and training for all user populations.
  - d. Describe implementation challenges and summarize lessons learned. Describe how to overcome implementation challenges.
- 4. Specify how your solution/service could be implemented and operational for the state. Please provide a high-level timeline and specify any assumptions/constraints associated with the timeline. Include a description of, at a high-level, what resources the state would have to make available as part of rollout and when these would be needed and at what level involvement and expertise. What would be the rollout in terms of number of months after contract execution?
- 5. Provide a high-level cost estimate/cost model for the solution/service described. Use Attachment 5: Cost Estimation Worksheet. Please explain one-time (design, configuration, testing, data conversion, training, and deployment) and recurring (annual subscriptions, licenses, and fees) costs. If a different fee structure or payment model is used, please explain.

### Attachment 3: Requirements Sets

In this Attachment, respondents may provide a complete set of solicitation requirements for at least one (1) IT project like the proposed MDM project that has been successfully implemented by the respondent in a government environment within the last five (5) years. For the purposes of this RFI a “complete set” is defined as a fully vetted, defined set of solution requirements from a successfully implemented proposed MDM project as received in or further refined because of a previously awarded solicitation. The requirements are to be provided in the following format:

- Microsoft Excel Spreadsheet
- Sortable Pivot Table
- Modifiable, unlocked and usable

Respondents are requested to redact or scrub the requirements set of all proprietary or otherwise classified and/or confidential information prior to submission to CDT for the purposes of responding to this RFI.

#### Attachment 4: Additional Information

In this Attachment, respondents may submit any additional information that has not been specifically requested but deemed important and relevant. Responses should be concise and straightforward. Respondents should provide narratives, diagrams, pictures, and any other available means to convey their comments or answer to each specification or question in the prior Attachments.

Respondents are requested to redact or scrub the requirements set of all proprietary or otherwise classified and/or confidential information prior to submission to CDT for the purposes of responding to this RFI.

## Attachment 5: Cost Information Worksheet

**Instructions:** CDT needs to obtain information to identify one-time and annual costs for the state data system. Please complete a cost worksheet for each scenario your organization offers for your solution.

| Solution Type (check all that apply) |                      |
|--------------------------------------|----------------------|
| <input type="checkbox"/>             | SaaS/PaaS            |
| <input type="checkbox"/>             | COTS/ MOTS           |
| <input type="checkbox"/>             | Custom Development   |
| <input type="checkbox"/>             | Cloud                |
| Service Solution (check one)         |                      |
| <input type="checkbox"/>             | Service              |
| <input type="checkbox"/>             | Subscription/License |

| Category         | Item  | Cost | Description |
|------------------|---|------|-------------|
| A. Initial Costs | 1. Hardware   |      |             |
|                  | 2. Software   |      |             |
|                  | 3. Other Costs  |      |             |
| B. Annual Costs  | 1. Hosting  |      |             |
|                  | 2. Annual Subscription/ License Fees                      |      |             |
|                  | 3. Annual Maintenance (assumes 100% respondent supported) |      |             |

| Category                  | Item  | Cost | Description |
|---------------------------|---|------|-------------|
|                           | 4. Other Annual Costs                               |      |             |
| C. Monthly Costs          | 1. Customization, Configuration, and/or Development |      |             |
|                           | 2. Project Management                               |      |             |
|                           | 3. Training and Organizational Change Management    |      |             |
|                           | 4. Other Implementation Costs                       |      |             |
| D. Additional Information | 1. Cost Assumptions                                 |      |             |

### Description of Categories

**A.1. Hardware:** Please list the costs to host the following environments: development, test, staging, sandbox (for “what if” scenarios), and production. In the description please list the number of servers and, if possible their specifications (OS, memory, CPU, etc.). If cloud, please describe.

**A.2. Hosting Costs: Annual Hosting cost.** The solution shall have five (5) environments: Development, Test, Training, a Sandbox for “what it” analysis, and the Production environment. At its peak, the solution shall sustain 30 users executing transactions (note: for pricing of authenticated users, please use the Client numbers above).

**B.1. Customization, Configuration, and Development:** Estimate the respondent staff costs (i.e., full-time equivalency, classification/type of resource, cost) to design, develop, test, and implement the solution.

**B.2. Project Management:** Estimate the respondent cost to manage the project. The Project Manager will manage the contractor team and contractor progress. The contractor shall develop, maintain, and execute the following Project Management Deliverables: Change Control Plan, Configurational Management Plan, Communication Management Plan, Data Conversion and Validation Plan, Document Management Plan, Governance Plan, Knowledge Transfer Plan, Maintenance and Operations (M&O) Plan, Organizational Change Management Plan, Project Management Plan, Quality Management Plan, Requirements Management Plan, Risk and Issue Management Plan, Schedule Management Plan, Staffing Management Plan, Stakeholder Management Plan, Test Plan, and Training Plan.

**B.3. Training:** Estimate the cost for training to implement the solution. The contractor shall estimate the cost to provide materials for, and deliver, end user training, instructor (Train-the-Trainer) training, and external stakeholder training.

**B.4. Software One-time Costs:** Itemize all one-time software costs to implement the proposed solution.

**B.5. Other Implementation Costs:** Itemize any other implementation costs not already captured, including any third party costs.

**C.1. Annual Subscription/License Fees:** Itemize annual subscription/license fees the state will incur because of this implementation.

**C.2. Other Annual Costs:** Itemize any annual costs not already described.

**C.3. Other Costs Not Listed:** Itemize other costs (i.e. per transaction costs, etc.) not addressed by the other categories.

**C.4. Annual Maintenance Costs:** If the respondent were to 100% maintain the solution, what would the annual cost estimate be?

**D.1. Cost Assumptions:** List any cost assumptions.



### Glossary

| Term                                    | Definition  |
|---|---|
| Act                                     | Cradle-to-Career Data System Act (Act)  |
| ADA                                     | Americans With Disabilities Act, as related to the compliance with federal standards that state that all electronic and information technology must be accessible to people with disabilities.  |
| <a href="#">Assembly Bill 2960</a>      | State bill filed September 27, 2018 (Chapter 829, Statutes of 2018) that requires the Superintendent, subject to the availability of public or private funding for these purposes, on or before June 30, 2022, to develop and post on the department's Internet Web site, for use by the general public, an online portal for the state's comprehensive child care and development services, as provided. |
| C-PARIS                                 | Child Development Provider Accounting Reporting Information System  |
| CDE                                     | California Department of Education  |
| CDMIS                                   | Child Development Management Information System   |
| CDT                                     | California Department of Technology   |
| Centralized Consumer Education Database | Database with child care provider data for families to get easy-to-understand information about choosing child care and getting financial assistance  |
| CHHS                                    | California Health and Human Services Agency   |
| Continued Funding Applications          | Subsidized Child Care Contractors that intend to continue services into the next contract year are required to complete and submit a Continued Funding Application  |
| Early Education Workforce Registry      | The California Early Care and Education Workforce Registry (Workforce Registry) is a web-based system designed to track and promote the employment, training, and education accomplishments of the early care and education workforce   |

| <b>Term</b>                               | <b>Definition</b>   |
|---|---|
| ECIDS                                     | Early Childhood Integrated Data System  |
| General Data Protection Regulation (GDPR) | A European Union regulation that allows students studying in the United States to withdraw consent for processing or request the deletion of information they consider no longer relevant                                 |
| HIPAA Business Associate                  | A person or entity that performs certain functions or activities that involve the use or disclosure of protected health information on behalf of, or provides services to, a covered entity or another business associate |
| K–12                                      | Used as a short form for the publicly-supported school grades prior to college i.e., kindergarten (K) through the 12th grade (12)   |
| MDM                                       | Master data management  |
| P20W                                      | A term used to define a data system capable of tracking student information over multiple years across multiple data sources (i.e., pre-kindergarten through workforce)   |
| PRA                                       | California Public Records Act   |
| QRIS                                      | Quality Rating and Improvement System   |
| Service eligibility tools                 | A technology that enables a client, such as a parent or a program administrator, to determine whether a client is eligible for a particular service or program.   |
| Unique identifier                         | A single, unduplicated identifier that is assigned to an individual person  |
| Unique provider identifier                | A single, unduplicated identifier that is assigned to and remains with an education or care provider.   |