

1.1 General Informa	ation					
		Carr		+ On a nation a A a a		
Agency or State Entity Name	2:			t Operations Agen	су	
Organization Code:		0511	1			
Proposal Name:		Crad	lle-to-C	areer Data System		
Proposal Description:			To meet the mandates of Educational Code (Chapter 8.5, Statutes of 2021) the Office of Cradle-to-Career Data proposes to create a suite of tools that link existing education, workforce, financial aid, and social service information to better equip policymakers, educators, and the public to address disparities in opportunities and improve outcomes for students throughout the state.			
When do you want to start this project?:		12/1	/2021			
Department of Technology Project Number:		0511	0511-004			
1.2 Submittal Inform	mation					
Contact Information:						
Contact First Name			Conta	ct Last Name		
Joy	Joy Bo		Bonaguro			
Contact Email			Contact Phone Number			
joy.bonaguro@govops.ca.gov				51-9063		
Submission Date: 9/		9/10)/2021			
Version Number:		1				
Project Approval Executive	Transmittal					
Attachment: Include	the Project Appro	val Exe	ecutive	Transmittal as an	attachment to your email submission.	
1.3 Business Sponse	orship					
Executive Sponsors						
Title	First Name			Last Name	Business Program Area	
Chief Deputy Cabinet Secretary at Office of Governor Gavin Newsom	Ben			Chida	Course and Operations	
Undersecretary	Jndersecretary Julie			Lee	Government Operations Agency	
Select + to add additional Ex	ecutive Sponsors					
Business Owners						
Title	First Name			Last Name	Business Program Area	
Statewide Chief Data Officer	yol		Bonaguro	Government Operations Agency		
Select + to add additional Bu	siness Owners					
Program Background and Co	ontext					
Cradle-to-Career Data System than 200 people from 15 sta community groups. Multiple development including tech	m was designed ov te agencies and m subcommittees co nology and securit	ver the any ed onside y, lega	course lucatior red and l frame	of 2020 and the fi nal institutions, res developed requir works, data definit	linal data system for California. The rst half of 2021 with the support of more earch and policy organizations, and ements for various aspects of data system ions and visualizations, data access tools, tise from each expected data contributor	



California Department of Technology, SIMM 19A.2 (Rev. 2.4), Revised 4/2/2018

Program Background and Context

as well as the Department of Technology and Government Operations Agency. The planning workgroup considered the findings of the subcommittees and advice from two advisory groups made up of community members to develop a set of recommendations for developing the data system that were summarized in three separate legislative reports. The detailed recommendations as well as supporting documents, including legal, security, data, and high-level system requirements, are available on a public website. The recommendations of the workgroup were enshrined in Educational Code in July 2021 (Chapter 8.5, Statutes of 2021).

The Cradle-to-Career Data System includes three core components:

- Tools for students and the educators who support them, referred to as operational tools, including college and career planning, college-eligibility monitoring, electronic transcripts, college applications, and access to financial aid and other services such as medical care and food aid. These services will be provided by scaling two existing state-funded programs, CaliforniaColleges.edu and eTranscript California.
- Tools for policy makers, researchers, educators, and advocates, referred to as analytical tools, including dashboards, a data query builder, summaries of key student and employment outcomes, and a research library. These tools will be accessible to the public and provide actionable information on education, social services, employment patterns, and equity gaps in opportunities and outcomes. Researchers will be able to request access to restricted data for authorized purposes. These tools will be configured by a vendor hired for the project.
- Support for data use including outreach, professional development, and clear feedback loops with intended users, designed to build the capacity of policymakers, educators, parents, and students to make better-informed decisions. This aspect of the data system is not a technology project.



California Department of Technology, SIMM 19A.2 (Rev. 2.4), Revised 4/2/2018

1.4 Stakeholders Key Stakeholders



California Department of Technology, SIMM 19A.2 (Rev. 2.4), Revised 4/2/2018

Org. Name	Name		
California Department of Education (CDE)	-	ma, Cindy Kazanis, , Glenn Miller, Paula , Mary Nicely, Alan Nakahara, Rodney Yonehiro	
Internal or External?	🗆 Internal 🛛 External		
When is the Stakeholder impacted?			
Input to Business Process	During the Business Process	Output of the Business Process	
		\boxtimes	
How are Stakeholders impacted?			

Input: CDE helped to design the data system including determining key research questions, which data points to contribute to the data set and their constructure, legal agreements, technical and security specifications, and record matching procedures

During: CDE will provide unitary records for the analytical set, will upgrade its CALPADS data system to integrate with CaliforniaColleges.edu to provide electronic transcripts

Output: CDE will review matched records and data for the analytical tools to ensure validity, will review requests for access to unitary records for research projects and the results of approved studies, and support the community engagement process

How will the Stakeholders participate in the project?

This stakeholder group participated in the 18-month planning process: three individuals were appointed to the planning workgroup, and representatives also participated in five subcommittees. For implementation, CDE will appoint one individual to the Cradle-to-Career Data System governing board and assign staff to support the implementation of the data system.



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Key Stakeholders					
Org. Name	Name				
California Community Colleges Chancellor's Office (CCCCO)	lifornia Community Colleges Chancellor's Marty Alvarado, Barney Gomez, John Hetts, Todd Hoig, Daryl Lal, Kathy fice (CCCCO) Lynch,				
Internal or External?	🗌 Internal 🛛 External				
When is the Stakeholder impacted?					
Input to Business Process	During the Business Process	Output of the Business Process			
How are Stakeholders impacted?					
Input: CCCCO helped to design the data system including determining key research questions, which data points to contribute to the data set and their constructure, legal agreements, technical and security specifications, and record matching procedures During: CCCCO will provide unitary records for the analytical set and will upgrade eTranscript California to provide enhanced features Output: CCCCO will review matched records and data for the analytical tools to ensure validity, will review requests for access to unitary records for research projects and the results of approved studies, and support the community engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the planning workgroup, and representatives also participated in five subcommittees. For implementation, CCCCO will appoint one individual to the Cradle-to-Career Data System governing board and assign staff to support the implementation of the data system. Key Stakeholders Org. Name California State University (CSU) Arun Casuba, Subash D'Souza, Nathan Evans, Ed Hudson, Monica					
California State University (CSU) Arun Casuba, Subash D'Souza, Nathan Evans, Ed Hudson, Monica Malhotra, Ed Sullivan, Jeff Whitney					
Internal or External?					
When is the Stakeholder impacted?	1				
Input to Business Process					
		\boxtimes			
How are Stakeholders impacted?					
 Input: CSU helped to design the data system including determining key research questions, which data points to contribute to the data set and their constructure, legal agreements, technical and security specifications, and record matching procedures During: CSU will provide unitary records for the analytical set Output: CSU will review matched records and data for the analytical tools to ensure validity, will review requests for access to unitary records for research projects and the results of approved studies, and support the community engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the planning workgroup, and representatives also participated in five subcommittees. For implementation, CSU will appoint one individual to the Cradle-to-Career Data System governing board and assign staff to support the implementation of the 					
data system.					
Key Stakeholders					



California Department of Technology, SIMM 19A.2 (Rev. 2.4), Revised 4/2/2018

Califor	nia Department of Technology, s	SIIVIIVI 19A.2 (Rev. 2.4), Revised 4/2/2018			
Org. Name	Name				
University of California (UC)	Jenna Allen, Tongshan Chang,	Chris Furgiuele, Eric Goodman, Matthew			
	Linzer, Stella Ngai, Hooman Pe	jman			
Internal or External?	Internal or External?				
When is the Stakeholder impacted?					
Input to Business Process	During the Business Process	Output of the Business Process			
\boxtimes					
How are Stakeholders impacted?	· · · · · · · · · · · · · · · · · · ·				
Input: UC helped to design the data system inc	luding determining key research	questions, which data points to			
contribute to the data set and their constructu	re, legal agreements, technical a	ind security specifications, and record			
matching procedures					
During: UC will provide unitary records for the	analytical set				
Output: UC will review matched records and da	ata for the analytical tools to ens	sure validity, will review requests for			
access to unitary records for research projects and the results of approved studies, and support the community					
engagement process					
How will the Stakeholders participate in the p	roject?				
This stakeholder group participated in the 18-n					
workgroup, and representatives also participat					
individual to the Cradle-to-Career Data System	governing board and assign stat	f to support the implementation of the			
data system.					
Key Stakeholders					
Org. Name	Name				
Association of Independent California Todd Britton, Veronica Villalobos Cruz, Jonathon Chillas, Helen Norris					
Colleges and Universities (AICCU) Randy Tarnowski, Thomas Vu					
Internal or External? 🛛 Internal 🛛 External					
When is the Stakeholder impacted?					
Input to Business Process	During the Business Process	Output of the Business Process			
How are Stakeholders impacted?					
Input: AICCU helped to design the data system	including determining key resea	rch questions, which data points to			
contribute to the data set and their constructu	re, legal agreements, technical a	ind security specifications, and record			
matching procedures					
During: AICCU will recruit independent colleges	s to participate in the data syste	m			
How will the Stakeholders participate in the p	roject?				
This stakeholder group participated in the 18-n	nonth planning process: an indiv	idual was appointed to the planning			
workgroup, and representatives also participat	ed in five subcommittees. For in	nplementation, AICCU will appoint one			
individual to the Cradle-to-Career Data System	governing board.				
Key Stakeholders					

Key Stakeholders



Califor	nia Department of Technology, s	SIMINI 19A.2 (Rev. 2.4), Revised 4/2/2018		
Org. Name	Name			
Bureau for Private Postsecondary Education		ovic, Joanna Murray, Jason Piccione,		
(BPPE)	Freshta Rasoli, Leeza Rifredi, D	ouglas Smith, Scott Valverde		
Internal or External?	🗆 Internal 🛛 External			
When is the Stakeholder impacted?				
Input to Business Process	During the Business Process	Output of the Business Process		
	\boxtimes			
How are Stakeholders impacted?				
Input: BPPE helped to design the data system i				
contribute to the data set and their constructu	re, legal agreements, technical a	and security specifications, and record		
matching procedures				
During: BPPE will provide unitary records for the	-			
Output: BPPE will review matched records and	•			
access to unitary records for research projects	and the results of approved stud	dies, and support the community		
engagement process				
How will the Stakeholders participate in the p				
This stakeholder group participated in the 18-r				
workgroup, and representatives also participated in five subcommittees. For implementation, BPPE will appoint one				
individual to the Cradle-to-Career Data System	governing board.			
Key Stakeholders	1 ••			
Org. Name	Name			
California Department of Social Services Patrick Delaney, Jayson Hunt, Akhtar Khan, Carolyn Kubish, Natasha (CDSS) Nicolai, Karissa Vidamo				
Internal or External?				
When is the Stakeholder impacted?				
Input to Business Process	During the Business Process	Output of the Business Process		
\boxtimes	\boxtimes	\boxtimes		
How are Stakeholders impacted?				
Input: CDSS helped to design the data system i	ncluding determining key resear	ch questions, which data points to		
contribute to the data set and their constructu	re, legal agreements, technical a	and security specifications, and record		
matching procedures				
During: CDSS will provide unitary records for the	ne analytical set and will integrat	te with new tools to determine eligibility		
for social services				
Output: CDSS will review matched records and				
access to unitary records for research projects	and the results of approved stud	dies, and support the community		
engagement process				
How will the Stakeholders participate in the p	-			
This stakeholder group participated in the 18-r				
	od in two subcommittoos For in	nnlementation this group will be		
workgroup, and representatives also participat	ed in five subcommittees. For in	ipicificitation, this group will be		
workgroup, and representatives also participat represented by the CHHS board member. Key Stakeholders	ed in five subcommittees. For in			



Org. Name	Name	
California Department of Technology (CDT)		Cruz, Jennifer Marquez, Kary Marshall,
	Tim Murphy, Vitaliy Panych, M	
Internal or External?	🗆 Internal 🛛 External	
When is the Stakeholder impacted?		
Input to Business Process	During the Business Process	Output of the Business Process
	Ŭ N	
How are Stakeholders impacted?		
Input: CDT helped to design the data system in	cluding technical and security sp	ecifications and record matching
procedures, including leading a request for info		
During: CDT will support the procurement proc	•	
How will the Stakeholders participate in the p		
This stakeholder group participated in the 18-n	-	idual was appointed to the planning
workgroup, and representatives also participat	ed in the technical subcommitte	es.
Key Stakeholders		
Org. Name Name		
Employment Development Department (EDD) Muhammad Akhtar, Brian Davis, Amy Faulkner, Margo Gonzales, Todd		
	Ibbotson	
Internal or External?	🗆 Internal 🛛 External	
When is the Stakeholder impacted?		
Input to Business Process	During the Business Process	Output of the Business Process
\boxtimes		
How are Stakeholders impacted?	· · · · · · · · · · · · · · · · · · ·	
Input: EDD helped to design the data system in	cluding determining key researc	h questions, which data points to
contribute to the data set and their constructu	re, legal agreements, technical a	nd security specifications, and record
matching procedures		
During: EDD will match student records to the	state wage file	
Input: EDD will review matched records and da	ta for the analytical tools to ensu	are validity, will review requests for
access to unitary records for research projects	and the results of approved stud	ies, and support the community
engagement process		
How will the Stakeholders participate in the p	-	
This stakeholder group participated in the 18-n		
workgroup, and representatives also participat		
represented by the California Labor and Workf	orce Development Agency board	l member.
Key Stakeholders		



Californ	hia Department of Technology, S	SIMM 19A.2 (Rev. 2.4), Revised 4/2/2018		
Org. Name	Name			
California School Information Services (CSIS)	Amy Fong			
Internal or External?	🗆 Internal 🛛 External			
When is the Stakeholder impacted?				
Input to Business Process	During the Business Process	Output of the Business Process		
How are Stakeholders impacted?				
Input: CSIS helped to design the data system in	cluding determining key researd	h questions, which data points to		
contribute to the data set and their constructur	re, legal agreements, technical a	nd security specifications, and record		
matching procedures				
How will the Stakeholders participate in the p	-			
This stakeholder group participated in the 18-m				
workgroup, and representatives also participated in six subcommittees. For implementation, the CSIS Chief Information				
Officer will be appointed to the Cradle-to-Career Data System governing board.				
Key Stakeholders				
Org. Name	Name			
California Health and Human Services (CHHS)		is Krawczyk, David Sanabria, Jennifer		
	Schwartz, Elaine Scordakis			
Internal or External?	🗆 Internal 🛛 External			
When is the Stakeholder impacted?				
Input to Business Process During the Business Process Output of the Business Process				
How are Stakeholders impacted?				
Input: CHHS helped to design the data system in contribute to the data set and their constructur		•		
matching procedures	a analytical sat			
During: CHHS will provide unitary records for the analytical set Output: CHHS will review matched records and data for the analytical tools to ensure validity, will review requests for				
access to unitary records for research projects and the results of approved studies, and support the community				
engagement process				
How will the Stakeholders participate in the pr	roiect?			
This stakeholder group participated in the 18-m	-	idual was appointed to the planning		
workgroup, and representatives also participate				
individual to the Cradle-to-Career Data System				
Key Stakeholders				
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		Silvilvi 19A.2 (Rev. 2.4), Revised 4/2/2018		
Org. Name	Name			
California Student Aid Commission (CSAC) Gurinder Bains, Julia Blair, Adrian Felix, Jessica Moldoff, Mark Paxson, Patrick Perry				
Internal or External?	🗆 Internal 🛛 External			
When is the Stakeholder impacted?				
Input to Business Process	During the Business Process	Output of the Business Process		
		\boxtimes		
How are Stakeholders impacted?				
Input: CSAC helped to design the data system				
contribute to the data set and their construct	ure, legal agreements, technical a	and security specifications, and record		
matching procedures	he analytical set			
During: CSAC will provide unitary records for the analytical set				
<i>Output</i> : CSAC will review matched records and data for the analytical tools to ensure validity, will review requests for access to unitary records for research projects and the results of approved studies, and support the community				
engagement process				
How will the Stakeholders participate in the project?				
This stakeholder group participated in the 18-month planning process: an individual was appointed to the planning				
workgroup, and representatives also participated in five subcommittees. For implementation, CSAC will appoint one				
individual to the Cradle-to-Career Data System	n governing board and assign staf	ff to support the implementation of the		
data system.				
Key Stakeholders				
Org. Name Name				
California State Board of Education (SBE) Sara Pietrowski				
Internal or External? Internal External				
When is the Stakeholder impacted?				
Input to Business Process	During the Business Process	Output of the Business Process		
How are Stakeholders impacted?				
Input: SBE helped to design the data system in	ncluding determining key researcl	h questions, which data points to		
contribute to the data set and their construct	ure, legal agreements, technical a	and security specifications, and record		
matching procedures				
How will the Stakeholders participate in the	-			
This stakeholder group participated in the 18-		vidual was appointed to the planning		
workgroup, and representatives also participa	ted in some subcommittees.			
Key Stakeholders				



Image: Stakeholders impacted? Input: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name California Labor and Workforce Development Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Agency (CLWDA) Internal or External? Internal Implicational External When is the Stakeholder impacted? Input to Business Process Output of the Business Process Input: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	nission on Teacher Credentialing (CTC)		
Internal or External? □ Internal ⊠ External When is the Stakeholder impacted? □ Internal ⊠ External Input to Business Process During the Business Process Output of the Business Process Input: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name Org. Name Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Agency (CLWDA) Internal or External? □ Internal ⊠ External When is the Stakeholder impacted? ☑ Input to Business Process During the Business Process Mure is the Stakeholder imp			
When is the Stakeholder impacted? Input to Business Process During the Business Process Output of the Business Process Imput: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will app individual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name Org. Name Name California Labor and Workforce Development Agency (CLWDA) Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Agency (CLWDA) Internal or External? Internal Internal Internal Improcess Muthen is the Stakeholder impacted? Input: CLWDA helped to design the data system including determining key research questions, which data poin contribute to the data set and their constructure, legal agr	al or External?	· · · · ·	
Input to Business Process During the Business Process Output of the Business Process Imput: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name California Labor and Workforce Development Agency (CLWDA) Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Agency (CLWDA) Internal or External? Internal Implicated Implications Process Output of the Business Process When is the Stakeholder impacted? Input: CLWDA helped to design the data system including determining key research questions, which data point on the data set and their constructure, legal agreements, technical and security specifications, and matching procedures		🗆 Internal 🛛 External	
Input to Business Process During the Business Process Output of the Business Process Imput: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name California Labor and Workforce Development Agency (CLWDA) Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Agency (CLWDA) Internal or External? Internal Implicated Implications Process Output of the Business Process When is the Stakeholder impacted? Input: CLWDA helped to design the data system including determining key research questions, which data point on the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	is the Stakeholder impacted?		
Image: Stakeholders impacted? Input: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name California Labor and Workforce Development Agency (CLWDA) Name Internal or External? Internal Implementation When is the Stakeholder impacted? Input: CLWDA helped to design the data system including determining key research questions, which data point constructure, legal agreements, technical and security specifications, and matching procedures	-	During the Business Process	Output of the Business Process
Input: CTC helped to design the data system including determining key research questions, which data points contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name California Labor and Workforce Development Agency (CLWDA) Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Internal or External? Internal Sectoral When is the Stakeholder impacted? Output of the Business Process Input: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	•		-
contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures During: CTC will provide unitary records for the analytical set, will upgrade its CALPADS data system to integra CaliforniaColleges.edu to provide electronic transcripts Output: CTC will review matched records and data for the analytical tools to ensure validity, will review reque access to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in several subcommittees. For implementation, CTC will apprindividual to the Cradle-to-Career Data System governing board. Key Stakeholders Org. Name California Labor and Workforce Development Agency (CLWDA) Patrick Getz, Douglas Leone, Dan Rounds, Jeanne Wolfe Agency (CLWDA) Internal or External? Internal is External When is the Stakeholder impacted? Internal is External Input: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	re Stakeholders impacted?		
Agency (CLWDA) Internal or External? Internal I External Internal or External? Internal I External When is the Stakeholder impacted? During the Business Process Output of the Business Process Input to Business Process During the Business Process Output of the Business Process Mow are Stakeholders impacted? Imput: CLWDA helped to design the data system including determining key research questions, which data poil contribute to the data set and their constructure, legal agreements, technical security specifications, and matching procedures	bute to the data set and their constructur ing procedures g: CTC will provide unitary records for the rniaColleges.edu to provide electronic tra it: CTC will review matched records and d is to unitary records for research projects a ement process vill the Stakeholders participate in the pr cakeholder group participated in the 18-m group, and representatives also participate dual to the Cradle-to-Career Data System cakeholders	re, legal agreements, technical ar analytical set, will upgrade its CA nscripts ata for the analytical tools to ens and the results of approved studi roject? nonth planning process: an individed in several subcommittees. For governing board.	ALPADS data system to integrate with sure validity, will review requests for ies, and support the community dual was appointed to the planning
When is the Stakeholder impacted? Input to Business Process During the Business Process Output of the Business Process Imput to Business Process Imput of the Business Process Output of the Business Process Imput: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	· ·	Patrick Getz, Douglas Leone, Da	n Rounds, Jeanne Wolfe
Input to Business Process During the Business Process Output of the Business Process Imput to Business Process Imput of the Business Process Imput of the Business Process How are Stakeholders impacted? Imput: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	al or External?	🗆 Internal 🛛 External	
Image: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	is the Stakeholder impacted?		
How are Stakeholders impacted? Input: CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	Input to Business Process	During the Business Process	Output of the Business Process
<i>Input</i> : CLWDA helped to design the data system including determining key research questions, which data point contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	\boxtimes	\boxtimes	\boxtimes
contribute to the data set and their constructure, legal agreements, technical and security specifications, and matching procedures	re Stakeholders impacted?		
 During: CLWDA will provide unitary records for the analytical set Output: CLWDA will review matched records and data for the analytical tools to ensure validity, will review reaccess to unitary records for research projects and the results of approved studies, and support the communi engagement process How will the Stakeholders participate in the project? This stakeholder group participated in the 18-month planning process: an individual was appointed to the pla workgroup, and representatives also participated in five subcommittees. For implementation, CLWDA will apprindividual to the Cradle-to-Career Data System governing board and assign staff to support the implementation data system. 	bute to the data set and their constructur ing procedures g: CLWDA will provide unitary records for t: CLWDA will review matched records ar s to unitary records for research projects a ement process vill the Stakeholders participate in the pro- cakeholder group participated in the 18-m	re, legal agreements, technical ar the analytical set ad data for the analytical tools to and the results of approved studi roject? nonth planning process: an individe ed in five subcommittees. For imp	nd security specifications, and record ensure validity, will review requests fo ies, and support the community dual was appointed to the planning plementation, CLWDA will appoint one
Select + to add additional Stakeholders	dual to the Cradle-to-Career Data System		
	dual to the Cradle-to-Career Data System ystem.		
1.5 Dusiness Program	dual to the Cradle-to-Career Data System ystem. - to add additional Stakeholders		
	dual to the Cradle-to-Career Data System ystem. - <i>to add additional Stakeholders</i> usiness Program		
Org. Name Name Government Operations Agency (GovOps) Joy Bonaguro	dual to the Cradle-to-Career Data System ystem. - <i>to add additional Stakeholders</i> usiness Program ame		



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Org. Name Name				
Σ	3		\boxtimes	
How is the business pr	ogram unit impacted?			
			•	s the entity responsible for developing and
	•			ode 8.5. Under the direction of the
			-	lopment, coordination, and implementation
of the data system, under the direction of the Governing Board and in close coordination with the data providers and				
community members.				
How will the business program participate in the project?				
One individual participated in the planning workgroup. The Office of Cradle to Career Data will serve as project				
manager, overseeing the development, coordination, and implementation of the data system from design throug				
completion.				
Select + to add additional Business Programs				
1.6 Business Alignment				
Business Driver(s)				
Financial Benefit				1
Increased Revenue	Cost Savings	Cost Avoidance		Cost Recovery
Mandate(s)				
	State			Federal
Improvement				
Better Services to	Efficiencies to Program	am Improved Health		Technology Refresh
Citizens	Operations	and/or Human		
		Safety		
Security				
Improved	Improved Business	Improved		Technology End of Life
Information Security	Continuity	-	Technology	
		Recovery		
Strategic Business Alig	nment			
Strategic Plan Last Up	odated?	Date	Picker N/A	
Strategic Business Go	al	Aligr	nment	
Select + to add addition	al Business Goals and Alian	ment		
Select + to add additional Business Goals and Alignment				

Executive Summary of the Business Problem or Opportunity

In 2019, the California State Legislature passed the California Cradle-to-Career Data System Act. The Act required that the state engage in an extensive planning process, with broad input and representation, to design a data system to ensure that existing education, workforce, financial aid, and social service information is fully leveraged to address disparities in opportunities and to improve outcomes for all Californians, from cradle to career.

California is one of only a handful of states that has not already linked state data sets related to educational and occupational attainment. The plan approved by the California Legislature has drawn acclaim from national experts because it addresses challenges that have hindered other states, including:

• Providing tools for students and families in addition to researchers and policymakers



Org. Name

Stage 1 Business Analysis

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Name

- Contextualizing education data by integrating financial aid, social service, and employment information to better identify structural barriers that may inhibit access and success
- Providing the public with access to a significant amount of information through dashboards and a query builder, paired with a streamlined data request process that aligns with state and federal privacy laws
- Addressing researchers' and policymakers' needs for access to anonymized data on groups of people over time, as well as educators' needs for highly secure information on individual students
- Including professional development to ensure that intended audiences know about and can utilize the information
- Guaranteeing a significant voice in the governance structure for members of the public to provide feedback and help design new solutions that support the state's goals for evidence-based decision-making and a more equitable future

By securely connecting data that schools, colleges, social service agencies, financial aid providers, and employers already collect, it will be easier to:

- Provide information that teachers, advisors, parents, and students can use to identify opportunities and make decisions about college and career options
- Identify the types of supports that help more students learn, stay in school, prepare for college, graduate, and secure a job
- Help agencies plan for and improve educational, workforce, and social services programs
- Support research on improving policies from birth through career

Extensive descriptions of the need for data system and the value to the state are provided in the Cradle-to-Career Workgroup December 2020 Report to the legislature, available at

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

Please also see this document which clarifies the current state and target state for the data system.

Business Problem or Opportunity and Objectives Table				
Problems/Opportunities				
Lack of access to data held by various state agencies about the progress of individuals				
from cradle to career				
1.1				
Link records provided by state agencies and individual colleges, and develop an analytical				
data set that can be accessed through dashboards, a query builder, and a request				
process for anonymized individual-level information that can be accessed through a				
secure enclave.				
Within two years, K-12, public postsecondary, financial aid, and employment information				
will be linked; within three years independent college information will be linked; within				
four years private college and early learning & care information will be linked; within five				
years social service, health, and workforce training information will be linked				
None				
By June 2026, data from all planned providers are available in public tools				
In the dashboard, query builder, and list of available data element for research requests,				
information from the specified data providers will be visible.				
bjectives				
Lack of access to information about college and career options, timely information about				
whether high school students have taken actions needed to apply for financial aid and to				
college, and electronic transcripts that can streamline the college application process				
2.1				



Org. Name		Name		
Objectives	Scale the existing state-funded CaliforniaColleges.edu to provide free resources for all California middle and high school students, integrate with CDE's CALPADS data system, and better connect with the public postsecondary and financial aid application processes			
Metric	Within two years, information exchanges will be strengthened with CDE, CSAC, CSU, CCC, and UC; within five years all interested local education agencies will have adopted the planning and monitoring tools			
Baseline	669,000 Califo	rnia 6th-12th grade students currently use CaliforniaColleges.edu		
Target	By June 2026,	3.2 million of 6th-12th grade students will use CaliforniaColleges.edu		
Measurement Method	Reports on the	e number of unique users		
Select + to add additional Ol	bjectives			
3.0	Electronic tran records	scripts that can streamline transfer of postsecondary and career-related		
Objective ID	3.1			
Objectives	Scale the existing state-funded eTranscript California to provide free resources for all California postsecondary students and integrate with CCCCO's Management Information System on the EdExchange platform			
Metric	Within two years, the underlying platform will be improved; within three years, free electronic transcript services will be available to all public college students; within four years free electronic transcript services will be available to all California private college students			
Baseline	650,000 stude	nts are currently able to access eTranscript California		
Target	By June 2026, 1	2.7 million college students will have access to eTranscript California		
Measurement Method	Reports on the	e number of students enrolled at participating colleges		
Select + to add additional Ol	bjectives			
Select + to add additional Prol	blems			
Project Approval Lifecycle Co	mnletion and Pr	roject Execution Capacity Assessment		
1. Does the proposal develop	oment or project	t execution anticipate sharing resources (state staff, vendors, consultants e Agency/state entity (projects, PALs, or programmatic/technology		
⊙ Yes ○ No ○ Clear				
 Does the Agency/ state entity anticipate this proposal will result in the creation of new business processes or changes to existing business processes? 				
C No C New Processes C Existing Processes Soft New and Existing C Clear				
1.7 Project Manager	nent			
Project Management Risk Sco	re:	1.6		
Attach completed Statewide I Management Manual (SIMM) Appendix A:		Include the completed SIMM 45 Appendix A as an attachment to your email submission.		
		Please see the three legislative reports that describe governance for the data system here: https://cadatasystem.wested.org/recommendations		
Existing Data Governance and	d Data			



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		1.6			
			C Unknown Yes No C Clear		If applicable, include the data governance org chart as an attachment to your email submission.
2.	Does the Agency/state entity have data go policies, data standards, etc.) formally def implemented? If yes, please attach the exi policies or IT standards used.	ined, documented, and	C Unknown ⊙ Yes C No C Clear		If applicable, include the data governance policies as an attachment to your email submission.
3.	Does the Agency/state entity have data se controls, and procedures formally defined implemented? If yes, please attach the exi policies, standards, and controls used.	, documented, and	C Unknown ⊙ Yes C No C Clear		If applicable, include the documented security policies, standards, and controls as an attachment to your email submission.
4.	Does the Agency/state entity have user ac standards, controls, and procedures forma and implemented? If yes, please attach the policies, accessibility governance plan, and additional information below.	ally defined, documented, e existing documented	C Unknown ⊙ Yes C No C Clear		If applicable, include the documented accessibility policies, standards, and controls as an attachment to your email submission.
5.	Do you have existing data that you are goi new solution?	ng to want to access in your	C Unknown Yes No C Clear		If applicable, include the data migration plan as an attachment to your email submission.
6.	If data migration is required, please rate the	ne quality of the data.	Few issues ic	lentif	ied with the existing data

1.8 Criticality Assessment

Business Criticality					
Legislative Mandates:	N/A 🗆				
Bill Number(s)/Code(s):			Educational Code Sections 10852, 10860, 10867		
Language that includes system relevant requirements:			Educational Code Section 10852 : It is the intent of the Legislature in enacting this article to do all of the following: (a) build a data system to enable partner entities to share information in a manner that promotes data privacy and security, (b) design a system that minimizes the need for new infrastructure, is adaptable, and is flexible to meet future		



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Business Criticality

needs, (c) Serve students and families by doing all of the following: (1) Identifying and tracking predictive indicators to enable parents, teachers, health and human services providers, and policymakers to provide appropriate interventions and supports to address disparities in opportunities and improve outcomes for all students, (2) Creating direct support tools for teachers, parents, advisors, and students, (3) Enabling agencies to plan for and optimize educational, workforce, and health and human services programs, (4) Enabling and streamlining the administration of student financial aid, (5) Advancing academic and governmental research on improving policies from birth through career, (d) Improve the quality and reliability of data reported, and ensure consistency of key data definitions, and (e) Identify additional data points and metrics that can be developed and integrated into the data system to support the goals of this article.

Educational Code Section 10860: (a) There is hereby established in state government the California Cradle-to-Career Data System for the purpose of connecting individuals and organizations to trusted information and resources. The data system shall be considered a source for actionable data and research on education, economic, and health outcomes for individuals, families, and communities, and provide for expanded access to tools and services that support the navigation of the education-to-employment pipeline. (b) (1) The data system shall be used to provide access to data and information necessary to provide insights into critical milestones in the education-to-employment pipeline, including insight regarding early learning and care to grade 12, inclusive, and into higher education, skills training opportunities, and employment to better enable individuals to maximize their educational and career opportunities, and to foster evidence-based decisionmaking to help the state build a more equitable future.

Educational Code Section 10867: (a) The managing entity shall implement and manage the data system based on the direction set by the governing board, (b) The managing entity shall be responsible for all of the following: (3) Managing the technical infrastructure for analytical tools, including, but not limited to, doing all of the following: (A) Creating, procuring, managing, securing, and maintaining the infrastructure necessary to compile, match, store, access, and visualize information from data providers, (B) Creating data sets tailored to processes approved by the governing board, (C) Ensuring both of the following: (i) The availability, reliability,



and performance of the technical infrastructure, (ii) Data privacy and security in accordance with state and federal law									
			Include the completed SIMM 45 Appendix C as an attachr						
		1.6		to you	email submi	ssion.			
								\boxtimes	
				12/1/2021					
				• Yes O No O Clear					
If "Yes," please ident			•						
The data system has been highly anticipated and involved high levels of public participation during the 18-month planning process. Although not yet developed, the data system is being cited in other recently passed legislation and members of the legislature will be included in the governance structure. The philanthropic community is also following the development process closely and hopes to leverage information for their own planning purposes.									
3. If there is an exis Please see the attac	• •			-		ment to	your email subn	nission.	
4. Does this proposal affect business program staff located in multiple geographic locations?									
If "Yes," provide an overview of the geographic dynamics below and enter the specific information in the space provided.									
Most state agencies are in Sacramento, but CSU is located in Long Beach and UC is in Oakland. Independent colleges will contribute data from points across the state.									
City	Numb	Number of Locations			Approximate Number of Staff				
Sacramento	CA	8			15				
Long Beach CA		1				1			
Oakland CA		1	1			1			
Select + to add Locat	tions								
1.9 Funding									
1. Does the Agency/state entity anticipate requesting additional resources through a budget action to complete the project approval lifecycle?							C Clear		
2. Will the state possibly incur a financial sanction or penalty if this proposal is not implemented? If yes, please identify the financial impact to the state below: O Yes O No O Clear						C Clear			
3. Has the funding source(s) been identified for this proposal? • Yes C No C Clear					C Clear				
FUNDING SOURCE			FUND AVAI						
General Fund	\boxtimes	7/1/2021							
Special Fund			Date Picker						



U U	ency/state entity and to complete the	🖸 Yes 💿 No	C Clear					
Federal Fu	nd		Date Picker					
Reimburse	ment		Date Picker					
Bond Func			Date Picker					
Other Fund	t		Date Picker					
	und" is checked, cify the funding:		1					
1.10 Report	ability Asses	ssment						
found in the If "No," this Project Appr	ency/state entity' State administrat initiative is not an oval Lifecycle.	• Yes C No	C Clear					
Section 4819	0.2?	Maintenance or Operations found in SAM complete the Project Approval Lifecycle.	07.01	0.4				
	t this workload or	C Yes 💿 No	U Clear					
	Has the project/effort been previously approved and considered an ongoing IT activity identified in SAM Section 4819.2, 4819.40?				C Clear			
	initiative is not re t this workload or							
4. Is the project Section 4812	t directly associat 32?	Ċ Yes 💿 No	C Clear					
telemetry sy communicat	on process-contro stems; telecomm ions; Voice Over I canners and copi							
		•	complete the Project Approval Lifecycle. cy Portfolio Report.					
	Is the primary objective of the project to acquire desktop and mobile computing commodities as defined by SAM Section 4819.34, 4989?				C Clear			
Approval Life the complete	If "Yes," this initiative is a non-reportable project. Approval of the Project Approval Lifecycle is delegated to the head of the state entity. Submit a copy of the completed, approved Stage 1 Business Analysis to the CDT and track the initiative on the Agency Portfolio Report.							



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1.	Does the Agency/state entity a budget action to complete the	C Yes 🖸 No 🛛 Clear				
6.	Does the project meet all of the Software and Cloud Software-a 4819.34, 4989.2 and SIMM 22	C Yes ⊙ No C Clear				
	If "Yes," this initiative is a non-r Approval Lifecycle is delegated an approved SIMM Section 22 f					
7.	Will the project require a Budge	et Action to be completed?	C Yes O No C Clear			
8.	Is it anticipated that the project by CDT as identified in SIMM 10	C Yes ⓒ No C Clear				
9.	Are there any previously impos project by the CDT (e.g., Correc If "Yes," provide the details reg	C Yes O No C Clear				
10.	Is the system specifically many		⊙ Yes ◯ No ◯ Clear			
Department of Technology Use Only						
Ori	ginal "New Submission" Date	12/20/2021				
Form Received Date		12/20/2021				
Form Accepted Date		12/20/2021				
Form Status		Completed				
Form Status Date		12/20/2021				
Form Disposition		Approved If "Other," specify:				
Form Disposition Date		12/20/2021				

Data Classification

All data points that will be uploaded to the analytical tools in the data system will be tagged based on their level of sensitivity using the following data classification policy:

Classification Related to Sensitivity

- Public Information Information that is not exempt from disclosure under state or federal laws.
- Personal Information Information that identifies or describes an individual based on the Information Practices Act (see Civil Code Section 1798.3). This information must be protected from inappropriate access, use, or disclosure and must be made accessible to data subjects upon request.

Classification Related to Allowable Use

• Dashboard – Information may be included on public facing dashboards, in accordance with the deidentification policy



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- Query builder Information may be included in the public query builder tool, in accordance with the deidentification policy
- Request Information may be accessed through the data request process only
- Matching only Information may only be used for purpose of matching records and may not be released from the data system

Data Classification Process

- Both sensitivity and allowable use tags would be applied by the data providers to the data points at the point of upload to the cloud repositories.
- The sensitivity tags would determine which data points should have deidentification protocols applied.
- The use tags would inform the index of available elements for data requests.