

U.S. Department of Education

Washington, D.C. 20202-5335



APPLICATION FOR GRANTS UNDER THE

**STATEWIDE LONGITUDINAL DATA SYSTEM RECOVERY ACT GRANTS
CFDA # 84.384A
PR/Award # R384A100057**

There were problems converting one or more of the attachments. Please see list below.

Closing Date: DEC 04, 2009

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This application was generated using the PDF functionality. The PDF functionality automatically numbers the pages in this application. Some pages/sections of this application may contain 2 sets of page numbers, one set created by the applicant and the other set created by e-Application's PDF functionality. Page numbers created by the e-Application PDF functionality will be preceded by the letter e (for example, e1, e2, e3, etc.).

Application for Federal Assistance SF-424		Version 02
* 1. Type of Submission		
<input type="checkbox"/> Preapplication	* 2. Type of Application: * If Revision, select appropriate letter(s):	
<input checked="" type="checkbox"/> Application	<input checked="" type="checkbox"/> New	
<input type="checkbox"/> Changed/Corrected Application	<input type="checkbox"/> Continuation	* Other (Specify)
	<input type="checkbox"/> Revision	
* 3. Date Received:		4. Applicant Identifier:
12/4/2009		
5a. Federal Entity Identifier:		* 5b. Federal Award Identifier:
		N/A
State Use Only:		
6. Date Received by State:		7. State Application Identifier:
8. APPLICANT INFORMATION:		
* a. Legal Name: California Department of Education		
* b. Employer/Taxpayer Identification Number (EIN/TIN):		* c. Organizational DUNS:
680258051		807480843
d. Address:		
* Street1:	1430 N Street	
Street2:		
* City:	Sacramento	
County:		
State:	CA	
Province:		
* Country:	USA	
* Zip / Postal Code:	95814	
e. Organizational Unit:		
Department Name:		Division Name:
CA Department of Education		Data Management
f. Name and contact information of person to be contacted on matters involving this application:		
Prefix:	* First Name:	Keric
Middle Name:		

* Last Name: Ashley

Suffix:

Title: Director

Organizational Affiliation:

Data Management Division, California Department of Education

* Telephone Number:

(916)323-5007

Fax Number:

(916)322-6407

* Email: KASHLEY@CDE.CA.GOV

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

10. Name of Federal Agency:

U.S. Department of Education

11. Catalog of Federal Domestic Assistance Number:

84.384A

CFDA Title:

Statewide Longitudinal Data System Recovery Act Grants

*** 12. Funding Opportunity Number:**

ED-GRANTS-072909-001

Title:

Statewide Longitudinal Data Systems Grant Program CFDA 84.384A

13. Competition Identification Number:

84.384A2009-1

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Local educational agencies (county offices of education, districts,

independently reporting charter schools, community colleges) and postsecondary institutions in California.

*** 15. Descriptive Title of Applicant's Project:**

The California Comprehensive Education Data System (CCEDS)

Attach supporting documents as specified in agency instructions.

Attachment:

Title :

File :

Attachment:

Title :

File :

Attachment:

Title :

File :

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: CA-ALL

* b. Program/Project: CA-ALL

Attach an additional list of Program/Project Congressional Districts if needed.

Attachment:

Title :

File :

17. Proposed Project:

* a. Start Date: 7/1/2010

* b. End Date: 6/30/2013

18. Estimated Funding (\$):

a. Federal	\$ 19999759
b. Applicant	\$ 0
c. State	\$
d. Local	\$
e. Other	\$
f. Program Income	\$
g. TOTAL	\$ 19999759

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on .

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name: Susan
Middle Name:
* Last Name: Lange
Suffix:

Title: Deputy Superintendent

* Telephone Number: (916)319-0815 Fax Number:

* Email: SLANGE@CDE.CA.GOV

* Signature of Authorized Representative: * Date Signed:

Application for Federal Assistance SF-424

Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.



U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
California Department of Education

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

SECTION A - BUDGET SUMMARY
U.S. DEPARTMENT OF EDUCATION FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	\$ 816,515	\$ 816,515	\$ 816,515	\$ 0	\$ 0	\$ 2,449,545
2. Fringe Benefits	\$ 256,574	\$ 256,574	\$ 256,574	\$ 0	\$ 0	\$ 769,722
3. Travel	\$ 71,430	\$ 61,180	\$ 61,180	\$ 0	\$ 0	\$ 193,790
4. Equipment	\$ 861,130	\$ 37,480	\$ 37,480	\$ 0	\$ 0	\$ 936,090
5. Supplies	\$ 7,490	\$ 7,490	\$ 7,490	\$ 0	\$ 0	\$ 22,470
6. Contractual	\$ 3,702,755	\$ 4,332,521	\$ 4,244,674	\$ 0	\$ 0	\$ 12,279,950
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 84,329	\$ 56,550	\$ 56,550	\$ 0	\$ 0	\$ 197,429
9. Total Direct Costs (lines 1-8)	\$ 5,800,223	\$ 5,568,310	\$ 5,480,463	\$ 0	\$ 0	\$ 16,848,996
10. Indirect Costs*	\$ 1,084,642	\$ 1,041,274	\$ 1,024,847	\$ 0	\$ 0	\$ 3,150,763
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 6,884,865	\$ 6,609,584	\$ 6,505,310	\$ 0	\$ 0	\$ 19,999,759

***Indirect Cost Information (To Be Completed by Your Business Office):**

If you are requesting reimbursement for indirect costs on line 10, please answer the following questions:

(1) Do you have an Indirect Cost Rate Agreement approved by the Federal government? Yes No

(2) If yes, please provide the following information:

Period Covered by the Indirect Cost Rate Agreement: From: 7/1/2009 To: 6/30/2010 (mm/dd/yyyy)

Approving Federal agency: ED Other (please specify): _____ The Indirect Cost Rate is 0%

(3) For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:

Is included in your approved Indirect Cost Rate Agreement? or, Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is 0%



U.S. DEPARTMENT OF EDUCATION
BUDGET INFORMATION
NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
 California Department of Education

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

SECTION B - BUDGET SUMMARY
NON-FEDERAL FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2. Fringe Benefits	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
3. Travel	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
4. Equipment	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
5. Supplies	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
6. Contractual	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
9. Total Direct Costs (lines 1-8)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
10. Indirect Costs	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Standard Form 424B (Rev.7-97)

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. "4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. "1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. '794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. "276a to 276a-7), the Copeland Act (40 U.S.C. '276c and 18 U.S.C. "874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. " 327-333), regarding labor standards for federally assisted construction sub-agreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. "1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. "7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. "1721 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance

of 1975, as amended (42 U.S.C. " 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) " 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. " 290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. ' 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with the provisions of the Hatch Act (5 U.S.C. "1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. '470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. "469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. "2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. "4801 et seq.) which prohibits the use of lead- based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

Signature of Authorized Certifying Representative:

Name of Authorized Certifying Representative: Susan Lange

Title: Deputy Superintendent

Date Submitted: 12/04/2009

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

1. Type of Federal Action: <input type="checkbox"/> Contract <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Loan <input type="checkbox"/> Loan Guarantee <input type="checkbox"/> Loan Insurance	2. Status of Federal Action: <input checked="" type="checkbox"/> Bid/Offer/Application <input type="checkbox"/> Initial Award <input type="checkbox"/> Post-Award	3. Report Type: <input checked="" type="checkbox"/> Initial Filing <input type="checkbox"/> Material Change For Material Change only: Year: 0 Quarter: 0 Date of Last Report:
4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier, if known: 0 Name: California Department of Education Address: 1430 N Street City: Sacramento State: CA Zip Code + 4: 95814-5008 Congressional District, if known: 05	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Name: Address: City: State: Zip Code + 4: - Congressional District, if known:	
6. Federal Department/Agency:	7. Federal Program Name/Description: CFDA Number, if applicable:	
8. Federal Action Number, if known:	9. Award Amount, if known: \$0	
10. a. Name of Lobbying Registrant (if individual, last name, first name, MI): Address: City: State: Zip Code + 4: -	b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): Address: City: State: Zip Code + 4: -	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Name: Susan Lange Title: Deputy Superintendent Applicant: California Department of Education Date: 12/04/2009	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements.

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal Loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance.

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

APPLICANT'S ORGANIZATION

California Department of Education

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE
--

Prefix:	First Name: Susan	Middle Name:
Last Name: Lange		Suffix:
Title: Deputy Superintendent		

Signature:	Date:
_____	12/04/2009

ED 80-0013

03/04

California Department of Education Human Subject Research Narrative

The CDE in collaboration with California Community Colleges, California State University, and University of California will develop a strategic plan for research as part of this grant proposal. This group is also proposing to conduct a minimum of three research project during this grant period. All proposed research activities are considered “exempt” under the Department of Education 34, CFR Part 97. However, these proposals will be subject to review by the Committee for the Protection of Human Subjects (CPHS). Following state privacy laws, the CPHS will determine if our proposals should be subject to further “Common Rule” review. All procedures for obtaining participant consent and minimizing perceptions of coercion for participation will be followed and subject to review by the CPHS.

Project Narrative

Project Narrative - Project Abstract

Attachment 1:

Title: **CA Project Abstract IES ARRA SLDS** Pages: **1** Uploaded File: **G:\DMIP\ARRA-SLDS IES Grant 2009\CA Proposal\Final Drafts\Abstract\CA Abstract IES ARRA SLDS.pdf**

Abstract

The California Comprehensive Education Data System (CCEDS)

While California has worked for many years to improve student achievement through various reforms, and progress has been made, more needs to be done. ARRA programs, including Race to the Top, the State Longitudinal Data Systems (SLDS) grant, and SFSF, Phase II, have provided California with a historic opportunity to move forward on key pieces of the state's strategy to better prepare our students for a brighter future. As a result, stakeholders have come together to work on shared goals for California's students like never before. The Governor and the Superintendent together commissioned a report entitled "Framework for a Comprehensive Education Data System in California: Unlocking the Power of Data to Continually Improve Public Education." This report reflects more than a year of research and analysis that was conducted by McKinsey & Company, a global management consulting firm. Their recommendations and the elements of the America COMPETES Act was the roadmap for our grant application. This application also supports California in its Race to the Top (RTTT) efforts and will set the stage for the critical reforms under RTTT.

The state of California serves to provide innovative leadership to build strong schools that are capable of addressing the comprehensive learning needs of our students. A particular focus is to minimize the achievement gap that currently exists among our students so that all children will have the opportunity to obtain excellence in education and successfully master the critical transition into workforce. The state of California is committed to the implementation of a comprehensive approach to education reform by achieving the following goals: (1) increasing the number of highly qualified teachers and administrators in our public education system, (2) strengthening the collection and use of California's education data to facilitate valuable data driven decisions, (3) effectively using college and career readiness standards and assessments to ensure that students graduate ready for the challenges of the global economy, and (4) turning around our lowest performing schools.

The purpose of this grant is to seek funding for California to support the following focus areas:

- **Focus Area 1: Expand Existing State Data Systems**
- **Focus Area 2: Build High Quality P-20 Longitudinal Data Warehouse**
- **Focus Area 3: Produce High Quality Research and Training**
- **Focus Area 4: Improve College and Workforce Readiness Tracking**

The proposed grant will support California's approach to education reform by providing the one time funds that are necessary to develop the CCEDS and establish the state's authoritative source for longitudinal education data. The CCEDS will provide researchers and policymakers with a rich source of data to use for the evaluation of education outcomes and will expand the opportunities to make training on data use readily available to local teachers and administrators to support continuous learning.

Project Narrative

Project Narrative - Project Narrative

Attachment 1:

**Title: CA Project Narrative IES ARRA SLDS Pages: 30 Uploaded File: G:\DMIP\ARRA-SLDS IES Grant 2009
\CA Proposal\Final Drafts\Narrative\CA Project Narrative IES ARRA SLDS.pdf**

(a) Need for the Project

Introduction

Recent mandates through the chaptering of the Education Data and Information Act (SB 1298 and SB 19) legislatively position the state of California to pursue the California Comprehensive Education Data System (CCEDS). The CCEDS will serve as the longitudinal P-20 education data warehouse that is capable of linking teacher and student information and connecting to non-education data (e.g., health, workforce, and social services). The California Department of Education (CDE) in collaboration with California Community Colleges (CCC), California State University (CSU), and University of California (UC) will build and maintain the CCEDS under a collective governance structure called the Joint Powers Authority (JPA). In addition to these four public education segments, the Commission on Teacher Credentialing (CTC), California County Superintendents Educational Services Association (CCSESA), California Postsecondary Education Commission (CPEC), California Partnership for Achieving Student Success (Cal-PASS), Fiscal Crisis and Management Assistance Team (FCMAT)/California School Information Services (CSIS), and Employment Development Department (EDD) will participate in the current project. A brief overview of the educational agencies involved with this proposal is located in *Appendix A* and further details on the JPA can be found in section (d) *Project Management and Governance Plan*.

Current status of the state's statewide longitudinal data system

The CDE received a 2006 Institute of Education Sciences (IES) Statewide Longitudinal Data Systems (SLDS) grant to support the development of the California Longitudinal Pupil Achievement Data System (CALPADS). This fall, the CALPADS began enrolling local educational agency (LEA) Administrators and is now gathering information on student enrollment and the status for those students that have exited a school (which the state uses to determine number and rate of graduates and dropouts) for over 6 million K-12 students. The system employs a unique statewide student identifier (SSID) to link the student data longitudinally. Throughout this year, additional data collection windows will be implemented to gather data on student program eligibility and participation, student primary language, teaching assignments (at the classroom level), student course enrollments, student discipline, student course completion, and student health. The CDE will calculate the 4-year NGA graduation rate starting with the graduating class of 2010. The state defined the requirements for course data that enables matching teachers to students by placing the teacher identifier on the course section record and placing the course section identifier on the student course enrollment record.

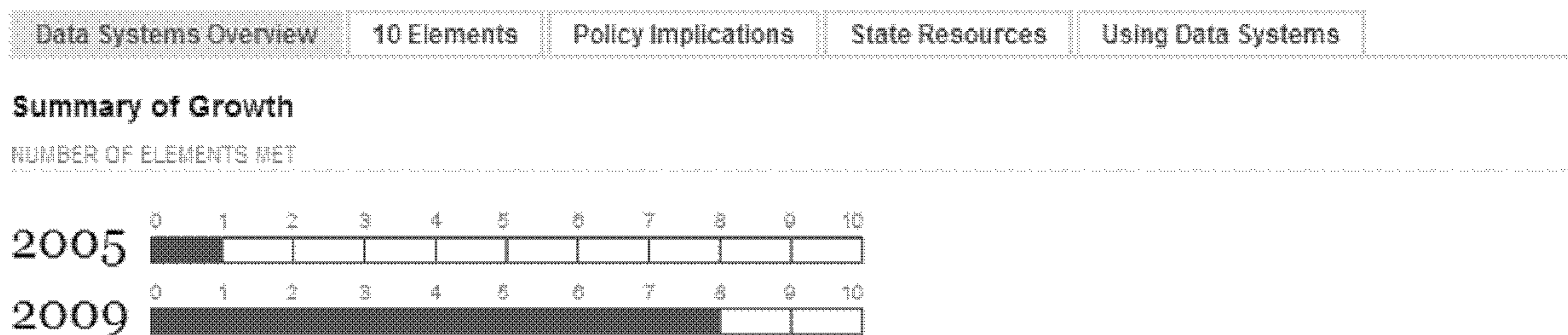
California has been publically posting data reports on a CDE web site known as DataQuest (<http://dq.cde.ca.gov/dataquest/>). While CALPADS will supply longitudinal reports for LEAs with student-level data, DataQuest will be expanded to include aggregate reports generated with CALPADS data. Most reports will be available by

school, district, county, and state levels and many will also be posted as downloadable files. Student-level data will only be made available through a FERPA-compliant data access process.

In 2009, the CDE and CTC received an IES SLDS grant to develop the California Longitudinal Teacher Integrated Data Education System (CALTIDES). The CALTIDES will integrate teacher assignment information collected by the CALPADS with teacher authorization and teacher preparation data (for over 1 million teachers) stored in the data systems at the CTC organization. The systems integration vendor will be selected in March 2010 and the CDE and CTC expect to launch the CALTIDES in 2011-12.

California (8 of 10 Essential Elements)

Although each state's education system is unique, 10 Elements are essential in a longitudinal data system. DQC's annual survey results track individual states' progress towards implementing these Elements but also the policy implications of creating such longitudinal systems. The DQC provides a forum for states to learn from each other as they continue to improve their systems, so DQC also catalogues state-specific resources to facilitate cross-state sharing of benefits, challenges, and lessons learned.



Elements met in this state

» What does this mean? Read about the 10 Essential Elements

- ✓ 1. Statewide Student Identifier
- ✓ 2. Student-Level Enrollment Data
- ✓ 3. Student-Level Test Data
- ✓ 4. Information on Untested Students
- ✓ 5. Statewide Teacher Identifier with a Teacher-Student Match
- ✗ 6. Student-Level Course Completion (Transcript) Data
- ✓ 7. Student-Level SAT, ACT, and Advanced Placement Exam Data
- ✓ 8. Student-Level Graduation and Dropout Data
- ✗ 9. Ability to Match Student-Level P-12 and Higher Education Data
- ✓ 10. A State Data Audit System

Figure 1. California Growth on the Data Quality Campaign (DQC) 10 Elements
Source: The Data Quality Campaign 2009 Survey Results

Although the CDE is making great progress on the Data Quality Campaign (DQC) 10 Essential Elements for P-20 data collection, the majority of information on students and teachers that transition through California's public education system is collected and stored in separate state-level source systems (Please refer to Appendix A for additional information on the different education data source systems). While these data systems provide very useful segment specific information, there is a need to connect these data in a manner that allows for tracking students from P-20 and to link with workforce data. The outcomes presented in the current proposal will address what is necessary for California to build a P-20 data system that adequately captures the seven system capabilities and the 12 essential America COMPETES Act elements that are required in the current Request for Application (RFA).

Key elements/capabilities to be improved through this grant

California will be capable of **examining student progress and outcomes over time** by completing the following:

- Expanding the existing K-12 CALPADS system to include individual level PK data.
- Developing a system to link data in CALPADS PK-12 to data from public postsecondary data systems.
- Engaging our key stakeholders (e.g., district personnel, principals, teachers, counselors, parents, university faculty, administrators and student organizations, business and employer groups) in developing and implementing the system to ensure its effective use for planning and decision making.

California will be capable of the **exchange of data among agencies and institutions within the State** by completing the following:

- Developing a system to link data in CALPADS PK-12 to data from public postsecondary data systems.
- Enabling the exchange of data between educational agencies and workforce agencies by developing a system that links a P-20 system to workforce data (e.g., wages earned and unemployment insurance claims data, possessed by the California Employment Development Department). This system will satisfy the data security concerns of all parties and establish the rights of all parties to access appropriate data needed to populate the longitudinal P-20 and workforce system.
- Working with P-20 councils that cross institutional segments and workforce councils that cross multiple employment sectors to promote linkages across multiple agencies in using these data.
- Establishing an interface between the CALPADS system and the University of California's Transcript Evaluation Services (TES) system that will enable data validation checks through (A-G) course taking patterns and course completion rates.
- Providing professional development through training on data quality and data use.
- Modernizing the data collection system at the California State University (CSU) and University of California (UC).
- Running periodic selected comparison checks between state reporting on schools with school site reports on data to ensure the integrity of the reporting data.

California will be capable of enabling **data to be easily generated for continuous improvement and decision making** by completing the following:

- Improving the School Accountability Report Card (SARC).
- Developing analytical reports and involving end users (teachers, parents, school administrators, district officials) in this development to ensure they are useful and user friendly.

California will be capable of **meeting reporting requirements of the U. S. Department of Education (ED)** by completing the following:

- Establishing a system to centralize data from CALPADS with other student level data in order to streamline reporting to *EDFacts*.

How these capabilities will support the state's improvement efforts, goals, and accountability systems

Linkage of the state's PK-12 education, postsecondary education, and workforce data is critically important to understanding movement of graduates from one education segment to the next, and into jobs and careers. This will allow researchers and educators to follow all students, including highly mobile students, not only across time but across geographical regions in the state. This will provide teachers of students who move from one location to another with up-to-date information on that student's progress along the academic pipeline, including points at which students exit and transfer. Understanding these patterns allows policymakers, educators, and workforce planners to target and implement necessary changes to improve the responsiveness and outcomes of the state education systems. The state will look for indicators and correlations of effectiveness in preschool programs, professional development practices, teacher preparation programs, English learner programs, and special education programs, etc., as we are able to tie student achievement to effective practices. P-20 collaborators will learn to use these data to follow students' progress from preschool through graduate school and will be able to see trends on the regional level between strong performance indicators of best practices in feeder school patterns. Additionally, linkage of these systems will consolidate existing duplicative efforts throughout the segments. This consolidation will allow for long-term sustainability and effective use of resources beyond the completion of this grant in 2013.

(b) Project Outcomes Related to System Requirements and Implementation

The current proposal is organized around four focus areas:

- Focus Area 1: Expand Existing Systems
- Focus Area 2: Build a High Quality P-20 Longitudinal Data Warehouse
- Focus Area 3: Produce High Quality Research and Training
- Focus Area 4: Improve College and Workforce Readiness Tracking

Within each focus area includes a series of outcomes that are further defined by specific measurable deliverables. Each outcome/deliverable is assigned a timeline and budget that allows for the evaluation of completion at the conclusion of the award period. Please see section (c) *Timeline and Budget Narrative* for details on tasks, parties responsible, and how efforts will be coordinated and duplication of effort avoided. This grant opportunity will support California in its Race to the Top (RTTT) efforts and will set the state for the critical reforms under RTTT. Working together, these programs will provide critical resources, tools and data: and enable critical reform conditions and comprehensive change for the state.

Focus Area 1: Expand Existing Systems

The primary objective of Focus Area 1 is to seek funds to expand and improve existing data systems. The outcomes proposed under this focus area will lay the foundation for California to pursue the development of the CCEDS. Specifically, these outcomes will produce the following:

- A process for local educational agencies (LEAs) to support the acquisition and maintenance of identifiers for preschool students and related data.
- The expansion of current CALPADS data collection to include additional “core data elements” that will facilitate college and workforce readiness tracking.
- An extensive reporting capability for CDE to meet federal reporting requirements (e.g., ED*Facts*) and provide additional public reports.
- The renovation of the California State University (CSU) data system to facilitate the linkage of CSU education data to the P-20 education data warehouse.

Outcome 1.1: Develop Process for LEAs to Acquire and Maintain Identifiers for Preschool Students

Senate Bill 1298 (see Appendix A) requires that the CDE establish a process for LEAs to “issue, maintain and report information using the statewide pupil identifiers” for pre-K children in state and federally funded center-based childcare and development programs. California has 97,948 children ages 2 - 5 participating in four CDE sponsored center-based preschool programs. Approximately half of the programs are operated by entities that are not associated with any LEA. All special education students, including preschool children, already have statewide student identifiers (SSIDs). In addition to these special education students, on a voluntary basis, 288 LEAs have obtained SSIDs for more than 23,000 preschool children across the state. In consultation with representatives from LEAs and child care providers, CDE will design a process and implement a pilot in order to demonstrate the feasibility and assess the cost of obtaining and maintaining SSIDs for preschool children attending programs not operated by an LEA. The CDE in consultation with stakeholders will also identify the data that should be collected and maintained for each student. Successful completion of Outcome 1.1 will establish the foundation for the CCEDS to have the seven required data system capabilities (in particular capability 1) in addition to the 12 elements prescribed by the America COMPETES Act (e.g., 1 through 9).

- *Deliverable 1.1a: Business process analysis and model to collect and maintain pre-K identifiers and related data*

Outcome 1.2: Expand CALPADS to Collect Additional Student-Centric “Core Data Elements”

In order for CALPADS data to be linked to postsecondary and workforce data in a manner that provides meaningful interpretations of college and workforce readiness, the functionality of the system should be expanded to include additional data elements.

This outcome aligns with the required RFA capabilities (1 & 5), elements from the America COMPETES Act (2,6,10,11&12) and will facilitate the proposed tracking of college and workforce readiness in California's public education system (Outcome 4.4).

- *Deliverable 1.2a: Develop an approach to collect and store additional student-centric data elements (e.g., attendance)*

In consultation with the California State Attendance Review Board (SARB), district and school administrators and the CALPADS Advisory Committee (CAC), a strategic plan on how to best modify CALPADS to collect additional student-level data will be developed. For example, attendance, Early Assessment Program (EAP) test scores, Advanced Placement (AP) test scores, ACT/SAT, and program participation in Science, Technology, Engineering, and Mathematics "STEM" curricula. The Education-Workforce Research Group (Outcome 3.2) will convene a group of key stakeholders to pinpoint a collection of effective indicators that can be used to create a composite to gauge workforce readiness (Outcome 4.4) and essential public reports (Outcome 1.3) with the end user in mind (e.g., parents, teachers, administrators and legislators). Following the recommendations of this group, the CALPADS system functionality will be expanded to facilitate the collection of these new data elements.

- *Deliverable 1.2b: Expanded PK-12 data system*

Outcome 1.3: Develop System to Centralize Data and Support Complex Reporting

This outcome is designed to develop a solution system that is capable of the following:

- Centralizing data from several CDE source systems (e.g., CALPADS, Migrant Student Information System, and California Special Education Management Information System) to generate files for ED*Facts* submission.
- Supporting sub-second reporting to answer complex PK-12 questions (e.g., examine the number of students being served by both migrant education and Title 1 and capture this information by race/ethnicity and gender).
- Generating standardized PK-12 reports for the public.

The CDE will hire an outside consultant to conduct a business needs assessment and feasibility study that will clarify the scope, schedule and resources needed to develop a system that will meet the needs as listed above. Using grant funds, the CDE will also hire one new senior staff person with technical expertise in the area of data warehousing and reporting. This person will be responsible for leading and mentoring five existing CDE staff in areas such as data warehousing and business intelligence. The CDE will also send five key CDE personnel to vendor neutral training provided by The Data Warehouse Institute (TDWI) in order to build technical expertise within the CDE related to data warehousing and to continue to improve skills under meta data management and data governance. The Data Management Division (DMD) and Technology Services Division (TSD) will coordinate efforts to hire the outside consultant and will decide which staff will be sent to the TDWI training.

- *Deliverable 1.3a: Business needs assessment and feasibility study report for centralizing and reporting PK-12 longitudinal data*
- *Deliverable 1.3b: Build CDE's technical expertise in data warehousing*
- *Deliverable 1.3c: System to support centralized data and reporting*

Outcome 1.4: Modernize the CSU Enterprise System of Data Collection, Maintenance, and Use to Better Align CSU Data Architecture: Expand Existing System and Initiate Common Course Equivalencies

The California State University (CSU) needs to improve its data system in three areas:

- CSU needs to collect, maintain, and use data through a modernized system – the original enterprise systems were developed and implemented in the 1960s;
- CSU recognizes that modernization in alignment with the data architectures of the CDE and the CCC will facilitate the development and use of intersegmental data; and
- CSU recognizes the need to initiate course equivalencies among its 23 institutions in order to enable analysis, evaluation, and comparable reporting.

The CSU's current system data architecture reflects the silos of collection, maintenance, and use of data that were associated with separate purposes during the 1960s: simple student term enrollments and tracking to graduation, information about faculty and sections that drove capital and support budget decisions (especially when the state maintained position control over the CSU when it was a state agency), and a system connected to the State Controller with regard to payroll, benefits, and retirement. Through the decades, some amendments have been made to the systems that the CSU Enterprise System group has maintained, but the antiquated collection approaches have made it difficult for people with substantive and technical responsibilities to be able to understand and provide the requested information to the system. More importantly, the silos of current system have been detrimental to campus and system planning, management, and accountability: both the campuses and system need access to time-series information at campus census dates (the point at which when state and federal accountability indicators are collected) and end-of-term information regarding the success of students in completing coursework.

The CSU embraces the qualities of a statewide educational database system that serves students that have been articulated by the Obama administration and others. The CSU is struck by the progress made by its sister system, the California Community Colleges, and the richness of CDE's plans and implementation with CALPADS and CALTIDES. The CSU proposes to modernize its Enterprise System in an architecture similar to these sister segments. The CSU is prepared to help build a High Quality P-20

Longitudinal Data Warehouse and recognizes that the provision of data from the CSU to the warehouse will require validation.

In particular, the major gaps in CSU data collection center on students and their actual patterns in taking and completing courses. The CSU currently does not collect information by student regarding the course sections in which they are enrolled (at census date) and student records of completion and grades in these course sections at the end-of-term. Summary data are collected, but not the kinds of data that would help instructors of similar courses to enable more efficient and effective student learning and progress to degree. The CSU proposes the expansion of its data collection to include census student class lists and end-of-term student grade lists which will then align CSU with CDE and CCC with regard to student course enrollment and completion.

In addition, at the request of CDE and with the highest level of executive support in the CSU, the CSU is prepared to initiate a process to establish course equivalencies within the CSU. All of the segments of higher education have participated in decades of discussion about common course numbering – the simplest and most transparent way to establish course equivalence, but no action has ever been taken beyond simple discussion. The CSU proposes to take action and build course function and equivalence data elements into its new data architecture. To build course equivalency, the CSU proposes two projects. The first project will focus on pre-baccalaureate and first-time freshman level courses, developmental instruction, courses counting for lower-division General Education (GE) English, GE Math, and other general education requirements in the lower division, and lower-division major requirements. Ultimately when the CSU is commonly grounded in these areas, it will facilitate connecting with its sister segments in courses in grade levels 8 through 12 and the community colleges with the pre-baccalaureate and first-year courses. The second project will focus on upper-division courses where CSU students are increasingly finding it difficult to complete their degree programs. Course equivalencies will facilitate the offering of a CSU virtual university geared toward completion of degree programs, which will enable more students to complete their degrees cost-effectively.

- *Deliverable 1.4a: Buy data warehouse hardware/software, create new table structures and data design, create new data element dictionary, and migrate (where available) legacy data to new data warehouse structure, design, and tables.*
- *Deliverable 1.4b: Map old Enterprise System siloed-fields from Peoplesoft ERP to new data warehouse structure, map expanded data elements (as necessary) to new data warehouse structure, set up ETL (extract/transform/load) from Peoplesoft to data warehouse.*
- *Deliverable 1.4c: Define new data elements on course function indicators (from degree audit systems) and course equivalence (use degree audit information from campuses and CCCs to develop initial list of possible equivalencies) and initiate the prebaccalaureate and first-year project and the CSU virtual university project to begin within-CSU common course equivalence (aka common course numbering).*

Focus Area 2: Build a High Quality P-20 Longitudinal Data Warehouse

Through the enactment of the Education Data and Information Act of 2008, California's leaders have already declared a clear intent to establish a system for linking education data from pre-kindergarten through postsecondary, and, in the long-term anticipate sharing of appropriate non-education data from other state sources such as health welfare, juvenile justice, corrections, and workforce agencies. This historic opportunity has enabled stakeholders to come together to work on shared goals for California's students like never before.

The purpose of Focus Area 2 is to develop a P-20 longitudinal data system called the California Comprehensive Education Data System (CCEDS). The purpose of the CCEDS will be to link and report education data that spans from public pre-kindergarten through postsecondary (and eventually other appropriate non-education data from other state systems, in particular, workforce).

The CCEDS will bring together data from CDE's CALPADS and CALTIDES systems, CCC's Chancellor's Office Management Information System (COMIS) system, CSU's Enterprise System (ES) and UC's Corporate Student System (CSS). (See Appendix A for a figure that shows the data flows between these systems.)

In addition, the CCEDS will:

- Centralize the state's public PK-12 and public postsecondary educational data at one single secure location.
- Serve as the single source of P-20 educational data for research interests, program evaluation, and other State reporting systems that rely on P-20 education data.
- Serve as a back-end application development data source and platform that will automate the reporting of P-20 student progress metrics, student transitions, and P-20 educational accountability efforts.
- Serve as a data collection and reporting point for other pertinent data that can be linked to P-20 student data, including wage/workforce data.

This system will not:

- Include analytical or business intelligence tools (this function will be addressed in California's Race to the Top application).
- Provide PK-12 district and school administrators with student level reports – these reports will be developed through Outcomes 1.3 (build a centralized system for reporting), 3.2 (initiate the resources of the Education-Workforce Research Group) and 4.4 (create a college and workforce readiness composite)

The CCEDS will be developed and administered by a Joint Powers Authority (JPA) as described in section (d) *Project Management and Governance Plan*.

It would not be appropriate for the CDE to expand the scope of data in the CALPADS to include postsecondary and workforce because:

- In California four separate agencies have authority over PK-12 and postsecondary education (CDE, CCC, CSU, UC); as one of the four agencies, it would not be appropriate for the CDE to solely manage a system that housed data from the postsecondary segments.
- It would be inappropriate for the CDE to administer access to postsecondary data, and also lacks the capacity to fulfill requests for P-20 data.
- The CALPADS was designed to collect longitudinal data from LEAs and was not designed to collect, store and report postsecondary data.
- From a practical standpoint, CALPADS will be under warranty, and as such, CDE cannot make significant changes to the system until 2011-12.

At the conclusion of this grant, Focus Area 2 will produce the following outcomes:

- A Comprehensive P-20 Data Dictionary
- A P-20 Data Architecture
- A data warehouse that links PK-12 to postsecondary student records to match PK-12 and postsecondary student records to workforce data and to store and provide extracts of non-personally identifiable data for researchers

Outcome 2.1: Data Conversion Plan for Existing PK-12 and Postsecondary Data

The Technical Project Director will be responsible for the development of this plan with JPA staff implementing the plan. This proposal seeks new positions for the JPA. These positions will complement the 4.5 positions redirected from existing state agency staff. See Appendix A for the proposed organization chart for the JPA team. The plan produced in this outcome will build upon the Office of the State Chief Information Officer (OCIO) Strategic Plan (see Appendix A) and will be comprised of three deliverables: a comprehensive P-20 data dictionary, a logical and physical data model, and translation scheme documentation.

- *Deliverable 2.1a: Develop a comprehensive P-20 data dictionary*

CDE will lead a working group comprised of one technical and one business representative from CSU, UC, CCC, CDE, CPEC, Cal-Pass, and CSIS to develop a common P-20 data dictionary. The working group will use the CDE's common data architecture approach, which CDE has already proven an efficient approach for developing a data dictionary. Using the common data architecture approach, the working group will document each organization's common core of data (i.e., those data and code sets that will be loaded and linked in CCEDS) as variations within the CCEDS common data architecture. The working group will also take into consideration the various national standards, especially the National Center for Education Statistics Data Handbooks and Integrated Postsecondary Education Data System (IPEDS).

- *Deliverable 2.1b: Design logical and physical data models*

The JPA, starting with the OCIO's Strategic Plan (as commissioned by SB 1298 and later SB 19) and the P-20 CCEDS data dictionary, will develop a logical data model and a physical data model for the P-20 CCEDS data warehouse. The development effort will include looking at the National Data Education Model (NEDM) to assess the degree to which the state might be able to employ the model. The data model will also be designed in consideration of the addition of workforce data.

- *Deliverable 2.1c: Devise translation scheme documentation*

The JPA staff will be responsible for developing the translation scheme document. The common data architecture approach used to develop the data dictionary also yields information that helps to expedite the development of translation schemes. Specifically, the common data architecture reflects the variations on a data element or code set that each organization uses, and the preferred variation for that data (in terms of data element name, format, etc.). This step would entail defining the translation scheme between each variation and the preferred variation.

In addition, the JPA's technical staff will also examine national standards for Extensible Markup Language (XML) data in transport – specifically, exploring the efficacy of the School Interoperability Framework (SIF) and Postsecondary Education Standards Council (PESC) standards for XML formatted data. The JPA's IT staff will coordinate with the SIFA and PESC organizations' staff to conduct a gap analysis between the CCEDS' common core of data and data supported in the SIF and PESC data models. CCC and CSIS will provide subject matter expertise with a focus on PESC and SIF.

Outcome 2.2 Establish Infrastructure/Platform

- *Deliverable 2.2a: Procure, install, and configure hardware/software*

The JPA will be responsible for procuring, installing and configuring the hardware and software. Also, the JPA will be responsible for ensuring the system is secure and the system is set up consistent with the governance plan as established by the JPA Board. The system will be housed at the Corporation for Education Network Initiatives in California (CENIC) which is waiving storage or network fees (see Letter of Support in Appendix D).

Outcome 2.3 Design/Develop/Test/System Functionality

- *Deliverable 2.3a: Design/develop secure transfer protocol and exchange between state source systems and CCEDS*

The JPA staff will work with the technology staff associated with each of the state source systems.

- *Deliverable 2.3b: Design/develop/test algorithm(s) to match K-12 records to postsecondary records*

All postsecondary institutions maintain the social security number (SSN) in their systems. Matching data from postsecondary data should be more straightforward than matching PK-12 to postsecondary data because of the SSN. However, based on the lessons learned from other states, as shared in the Data Quality Campaign's webinar in November, each postsecondary organization will conduct a series of data quality checks on the SSN data in their system to make sure data are reliable and clean prior to loading their data into the P-20 data warehouse. The CPEC has experience matching postsecondary data. The CPEC staff will work with the JPA staff to develop one or more matching algorithms to match PK-12 to postsecondary. At minimum, the matching algorithms will ensure the following linkages are made:

- PK-12 CALPADS student data to postsecondary common data (already loaded in the P-20 data warehouse).
 - Teacher data in CALPADS and CALTIDES data linked to teacher data from CSU.
 - Student data across postsecondary institutions.
- *Deliverable 2.3.c: Pre-cleanse and load K-12 and postsecondary data into system*

Prior to loading any data into the system, each segment will be responsible for devoting staff (IT and data) to run data cleansing checks against their data and cleanse the data. Once the segments have cleansed their data, the JPA staff will work with the technology staff at each of the state sources systems to load the data into the CCEDS system.

- *Deliverable 2.3.d: Design/build functionality to link postsecondary data to workforce data*

The JPA staff will work with the Employment Development Department to develop a link that matches PK-12/postsecondary data to workforce data, such as wage records and unemployment insurance claims data, possessed by the Employment Development Department.

- *Deliverable 2.3.e: Design/build functionality to generate non-personal identifiers*

The JPA will build functionality into the CCEDS that allows the state to release individual level teacher and student level data in a manner that ensures the state is compliant with various federal and state laws (especially FERPA, California Information Privacy Act, and Federal Privacy Act). The JPA staff will seek assistance from an IES Regional Education Laboratory (REL) and the Education-Workforce Research Group (Outcome 3.2) to develop protocols for masking and de-identifying data.

- *Deliverable 2.3f Develop plan for ongoing data extracts from the CCEDS to Cal-PASS and CPEC*

Consistent with policies and procedures set by the P-20 data governance group (Outcome 3.1), the JPA will be responsible for developing a plan for routine data extracts from the CCEDS system for various consumers. These extracts will provide

longitudinal data that is at minimum equivalent to what they currently receive (e.g., Cal-PASS for use in their training portal, CPEC, and other providers of public reports including Statfinder, DataMart and DataQuest).

Focus Area 3: Produce High Quality Research and Training

The objective of Focus Area 3 is to produce high quality research and training that informs decision-making and supports continuous improvement at all levels of California's education system that will move forward the key pieces of the state's strategy to better prepare our students for a brighter future. Aligned with the Joint Power Authority (JPA) governance structure as described in section (d) *Project Management and Governance Plan*, the JPA Board will assign staff with the responsibility for managing the day-to-day operations of the CCEDS.

At the conclusion of the grant, Focus Area 3 will yield the following outcomes:

- Ethical stewardship of P-20 cross-education segment data,
- Quality education and workforce research activities that effectively inform educational policy,
- Consistent outreach to education and workforce research community and general public, and
- Advanced training on data use and data quality that impacts continuous learning.

The outcomes identified within this focus area lay the foundation for the CCEDS to address the ARRA RFA required capabilities (i.e., 1 and 2) as well as the elements set forth by the America COMPETES Act (e.g., 3,9,10,11, and 12). The research governance and data management policies and procedures will be modeled after existing practices set forth by the Committee for the Protection of Human Subjects (CPHS). The CPHS sets the gold standard for the institutional review of personally identifiable data that is governed by the State of California. As the state institutional review board, members from the CPHS have volunteered to assist with the development of cross-segment education research governance. Furthermore, a team of CCC, CSU, and UC research faculty engaged in working with data on P-20 will be part of the key stakeholders team that is involved in giving feedback at all stages of the development and implementation of the data system. The researchers will specifically provide support in the development of guidelines for the use of the database by research for the purpose of informing policy.

Outcome 3.1: Establish Ethical Stewardship of P-20 Education Data

- *Deliverable 3.1a: Develop the CCEDS data access and use policies*

The JPA staff will be responsible for convening a group of expert education policy makers, researchers, and key stakeholders (e.g., parents, P-20 teachers and administrators) to develop the CCEDS data access and use policies. These policies will adhere to all relevant federal and state privacy laws, including but not limited to, the Family Educational Rights and Privacy Act (34 Code of Federal Regulations, Part 99) and the California Information Practices Act of 1977 (California Civil Code, § 1798 et seq.).

- *Deliverable 3.1b: Institute the CCEDS data access procedures*

Upon implementation of the CCEDS, a number of statewide P-20 data requirements will be transitioned to a data warehouse in an effort to streamline data collection, storage, and dissemination. This centralization is dependent upon a collective effort among all public education segments and key education partners to coordinate the process to jointly review and fulfill requests for individual level student and teacher data. The JPA staff will be in charge of designing and implementing data access procedures that compliment the policies that emerge from Outcome 3.1a. The JPA staff will also coordinate this outcome with the development of outcomes in Focus Area 2. These procedures will improve efficiency in reviewing and processing requests for data using evaluation rubrics that evaluate the necessary privacy and security protocols that are required by state and federal laws. One of the primary goals of the system is to provide timely access to education and workforce data to agencies most in need of this information for authorized research and evaluation purposes.

- *Deliverable 3.1c: Implement the CCEDS web-based data request and review process*

The JPA staff will oversee the procurement and implementation of an online data/research request application and tracking software that allows for processing and tracking these requests in a timely manner. This web-based application system is currently used by the CPHS and is reported to reduce staff workload by 35%. This outcome will compliment deliverable 3.1b by improving access protocols to cross-segment and workforce data.

Outcome 3.2: Initiate P-20 Education and Workforce Research Agenda

Upon receiving IES grant funds in 2006 to develop the CALPADS, the CDE initiated a research group to strengthen internal capacity for research. This group meets once every month to discuss pertinent education research and facilitate ongoing projects. In addition to learning about internal projects, the Research Group regularly invites experts from the education policy and research community to attend meetings and share their most recent work to update CDE staff of some of the most current policy and research

findings. Many of these presentations have informed the planned outcomes in the current grant proposal (e.g., Cal-PASS presented on their Professional Learning Councils). With the advent of the CCEDS, the CDE plans to leverage the resources provided by the CDE-RG with research resources in higher education and workforce to establish an Education-Workforce Research Group. Some of the key partners that have expressed an interest in volunteering include researchers from the California Research Bureau, the Employment Development Department, the California Labor and Workforce Development Agency, CPEC, Cal-PASS, UC P-20 Leaders Group, Alliance for Regional Collaboration to Heighten Educational Success-ARCHES and Directors of Institutional Research from CCCCCO, CSUCO, UCOP.

- *Deliverable 3.2a: Develop a comprehensive strategic plan for P-20 education and workforce research*

Research group members will convene a group of high quality researchers, policymakers, and important stakeholders to develop a strategic plan for research that addresses closing the achievement gap and identifying timely measures for college and workforce readiness. Specific equipment and software will be purchased to facilitate “concept mapping” a planning strategy that is used to achieve a level of consensus among many perspectives to capture the most relevant issues that need to be addressed to maximize the use of the CCEDS. The Education-Workforce Research Group will make a major contribution by creating a clear pathway for university and other researchers to access P-20 data in ethically appropriate ways.

These researchers can address crucial issues such as:

- What resources matter the most in helping youth succeed in attaining STEM careers such as in the health professions, engineering, and "green" jobs?
- When along the academic pipeline do interventions pay off the most? How long do effective interventions last?
- Among students' multiple pathways through school into the workforce, what interventions are most effective with "second chances" youth, who leave and re-enter educational segments and systems?

The Education-Workforce Research Group and affiliated researchers will benefit from and contribute to national educational research events such as the American Educational Research Association (AERA), in addition to the IES Research Conference, California Educational Research Association (CERA) and California Association of Institutional Research (CAIR) events.

- *Deliverable 3.2b: Complete a minimum of three research studies*

Aligned with the recommendations of the strategic plan, a series of studies will be launched during the three year grant period that will utilize existing data and prepare for

the eventual linkage across segments to investigate the developmental pathways in educational and workforce settings. The first year will focus on necessary background research activities (i.e., comprehensive literature reviews, meta-analyses) followed by cross-sectional (Year 2) and longitudinal research investigations (Year 3). The findings from this line of research will be disseminated through the outreach deliverables outlined below under Outcome 3.3.

- *Deliverable 3.2c: Submit a minimum of three grant proposals*

The Education-Workforce Research Group will support the sustainability of research through grant funding. Stemming from the membership of the Education-Workforce Research Group, a grant writing work group will be formed with the purpose of submitting at least one grant proposal a year. Initially, the focus will be on development grants in year one, followed by research grant proposals for years two and three to support the planned research activities that emerge from the strategic plan and research group meetings. These benchmarks will be used to regularly assess the growth and progress in internal research activities as well as address requirements eleven and twelve of the America COMPETES Act.

Outcome 3.3: Provide Consistent Education Governance and Research Outreach

Deliverables 3.3a through 3.3c reflect the planned outreach activities that are necessary to inform the public and consumers of research about the appropriate use of data, privacy and security, in addition to current findings.

- *Deliverable 3.3a: Distribute education research newsletter*

The research group will produce a quarterly newsletter that focuses on important research findings and regularly highlights privacy and security issues. It will also report on important state and national data use activities (e.g., NCES Forum Code of Data Ethics).

- *Deliverable 3.3b: Coordinate state education research conference*

The research group will collaborate with the California Education Research Association (CERA) and the California Association for Institutional Research (CAIR) to provide a conference on P-20 – Workforce transitions. This conference will provide a forum for connecting PK-12 to postsecondary institutional research. The conference will have a community outreach component that will feature sessions for parents and teachers to attend.

- *Deliverable 3.3c: Send four research group members to the annual IES research conference; ensure at least one research group representative also attends the IES grantee meeting each year*

The CDE sponsored two staff to attend the 2008 IES Research Conference as CA SLDS grantee representatives (invitation only to research grantees). These same staff later attended and presented at the 2008 Summer MIS conference and represented the CDE at the SLDS grantee meeting. The CDE found this to be a valuable activity because it allowed for a stronger connection and understanding of integrating trends in education research with current SLDS information management initiatives.

Outcome 3.4: Provide Training and Continuing Education on Best Practices in Data Quality and Data Use

Central to the success of producing high quality research and evaluation that impacts continuous learning is training that prepares LEA staff to adopt best practices in data quality and teaches effective strategies on the appropriate interpretation of data when assessing education outcomes. The CDE in collaboration with California County Superintendent Educational Services Association (CCSESA) and the Fiscal Crisis Management Assistance Team's (FCMAT) California School Information Services (CSIS) will develop curricula, workshop training materials, and online training modules for LEA staff that are responsible for working with education data. These trainings will be developed to coincide with the proposed modifications to the CALPADS functionality to include additional readiness indicators (Outcome 1.1a) and the creation of a readiness composite (Outcome 4.1a) to better prepare LEA staff for these changes (e.g., instruction on how to accurately collect attendance and evaluate the chronic absence indicator). This outcome will also align with the RFA required capability six and America COMPETES Act element five.

- *Deliverable 3.4a: Provide training and continuing education on data quality*

This deliverable will expand current training efforts in California to provide data quality training for LEA data coordinators. Historically, there is a turnover of approximately 22% of LEA data coordinators each year. In addition, approximately 23% of LEAs have to amend their data after each State certification due to poor quality (Some of these LEAs have new coordinators and some do not). With the current budget crisis in California, there is an expectation that both of these numbers will continue to increase over the next 2-3 years. CSIS provides basic training to help data coordinators understand what they need to do to submit and certify data in CALPADS and also provides new coordinator training on basic data management principles. However, given that many LEAs are unable to recruit data coordinators with a significant background in data management and that many LEAs have to amend their data due to poor data quality, advanced training is needed to assist data coordinators in learning how to improve their procedures for data collection, submission, and certification. A series of six workshops

and six online training modules will be developed and offered continuously throughout the year.

- *Deliverable 3.4b: Develop and administer the data analysis, interpretation, and use (DAIU) training*

To help LEA staff access, correctly analyze and interpret, and appropriately present and use student data, CDE in collaboration with California County Superintendents Educational Services Association (CCSESA) will develop and present a series of Data Analysis, Interpretation, and Use (DAIU) workshops and online training modules. Each year, approximately twelve workshops will be held around the state, in addition to six Web-based trainings, that teach LEA staff how to make appropriate data-driven decisions. The first series of workshops will focus on the interpretation and use of state standardized tests, followed by a series on the interpretation of the readiness composite to identify students at-risk of dropping out (e.g., appropriate ways to interpret and use data; types of valid conclusions, inference; Annual Measurable Achievement Objectives (AMAOs); using data for placement, instruction, reclassification, and program evaluation).

Focus Area 4: Improve College and Workforce Readiness Tracking

LEAs have been collaborating with postsecondary institutions to work with industry and community partners to develop rigorous curricula in science, technology, engineering, and mathematics (STEM). Aligned with this curricula are statewide intervention efforts that are intended to facilitate the transitions along educational pathways into workforce to prepare our students for STEM fields (e.g., California Mathematics, Engineering, Science Achievement- MESA , California Summer School for Math and Science COSMOS; UC College Prep; UC Statewide Summer Algebra Academies; and CalTeach creating a pipeline for Math and Science teachers and participation in STEM academies in high school). The purpose of focus area four is to implement college and workforce readiness outcomes that will improve readiness tracking at the student and school level. The outcomes in this focus area address the required RFA capabilities one and five and elements six through nine of the America Competes Act.

Outcome 4.1: Expand Functionality of eTranscript California

Outcomes 4.1a and 4.1b will expand the scope and capabilities of the K-12 to college electronic transcript exchange between the California School Information Services (CSIS) K-12 Academic Records Transfer system and the eTranscript California post-secondary transcript exchange and to enable public schools serving high school students to send transcripts at no cost to postsecondary institutions in California.

- *Deliverable 4.1a: Expand functionality of request process, web services, and composite transcript request system*

