



Application Profile

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Competition: 84.372A05

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Organization Information

Organization Name: California Department of Education

Organization Unit: Data Management Division

Organization Address: 1430 N Street, Suite 6416

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Project Director Name and Information

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Collaboration Organization(s)

Organization Name	Organization Type	State	Country	Key Personnel	Role on Project
California Community Colleges Chancellor's Office	State	CA	United States of America	Perry, Patrick	Record transfer secondary to post secondary
California School Information Services	Local	CA	United States of America	Brawn, Russ	Student IDs and K-12 Records Transfer

Application Title

California Longitudinal Pupil Achievement Data System

State Identifier: N/A

Period of Performance **Project Begin Date:** 03/15/2006

Project End Date: 08/08/2008

Abstract

The California Department of Education (CDE) requests a total of \$3,679,018 to support three priority components of California's overall educational data system. Specifically, the CDE requests: (1)\$449,973 to support the CDE's current efforts to coordinate data collection and reporting with the federal Performance Based Data Management Initiative (PBDMI); (2)\$2,587,045 on a 50% matching basis to fund the one-time systems integration costs to develop the California Longitudinal Pupil Achievement Data System (CALPADS); and (3) \$642,000 to complete the build out of California's statewide student records transfer system.

In response to the federal No Child Left Behind (NCLB) requirements, Senate Bill 1453 was enacted to provide access to longitudinal pupil data. Senate Bill 1453 requires: (1) the assignment of individual, yet non-personally identifiable Statewide Student Identifiers (SSIDS)to all K-12 student enrolled in California public schools; and (2)the establishment of CALPADS that includes statewide assessment data, enrollment data, and other demographic and program participation data needed to meet federal NCLB reporting requirements. The lynchpin to California's overall educational data system is the development and implementation of CALPADS. The objectives of CALPADS are to:

- 1) Provide school districts and the CDE access to data necessary to comply with federal NCLB reporting requirements;
- 2) Provide a better means of evaluating educational progress and investments over time;
- 3) Provide local education agencies information that can be used to improve pupil achievement;
- 4) Provide an efficient, flexible, and secure means of maintaining longitudinal statewide pupil level data; and
- 5) Promote good data management practices with respect to pupil data systems and issues.

As a foundation to the CALPADS efforts, the CDE is working to standardize the data it collects (names, definitions, codes)in consideration of federal data standards in order to facilitate vertical reporting from local educational agencies (LEAs), to the state, and to the federal government. Accordingly, the CDE requests funding to support this effort.

Finally, ultimately the quality of CALPADS data depends on LEAs assigning and maintaining the Statewide Student Identifiers, and collecting, maintaining, and reporting quality data. One way to better ensure the quality of local data is to give LEAs a stake in maintaining that data. Providing statewide records transfer capacity within K-12 and to postsecondary education will provide LEAs an incentive to maintain their data, as LEAs mutually benefit from quality data received from each other. In addition, not only will the electronic transfer of records reduce administrative costs, but perhaps mostly importantly it will provide valuable and timely information that will help ensure that students are served appropriately and thereby increase student achievement.

NOTE: The CDE is only requesting a portion of the funds required to support the three cited component areas. The CDE did not reflect in Section B on ED 524 the Non-Federal Budget Non-Construction Programs page all other funds spent on California's overall education data system.

Human Subjects: No **Exempt from Regulations:** No **Exemption #:** **Assurance #:**

Exempt Narrative:

Non-Exempt Narrative:

Estimated Funding

Federal:	\$3,679,018.00	Local:	\$0.00	Total:	(b)(4)
Applicant:	\$0.00	Other:	(b)(4)		
State:	\$0.00	Program Income:	\$0.00		

Federal Budget

Budget Categories	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1. Personnel	\$72,660.00	\$72,660.00	\$72,660.00	\$0.00	\$0.00	\$217,980.00
2. Fringe Benefits	\$31,140.00	\$31,140.00	\$31,140.00	\$0.00	\$0.00	\$93,420.00
3. Travel	\$43,691.00	\$43,691.00	\$43,691.00	\$0.00	\$0.00	\$131,073.00
4. Equipment	\$304,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5. Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6. Contractual	\$968,354.00	\$2,163,879.00	\$96,812.00	\$0.00	\$0.00	\$3,229,045.00
7. Construction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
8. Other	\$2,500.00	\$2,500.00	\$2,500.00	\$0.00	\$0.00	\$7,500.00
9. Total Direct Costs	\$1,118,345.00	\$2,313,870.00	\$246,803.00	\$0.00	\$0.00	\$3,679,018.00
10. Indirect Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11. Training Stipends	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12. Total Costs	\$1,118,345.00	\$2,313,870.00	\$246,803.00	\$0.00	\$0.00	\$3,679,018.00

Non-Federal Budget

Budget Categories	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1. Personnel						
2. Fringe Benefits						
3. Travel						
4. Equipment						
5. Supplies						
6. Contractual						
7. Construction						

- 8. Other
- 9. Total Direct Costs
- 10. Indirect Costs
- 11. Training Stipends
- 12. Total Costs

Application Details

D-U-N-S Number: (b)(2)
 Any Federal Debt: No Specify:
 Type of Applicant: Other (Specify)

T-I-N: 680258051 Duration (years): 3

If Other, Specify: State Education Agency

Authorized Representative Information

AR Name	AR Address	AR Phone	AR Fax	AR E-mail	Primary:
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Longitudinal Data System Grant: Project Narrative

Section 1: Need for Project

Status of Current System

California provides public education to more than 6.3 million students through 58 county offices of education, 1,049 school districts and 9,763 schools. California believes that effectively managing the data of this enterprise is critical to the goal of increased student achievement. Accordingly, California is in the process of moving from collecting numerous aggregate data collections containing redundant, inconsistent, and poor quality data, to a streamlined, flexible educational data system which relies primarily on the collection of student and teacher level data that can be extracted and aggregated into various reports that satisfy state and federal requirements, and provide a rich resource for research and evaluation. The primary components of California's comprehensive educational data system are described in this section. Each component is in a different stage of development or implementation.

In this Longitudinal Data System Grant application, the California Department of Education (CDE) requests **\$3,679,018** to support funding for three priority components of its overall educational data system. First, any education data system should be grounded by well-defined data elements that are collected and used consistently by local, state, and federal educational agencies. Towards this end, the CDE requests **\$449,973** to participate in national School Interoperability Framework (SIF) activities, and to support its efforts to collect and submit data for the federal Performance-Based Data Management Initiative (PBDMI) through the Education Data Exchange Network (EDEN). Second, the lynchpin to California's overall educational data system is the development and implementation of the California Longitudinal Pupil Achievement Data System (CALPADS); accordingly, the CDE requests **\$2,587,045** to support 50% of the one-time systems integration costs required to develop the system. Finally, building student records transfer capacity statewide is critical to promoting the ongoing maintenance of quality data at the local level that is reported to the state through CALPADS. To build out California's student records transfer system, the CDE requests **\$642,000** to support two collaborating partners, California School Information Services (CSIS), and the Chancellor's Office of the California Community Colleges, to support these efforts.

Data Management

Key to any educational data system is well defined data collected in a consistent manner. The CDE is currently involved in a long-term effort to improve the management and quality of its data. The Data Management Improvement Program (DMIP), includes the following major components: (1) cataloging and maintaining CDE data resources in the Data Resource Guide; (2) standardizing data elements (names, codes, definitions) by adopting "preferred variations" for all data elements collected by the CDE and its contractors; (3) analyzing and eliminating unnecessary collections; and (4) centrally monitoring all new collections, and monitoring state and federal reporting requirement activities to align and advocate for consistency in reporting. In addition, California must ready its systems to efficiently create and submit files for PBDMI

reporting through EDEN. At the same time these efforts will feed into the CALPADS development. The CDE also believes it is critical that it *fully participates* in these data activities at the national level. All of these efforts will to increase the quality of CDE data and facilitate the exchange and integration of data at all levels of government. *Accordingly, the CDE seeks \$448,973 to support its PBDMI, EDEN and SIF activities.*

Local Capacity

Ultimately, the local educational agency (LEA) is responsible for collecting, maintaining, and reporting quality data. To assist LEAs in the management of their data, California established the California School Information Services (CSIS) program in 1997. CSIS is a public agency under the administrative oversight of the Kern County Office of Education. California Education Code Section 49080 states that the mission of CSIS is to:

- *Build the capacity of local education agencies to implement and maintain comparable, effective, and efficient pupil information systems that will support their daily program needs, assist local education agencies in improving the outcomes of pupils, and promote the use of information for educational decision making by schoolsite, district office, and county staff.*
- *Enable the accurate and timely exchange of pupil transcripts between local education agencies and to postsecondary institutions.*
- *Assist local education agencies to transmit state and federal reports electronically to the State Department of Education, thereby reducing the reporting burden of local education agency staff.*

Participation in the CSIS program is voluntary. Currently approximately one quarter of the state's LEAs are participating in the program. The program has primarily emphasized assisting LEAs to collect, maintain, and report student level data for the purposes of meeting the reporting requirements of five state data collections. California will leverage the CSIS program in its statewide implementation of CALPADS which will require all LEAs to collect, maintain, and report student level data. With its annual \$4 million operating budget, and 30 experienced staff, CSIS is a critical collaborating partner in the development and implementation of CALPADS. CSIS is particularly experienced and well positioned to provide training and technical assistance to LEAs in data collection and reporting. *The CDE does not request any grant funding to support the general operations of CSIS.*

Statewide Student Identifier (SSID)

In 1997, CSIS began to assign unique, yet non-personally identifiable student identification numbers to students in LEAs voluntarily participating in the CSIS state reporting and records transfer program. In 2001, legislation was enacted requiring all public K-12 students in California to have a Statewide Student Identifier (SSID). Leveraging their earlier work, CSIS was tasked with assigning *all* California K-12 public school students a SSID and then maintaining these data on an ongoing basis to ensure that they reflect new enrollment or transfer information. As of June 30, 2005, all students have an identifier. CSIS in collaboration with the CDE is in the process of implementing the necessary processes for LEAs to maintain the SSIDS, and California plans to have this process well established prior to the full implementation of CALPADS.

The CDE is also working to integrate the SSID in all student-level data collections to maximize data use through integration. In fact the SSID is required on all individual student data submissions to the state beginning in 2005-06, including statewide assessments. CSIS and the CDE is also working with the postsecondary institutions to include the SSID in their records to allow for longitudinal analysis of student achievement through postsecondary education. *The CDE does not request any grant funding to support the SSID.*

California Longitudinal Pupil Achievement Data System (CALPADS)

The CDE recently completed a Feasibility Study Report (FSR) for CALPADS. Upon FSR approval and receipt of funding, the CDE will initiate the CALPADS project to establish an integrated, statewide operational data store to collect, maintain, and report student, teacher, and institution-level data required for NCLB reporting from LEAs, and student statewide assessment data from test vendors. CALPADS will maintain the data longitudinally, and provide LEAs, CDE, and other authorized users access to the data pursuant to state and federal privacy laws. The project design for CALPADS is described extensively in the Project Design section of this application. *The CDE seeks \$2,587,045 to support 50% of the one-time systems integration costs to develop CALPADS.*

Records Transfer System

In California, CSIS is tasked with enabling “the accurate and timely exchange of pupil transcripts between local education agencies and to postsecondary institutions” (California Education Code section 49080(b)). CSIS has developed a common file format for pupil transcripts and the infrastructure for transferring those records. CSIS has also been involved in a number of projects transferring transcripts from high schools to postsecondary institutions. CSIS is a voluntary program, however, and it has been difficult to establish a full records transfer system when not all LEAs are participating. However, since SB 1453 now requires all LEAs to acquire and maintain SSIDs for all students, there is a new opportunity to implement records transfer statewide. The records transfer system will be described further in the Project Design section of this application. *The CDE requests \$642,000 from this application to support the records transfer effort through two partners, CSIS and the Chancellor’s Office of the California Community Colleges.*

Teacher Data System (TDS)

Currently, various teacher data resides in different ways in multiple databases in different agencies at the state and local levels with no system for integration. As a result, resources are wasted on redundant data collection and maintenance. In addition, there is a lack of quality data to support state and local decision-making and compliance activities, and to meet state and federal reporting requirements, including those under NCLB. This year, the CDE, in collaboration with other state and local agencies, will develop a Feasibility Study Report to identify the most cost-effective approach for converting the existing data systems into an integrated, comprehensive, longitudinally linked teacher information system that can yield high-quality program evaluations. The FSR will be developed with the intent that the TDS be coordinated with CALPADS so that there will be the capacity to link records across information systems. *The CDE does not request grant funds to support the TDS.*

Analysis of Business Needs for CALPADS

The federal No Child Left Behind Act (NCLB) of 2001 places a new emphasis on the collection and analysis of student-level data. To determine whether schools are meeting NCLB accountability measures, California recognized the need to assign a statewide student identifier in order to track students to assess achievement overtime and to determine more accurate graduation rates. To meet this need, Senate Bill (SB) 1453 (Chapter 1002, Statutes of 2002), was enacted, requiring: (1) all students to have an individual, non-personally identifiable student identification number; and (2) the California Department of Education (CDE) to contract for the development of CALPADS to maintain longitudinal data. SB 1453 specifies that CALPADS shall be used to:

- *“Provide school districts and the State Department of Education access to data necessary to comply with federal reporting requirement delineated in the No Child Left Behind Act of 2001 (P.L. 107-110).*
- *Provide a better means of evaluating educational progress and investments over time.*
- *Provide local education agencies information that can be used to improve pupil achievement.*
- *Provide an efficient, flexible, and secure means of maintaining longitudinal statewide pupil level data.”*

To further define the intent of SB 1453 and address concerns related to data management practices and confidentiality, the Legislature passed, and the Governor signed into law in October 2003, Senate Bill (SB) 257 (Chapter 782, Statutes of 2003). SB 257 specified that it is the intent of the Legislature to:

- *“Promote good data management practices with respect to pupil data systems and issues including, ensuring confidentiality, producing analyzable files for approved users, and linking pupil data with data from other agencies and users, including a mechanism to monitor pupil progress in postsecondary education.*
- *Provide for data management and data sharing that is conducted in a manner so as to protect individual pupil data. Specifically, the systems should use unique identifiers that cannot be traced to the pupil’s identity.*
- *Establish state data management practices that require the development of specific categories of users and uses for pupil data and establish responsibility for approving and servicing users, as well as, responsibility for establishing and posting protocols, criteria, and procedures for use that are developed in a manner consistent with recommendations of the State Department of Education’s advisory committee on privacy and data protocol.”*

To meet the requirements of SB 1453, the CDE developed a Feasibility Study Report (FSR) for the development of CALPADS. The FSR included an extensive analysis of business needs.

Based on that analysis, CALPADS is designed to meet the following needs:

- *CALPADS will provide longitudinal data that will provide an important means of evaluating educational progress and investments over time. The state’s current accountability system is based on evaluating cross-sectional data and provides a snapshot of achievement for a specific group of students at a given moment in time. As such, the current system compares two different populations of students. While the system*

provides one measure of school performance, it cannot tell how well a school is doing with students that have been continuously enrolled, or how a group of students have progressed academically over time. CALPADS will provide longitudinal data that will allow such analysis.

- *CALPADS will provide LEAs information that can be used to improve student achievement.* CALPADS will provide LEAs access to the aggregated data of other schools and districts, allowing them to compare themselves to like schools and districts that are getting better results, thus pointing them to a potential resource. For LEAs that do not keep longitudinal data, they will now have access to their own students' longitudinal data in the form of data files, pre-determined reports, and some queries. All LEAs will be able to download and merge CALPADS data with local data and utilize the combined information with local decision-support systems to create a rich decision-making environment that will help improve student achievement.
- *CALPADS will provide limited student records transfer capability.* CALPADS will provide all LEAs immediate access to information on new students. This will help LEAs place students appropriately or determine if students have already been administered a required assessment (such as the California English Language Development Test, or the California High School Exit Exam). Finally, CALPADS will help LEAs determine whether an apparent “drop out” actually transferred to another school district.
- *CALPADS will provide an efficient, flexible data system that increases data quality and value yet reduces the reporting burden on LEAs.* CALPADS will become the “database of record” that LEAs will be allowed to update throughout the year, as they deem necessary. The individual tracking of students will result in more accurate graduation and drop out rates. Finally, collecting data at the lowest level will allow CDE to extract and aggregate data from CALPADS to create NCLB reports and potentially many other required reports, thereby allowing CDE to significantly reduce or eliminate current data collections.

Analysis of Business Needs for Records Transfer

CSIS K-12 Records Transfer. Ultimately, CALPADS depends on LEAs assigning and maintaining the statewide student identifiers, and collecting, maintaining and reporting quality data. In fact, the CALPADS FSR identified LEA data quality as a risk to the project with a high impact. In a recent study, CSIS found that of the states surveyed with statewide student identifiers systems, most identified local data quality as the most significant problem. The CDE has engaged in a number of strategies to mitigate the risk, including seeking state funding to support LEA data activities on an ongoing basis. Another important way to mitigate the risk is to give LEAs a stake in maintaining the SSID and other student data. Providing statewide records transfer capacity within K-12 will provide LEAs an incentive to maintain their data, as LEAs mutually benefit from quality data received from each other. Records transfer capacity will not only result in administrative cost savings, but will also provide valuable and timely information that will help ensure that students are served appropriately.

CCCtran Project - Records Transfer from High Schools to the California Community Colleges (CCCs). For a substantial portion of the student population, success of high school student preparation is measured upon continuation into higher education. Being able to monitor and

analyze student performance, particularly in the early postsecondary years, is essential to evaluating educational effectiveness longitudinally. To improve outcomes, it is also critical at the junction of transfer from secondary to post-secondary education that the student academic records are made readily available to advisers and counselors to help students formulate and enter into successful and effective post-secondary education paths. The ability to exchange academic records between the K-12 and postsecondary segments in a timely, accurate and secure manner is the lynchpin to both actual success and the evaluation of longitudinal educational effectiveness.

A 1999-2000 Academic Records Feasibility Study Report (FSR) for the exchange of electronic records performed by the California Community Colleges, found that a great gap exists between high school and community colleges in California. These two groups represent the largest systems of secondary and post-secondary education in the world. Each year, close to a million new students flow into the CCC's with minimal exclusion or pre-processing (very often admitted and enrolled during the same session of interaction) and with relatively little exchange of information. Less than 10% of transcripts are available for students at the time they enroll in a CCC. For the majority of the 13/14 years, academic data from external institutions are not available to counselors, advisers, and researchers, and most colleges do not receive transcripts until the process of graduation is begun, which is well toward the end of the program of study rather than at the beginning. Thus, the greatest unmet need is academic record exchange just where it is needed to be effective for student success: at the point of transfer from secondary to post-secondary education. Substantial improvement in year 13/14 success rates is attainable with access to accurate, timely and secure academic achievement information at the point of transfer from secondary education. Filling this gap should result in improved outcomes longitudinally.

Analysis of Business Needs for PBDMI, EDEN, and SIF Activities

In 2004, for each PBDMI file it took, on average, 24.2 hours to analyze PBDMI requirements, locate the data source, develop queries, and successfully upload files to USDE's portal. The CDE had significant problems during the upload process, with only 35.8 percent of the attempted uploads being successful. Ultimately, the CDE was able to upload 19 files of the 170 files. Accordingly, the CDE requests funds to conduct the required activities to enable it to upload all 170 files. Based on past experience, this will require 4,114 hours, or a total of \$411,400 in staff time.

In addition, the CDE believes it is critical to *fully participate* in PBDMI, EDEN, and SIF activities, and accordingly requests funding to attend all meetings in 2006-07, 2007-08, and 2009-10.

Section 2: Project Design

This section describes the project design of two of the components for which the CDE is requesting grant funding: (1) California Longitudinal Pupil Achievement Data System (CALPADS); and (2) student records transfer. The funding request for the CDE to prepare for PBDMI submissions through EDEN, and to participate in PBDMI, EDEN, and SIF efforts do not have project design components, and therefore are only described in the Budget Justification

section of this application. Also, **Appendix B, Exhibit 1** summarizes the current status and CDE’s future plans relative to each of the “Core Elements for Establishing a Statewide Longitudinal Data System,” as outlined in the Request for Application.

California Longitudinal Pupil Achievement Data System

The CDE requests 50 percent matching funding to support the one-time development costs of CALPADS. The CDE will procure and implement an integrated data management and analysis solution for collecting, managing, and reporting longitudinal student achievement data. The risk and cost associated with implementing an integrated CALPADS solution will likely be minimized by the existence of a number of system integration vendors and product and service vendors offering proven data management and analysis capabilities, many of whom have specialized expertise in K-12 education. **Appendix B, Exhibits 2 through 4** illustrates the high-level proposed solution architecture for CALPADS.

Data Collection

CALPADS places local educational agencies (LEAs) in the primary role of providing student-level demographic and program participation data to the CDE and the test vendors in the primary role of providing student-level test results to the CDE. **Appendix B, Exhibit 2** presents the proposed CALPADS data collection and reporting process.

Currently test vendors collect all the student demographic and program participation data required for NCLB reporting on the statewide assessment answer document. This method of data collection is highly problematic for two reasons: (1) it requires LEAs to submit data multiple times during the year for each statewide assessment; and (2) results in poor data quality as test vendors are not in a position to help LEAs cleanse their data, and LEAs generally do not have an opportunity to cleanse their data until late in the process.

CALPADS will address these problems. CALPADS will be the database of record for all LEAs, collecting student, teacher, and institutional data directly from LEAs. LEAs will submit a complete set of student information each fall, and then be able to send new and updated student-level records through out the year, as needed, to maintain the accuracy of CALPADS data. This will allow LEAs to maintain their data on an ongoing basis on a schedule that fits their needs. Business rules for data format, acceptable values, missing data options, and logical comparisons to prior data will be developed. Automated data edit processes, and summary reports will be employed by CALPADS to verify data quality and to ensure that the rules are met before allowing data into the State’s data system. CSIS will provide ongoing training and technical assistance to LEAs in the submission of their data.

The LEAs will no longer have to submit this data to the test vendors on the answer documents for each statewide assessment. The assessment data, however, will continue to come from test vendors as the answer documents will include the Statewide Student Identifier (SSID) which will link assessment data to the demographic and program participation data in CALPADS.

CALPADS also helps California move from its current collection of over 140 aggregate collections into a streamlined system in which student and teacher level data is collected,

maintained, and then extracted to create the various aggregate reports required by state and federal law. It also provides a rich database for research purposes. In moving to CALPADS, the CDE will be able to discontinue a number of its current aggregate collections and thereby reduce the reporting burden on LEAs. For example, the fall submission of data required by CALPADS will largely replace the current California Basic Educational Data System (CBEDS), which contains three separate collections. The CDE also anticipates adding a few more elements to the fall submission, and then discontinuing other entire aggregate collections. Finally, it has been the CDE's experience that moving from aggregate to student or teacher level data collection significantly increases data quality.

In terms of the data collected by CALPADS, the CDE has taken numerous steps to ensure data quality and integration. As described earlier, the CDE Data Management Improvement Program is developing preferred variations (standardized) for all data elements, including names, definitions, and codes, and in so doing is taking into account data standardization efforts at the federal and national level. CALPADS will collect data using CDE's preferred variations, which will be included in the CSIS Data Dictionary. Any changes to the CSIS Data Dictionary are vetted through a Change Review Process which includes formal input from both state and local users.

CALPADS will provide LEAs with three options for submitting data:

- ❑ Online data entry via a dedicated, Web-based portal hosted by the CDE
- ❑ Batch submission of data in the form of standardized flat files via secure file transfer protocol (FTP) or secure hypertext transport protocol (HTTPS), per data interchange specifications developed by the CDE
- ❑ Batch submission of data in the form of Schools Interoperability Framework (SIF) compliant, extensible markup language (XML) data streams via secure FTP or HTTPS.

The first option is intended for small LEAs (typically independent charter schools and small districts with fewer than 300 students) that do not have automated education administration systems. The second option is intended for districts that have automated education administration systems capable of producing extract files for submission to the CDE. The third option enables LEAs with SIF compliant systems to utilize these capabilities. (Note: the CDE considered requiring full SIF implementation to allow for real time reporting of data. This alternative, however, was not recommended because: (1) SIF is still evolving; and (2) the cost for implementing such a system in a state as large as California was prohibitive. The CDE views SIF, however, as a promising option for the future.)

Operational Data Store

CALPADS will host a single, integrated, statewide operational data store that complies with Internet-based standards for interoperability, communications, data interchange, and information security. This operational data store will store student, teacher, and institution-level data required for NCLB reporting and will store student-level achievement data in a longitudinal manner. The primary objective of CALPADS is to store longitudinal student-level achievement data and enable the reporting and extracting of analyzable files to authorized users. As defined in SB 1453, the CALPADS environment is not a data warehouse implementation or a decision support

system. However, the CDE views the CALPADS data repository as the source data for a future second phase data warehouse or decision support system.

Reporting

CALPADS will provide the data necessary to generate required NCLB reports and provide the CDE with a single, centralized database-of-record for K-12 longitudinal student achievement data for all students served by public schools in California. This will enable the CDE to efficiently meet state and federal reporting requirements, provide data required to help determine the efficacy of the state's investments in education, and streamline or reduce the number of existing data collections. CALPADS will be developed to report data for the PBDMI through the Education Data Exchange Network (EDEN), and the Common Core of Data (CCD).

Student Level Data: LEAs will have access to the data for all students within their jurisdiction for the purpose of audits, operations, accreditation, research and evaluation, and reporting. LEAs retain ownership of data pertaining to students within their jurisdiction and may provide varying levels of access to local personnel as they determine to be appropriate and necessary. LEAs may also download data files into their own decision support systems. Qualified entities (e.g. researchers, evaluators, legislative policy analysts, and other LEAs) will have access to student level data when requested for a legitimate education purpose. These entities will be provided read-only access or a data file, within a limited set of fields for some or all students, as necessary and appropriate, within the context of legitimate audit, evaluation, or research.

Aggregate Data: CALPADS will generate pre-define, automated state and federal reports, including a set of pre-defined, automated aggregate reports for LEAs. CALPADS also will enable secure access via the CDE's Internet portal to summarized non-personally identifiable student achievement data and other various aggregate reports on the CDE's website allowing access to parents and the general public. In addition, specialized aggregate reports requiring limited data mining of the core data sets will be produced upon request.

Additional information regarding CALPADS project design is contained in the subsections that follow.

Hardware, Software, Technical Platform

Hardware: CALPADS will reside on a suite of servers similar to servers currently in production at the CDE. Hardware needed for this project will include standard server platforms, routers, switches, and client personal computers (PCs). A conceptual view of CALPADS hardware is presented in **Appendix B, Exhibit 3**.

Software: The CDE has established interoperability standards, open communications and messaging protocols, standards-based system services, and data interchange specifications needed to accommodate its business requirements for data management and analysis in support of NCLB reporting requirements. The CDE software standards, presented in this proposal, are widely used in both the public and private sectors. A conceptual solution is presented in **Appendix B, Exhibit 4**.

The CDE will seek a solution utilizing the standards and conceptual solution that are widely used in both the public and private sectors. In addition, the CDE will consider as mandatory, a solution that embraces SIF and complies with the latest version of the SIF data object architecture, or an equivalent alternative. This will position the CDE to make CALPADS fully compliant with SIF in the future, which will further streamline the vertical reporting of NCLB and other data across education agencies at all levels.

Technical Platform: The CDE intends to specify the use of hardware and software that comply with CDE Technology Services Division (TSD) standards, which are widely supported in the marketplace. Because LEAs vary significantly in technical sophistication and availability of technical staff resources, the CDE will give preference to solutions that place a minimal support burden on LEAs.

Development Approach

The CDE in collaboration with CSIS will partner with the selected systems integrator in the design, development, business process change, data cleansing and migration, testing, and training aspects of the CALPADS implementation. In addition, the CDE will engage representatives from LEAs to provide subject matter expertise in the design, development, and testing of the CALPADS solution. Initially, the systems integrator will be responsible for providing a detailed work breakdown structure (WBS) and schedule for each phase of the project. The project and systems development lifecycles must be adhered to when developing the project management and technical project plans. The CDE already has engaged the services of a CALPADS professional, certified project manager. The CALPADS project manager will work alongside key CDE management personnel to drive the successful implementation of CALPADS. The project team is described in the Personnel and Management Sections of this application.

Integration Issues

Currently the majority of LEAs utilize the Visual FoxPro-based data entry applications (or their underlying data structures) developed and maintained by the CDE to submit data for the California Basic Education Data System (CBEDS), Language Census (Form R30-LC), and Consolidated Application for Funding Categorical Aid Programs (Part I) (ConApp) data collections. Approximately 200 LEAs utilize CSIS to submit these data for the CBEDS and language census data collections. The vast majority of LEAs use either the CSIS data interchange specifications or the data interchange specifications for the CBEDS and ConApp Visual FoxPro-based data entry applications to submit data to the CDE. As a result, these specifications constitute an appropriate point of departure for defining the data interchange specifications required by CALPADS.

The CDE already has a secure FTP site that LEAs use to upload data for submission to the CDE. Because LEAs are familiar with this process, CALPADS will likely implement a similar mechanism for LEAs to use to upload student, teacher, and institution-level data to the CDE in a secure manner. This mechanism will allow LEAs to upload CALPADS data either in the form of flat files or XML data streams that conform to the latest SIF data object specifications. By offering LEAs the choice to submit data in either format, LEAs can choose to make relatively minor modifications to their existing data extraction processes and submit their data as flat files, or move toward SIF compliance and submit their data as XML data streams.

Procurement Approach

The CDE anticipates the formal state competitive procurement effort to increase the likelihood that an integrated solution can be developed and implemented by a systems integrator utilizing existing data management and analysis software products and/or public domain systems capabilities. The CDE believes a systems integrator can define and propose a complete end-to-end solution by integrating the available custom-off-the-shelf (COTS) products and/or existing public domain solution to meet the CALPADS requirements. In order to potentially leverage the investment that State has made, the CDE will request that all bidders submitting proposals in response to the CALPADS RFP to assess the viability of leveraging the CSIS State Reporting and Records Transfer System (SRRTS) within their proposed solution. The CDE plans to follow the state's traditional competitive procurement process and develop a formal Request for Proposal (RFP) for an integrated solution. The CDE will distribute the RFP to: systems integrators; vendors offering data modeling, and extract, transformation and load services and/or products; end user and business intelligence reporting products and/or services; and vendors providing data warehousing products and/or services. By proactively inviting a wide array of potential solution providers to participate, and perhaps partner, in developing a suitable integrated solution, the CDE believes the existence of proven data collection and/or reporting COTS products reduces the potential cost and risk of developing an integrated system from the ground up.

In its procurement effort, the CDE will not specify a technical solution, except to require that the solution be compatible with CDE Technology Services Division standards for interoperability, open communications and messaging, and system services and components.

Testing Plan

At least \$1.6 million is budgeted for testing. The systems integrator, in conjunction with the CALPADS project team and CSIS will develop detailed test plans. Test scenarios developed by the CDE and participating LEA staff will be included in the test plan and used during extensive system testing. The systems integrator will be responsible for unit testing and managing, tracking, and coordinating system, integration and user acceptance testing. The CDE and LEAs will collaborate with the systems integrator on system, integration, and acceptance testing prior to statewide rollout and during the scheduled rollout across LEAs.

Privacy, Confidentiality and Information Security

CALPADS will be designed, developed, and implemented to conform to the Family Educational Rights and Privacy Act (FERPA) and state privacy requirements. The CDE is currently developing a comprehensive policy for privacy, confidentiality and information security. This policy will be reviewed and approved by the CALPADS Advisory Board, and will be implemented in state regulations. The following summarizes what is anticipated to be part of the policy.

The CDE anticipates no needed changes to its current physical security practices, as the platform for CALPADS will be hosted at the Teale Data Center (Teale). Physical access to server and network equipment at Teale is restricted and accessible only through card key access by authorized Teale staff.

The CDE will manage all logical access to CALPADS information through system and application-level security, and will utilize group policy objects for security administration. The CDE will apply group policy objects to authorize user access to specific data elements on a need-to-know basis only. This will prevent unauthorized users from creating, reading, updating, or deleting sensitive CALPADS data for which they are not primarily responsible. The CDE will implement CALPADS to meet the state and CDE information security standards. A summary of major user groups, including those identified by SB 257, and their access rights follows:

Access Level 1: Authorized CDE data administration personnel using the Internet to interactively access the CALPADS ODS will be required to provide a unique user name and strong password, and to possess a digitally signed public key infrastructure (PKI) X.509 certificate for mutual authentication. They will be authorized to tune the database, convert logical deletions to physical deletions, and to archive data beyond the retention period. These staff must receive approved access, and complete annual training and certification regarding privacy and confidentiality procedures and responsibilities.

Access Level 2: Authorized CDE program staff has read-only access to a limited set up fields for all students within the state to conduct audits, calculate accountability measures, and create reports. These staff must receive approved access, and complete annual training and certification regarding privacy and confidentiality procedures and responsibilities.

Access Level 3: County offices of education, school districts, and charter schools, will be allowed Internet access their own data in the CALPADS ODS, either interactively or through batch data transfer via secure FTP or HTTPS. This will be required to provide a unique user name and strong password, and to possess a digitally signed public key infrastructure (PKI) X.509 certificate for mutual authentication. LEA users will be allowed to access and update their own data. They will be allowed to create, read, update, and logically (but not physically) delete selected student, teacher, and institution data. However, they will be allowed read-only access to historical demographic and achievement data and to current student achievement data.

Access Level 4: Evaluators of public school programs, legislative policy analysts, and education researchers from established research organizations will be required to submit an application to the CDE that allows the CDE to qualify the requesting entity and the research project. The CDE will review the purpose of each qualified entity's request for CALPADS data. If approved, the CDE will track each request as required by FERPA, construct the data set requested, and transmit the data set to the requestor. To receive student-level data, researchers must sign an agreement to adhere to specified requirements, and to destroy student-level data after they have completed their research, or the passage of time.

Access Level 5: Test vendors using the Internet to access the CALPADS ODS through batch data transfer via secure FTP or HTTPS will be required to provide a unique user name and strong password, and to possess a digitally signed public key infrastructure (PKI) X.509 certificate for mutual authentication. Test vendors will be allowed to access and update their own data only. They will be allowed to create, read, update, and logically (but not physically) delete current student achievement data only.

As indicated in **Appendix B, Exhibits 3 and 4** the CDE will utilize the following security services to safeguard CALPADS data:

- ❑ PKI X.509 digital certificates. The digital certificate is sent along with an encrypted message to verify that the sender is truly the entity identifying itself in the transmission.
- ❑ HTTPS, used for accessing a secure Web server
- ❑ Secure sockets layer (SSL) version 3.0 with 128-bit encryption and triple data encryption standard (DES) cipher strength.

The CDE will also maintain a dedicated T-1 data line for the exchange of CALPADS data to increase security and minimize potential disruption on other systems and users.

Confidentiality will be maintained through a group policy, object-based security scheme. In addition, data displayable via pre-defined queries and reports executed on the query version of the CALPADS database will be suppressed according to the “Rule of Ten.” In other words, when disaggregating longitudinal student achievement data by one or more student attributes, including any and all demographic or program participation attributes, query results will be hidden from view where 10 or fewer students are members of the subset defined by the selected attributes. In no case shall any group score be reported that would deliberately or inadvertently make public the score or performance of an individual pupil.

Student Records Transfer

Exhibit 5 in Appendix B displays California’s records transfer system. In building out this system, the CDE requests funding to support two priority areas.

K-12 Records Transfer

As described earlier, current records transfer among California’s K-12 community is largely district-based. The next step in achieving a robust, ubiquitous practice of electronic transcripts exchange among and beyond K-12 is to extend CSIS’s Internet-based application to site administrators and enable transcript requests to be launched by authenticated students. As Exhibit 5 shows, CSIS is the K-12 mechanism for collecting and distributing student transcripts from LEAs in a “push” model. The postsecondary segments generate and distribute their transcripts, pulling from an authenticated K-12 store, and pushing or pulling among one another. To build out the K-12 Records Transfer system, the CDE requests \$350,000 to: (1) augment the current CSIS system to enable student requests for transcripts authenticated by their K-12 schools of attendance; and (2) simplify existing system’s user interface to address the needs of less technically proficient, site-based staff. CSIS, through its on-going operational budget will continue to support statewide student records transfer within the K-12 community.

CCCTran – Records Transfer from High School to the California Community Colleges

As a consequence of the FSR described in Section 1 of this application, the California Community Colleges are now actively engaged in the development of “CCCTran,” a central system of exchange and access for academic records. The most prominent feature of this application system is a standardized electronic transcript for the roughly 2.5 million students of the 109 CCC campuses, to replace the existing unique and primarily paper-based individual

college formats, and enable immediate, “on-demand” exchange of records and rapid evaluation and intake into information systems. But the equally important complement to the transcript data format is the access system, which will provide transcripts rapidly, directly and securely to counselors, advisors, evaluators and researchers via the Web using XML technology. The system will offer new capabilities as options to combine and sort academic data (such as by general education and basic skills categories) from multiple transcripts and to incorporate cross-institutional data such as course articulations from other sharable data repositories. These services will apply to transcripts both to and from the CCCs including from high schools.

The architecture of the CCCTran system is adaptable to interface with other transcript sources such as CSIS (for the standard California high school transcript), and is also extensible to other segments of higher education such as the California State University (CSU) system of 23 campuses, and even to students themselves through the statewide student portal “www.californiacolleges.edu” (a.k.a. “Student Friendly Services”). CCCTran is being developed in collaboration with several educational agencies, including the cross-segmental californiacolleges.edu effort, CSIS, CALPADS, and the national Post-Secondary Education Standards Council (PESC).

In 2003-2004, the CCC performed pilot tests of competitive architectural models in order to refine budget projections and system specifications. In 2004-2005, a Request for Proposal (RFP) was conducted by the CCC to select a developer for the system and in March 2005, the year-long development project was launched with 10 community colleges participating in the development team.

Phase 1 of the project will establish the transcript data format and the central exchange and access system with secure access and transmission. This foundation will be used to engage the colleges and their trading partners in a schedule of rapid deployment and adoption of electronic transcript exchange. The architecture of CCCTran also serves CSU and CaliforniaColleges.edu, who share the system through the same vendor.

The “value-added” features of combining and sorting data from transcripts, incorporating data from shared data repositories, and providing academic data online to students are slated to be taken up in Phase 2 of the project. Acceptance of transcripts from external systems into CCCTran is also part of the Phase 2 development. Phase 2 will enable the CCCs to receive transcripts from the high schools and to provide consolidated transcript information to students.

The California Community Colleges have committed \$4.2 million to Phase 1 of CCCTran, including five years of operation for the entire CCC system and exchange with all their trading partners. The CDE requests \$292,000 to support Phase 2 of CCCTran. This project, because of its scope and scale, could easily become a national demonstration model. The Budget Justification section of this application provides details of this funding request.

Technical and Data Standards

In developing the CALPADS proposal the CDE has attempted, wherever possible, to utilize the following standards and guidelines established or identified by the National Center for Education Statistics (NCES):

- ❑ Data element definitions in the NCES data handbooks: *NCES Handbooks Online*, and *Financial Accounting for Local and State School Systems: 2003 Edition*,
- ❑ Schools Interoperability Framework (SIF),
- ❑ Recommendation 7 (Integrating Data Systems) of the U.S. Department of Education's National Educational Technology Plan,
- ❑ Data confidentiality guide of the National Forum on Education: *Forum Guide to Protecting the Privacy of Student Information: State and Local Education Agencies* (2004),
- ❑ Technology security standards of the National Forum on Education: *Weaving a Secure Web Around Education: A Guide to Technology Standards and Security* (2003), and
- ❑ Map of Core Elements for Establishing a Statewide Longitudinal Data System (Attachment to this RFA).

3. Project Personnel

The major participants in the project will be the project sponsors, project director, project manager, contract manager, the independent project oversight contractor (IPOC), the CALPADS Steering Committee, the CALPADS Advisory Board, and CSIS staff, and program leads. All of these participants except the IPOC have been identified and engaged in planning activities to develop CALPADS. Procurement of the IPOC will occur once project funding has been secured and state control agencies have approved the expenditure of project funds. Key staff for the records transfer project include staff from CSIS and the CCC.

Appendix B, Exhibit 6 displays the organizational structure for the CALPADS project. The roles and responsibilities of these participants is described in greater detail in the **Resource Section** of this application and summarized in **Appendix B, Exhibit 7**. In addition, the membership of the CALPADS Steering Committee is presented in **Appendix B, Exhibit 8** and the membership of the CALPADS Advisory Board is presented in **Appendix B, Exhibit 9**.

Project Manager Qualifications

The person responsible for the development and implementation of CALPADS must have the skills and knowledge to lead information technology project effort through implementation. The CDE has secured a professional certified project manager who possesses the following minimum qualifications:

- ❑ Previous experience in the state's procurement and reporting processes
- ❑ Previous experience and success in managing projects of this size, scope, and complexity

- ❑ Knowledge of project management concepts and techniques, including management of change, issues, risk, quality, schedule, deliverables, vendor, and budget
- ❑ Knowledge of team leadership principles
- ❑ Ability to work with other organizations in order to establish a process for sharing data
- ❑ Knowledge of data management and data conversion
- ❑ Knowledge of programs and issues related to No Child Left Behind Act of 2001 (NCLB) reporting requirements and student assessment processes
- ❑ Ability to clearly communicate project status and change management issues to all levels of departmental management
- ❑ Ability to develop and maintain detailed project schedules.

Resumes of Key Personnel

Resumes for the following key staff already engaged in planning to develop CALPADS are included immediately following the project narrative.

- ❑ Program Director: Paula Mishima, Manager, Data Management Division, CSIS-CALPADS Office
- ❑ Contract Manager, Manager: Ken Okuhara, Technology Services Division, Project Management Office
- ❑ CALPADS Project Manager, Dan Conway, Senior Business Analyst, Private Vendor
- ❑ Russ Brawn, Chief Operations Officer, California School Information Services
- ❑ Jan Langtry, Administrator, Special projects California School Information Services
- ❑ Patrick Perry, Vice Chancellor of Technology, Research, and Administration, California Community Chancellor's Office
- ❑ Sonya Edwards, Manager, Data Management Division, Education Data Office

The vendor chosen to develop CALPADS will be selected 50% on the qualifications and experience of its personnel.

Section 4: Resources

This section refers to the CALPADS component. The California Department of Education (CDE) recognizes that CDE, local educational agency (LEA), and vendor resources are needed during all phases and stages of this project, including design, development, testing, implementation, and training. The CDE also recognizes that resources will be required to operate and maintain CALPADS. The CDE resources include CDE program and technical staff. The CDE assumes that selected LEAs will be involved in various stages of system design and testing. To leverage existing knowledge of LEA data processes and interfaces, the CDE and California School Information Services (CSIS) will collaborate throughout the project. The CDE also assumes that significant project management resources will be necessary to successfully implement CALPADS.

The human resources required for the CALPADS project, including personnel positions, are described in this section. Additional information regarding roles and responsibilities may be found in the Management Plan section of this narrative. Also, resource requirement assumptions

made by CDE, including personnel years (PYs), and costs required to develop and maintain CALPADS, are presented in the **Budget Justification Section** of this application, following this narrative and the **Resumes of Key Personnel. Section.**

Project Management

The CDE has procured the services of a private vendor to serve as professional, certified project manager during the design and implementation of CALPADS. The costs of project management services are outlined in the Budget Justification Section of this application and will be funded with federal Title VI funds.

CDE Staff

Current CDE technical and program staff performing duties related to data collection and reporting for NCLB will continue. These staff are currently funded by various federal and state funds. CALPADS will require the following additional staff:

- ❑ *One full-time Staff Programmer Analyst-Specialist* to be responsible for business rules updates, definition of new business requirements, liaison with the vendor and/or organization selected to operate and maintain CALPADS, technical planning, program coordination, and administration.
- ❑ *Two full-time associate governmental program analysts* to provide first level CALPADS help desk support and serve as liaison with the CDE's Technology Services Division.
- ❑ *One full-time education programs consultant, one full-time office technician, and one-quarter PY of a staff counsel to staff a CALPADS Service Unit.* This unit will be responsible for qualifying researchers who request access to CALPADS, reviewing the purpose of each qualified researcher's request for CALPADS data, tracking each request in accordance with Federal Education Rights and Privacy Act (FERPA) and state privacy requirements, constructing the data set requested, and transmitting the data set to the researcher.

The costs associated with these additional staff are outlined in the Budget Justification section of this application and will be funded by federal Title VI funds or state General Funds.

Facilities and Equipment

The CDE intends to site the CALPADS platform at the Teale Data Center, which is the state data center for the state of California. The CDE will pay Teale charges to procure and house all hardware and software applications. Teale costs are outlined in the Budget Justification Section of this application and will be funded by federal Title VI funds or state General Funds.

On-going Maintenance

CALPADS will be available online 16 hours per day, 7 days per week to accommodate extract, transform, and load (ETL) processing outside of normal business hours. In addition to ETL processing, the CDE will use the nightly batch window to perform backups and to replicate specific database changes in the operational data store (ODS) to the query version of the database for query and reporting purposes. Ongoing maintenance of the CALPADS technical infrastructure (e.g., servers, network, etc.) will be performed by Teale.

The CDE will require the systems integrator to provide ongoing maintenance services for the CALPADS application environment during the implementation and warranty period. After this period is up, CDE will either reengage the systems integrator or engage CSIS to maintain the CALPADS application environment. The types of vendor services required to maintain and support CALPADS, include second and third level help desk support, system and application support, and database administration. The **Management Plan section** and the **Economic Analysis Worksheets (EAWs)** contained in the **Budget Justification section** of this application include the CDE's assumptions and estimated personnel years and costs to perform ongoing system maintenance. Ongoing costs will be funded from federal Title VI funds, or from the state General Fund.

Training

The systems integrator will be responsible for initial training, however, the CDE and CSIS will collaborate with the systems integrator to develop a training plan, training and reference materials, and to conduct LEA training prior to placing CALPADS into production. The **Management Plan section** and the **Economic Analysis Worksheets (EAWs)** contained in the **Budget Justification section** of this application include resources required to conduct end user training to LEA and CDE staff and conduct technical training to CDE technical and program staff. These costs are included in the systems integrator contract and the CDE is requesting 50% matching funds from this grant to support these activities and will use federal Title VI funds to support the remainder.

On-going Technical Assistance

The CDE also recognizes that LEAs must build capacity to transition to the CALPADS environment. To assist LEAs in this process, CSIS will provide one-time technical assistance required by LEAs to transition their current data submission processes to meet the data submission requirements for CALPADS. In addition to supporting the unique identifier process, CSIS will also provide on-going technical assistance to LEAs to support their data submission processes to the CDE and promote the use of CALPADS data for educational decision-making. Currently, CSIS receives nearly \$4 million annually in state General Fund dollars to support these technical assistance activities. The CDE believes that these funds will continue.

Sources of Funding

The primary sources of funding the CDE will use to support the one-time development and ongoing maintenance of the various components of its comprehensive educational data system

are: (1) state General Funds; and (2) federal Title VI funds (Title VI, Part A, Section 6111). Title VI funds are provided to help states that already have developed required assessments in grades 3-8 for the purpose of improving the dissemination of performance information or to assist in linking student achievement, enrollment, and graduation records over time. The funding sources for CALPADS, records transfer, and federal data activity participation are described below:

Funding Sources for CALPADS

For the one-time costs to develop CALPADS, the CDE intends to use Title IV funds in conjunction with funds received through the Longitudinal Data System Grant. Total one-time costs for the project are \$9,554,547. Of this amount, the CDE requests 50% matching funds for one-time systems integration costs or, \$2,587,045. For 2005-06 activities, the California 2005 Budget includes \$844,072 in Title VI funds to support the development of a CALPADS Request for Proposal, project management, and CDE staff costs. The CDE will submit a budget request to fund 50% of the one-time CALPADS development costs in 2006-07, which will be used in conjunction with funding from this application, if approved, to fund the development of CALPADS.

Funding Sources for K-12 Records Transfer

CSIS is annually receives \$4 million in state General Fund dollar to support its technical assistance activities related to state reporting, local capacity building, and records transfer. The CDE requests \$350,000 in this application to support the one-time costs associated with building out specific aspects of the records transfer system. Once completed, CSIS will support records transfer with its ongoing state General Fund resources.

Funding Sources for CCCTran.

The California Community Colleges have committed \$4.2 million in state General Fund dollars to Phase 1 of CCCTran, including five years of operation for the entire CCC system and exchange with all their trading partners. The CDE requests \$292,000 in this application to support the one-time costs associated with building out Phase 2 of the CCCTran project which will include records transfer from high schools to community colleges. Once completed, records transfer activities will be maintained by the CCC's ongoing state operations budget.

Funding Sources for CDE Participation in National and Federal Data Activities

The CDE does not have funds to complete the activities required to submit all 170 PBDMI files through EDEN, nor the funds to fully participate in PBDMI, EDEN, and SIF activities. Therefore, the CDE requests \$449,973 in this application to support these federally reporting activities. If funds are not provided from this grant application, California will only be able to submit a very limited number of files through EDEN to PBDMI, and its participation in these activities at the national level will be extremely limited.

Section 5: Management Plan

The Management Plan section of this application relates exclusively to the development of the California Longitudinal Pupil Achievement Data System (CALPADS). The other funding requests are smaller additions to existing programs, or only support CDE participation in federal data management activities. For CALPADS, the California Department of Education (CDE) has

developed a project management plan that complies with the California Department of Finance's (DOF) Information Technology Project Management Methodology (as presented in the State Information Management Manual or "SIMM") and will be used to assure success of this project. This project management plan is presented in the following sections: Project Management Methodology, Project Organization, Project Plan, Project Scope, Project Phasing, Project Schedule, Project Monitoring, Project Quality, Change Management, and Risk Management.

Project Management Methodology

The CDE's adopted Project Management Methodology (PMM) is based on guidelines in the SIMM, section 200. The CDE PMM includes the recommended project management and risk management practices of the DOF information technology project oversight framework. The CDE PMM also reflects industry best practices and lessons learned.

The CDE project manager will use Microsoft Project to develop the project schedule and to manage and track the progress of the project. The CDE project manager will be required to identify tasks and activities for inclusion in the project plan, as well as report status for each of their assigned tasks throughout the project. The qualifications of the CDE Project Manager are described in the Project Personnel Section of this application.

Project Organization

Appendix B: Exhibit 6 presents the project organization for CALPADS. The Project Management Team is responsible for the project, and includes the Project Sponsors, the Project Director, the Project Manager, and the Contract Manager. This Management Team receives input from the CALPADS Steering Committee, and the CALPADS Advisory Board. Working teams will be convened for specific aspects of the project, and includes Subject Matter experts, Software Integration Team, Data Management Team, and Business Improvement Team. Additional information about the membership as well as the duties of these entities is described below and is available in the Project Personnel Section of this application.

Project Plan

Project planning defines the project activities to be performed, end products to be delivered, and how the activities will be accomplished. The purpose of project planning is to define each major task, estimate the time and resources required, and provide a framework for management review and control. The project planning activities and goals include defining: (1) project scope, (2) project assumptions, (3) project phasing (i.e., approach), (4) project team roles and responsibilities, and (5) project schedule.

Project Scope

The project scope defines the business processes and systems that form the logical boundaries of the business areas directly included in the CALPADS project. The CALPADS project scope includes a wide-range of CDE organizational units that currently are responsible for supporting, managing, and producing reports required to meet the statewide assessment and federal NCLB

requirements. These state assessment and NCLP Reporting requirements are summarized in the following figure.

Assessment Information	Student Information	NCLB Reporting
STAR – Standardized Testing And Reporting CAHSEE – California High School Exit Exam CELDT – California English Language Development Test	California School Information Services (CSIS) Unique Student Identifier Demographic data elements Program participation data elements Discipline data elements	AYP – Adequate Yearly Progress API – Academic Performance Index Schools in Program Improvement Graduation and Dropout Rates Highly Qualified Teachers Emergency or Provisional Teacher Credentials English Language Acquisition Student Discipline Data

This project will consist of those activities required to design, test, and implement a system that meets each of the functional requirements listed in the Feasibility Study Report (FSR). In addition, the project’s scope includes training provided to those end-users directly impacted by CALPADS.

CALPADS will capture and maintain “transaction” data. These transactions are the individual student assessment records linked to student demographic and program participation data. LEAs will submit their individual student data and other NCLB required information to meet state and federal reporting requirements. The LEAs will be responsible for maintaining the accuracy of the CALPADS data through regular update submissions or on-line updates.

The CDE intends to provide secured access to the data via an Internet browser and pre-defined or “canned” queries set up for end users. These queries will either be attached to a button or will prompt the user to qualify the query based on input values or to add any desired qualifications to limit the search (e.g., a year). The canned reports will be viewable and printable, and can be manipulated using predefined prompts. The system will allow the user to request from CDE a file containing the individual student records that support the reports.

CALPADS will not be a “data warehouse” in that it will not maintain the detail and summary aggregations of student-level transactions in a manner specifically designed to support elaborate and complex data selection queries for decision support analysis and research. CALPADS, however, will certainly provide valuable data and can be the source data for a next phase data warehouse application.

A number of CDE organizational units utilize various application systems, software tools, and third-party vendors to capture, manage, and process student assessment data and various data elements necessary to meet NCLB reporting requirements. The existing automated and manual systems consist of disparate, independent application environments resulting in isolated data repositories, duplicate data, and non-standard data elements and formats across the applications. In many cases, existing collection processes capture just the aggregate data necessary to meet the federal reporting requirements under NCLB. However, current applications and data collection processes do not capture all data elements at the individual detailed level required to meet the longitudinal student data needs, as defined in SB 1453.

NCLB and SB1453 do not require a direct link between achievement and their teachers, and therefore, CALPADS does not include this functionality. However, in coordination with the development of Teacher Data System (described in Section 1), CALPADS is being developed to allow for this functionality in the future.

Project Assumptions

The CDE detailed all project assumptions.

Project Phasing

Appendix A provides a time line summarizing CALPADS phases, deliverables and key dates. Following is a narrative summary of each phase:

Phase I: *Software Vendor Procurement and Contract Approval*

This phase involves definition of detailed CALPADS requirements, development of a request for proposal (RFP), evaluation and selection of a software integration vendor to implement the CALPADS environment, and development and submission of evaluation and selection summary documents for control agency review and approval. The CDE anticipates some of the detailed system requirements definition activities will be conducted concurrently with the control agency review and approval. Services will not occur until approval has been received from the control agencies.

Phase II: *System Development and Implementation*

This phase involves design, development, testing, and implementation of the CALPADS environment. The CALPADS software integration vendor will confirm the functional requirements, then design, develop, test, and implement all components of the new CALPADS application environment and business processes. This phase will require significant involvement from CDE end-users, managers, and appropriate stakeholders to design the application menus, data entry forms, system interfaces, business rules, and data conversion processes. The CDE expects that the new CALPADS environment will eliminate some current CDE data collection processes. Other CDE program area applications and processes that rely on current data collection process may require modification to receive their input data from the CALPADS environment upon production implementation.

The CDE will contract with a vendor to conduct business process improvement work steps to develop and implement improved business processes and procedures to leverage the CALPADS environment.

Project Team Roles and Responsibilities

The major participants in the project will be the project sponsors, project director, project manager, the CALPADS Advisory Committee, and program leads. A formal project structure provides participants with a clear understanding of the authority and responsibility necessary for successful accomplishment of project activities, and enables project team members to be held accountable for effective performance of their assignments. **Appendix B, Exhibit 7**, summarizes key CALPADS project roles and respective responsibilities. The key project teams include:

- *The CALPADS Project Management Team* consists of the project sponsors (two CDE deputy superintendents), the Project Director, the CDE contract manager, the CDE Project Manager, and the CALPADS consultant. The Project Director, the CDE contract manager, the CDE Project Manager, and CALPADS consultant, meet on a weekly basis. The entire Project Management Team meets on a bi-monthly basis and as needed. The primary role of this team is to oversee and monitor the day to day implementation of the project, and to address policy issues that arise.
- *The CALPADS Steering Committee* is made up of CDE executive and managerial staff that has primary responsibility for NCLB programs and reporting. **Appendix B, Exhibit 8** lists members of the CALPADS steering committee. The purpose of the steering committee is to: (1) Provide oversight for the CALPADS project; (2) Serve as a liaison to stakeholders and other interested parties; and (3) Address policy or procedure issues identified during the CALPADS project.
- The CALPADS Steering Committee meets on a bi-monthly basis. If project issues arise that require the steering committee's input, the CALPADS project manager may schedule steering committee meetings more frequently or as deemed necessary. The CALPADS project manager will develop an agenda for each meeting and distribute it prior to the meeting. The CALPADS project manager will capture, document, and distribute to all CALPADS steering committee members minutes from each meeting.
- *The CALPADS Advisory Board*, authorized by SB 1453, includes representatives from local educational agencies, education researchers, parent groups, the Legislature, DOF, the State Board of Education, and the California Office of Privacy. The Board provides general guidance on the development of CALPADS and provides external input. **Appendix B, Exhibit 9** lists members of the CALPADS Advisory Board. The Board met four times during the development of CALPADS FSR. It will continue to meet during the next project phases, particularly to provide guidance on the development of CALPADS privacy and access protocols, and CALPADS reporting capabilities.

Project Schedule

Appendix A provides a schedule for the project's phases and high level tasks ("stages") and project deliverables. The project schedule reflects the following:

- High level tasks include procurement, design, development/programming and/or software modification, data conversion, installation, training for end users, and training for technical staff
- The schedule allows for status reporting against which CDE will monitor completion of tasks during the course of the project. The schedule provides the duration of critical tasks, major management decision points, and progress reporting milestones

- ❑ Milestones reflect products and major events that are readily identified as completed or not completed on the specified due date
- ❑ Milestones are spaced at reasonable intervals that allow management and control agency monitoring of the project's progress.

The CDE made a number of assumptions to prepare the project schedule, including the following:

- ❑ The time required from when CDE submits the FSR for control agency review to obtaining final approval from control agency will be two months
- ❑ The time required from when CDE submits the RFP for control agency review to getting final approval from control agency will be two months
- ❑ The time required from release of the RFP through selection of the systems integrator will be eight months. This time frame will be influenced by a number of factors, including the number of vendors who submit proposals, the number and type of questions that vendors submit, and changes in legislation
- ❑ The time required from selection of the systems integrator to contract approval will be three months. The CDE will submit the selection to DGS, along with the evaluation and selection report. Within these three months, the CDE assumes a two-week protest period.

Project Monitoring

The CDE will contract with an Independent Project Oversight Contractor (IPOC) to provide project oversight and review activities for the CALPADS project. The selected IPOC will meet the reporting requirements and project oversight and evaluation requirements as stated in SB 1453.

The CDE will monitor this project utilizing structured project management processes and follow the guidelines as described in the Information Technology Project Oversight Framework to minimize the project risks associated with informal project management practices. The CDE will utilize the following processes and approach for tracking and reporting on the status of project deliverables, project schedule, and project budget:

- ❑ *Conduct Weekly Team Meetings.* On a weekly basis, project status meetings will be held. These meetings will be conducted by the project manager and involve contracted and non-contracted project team members. The major areas of discussion will include schedule and deliverable status, upcoming events (e.g., meetings, interviews, working sessions, etc.), issue log review, and relevant miscellaneous topics.
- ❑ *Conduct Monthly Project Management Meetings.* On a monthly basis, the CALPADS Project Management Team will meet to review the project. During these meetings, the project status, upcoming events, outstanding issues, and project schedule will be discussed.
- ❑ *Prepare and Distribute Weekly Status Report.* Weekly, the project manager will develop and distribute a CALPADS *Project Status Report* to the project director and project sponsors. This report represents the activities performed by all project team members during the previous week and includes information on accomplishments, activities in progress, upcoming activities, issues, and deliverable status.

- *Contract with an Independent Project Oversight Contractor (IPOC)*. The CDE will contract with a third-party vendor to perform IPOC functions for the CALPADS project. The responsibilities of the IPOC vendor are provided in Appendix B, Exhibit 7.

Project Quality

In order to establish that the CALPADS solution meets identified statutory goals, business objectives and requirements, and technical objectives and requirements, a quality assurance plan will be developed based on the Department's *Project Management Methodology*, which aligns with the Department of Finance's *Statewide Information Management Manual* project management methodology. This plan will establish that the CALPADS project results meet the business and technical objectives.

Change Management

The project manager will follow a change control process that meets requirements of the CDE PMM, and which aligns with the SIMM IT project management methodology. The CALPADS project manager and project director will generate a baseline project plan. This baseline project plan will be adjusted and aligned with the software integration vendor's proposed project plan as part of the Project Start Up and Gap Analysis stage within System Development and Implementation phase. The CALPADS project management team will identify and manage subsequent proposed changes to the project scope, schedule, or resource requirements.

Risk Management

The CDE has developed and will use a risk management plan that complies with the SIMM IT DOF's management methodology to assure success of this project. Risk management is a key responsibility of the CALPADS project management team; the project management team will design, implement, and monitor the risk management plan. The risk management roles of various members of the project management team are described below:

- **Project Director** – The project director has overall responsibility for the CALPADS project and for implementing the system. The project director will review and approve the risk management plan, assist in identifying project risks, review the CALPADS project issues log, and approve mitigation strategies. In addition, the project director will meet on a regular basis with the independent project oversight consultant to discuss the project's risks.
- **Project Manager** – In addition to identifying risks, the project manager will develop and maintain the risk management plan, maintain the issues log, develop mitigation strategies and contingency plans, and monitor project risks.
- **Independent Project Oversight Consultant (IPOC)** – In addition to identifying risks, the IPOC will be responsible for assisting the project manager in identifying mitigation strategies, developing contingency plans, and monitoring project risks. On a monthly basis, the IPOC will meet with the project director and project manager to discuss the status of the project, including project risks.

PAULA ANN MISHIMA

(b)(6)

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pmishima@cde.ca.gov

WORK EXPERIENCE

California Department of Education (CDE), Sacramento, CA, (2/94 – present).

Education Administrator, Data Management Division, (3/04 – present)

Manage the CSIS-CALPADS Program Office. Act as the Project Director for the California Longitudinal Pupil Achievement Data System (CALPADS), which will longitudinally track student and teacher level data to meet federal reporting requirements and to provide state and local policymakers with the data needed to evaluate and modify educational programs.

Oversee the implementation of the Data Integration Project (DIP) which accepts student and teacher level data from one quarter of the state's school districts through the California School Information Services (CSIS) program for specified data collections and integrates it with data collected from all remaining districts in the traditional manner.

Education Consultant, Data Management Division, (9/03 – 3/04)

Lead program consultant on the development of the California Longitudinal Pupil Achievement Data System (CALPADS); convened a CALPADS Advisory Board; made policy recommendations to CDE management on the development of CALPADS and CDE data collection activities.

Deputy/Associate Superintendent, Ed. Equity, Access & Support Branch, (9/01 – 8/03)

Provided leadership to California local education agencies that provide special education, adult education, and alternative education programs; provided policy and administrative direction to and supervised three major CDE divisions--Special Education, State Special Schools, and Education Support Systems, which includes approximately 1,300 staff; oversaw the allocation of several million dollars of state and federal funds; served as a member of CDE's executive management team.

Chief Policy Advisor to the State Superintendent of Public Instruction (SSPI), (1/98 – 9/01). Advised the SSPI on all sensitive and critical K-12 policy and CDE management issues; coordinated the formulation of CDE budget proposals; monitored the implementation of high priority initiatives; reviewed and edited selected SSPI correspondence and reports; represented the SSPI publicly as needed; acted as liaison to the State Board of Education.

Director, Governmental Affairs Office (GAO), (2/96 – 12/97). Managed GAO: provided leadership for and helped develop and implement legislative priorities; advised the SSPI and executive management on policy and legislative issues; supervised 8 professional and support staff; ensured smooth operations of GAO to provide information and service to CDE management and staff, the State Board of Education, the Legislature, education groups and the public; reviewed and edited staff work. Coordinated CDE's response and input to the development of the state education budget through the legislative process; negotiated budget issues with the Legislature, the Governor's Office, the Department of Finance, and others.

PAULA ANN MISHIMA

Legislative Representative, GAO, (2/94 – 2/96). Represented the SSPI and the CDE to the Legislature; recommended positions on legislation, drafted position letters, and testified before legislative committees; staffed CDE sponsored legislation. Worked on major legislation related to programs for at-risk students, and categorical reform.

K-12 Senior Consultant, Assembly Ways and Means Committee, California State Legislature, Sacramento, CA, (3/91 – 2/94). Staffed the subcommittee on education including, preparing hearing agendas and negotiating solutions to issues. Advised and made recommendations to Legislators on all K-12 education issues. Analyzed all education bills that came before the committee.

Legislative Analyst's Office (LAO), Sacramento, CA, (8/83 – 3/91).

Staff Development Coordinator, (10/88 – 3/91). Conducted office recruitment and staff development programs including: interviewing job applicants; making hiring recommendations to executive management; developing and conducting training sessions on bill analysis and testifying; and supervising the internship program. Advised executive management on all human resources and other management issues.

Senior Policy and Fiscal Education Analyst, (11/84 – 9/88). Analyzed budget and policy issues related to various K-12 education programs; prepared written analyses; testified before legislative budget subcommittees on recommendations made in analyses; estimated the fiscal impact of education legislation.

General Fund Analyst, (8/83 – 10/84). Tracked and forecasted General Fund expenditures of the State of California.

Human Biology Teaching Assistant/Coordinator, Stanford University, Stanford, CA., (10/80 – 7/81). Coordinated a team of teaching assistants with faculty and staff; supervised part-time teaching assistants; was a liaison between students and faculty; was responsible for the grades of 300 students; wrote exams; graded exams and papers; wrote a 40-page TA manual; taught sections of 20 – 40 students.

EDUCATION

Graduate School of Public Affairs, University of Washington, Seattle, WA. MPA, June 1983, with emphasis in public administration, policy analysis, and budgeting. Internship with the Office of Financial Management, State of Washington.

Stanford University, Stanford, CA. BA, June 1980, with a major in Human Biology. Graduated “With Distinction.” Studied humanities at overseas campus, Florence Italy. Earned varsity letters in basketball and field hockey.

KEN M. OKUHARA, PMP

(b)(6)

WK: (916) 323-8538

EDUCATION California State University, Sacramento
B.S., Electrical and Electronics Engineering, May 1986

EXPERIENCE California Department of Education
Technology Services Division
Sacramento, CA

2/00 – present Manager – Project Management Office – Manage, lead, and direct the department's Project Management Office in ensuring all IT projects are initiated, planned, and managed successfully in accordance with all state rules and regulations governing IT projects. Responsible for reporting project status to executive staff, the legislature, and control agencies. Responsible for providing project management oversight for all major IT projects including the California Longitudinal Pupil Achievement Data System (CALPADS).

4/99 – 2/00 Manager - Y2K Project Management Office - Manage, lead, and direct the department's Y2K Project Management Office to ensure Y2K preparedness across the enterprise. Oversight responsibility for all CDC IT systems, desktops, embedded systems, and continuity planning for business. Responsible for reporting Y2K preparedness status to executive staff, the legislature, and control agencies.

7/97 - 4/99 Technical Project Manager - Manage the technical component of the Corrections Automated Materials Management System (CAMMS) project. Responsible for planning, managing, and contractor oversight for one-time development efforts in excess of \$60M. Responsible for the CAMMS Feasibility Study Report development and approval process. Responsible for the development and maintenance of the CAMMS IEEE-compliant Project Management Plan.

9/96 - 6/97 Project Initiation Analyst - Facilitate the development of feasibility study reports and other documents needed to initiate new projects. Coordinate the development of IT policies and the department's Strategic Information Systems Plan. Support the department's Information Technology Executive Committee. Act as liaison with control agencies on IT matters. Developed a cost control policy for all departmental IT projects.

Sacramento Air Logistics Center Software Engineering Division McClellan AFB, CA 95652

2/96 - 9/96 Program Manager GS-13 - Manage all Ground Theater Air Control System (GT ACS) software projects for the software engineering division. .

Responsible for cost, schedule, and performance requirements for the Modular Control Equipment (MCE), ANffPS-75 Tactical Radar, and ARMDECOY software development/maintenance projects. Lead acquisition engineer for obtaining future workload with system program management office (customer).

6/90 - 2/96 Project Manager - Manage the AN/TPS-75 Test Program Set Development Project. Applied Project Management Institute, Total Quality Management, and SEI Capability Maturity Model techniques in managing a project utilizing 22 software engineers with project funding of \$9.8M. Developed the feasibility study, project management plan, software development plan, quality assurance plan, and configuration management plan for this software development project. Developed the standard process for developing computer programs to test complex electronic data processing systems which enabled the division to achieve an SEI CMM Level 3 rating. Analyzed operational methods for developing computer programs.

2/93 - 8/93 Proposal Manager - Manage the NASA/JPL Deep Space Network Test Program Set Development Proposal in response to a NASA RFP. Plan, assign, manage, and track all proposal activities to ensure a 3 month schedule delivery.

4/90 - 12/90 System Manager - Manage the AN/TPS-75 Test Program Set Development user environment. Manage user accounts and perform system administration duties using UNIX and VAX VMS.

6/86 - 6/90 Software Development Engineer- Study, design, develop, program, modify, test, and integrate full diagnostic test software for complex electronic data processing systems. Develop all software related engineering data and user documentation. Act as an acceptance agent for USAF by performing independent validation and verification on contractor-developed software.

PERTINENT COURSEWORK Project Management Institute Study Group, Total Quality Management, Team Building, Requirements Management, Acquisition Management, Logistics Management, Configuration Management, SEI Capability Maturity Model, Software System Engineering, Software Engineering Economics, Software Engineering Project Management, Writing Winning Proposals, Managing Winning Proposals, Object Oriented Analysis and Design, Novell Network Administration and Management. .

ADDITIONAL INFORMATION McClellan Sustained Superior Performance Award 1988, 1991-96, Quality Performance Award 1994, Certified Project Management Professional (PMP) 1998. Graduate Student, C.S.U.S. - Software Engineering. Enjoy basketball, softball, and team-oriented activities.

REFERENCES Provided upon request

DANIEL H. CONWAY, PMP
PROJECT MANAGER
SENIOR BUSINESS ANALYST
916-947-2780

CAREER SUMMARY

Over twenty years of business and information technology experience working with a wide range of private and public sector clients and businesses. Over fifteen years experience as a management consultant with Project Management and Systems Development methodology training under Price Waterhouse's System Management Methodology (PW/SMM). Certified Project Management Professional (PMP) with the Project Management Institute (PMI) with extensive experience in information technology project management, business and systems analysis, software and vendor selection and procurement, and all areas of system development life cycle methodologies. Extensive expertise in large client/server system implementations, requirements definition, State of California procurement processes, application analysis and design, and software package assessment and selection. Extensive technology expertise and experience with various technologies, hardware platforms, software platforms, and networking environments.

EDUCATION

Bachelor of Science in Computer Science — California State University, Sacramento

SELECTED PROFESSIONAL AND BUSINESS EXPERIENCE

California Department of Education (CDE) *November 2003 to present*

Responsible for providing Project Management services for the California Longitudinal Pupil Achievement Data System (CALPADS) Project. The CALPADS project will establish a statewide data collection and reporting repository of student level assessment data and all data elements required by the No Child Left Behind (NCLB) Act of 2001. This project is a multi-year, multi-million dollar project effort. Conducted staff and management interviews to determine business needs, business requirements, and developed the project definition document which outlined the project scope, organization, reporting requirements, and issue and risk management approach. Responsible for leading and developing the State required Feasibility Study Report (FSR) and working with the CDE hired contractor, CDE technical and program area management and the state control agencies to obtain approval. Performing all aspect of project management and project planning including project scope definition, work plan development, issues management, and conducting project management status meetings and project steering committee meetings. Responsibilities include conducting weekly status meetings with CDE management, apply the State's Project Management Framework guidelines to managing project risks and criticality measures, overseeing related project effort activities and attending project management meetings, and working jointly with CDE management addressing control agency inquires and requests.

Department of Developmental Services (DDS) *August 2003 - present*

Responsible for providing Project Management (PM) services for the California Developmental Disabilities System (CADDIS) Project. The CADDIS Project is a multi-year, multi-million dollar commercial-off-the-shelf application customization effort. Led and participated in working sessions related to system design, testing, and implementation planning for the roll-out of the statewide application. Reviewed and monitored system development progress and system defect tracking and correction processes through system testing and user acceptance testing. Performed all aspects of project management including project planning and

definition, work plan development, issue management, and conducted the project status meetings, management team status meetings, and project steering committee meetings. Provided project oversight and advice to the DDS Program Manager and DDS management. Responsibilities included conducting weekly project status meetings with DDS and the software vendor, managing and reporting on project risks and issues, prepared agency status reports, reviewed and evaluated software vendor project deliverables, lead contract negotiations, and prepared contract amendments, and served as the liaison with the state control agencies.

California Department of Education (CDE)

March 2002 to July 2003

Project Manager over the analysis and vendor procurement phase of CDE's Child Nutrition Information and Payments System (CNIPS) project. This was the first phase of a multi-phased thin client/web-based implementation project involving the procurement and implementation of a new child nutrition information management and payment tracking systems to support the various Federal and State Child Nutrition programs administered by CDE. Established the project approach and developed the CNIPS Business Plan (Project Definition) document which described the project goals and objectives, project organization, project reporting requirements, procurement approach, initial risk assessment, and standard project software tools. Conducted numerous staff and management interview sessions and documented the current business processes, business requirements, and identified process improvements in a Current State Assessment document. Developed the Statement of Work (SOW) used to solicit proposals from vendors to develop the Feasibility Study Report and Information Technology Procurement Plan. Performed all aspects of project management including project planning and definition, work plan development, issue management, and conducted the project status meetings, management team status meetings, and project steering committee meetings.

California Department of Developmental Services (DDS)

June 2000 to May 2002

Project Manager over the requirement development and procurement phase of DDS' California Developmental Disabilities Information System (CADDIS) project. The \$13 million project involved the procurement and implementation of a new case management and financial accounting system. The selected web-based application environment will provide comprehensive case management and financial management functionality to 21 regional center offices across California. Conducted over twelve Joint Application Development (JAD) sessions to define business needs and functional requirements. Analyzed the current business and technical environment through interviews, shadowing sessions, research, and working sessions. Developed the Project Definition Document (PDD) which documents the project goals and objectives, project organization, project reporting requirements, procurement approach, initial risk assessment, and standard project software tools. Developed the Technology Site Survey, Request for Proposal (RFP), State Model Contract, and associated proposal evaluation procedures. Developed and managed correspondences between DDS, potential vendors, Department of Information Technology (DOIT), Department of Finance (DOF), and the Department of General Services (DGS). Worked closely with DOIT, DOF, and DGS during the review and approval process of the DDS RFP document. Conducted and led the DDS project team through the traditional procurement process including multiple evaluation phases and session reviews, confidential discussions, prepared and managed all vendor correspondence, and prepared the final Evaluation and Selection Report for the Department of General Services' (DGS) review and approval. Performed all aspects of project management including project planning and definition, work plan development, issue management, and conducted the project status meetings, management team status meetings, and project steering committee meetings.

California Department of Education (CDE)

November 1999 to June 2000

Project Manager over a procurement process to select potential vendors to rewrite a critical Financial Apportionment System for the California Department of Education (CDE). The CDE project was a multi-million dollar information technology effort. Responsibilities included the development of the Request for Proposal (RFP) and related addenda, State Model Contract, Request for Information (RFI), and Business Plan (project definition document). Developed the RFP evaluation criteria, conducted training sessions on the procurement process to CDE staff, reviewed and evaluated vendor proposals, interviewed potential vendors, and provided procurement and RFP subject matter advice to CDE management and staff. Developed and managed correspondences between CDE, potential vendors, and the Department of General Services. In addition, developed the Service Level Agreement (SLA) between CDE and the HHSDC data center, worked with CDE to develop and refine business requirements, business rules, project work plan, and project management tools and processes.

Multiple Clients

August 1992 to December 1998

Served as a project manager, senior analyst or technology analyst over numerous business analysis and system development efforts for various clients including Mercy Healthcare Sacramento, Catholic Healthcare West (CHW) Medical Foundation, Intel Corporation, Pacific Bell Corporation, Aerojet, and AmeriGas Corporation.

Price Waterhouse - Multiple Clients

October 1987 to August 1992

Served as a project manager, senior analyst or technology analyst over numerous business analysis and system development efforts for various clients including the California Highway Patrol, California State Legislature, Nevada State Industrial Insurance System (SIIS), Participants Trust Company, Kellogg's, Ralston Purina, Pacific Telesis, PG & E, Aerojet Corp., Shasta County, and the Utah Department of Transportation.

PROFESSIONAL AND BUSINESS HISTORY

ACCESS BUSINESS SYSTEMS, INC. Principal	August 1992 to Present
PRICE WATERHOUSE Manager Senior Consultant	October 1987 to August 1992
DIGITAL EQUIPMENT CORPORATION Software Specialist	April 1985 to October 1987
MARTIN MARIETTA DATA SYSTEMS Systems Programmer	November 1984 to April 1985
CITY OF SANTA ROSA Data Systems Programmer	November 1983 to November 1984
McClellan AFB Programmer	January 1981 to November 1983

VITA

NAME AND JOB TITLE

L. Russ Brawn
CSIS Chief Operations Officer.

AREAS OF EXPERTISE / SPECIAL SKILLS

Over the last eighteen years, Mr. Brawn has advocated for and worked toward the use of information technologies as support structures for education administration. Mr. Brawn has variously functioned as a systems architect, an information systems designer, a research analyst and as a systems integrator. He has led project teams in programmatic and technical areas, and has extensive management experience of technical organizations both within and outside of education.

DEGREES / CREDENTIALS / BACKGROUND

1975 Financial Management Program, General Electric, San Jose, CA

1974 M.B.A., San Jose State University

1969 B.S., Marketing, San Jose State University

Past President and current Board Member of California Educational Technology Professionals Association, www.cetpa-k12.org

Past Member of Technology, Methods and Dissemination subcommittee of the National Center for Education Statistics Data Forum, www.nces.ed.gov/forum/

SIGNIFICANT ENGAGEMENTS / ASSIGNMENTS

1999 - California School Information Services, Sacramento, CA

Present Chief Operations Officer, formerly as Information Systems Administrator

Joined in the early stages of California School Information Services (CSIS) as a senior member of the management team and contributed to the formation and maturation of the CSIS Program. Lead the strategic planning and guide responses to basic operational demands. Represent CSIS in myriad venues and communications that has included meetings with: California legislators and their staffs; members and/or staffs from the Department of Finance; Legislative Analyst's Office; State Board of Education; Office of the Secretary for Education; California Department of Education; all segments of California postsecondary community; and various Local Education Agencies.

Represent CSIS in relevant meetings, panels, conferences that have included: the National Center for Education Statistics; Postsecondary Electronic Standards Council (PESC); School Interoperability Framework (SIF) Association; California County Superintendents Educational Services Association; California School Boards Association; the HELIX Project; California Educational Technology Professionals Association; Statewide Education Technology Services, and the Public Forum on Public School Accountability. Identify potential stakeholders in CSIS and participated in dissemination efforts to all communities.

As chief technologist of CSIS conceived, recruited internal and external resources and led the specification, design, development and implementation of the State Reporting and Records Transfer System (SRRTS). SRRTS is a multi-tier system with a web-enabled

'thin client' deployment built upon the latest of systems architectural principles enabling it to be highly accessible to a geographically dispersed client base within local education agencies. SRRTS employs industry-leading technology in protecting the privacy and confidentiality of the student and staff data collected. One aspect of this secure environment is the use of public and private key pairs to enforce authentication of users and to be sure that all transmitted data is encrypted in such a manner as only the intended recipient can decrypt the data once received.

1992 - WestEd, San Francisco, CA
1999 Manager of Education Information Systems, Technology In Education Program

Responsible for resource development, strategic and tactical planning, plus recruitment and management of employees and contracted staff. As one of the federally chartered Regional Education Laboratories, WestEd provides research, development and service through projects designed to satisfy immediate client needs, as well as to achieve sustainable impact within the K-12 education community.

For the Nevada Department of Education (NDE), served as the systems integrator for the Statewide Management of Automated Record Transfer (SMART) Project. SMART emphasizes improved management of student data at all levels, so that school site and district administrators, state department of education program staff and legislative policy-makers can more effectively serve students. Directed work with project stakeholders that included NDE Staff, the State Superintendent of Public Instruction and each county Superintendent, plus legislators and their support staffs.

Created and led California's Migrant Student Information Network (MSIN) serving California's Migrant student population. Under contract to the California Department of Education (CDE), developed this system to collect and coordinate information electronically collected from each of California's twenty-two Migrant Regional Offices.

Acting on behalf of the California County Superintendents Educational Services Association (CCSESA), surveyed the current telecommunications capabilities and state of readiness in each of California's county offices of education. The survey instrument was designed to profile information of each county office in four areas: *vision; fiscal and staff investment; organization and management support; and telecommunications capabilities and services*. Survey information was used to help determine appropriate telecommunications services and support structure for K-12 education in California including establishing the minimum threshold of services that each COE needed to provide.

Previous work assignments:

Manager of Information Systems, San Jose Unified School District
Vice President and Principal Designer, Business Programmer Services, Inc
Systems Analyst, Cost Accountant, General Electric Company
Senior Programmer, Lockheed Missiles and Space Company

VITA

NAME AND JOB TITLE

Jan Langtry
CSIS Administrator, Special Projects

AREAS OF EXPERTISE / SPECIAL SKILLS

For more than 20 years, Ms. Langtry has dedicated her career to developing and implementing technical and process improvements to promote greater efficiencies and accountability within the California K12 community.

DEGREES / CREDENTIALS / BACKGROUND

September 1965- **College of Marin**, Kentfield CA
June 1967 Emphasis: Computer Science and Accounting

Other Course Work:

- IBM-COBOL Programming
- IBM-PL1 Programming
- Hewlett Packard – HP3000 System Administration
- Hewlett Packard – Unix System Administration
- Hewlett Packard – Network Design and Implementation

Member of the Board of Directors for the California Educational Technology Professionals Association, www.cetpa-k12.org
Past President of the Carter Pertain Users Group (CPUG)

SIGNIFICANT ENGAGEMENTS / ASSIGNMENTS

2003 - California School Information Services, Sacramento, CA
Present CSIS Administrator, Special Projects

- Member of the management staff responsible for general program oversight, including budget, program direction and advocacy.
- Responsible for implementation of the program's responsibilities under Senate Bill SB1453:
 - Responsible for planning and budgeting.
 - Recruitment of large LEAs (Long Beach, Stockton, Elk Grove, Fresno etc) to ensure early participation.
 - Oversight for training and technical planning.
 - Responsible for communication on rollout activities to groups of LEAs, such as CASBO, CCSESA, CAASFEP etc.
- Administrative support to the Pre-Id for State Assessments as the next data collection thru CSIS:
 - Working with California Department of Education, develop policy and process for transition of Pre-Id through CSIS.
 - Participate in workgroups developing data standards and transition activities.
- Part of the team supporting Los Angeles Unified School District's participation in CSIS state reporting and electronic student records transfer.

1995 - Novato Unified School District, Novato, CA

2003 Director of Information Services

- Member of the superintendent's cabinet responsible for all aspects of technology (both instructional and business) for Novato Unified School District, a K-12 local education agency.
- Supervise staff, oversee technology purchasing, and support school sites and other departments with planning and training.
- Support the district's WAN, citywide single mode fiber network, web servers and all LAN networks (16 Novell, 4 NT) at 17 separate physical sites.
- Responsible for maintenance, training and implementation of the student information system for all school sites.
- Developed an assessment tracking system to better inform the district and school sites of the individual needs of students. Responsible for all data collection and dissemination.
- Responsible for all maintenance, training and production activities of the district's business services software, including payroll, personnel, budgeting, purchasing etc.
- Served as fiscal agent for a consortium of 20 districts participating in the California School Information Services project. Active participant at CSIS advisory group meetings since 1996.
- Implemented CSIS defined electronic state reporting as a Phase 1 district beginning in 1998.
- Developed multi-agency support system for the City of Novato and the Novato Fire District to develop and supply technical support for their wide area networks.
- Member of Novato Public Access Television's board of directors and part of the organizational team that developed the local studio.
- Worked as part of a multi-agency team (the County of Marin, Marin County Office of Education and Novato Unified School District) to form a county wide technical group to supply Internet Access to 250+ schools, government offices and non-profit organizations.
- Worked with the local cable television company to develop a contractual relationship for installation and maintenance of a single mode fiber backbone for the district's wide area network at no cost to the district under a ten year contract saving the district all communication costs between sites.

Previous work assignments:

Information Systems Management Consultant, multiple California public education agencies
Systems Analyst and Software Development Engineer, Cyberdata corporation, Sausalito, CA
Programmer, Marin County Office of Education, San Rafael, CA
Programmer, College of Marin, Kentfield, CA

Summary of Skills

- Skilled in managing, administering, and operating public sector Research and Information Technology programs
- Excellent oral, written, analytical, and interpersonal skills
- Proven ability to forge business alliances between public entities and private industry
- Extensive knowledge of advanced computing technology and data warehousing

Professional Experience**Vice Chancellor of Technology, Research, and Information Systems****Dean/Specialist, Information Systems and Analysis (10/96 to present)***State of California, California Community Colleges, Chancellor's Office*

- Acted as Division Vice Chancellor for Technology, Research and Information Systems Division; managed a staff of 32 research and information systems professionals. Acted as Division liaison to Chancellor's Office management team, Community Colleges Board of Governors, and field constituents.
- Managed the Policy Analysis Division of the Chancellor's Office Management Information Systems Unit. Responsible for the collection and reporting of all student record data to State and Federal entities and for shared governance administration of statewide MIS policies. Determined effects of policy on college operations; presented policy mandates and alternatives to affected audiences and consulted with them in the creation of action plans. Regularly attended board meetings and presented at conferences.
- Chaired the "Intersegmental Data Exchange Committee" and executed a data matching agreement between State postsecondary entities that allowed the privacy-compliant exchange of student data for federal mandate and research purposes.
- Program Manager of the "Student Right-to-Know Reporting Program", a public disclosure of college completion/graduation rates. Devised the "Expanded Student Right-To-Know Dataset," a longitudinal tracking system of all first-time freshmen statewide. Developed data distribution methodologies and lectured in the field on the use of the dataset as a research tool.
- Implemented a data warehousing solution to store the Chancellor's Office MIS Data System and prototyped system using Microsoft SQL Server and BrioQuery. Project has since become a Microsoft Industry Solution and a BrioQuery Case Study.

Information Systems Analyst (1/95 to 10/96)*State of California, Council for Private Postsecondary and Vocational Education*

- Local Area Network (LAN) Administrator for 100-user Novell/Windows NT Local and Wide Area Network. Directed all activities of information systems organization; determined agency information technology needs, recommended purchases; managed an information systems staff.
- Managed the Council's "Private Postsecondary Data System" and the "Private Postsecondary Annual Reports Database"; reported on State private postsecondary educational institutes' demography, finances, and placement and completion rates.

Professional Experience, cont.

Boating Facilities Manager (8/89 to 1/95)

State of California, Department of Boating and Waterways

- Program Coordinator/Project Manager for Boating and Waterways' "Private Sector Recreational Marina Loan Program"; responsible for all aspects of loan program including budgeting of \$8 million annually, marketing, credit analysis, preparation of loan application reviews, loan security documents, loan contracts, and loan disbursement. Interfaced extensively with private marina operators and local, State, and Federal planning agencies. Presented loans for approval by the Boating and Waterways Commission. Wrote and managed all Departmental loan, grant, cooperative agreement, and construction contracts.
- Local Area Network (LAN) Administrator for 3Com and Novell Local Area Network. Independently directed all activities of information systems organization; assessed agency needs, planned network evolution and successfully migrated all departmental information systems operations to Novell network operating system.

Education

Bachelor of Science in Economics, University of Nevada, Reno, Nevada

- Extensive econometric, statistical, and mathematical curriculum.

Affiliations

Member, Board of Advisors, National Student Clearinghouse (NSC).

Appointed Board Member, Corporation for Educational Networking Initiatives in California (CENIC), representing the California Community College system.

Ex-Officio Member, Board of Directors, California Community Colleges Chief Information Systems Officers Association (CISOA).

Ex-Officio Member, Board of Directors, The Research and Planning Group for California Community Colleges (RP Group).

Publications & Accomplishments

- **Consultant Study: Contributor.** Pickens, William H., *Economic Study of the Proprietary Sector of Postsecondary Education in California*. Sacramento: 1996. Devised core methodology for determining estimates of collected tuition and operating expenses for the California proprietary educational sector.
- **Published interview** with Brio and Microsoft about use of Brio/Microsoft solution at the California Community Colleges Chancellor's Office. Microsoft Industry Solutions, Volume 4: Business Intelligence Solutions on the Microsoft Platform, *Microsoft SQL Server 7.0 and Brio Enterprise Fuel California Community Colleges' 'Student Right-to-Know' Program*. Microsoft Press, DM Review, Vol. 9, Number 6 (June, 1999).
- **Received Award of Excellence** for "The Expanded Student Right-To-Know Dataset" from The RP Group for California Community Colleges, April, 2000.
- **Received Award of Distinction** for "Student Right-To-Know Website" from The RP Group for California Community Colleges, April, 1999.
- **Authored product review** of Brio Enterprise on request from trade magazine. *Brio Enterprise Powers Student Projects at California Community Colleges*. DM Review, Vol. 9, Number 3 (March, 1999).

Sonya Edwards

(b)(6)

(916) 322-5791 work

Objective

To contribute to the education community towards improved learning, excellent public school management practices and sound education policy-making decisions.

Work Experience

**Education Administrator
Data Management Improvement Program
Data Management Division**

July 1, 2004 to Present

Administering the Data Management Improvement Program (DMIP), an enterprise-wide effort to improve the department's data management.

Designing systems to monitor new and changing federal and state data requirements that allow the department to be more proactive with respect to data requirements.

Managing several projects related to the development of common data architecture including: Student Data Project, Teacher Data Product, eTranscript/Course Data, and School Classification. Providing leadership in integrating data from the California School Information System (CSIS), California Special Education Management Information System (CASEMIS), the Migrant Education Program System (MEPSIS) and other systems.

National and Federal Roles

Education Information Management Advisory Council (EIMAC) - California state representative and new member of the EIMAC General Statistics Permanent Standing Task Force.

National Forum – state representative and incoming chair of the National Education Statistics Advisory Committee.

Performance Based Data Management Initiative /Education Data Exchange Network (PBDMI/EDEN) – state coordinator.

School Interoperability Framework (SIF) - State lead and participant various workgroups including eTranscripts and Vertical Reporting.

**Education Fiscal Services Consultant
Education Fiscal Services Assistant
California Department of Education**

**10/15/2000 - Present
10/1/1999 – 10/14/2000**

Lead consultant on Data Management Improvement Program, a department-wide program planning and implementation of activities that address recommendations of the Data Management Study (2001) of the California Department of Education's (CDE). Activities included recruiting and hiring appropriate staff, writing budget proposals, writing a feasibility report, analyzing bills and refining budget language. Establishing a comprehensive framework for good data management in CDE that includes data management reviews of contracts, IT proposals, department-wide training, and legislative bills. Served as the department's representative reporting on data management activities to the Department of Finance, the Legislative Analysts Office and county office administrators. Formulating policy related to educational data definitions and data management. Participating in strategic and tactical work group to align major CDE initiatives (e.g., the California School Information Services, Migrant Education, California Longitudinal Data System) with CDE's common data architecture. Leading the project to develop the CDE's Data Resource Guide and coordinating work groups to establish common definitions.

Administered a comprehensive review of the reporting requirements under the *No Child Left Behind* (NCLB) federal reauthorization including meeting with a variety of program managers and staff to facilitate inter-program coordination. Highly involved in analyzing and revising SB 1453 (Alpert) with executive level staff, outside vendors, and lobbyists to enable the CDE to create a longitudinal achievement database for accurately measuring changes in student and school academic performance which is pivotal to meeting NCLB's accountability requirements.

Based on an understanding of the complex school financial system, including the new Standardized Accounting Code Structure (SACS), and federal, state and local information needs, designed and implemented strategies to collect, evaluate and disseminate California K-12 financial data. Provided leadership in designing, developing and implementing a process to collect over 500 annual SACS reports via the Internet. Consulted with local education agencies representatives to ensure the process also met their needs.

Led a project to map California's SACS based financial data to the federal data elements.

Responded to requests for information from the California Legislature, Department of Finance, local education agencies, lobbyists, the State Controllers

Office, the U.S. Department of Commerce and other organizations interested in education; frequently recommend and developed appropriate, comparative data for financial decision-making.

Prepared financial data and recommended improvements for the Lottery report, the School Accountability Report Card, Maintenance of Effort, Federal Impact Aid, Cost Per Pupil and other reports.

Participated in two department task forces representing a diverse group of program representatives that produced and presented plans for enterprise data management and data dissemination via the Internet.

Migrated databases from Sybase System 11 and Sybase SQL Anywhere to MS SQL Server and wrote stored procedures.

Staff Information Systems Analyst 1/1/97 to 9/30/99 (Full-time)
Associated Information Systems Analyst 4/1/93 to 12/31/96 (Full-time)

Developed, implemented and maintained internal automated systems to ensure the accuracy of financial data collected from over 1,000 local educational agencies. Wrote Feasibility Study Report for the establishment of a new system to process and store data collected under the newly implemented Standardized Accounting Code Structure (SACS).

Analyzed, designed and developed automated and manual technical checks for complete data submissions from the local educational agencies including the annual unaudited financial reports, teacher salary and benefits schedules, and program cost reports.

Worked with federal government representatives, outside consultants, and other interested parties to identify and design data definitions and collections that would satisfy various reporting and information requirements.

Provided risk management by establishing various support agreements with hardware and software vendors.

Associate Governmental Program Analyst 8/13/90 to 3/31/93 (Full-time)
California Department of Education

Developed and delivered training for Novell LAN Users. Wrote network administrator's guide. Provided network administration including updating user access rights, performing capacity planning, and backup/recovery services.

Section C - Budget Information Non-Construction Programs (ED 524)

	FY 2006-07	Grant	Title IV	FY 2007-08	Grant	Title IV	FY 2008-09	Grant	Title IV	3 yr cst	Grant	Title IV
Salaries	(b)(4)											
Calpads												
Transfer												
PBDMI												
SIF												
Total all progs												
Benefits												
Calpads												
Transfer												
PBDMI												
SIF												
Total all progs												
Travel												
Calpads												
Transfer												
PBDMI												
SIF												
Total all progs												
Equipment												
Calpads												
Transfer												
PBDMI												
SIF												
Total all progs												
Contracts												
Calpads												
Transfer												
PBDMI												
SIF												
Total all progs												
Other												
Calpads												
Transfer												
PBDMI												
SIF												
Total all progs												
Total												
Calpads												
Transfer												
PBDMI												
SIF												
Grand Totals												

Budget Detail ED 524-Section C

Performance Based Data Management Initiative/Education Data Exchange Network (PBDMI/EDEN) 2006-07

Cost Analysis for the Education Data Office

All figures based on estimates from 2005 meetings

Date	Location	Number of People***	Number of Days	Meeting Fee*	Airfare*	Hotel**	Rental Car**	Meals & Incidentals****	Total
Spring EDEN Mtg	TBD	3	4	\$525	\$1,872	\$1,350	\$245	\$348	\$3,992
July - NCES Summer Data Conference	DC	3	4	\$525	\$1,872	\$1,350	\$0	\$348	\$3,747
Fall EDEN Mtg	TBD	3	4	\$525	\$1,872	\$1,350	\$245	\$348	\$3,992
Total				\$1,575	\$5,616	\$4,050	\$490	\$1,044	\$11,731

Assumptions made in projected costs for file creation and submission. In 2004, on average, each PBDMI file took 24.2 hours to analyze PBDMI requirements, locate the data source, develop queries and successfully upload files to USDE's portal. We had significant problems during upload (35.8 percent of the attempted upload were successful). Ultimately, we were able to upload 19 files. If we extend the average 24.2 hours to the entire 170 files, the estimated total hours for full participation is 4,114. At an hourly rate of \$100, that total comes to \$411,400. However, we have deducted the funds the USDE provided through a Task Order in year 1 and year 2 from the total setup.

Meeting costs for 3 years (see above)	\$11,731
Plus projected costs for file creation and submission	\$103,800
Total PBDMI Costs (Meetings and File Creation and Submission)	\$ 115,531

* represents the cost for three people

** represents the cost for three rooms and one car

*** participants comprised of various data stewards (e.g., assessment, special education, accountability)

**** usually, NCES provides breakfast and lunch on the days of the meeting; those are not included in these costs - only meals on travel days and dinner during meeting days

Classifications	PY	Amount
Project Manager	0.1	\$8,580
Data Integrator	0.3	\$32,940
Data Analyst	0.25	\$26,850
Database Administrator	0.2	\$20,760
Program Staff	0.15	\$14,670
	<u>1</u>	<u>\$103,800</u>

Budget Detail ED 524-Section C

Performance Based Data Management Initiative/Education Data Exchange Network (PBDMI/EDEN) 2007-08

Cost Analysis for the Education Data Office

All figures based on estimates from 2005 meetings

Date	Location	Number of People***	Number of Days	Meeting Fee*	Airfare*	Hotel**	Rental Car**	Meals & Incidentals****	Total
Spring EDEN Mtg	TBD	3	4	\$525	\$1,872	\$1,350	\$245	\$348	\$3,992
July - NCES Summer Data Conference	DC	3	4	\$525	\$1,872	\$1,350	\$0	\$348	\$3,747
Fall EDEN Mtg	TBD	3	4	\$525	\$1,872	\$1,350	\$245	\$348	\$3,992
Total				\$1,575	\$5,616	\$4,050	\$490	\$1,044	\$11,731

Assumptions made in projected costs for file creation and submission. In 2004, on average, each PBDMI file took 24.2 hours to analyze PBDMI requirements, locate the data source, develop queries and successfully upload files to USDE's portal. We had significant problems during upload (35.8 percent of the attempted upload were successful). Ultimately, we were able to upload 19 files. If we extend the average 24.2 hours to the entire 170 files, the estimated total hours for full participation is 4,114. At an hourly rate of \$100, that total comes to \$411,400. However, we have deducted the funds the USDE provided through a Task Order in year 1 and year 2 from the total setup.

Meeting costs for 3 years (see above)	\$11,731
Plus projected costs for file creation and submission	\$103,800
Total PBDMI Costs (Meetings and File Creation and Submission)	\$ 115,531

* represents the cost for three people

** represents the cost for three rooms and one car

*** participants comprised of various data stewards (e.g., assessment, special education, accountability)

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Data Integrator	0.3	\$32,940
Data Analyst	0.25	\$26,850
Database Administrator	0.2	\$20,760
Program Staff	0.15	\$14,670
	<u>1</u>	<u>\$103,800</u>

Budget Detail ED 524-Section C

Performance Based Data Management Initiative/Education Data Exchange Network (PBDMI/EDEN) 2008-09 Cost Analysis for the Education Data Office

All figures based on estimates from 2005 meetings

Date	Location	Number of People***	Number of Days	Meeting Fee*	Airfare*	Hotel**	Rental Car**	Meals & Incidentals****	Total
Spring EDEN Mtg	TBD	3	4	\$525	\$1,872	\$1,350	\$245	\$348	\$3,992
July - NCES Summer Data Conference	DC	3	4	\$525	\$1,872	\$1,350	\$0	\$348	\$3,747
Fall EDEN Mtg	TBD	3	4	\$525	\$1,872	\$1,350	\$245	\$348	\$3,992
Total				\$1,575	\$5,616	\$4,050	\$490	\$1,044	\$11,731

Assumptions made in projected costs for file creation and submission. In 2004, on average, each PBDMI file took 24.2 hours to analyze PBDMI requirements, locate the data source, develop queries and successfully upload files to USDE's portal. We had significant problems during upload (35.8 percent of the attempted upload were successful). Ultimately, we were able to upload 19 files. If we extend the average 24.2 hours to the entire 170 files, the estimated total hours for full participation is 4,114. At an hourly rate of \$100, that total comes to \$411,400. However, we have deducted the funds the USDE provided through a Task Order in year 1 and year 2 from the total setup.

Meeting costs for 3 years (see above)	\$11,731
Plus projected costs for file creation and submission	\$103,800
Total PBDMI Costs (Meetings and File Creation and Submission)	\$ 115,531

* represents the cost for three people

** represents the cost for three rooms and one car

*** participants comprised of various data stewards (e.g., assessment, special education, accountability)

**** usually, NCES provides breakfast and lunch on the days of the meeting; those are not included in these costs - only meals on travel days and dinner during meeting days

Classifications	PY	Amount
Project Manager	0.1	\$8,580
Data Integrator	0.3	\$32,940
Data Analyst	0.25	\$26,850
Database Administrator	0.2	\$20,760
Program Staff	0.15	\$14,670
	<u>1</u>	<u>\$103,800</u>

Budget Detail ED 524-Section C 2006-07
Schools Interoperability Framework (SIF) Association
Cost Analysis for the Education Data Office

All figures based on estimates from 2005 meetings

Cost of Membership

\$2,500

Date	Location	Number of People***	Number of Days	Meeting Fee*	Airfare*	Hotel**	Rental Car**	Meals & Incidentals****	Total
Q1									
Feb	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q2									
June	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q3									
Sept	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q4									
Dec	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Total				\$3,500	\$12,480	\$15,000	\$980	\$2,680	\$31,960

Basic Membership	\$2,500
Add:	
Q1 Total	\$7,990
Q2 Total	\$7,990
Q3 Total	\$7,990
Q4 Total	\$7,990

Adjusted Cost of Membership \$34,460

* represents the cost for five people

** represents the cost for five rooms and one car

*** participants comprised of data integrator, data warehouse person, and 2 subject matter experts (e.g., transcripts, assessment, human resources)

**** usually, SIF provides breakfast and lunch on the days of the meeting; those are not included in these costs - only meals on travel days and dinner during meeting days

Budget Detail ED 524-Section C 2007-08
Schools Interoperability Framework (SIF) Association
Cost Analysis for the Education Data Office

All figures based on estimates from 2005 meetings

Cost of Membership

\$2,500

Date	Location	Number of People***	Number of Days	Meeting Fee*	Airfare*	Hotel**	Rental Car**	Meals & Incidentals****	Total
Q1									
Feb	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q2									
June	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q3									
Sept	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q4									
Dec	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Total				\$3,500	\$12,480	\$15,000	\$980	\$2,680	\$31,960

Basic Membership	\$2,500
Add:	
Q1 Total	\$7,990
Q2 Total	\$7,990
Q3 Total	\$7,990
Q4 Total	\$7,990

Adjusted Cost of Membership \$34,460

* represents the cost for five people

** represents the cost for five rooms and one car

*** participants comprised of data integrator, data warehouse person, and 2 subject matter experts (e.g., transcripts, assessment, human resources)

**** usually, SIF provides breakfast and lunch on the days of the meeting; those are not included in these costs - only meals on travel days and dinner during meeting days

Budget Detail ED 524-Section C 2008-09
Schools Interoperability Framework (SIF) Association
Cost Analysis for the Education Data Office

All figures based on estimates from 2005 meetings

Cost of Membership

\$2,500

Date	Location	Number of People***	Number of Days	Meeting Fee*	Airfare*	Hotel**	Rental Car**	Meals & Incidentals****	Total
Q1									
Feb	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q2									
June	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q3									
Sept	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Q4									
Dec	TBD	5	5	\$875	\$3,120	\$3,750	\$245	\$670	\$7,990
Total				\$3,500	\$12,480	\$15,000	\$980	\$2,680	\$31,960

Basic Membership	\$2,500
Add:	
Q1 Total	\$7,990
Q2 Total	\$7,990
Q3 Total	\$7,990
Q4 Total	\$7,990

Adjusted Cost of Membership \$34,460

* represents the cost for five people

** represents the cost for five rooms and one car

*** participants comprised of data integrator, data warehouse person, and 2 subject matter experts (e.g., transcripts, assessment, human resources)

**** usually, SIF provides breakfast and lunch on the days of the meeting; those are not included in these costs - only meals on travel days and dinner during meeting days

Budget Justification

The California Department of Education (CDE) requests: (1) \$449,973 to support one-time activities required to submit data for the federal Performance-Based Data Management Initiative (PBDMI) through the Education Data Exchange Network (EDEN), and to participate in PBDMI and EDEN meetings and School Interoperability Framework (SIF) developmental activities; (2) \$2,587,000 to support 50% of the one-time systems integration costs to develop the California Longitudinal Pupil Achievement Data System (CALPADS); and (2) \$642,000 to support one-time costs to build out specific components of the state's records transfer system.

Budget Justification for PBDMI, EDEN, and SIF Activities

The CDE requests a total of \$449,973 to support one-time activities required to submit data for PBDMI through EDEN, and to participate in PBDMI, EDEN, and SIF meetings.

In 2004 it took, on average, 24.2 hours to analyze PBDMI requirements, locate the data source, develop queries, and successfully upload files to the United States Department of Education's portal. Given available resources, the CDE was only able to upload 19 of the 170 PBDMI files. Based on this experience, the CDE estimates that it will require 4,114 hours to conduct all one-time preparation activities required to enable the upload of 170 files. At an hourly rate of \$100, this activity will require \$411,400 in staff time. The CDE deducted \$100,000 already received from PBDMI Task Order Funds provided in 2003-04 and 2004-05 for this activity, and requests \$311,400 to support this activity in 2006-07 through 2008-09.

The CDE also requests meeting and travel funds to participate in PBDMI, EDEN, and SIF meetings. The CDE requests \$35,193 to participate in PBDMI/EDEN meetings. This request includes meeting fees and travel costs for three staff members to attend three, four-day meetings, over a three-year period. The CDE also requests \$103,380 to support SIF membership and to participate in SIF meeting in 2006-07. This request includes meeting fees and travel costs for five staff members to attend four, five-day meetings.

Budget Justification for CALPADS

This section presents two economic analysis worksheets (EAWs), detailing: (1) existing system/baseline costs; and (2) proposed alternative or CALPADS costs. The EAWs present estimated personnel years (PYs) and costs for fiscal years 2005/06 through 2010/11. The CDE projects costs this far into the future because 2009/10 is the first full fiscal year in which annual recurring costs to operate and maintain CALPADS are expected to remain constant. The

narrative presents the assumptions made by the CDE to prepare the estimated PYs and costs presented in the EAWs.

As shown previously in the project management plan, the CDE will begin procurement for the development of CALPADS after receiving approval of the FSR, expected by July 30, 2005. The CDE expects that CALPADS will be implemented in August 2008.

The worksheets present personnel years and cost estimates for existing systems and for the proposed alternative, CALPADS. The CDE based estimates for existing systems on current staffing and operating information and a cost analysis of local education agencies (LEAs) activities that would be impacted by the solution. Estimates for the proposed alternative involved a bottom up approach, as described below.

In order to estimate one-time costs for development and acquisition of the proposed alternative, the CDE first prepared a work breakdown structure (WBS) consisting of 15 major tasks and 100 subtasks across the life cycle of the project, including 13 months of full operation through December 31, 2008. The CDE then estimated the level of effort (i.e., number of days) for both state staff and vendor staff needed to complete each task and subtask. The CDE determined state staff personnel-years (PYs) by dividing the total estimated level of effort days by 221 (i.e., 221 days = 1 PY).

The CDE applied an assumed cost per state “staff day” to estimate state costs for the project. The CDE assumes that the cost for one State staff day is \$396. This daily cost remains constant for the entire projection period. The daily cost includes salaries, wages, benefits, and training. The CDE based its estimate for the cost for a staff day on the estimated mix of existing CDE staff that currently support the NCLB reporting process. The CDE weighted the monthly salary of each personnel classification supporting NCLB by the number of PYs that CDE estimated for that classification. The CDE then applied a benefit factor to the weighted average monthly salary and determined the cost for one staff day.

Similarly, CDE applied an assumed daily cost of \$1,367 per day for contractor time, including fees, State allowable per diem, and transportation costs, in order to determine total contractor costs. This daily cost remains constant for the entire projection period. The CDE based this estimate on assumptions made by CDE on the average hourly billing rate for the vendor team, the percent of time the vendor team will incur travel and lodging expenses, the rates now allowed by State guidelines for lodging and per diem, and assumed rates for transportation.

Estimated personnel years and staff costs displayed in the EAWs for each fiscal year are based on the proposed project schedule presented the Management Plan section of this proposal. The CDE estimated what portion of each of the 100 WBS subtasks would be performed in each fiscal

year. Many subtasks cross fiscal years. If the project schedule changes, and this schedule change is significant, then the timing of staffing levels and costs will change.

EAW #1: Existing System/Baseline Cost Worksheet

NOTE: The narrative refers to FY 2005/06 because it reflects current annual baseline costs. Referring to cumulative costs reflected in the last column is not meaningful.

Continuing Information Technology Costs (\$166,083)

Approximately nine CDE information technology (IT) positions currently provide some level of IT services for CDE applications that support NCLB reporting requirements. The following figure provides a roll-up of the personnel classifications for these positions, the monthly salary for each classification, and the estimated PYs for each classification.

Continuing Information Technology Support

Classification	Monthly Salary	PYs
Assistant Information Systems Analyst	\$3,320	0.6
Associate Programmer Analyst (Specialist)	4,782	0.4
Information Systems Technician	2,670	0.4
Senior Information Systems Analyst (Spc)	5,767	0.1
Senior Information Systems Analyst (Sprv)	5,243	0.3
Staff Information Systems Analyst (Spc)	5,243	0.4
Total Personnel Years (PYs)		2.2

Direct wages are estimated at \$109,987. The CDE assumes that fringe benefits are 31 percent of these direct wages. Total annual continuing costs for information technology staff are estimated at \$144,083. The CDE assumes that annual operating expense and equipment (OE&E) costs are \$10,000 per PY. The CDE estimates annual existing information technology PYs at 2.2. Therefore, the CDE estimates annual OE&E costs for existing program staff at \$22,000.

Continuing Program Costs (\$62,727,975)

CDE Staff (\$2,231,926): Approximately 38 CDE positions currently provide some level of support for collecting, maintaining, and reporting data necessary to support NCLB reporting requirements. These include employees in three of CDE’s four branches. The following figure provides a roll-up of the personnel classifications for these positions, the monthly salary for each classification, and the estimated PYs for each classification.

Existing System/Baseline Personnel Support

Classification	Monthly Salary	PYs
Associate Governmental Program Analyst	\$4,554	1.1
Career Executive Assignment I	7,744	0.1
Career Executive Assignment II	7,668	0.9
Education Administrator I	6,883	0.5
Education Programs Assistant	4,492	0.3
Education Programs Consultant	5,924	5.4
Education Research and Evaluation Administrator I	6,586	2.6
Education Research and Evaluation Consultant	5,924	11.1
Office Technician	2,732	1.6
Research Analyst II	4,782	1.0
Staff Services Analyst	3,158	0.2
Total Personnel Years (PYs)		24.8

Direct wages are estimated at \$1,703,760. Fringe benefits are assumed to be 31 percent of these direct wages. Total annual continuing costs for program staff are estimated at \$2,231,926.

Other Costs (\$60,496,049): The CDE determined three primary components of “other” continuing program costs: (1) CDE operating expense and equipment, (2) LEA activities that will be directly impacted by CALPADS, and (3) test vendor activities that will be directly impacted by CALPADS. Each of these is discussed below. The CDE provides total costs for all three in this single line item of the EAW.

Budget Justification

The CDE assumes that annual operating expense and equipment (OE&E) costs are \$10,000 per PY. The CDE estimates annual existing program PYs at 24.8. Therefore, the CDE estimates annual OE&E costs for existing program staff at \$248,000.

The Department of Finance, the control agency that approves FSRs, requested that the CDE include the cost of LEAs in the EAWs. To do so, the CDE identified three of the major existing LEA activities that will be directly impacted by CALPADS, and then worked with LEAs to estimate costs for these activities. These activities, and CDE's estimate of annual LEA costs statewide for each, are as follows:

Collect, maintain, extract (from local student information systems), review, correct, prepare, and submit student information required on Standardized Testing and Reporting (STAR) program assessment header sheets to the test vendor in advance of the test. The test vendor then generates bar-coded answer documents and/or bar coded labels for the STAR statewide assessments that contain the student information submitted by LEAs. This process is known as the "pre-ID" process. These assessments are used by the CDE to comply with NCLB, Title I reporting requirements for adequate yearly progress (AYP).	\$10,000,000
Collect, maintain, extract (from local human resources information systems), review, correct, prepare, and submit the professional assignment information form (PAIF) to the CDE. This form will be used by CDE to comply with NCLB, Title II reporting requirements for high quality teachers.	\$8,500,000
Collect, maintain, extract (from local student information systems), review, correct, prepare, and submit student information required on California English Language Development Test (CELDT) header sheets to the test vendor in advance of the test. The test vendor then generates bar-coded answer documents and/or bar coded labels for the CELDT statewide assessments that contain the student information submitted by LEAs. This process is known as the "pre-ID" process. These assessments are used by the CDE to comply with NCLB, Title III reporting requirements for English language learners.	<u>\$1,800,000</u>

Total LEA Costs

\$20,300,000

Test vendors that contract with the CDE to administer statewide assessments perform four activities that will be directly impacted by CALPADS:

- ❑ Collect student-level data required to generate bar-coded answer documents and/or bar coded labels for the STAR and CELDT statewide assessments that contain student information submitted by LEAs
- ❑ Merge student test results with student demographic and program participation data collected separately from LEAs, create a file of student test records, and submit these files to the CDE
- ❑ Prepare various reports to allow LEAs and the CDE to review the quality of the student test records
- ❑ Provide Internet browser-based capability that allows LEAs to review and edit individual student demographic and program participation data elements.

The CDE reviewed STAR, California High School Exit Examination (CAHSEE), and CELDT test vendor contracts to determine the scope of work and contract amount for each of these four activities. Based on this review, the CDE estimates total annual test vendor contract costs for these four activities at \$39,948,049.

Adding together OE&E, LEA, and test vendor costs for purposes of the EAW, the CDE estimates annual “other” continuing program costs at \$60,496,049.

EAW #2: Proposed Alternative: CALPADS

Note: The narrative refers to the last column, which reflects total one-time costs to develop CALPADS.

Total One-Time IT Project Costs (\$9,554,547)

Staff (\$1,242,255): The CDE estimated the level of state staff effort (days) for each of 15 development/deployment tasks and 100 subtasks. These estimates assume that vendors will be procured for project management, solicitation document development, independent project oversight, business process improvement, and systems integration services.

The CDE converted these estimated State staff days to personnel years (PYs), assuming 221 days per year per PY. The CDE distributed total state staff days across four fiscal years based upon assumptions made about when major procurement, project development, and project deployment steps take place. The proposed project schedule is provided in the **Management Plan Section** and in **Appendix A**.

The CDE applied an assumed cost per state “staff day” in order to estimate total state costs for the project. The CDE assumes that the cost for one State staff day is \$396 for the duration of the project time frame. This daily cost, multiplied by the estimated state staff days during each fiscal

year, provides the cost estimate for each fiscal year. The CDE estimates 14.1 PYs of one-time state staff through the first three months of fiscal year 2008/09. Total one-time staff costs are estimated at **\$1,242,255**.

Hardware: The CDE will house CALPADS at the state data center, Stephen P. Teale Data Center (Teale). Teale provided the CDE with an estimate of one-time and recurring Teale charges to purchase and host the system. These Teale charges include the purchase of hardware and are reflected in another line of this EAW (“Data Center Services”). Therefore, the CDE leaves the “Hardware Purchase” line of the EAW blank.

Software (**\$304,600**): As noted in the prior hardware purchase paragraph, Teale will purchase required operating and support software for CALPADS. Teale charges include the purchase of software and are reflected in another line of this EAW (“Data Center Services”). Therefore, the CDE assumes no one-time costs for Teale purchased software in the “Software Purchase/License” line of the EAW.

The CDE assumes that additional software tools will be needed by CDE administrators and targeted CDE end-users. These tools include ad hoc query/reporting and online analytical processing. The CDE assumes that the one-time costs for these tools will be **\$304,600**.

Contract Services (**\$7,037,095**): The CDE estimates total contracted services costs of **\$7,037,095** to support the following five vendor contracts: (1) Project management; (2) Solicitation document development; (3) Independent project oversight; (4) Business process improvement; (5) Systems integration services. These five contract services are described below in the order that they are shown on the EAW:

- Systems Integration (**\$5,174,090**): As described in the first two pages of this section, the CDE developed a detailed work breakdown structure of more than 100 activities, and estimated for each the level of effort (as number of days) that a contractor would need to complete each task. Based on these estimates and an assumed daily cost of \$1,367 for a contractor, total software customization costs are estimated at \$5.2 million through the end of fiscal year 2008/09. *The CDE requests \$2,587,045, which is 50% of these one-time costs.*
- Project Management (\$735,228): The CDE estimates the development project will span 39 months, and that a contractor would expend an average of approximately 3.2 days per week on project management activities. The cost per day for the project management contractor is estimated at \$1,367, as described earlier in this section. Total project management costs during the time period shown in the EAWs are estimated at \$735,228 through the end of fiscal year 2008/09. Costs incurred for project management activities that the CDE incurred prior to July 1, 2005, are not shown in the EAWs.
- Independent Project Oversight (\$518,094): The CDE estimates that the independent project oversight contractor will expend ten percent of the time on the project that the systems integration contractor expends. The cost per day for the project oversight

contractor is estimated at \$1,367, as described earlier in this section. Total project oversight costs are estimated at \$518,094 through the end of fiscal year 2008/09

- ❑ Other Contract Services (\$609,683): Other contracted services include: (1) Solicitation Document Development for a vendor to develop the CALPADS request for proposal (RFP) and assist with evaluation and selection of the systems integrator will be \$472,983; and (2) Business Process Improvement for a vendor to assist with evaluating and improving NCLB related processes impacted by CALPADS will be \$136,700.
- ❑ Data Center Services (\$828,597): The CDE estimates that one-time Teale charges at \$828,597.

Teale Data Center will assist in procuring required hardware and operating system software for CALPADS. The CDE worked with Teale to identify and confirm the scope and requirements for data center services. The requirements include a development environment of four servers, a production environment of 11 servers, and required storage area network capacity, network components, and digital certificate administration.

Other Costs (\$142,000)

The CDE estimates that operating expense and equipment (OE&E) costs are \$10,000 per PY. Total one-time IT project staff PYs are estimated at 14.2. Therefore, the CDE estimates OE&E costs for one-time IT project staff at \$142,000.

Total Continuing IT Costs (\$1,850,728)

NOTE: Narrative refers to the FY 2010/11 costs, as they most accurately reflect the projected annual continuing costs. It is meaningless to refer to accumulative ongoing costs.

Staff (\$384,068): The CDE plans to contract for operations and maintenance of CALPADS. However, the CDE will need a total of 5.3 positions for CALPADS. This includes (1) one full-time Staff Programmer Analyst – Specialist position (1 PY) to be responsible for business rules updates, definition of new business requirements, liaison with the vendor and/or organization selected to operate and maintain CALPADS, technical planning, program coordination, and administration; (2) two full-time associate governmental program analysts to provide first level CALPADS help desk support; (3) one full-time education programs consultant, one full-time office technician, and one-quarter PY of a staff counsel (CALPADS Service Unit) to provide administrative support to provide access to CALPADS data including, qualifying researchers, reviewing research proposals, tracking each request in accordance with FERPA, constructing data sets requested, and transmitting the data sets to approved requestors. The CDE estimates \$384,068 for recurring annual costs to maintain and operate CALPADS, and to support the CALPADS Service Unit

Hardware and Software Lease/Maintenance (\$76,150): The CDE intends to contract with Teale Data Center to procure, house, and maintain the hardware and software required to support CALPADS. Teale billing rates and monthly charges include the cost to support and maintain the hardware and software and are displayed on a separate line item of the EAWs. Therefore, the CDE did not include annual hardware and software maintenance/licenses costs on this line item of the EAW. The CDE did include in this line item the estimated annual maintenance costs for

additional software tools will be needed by CDE administrators and targeted CDE end-users. These tools include ad hoc query/reporting and online analytical processing. The CDE assumes that annually recurring costs for these tools will be **\$76,150**.

Contract Services (\$1,213,896): The CDE will contract for operations and maintenance of the CALPADS application. The CDE identified the types of services required to support CALPADS, which include second and third level help desk support, system and application support, and database administration. The CDE identified the personnel class most appropriate to provide these resources and the full-time equivalents required by each personnel class. The CDE converted total estimated FTEs to work days, and then applied the daily cost of \$1,367 for a contractor. Based on these assumptions, the CDE estimates annual contract services costs to operate and maintain CALPADS at **\$1,213,896**. Costs assumed during FY 2008/09 assume that the system's first full month of production is September 2008.

Data Center Services (\$966,840): The CDE intends to house CALPADS hardware, software, and data at the Teale Data Center. Teale provided a quote for servicing CALPADS servers, based on specifications for the system provided by the CDE. The CDE estimates that annual Teale charges to support hardware, software, and network components at **\$966,840**. Costs assumed during FY 2008/09 assume that the system's first full month of production is September 2008.

Other (\$53,000): The CDE estimates that operating expense and equipment (OE&E) costs are \$10,000 per PY. Continuing IT PYs are displayed on the "Staff (Salaries & Benefits)" row of the EAW. Therefore, the CDE estimates total OE&E costs for continuing IT project staff each fiscal year are based on the assumed PYs each fiscal year.

Continuing Existing Costs (\$58,899,253)

IT (\$166,083): The CDE assumes that continuing existing IT staff PYs will include the same 2.2 PYs of existing IT staff PYs and associated costs. Therefore, the CDE estimates total costs for continuing existing IT project staff at \$144,083. The CDE estimates that operating expense and equipment (OE&E) costs are \$10,000 per PY. Total continuing existing IT staff PYs are estimated at 2.2. Therefore, the CDE estimates OE&E costs for continuing existing IT staff at **\$22,000**.

Program Costs (\$58,733,170): The CDE assumes that the continuing existing program staff PYs will include the same 24.8 program staff PYs and associated costs estimated for existing program staff. Assuming the same wages and benefits costs for each classification presented earlier in subsection 8.1, the CDE estimates total costs for continuing existing program staff at **\$2,231,926**.

The CDE determined three primary components of "other" continuing program costs: (1) CDE operating expense and equipment, (2) LEA activities that will be directly impacted by CALPADS, and (3) test vendor activities that will be directly impacted by CALPADS. Each of these is discussed below.

The CDE estimates that operating expense and equipment (OE&E) costs are \$10,000 per PY. The CDE estimates 29.1 PYs for continuing existing program staff. Therefore, the CDE estimates OE&E costs for continuing existing program staff at \$291,000.

The CDE assumes that continuing existing LEA program costs will not change from existing LEA program costs. LEAs currently provide student demographic and program participation data to test vendors, and these data are required to be accurate and up-to-date. LEAs will provide the same accurate and up-to-date student demographic and program participation data to CALPADS rather than to test vendors. LEAs currently complete and submit to CDE (or to CSIS, in the case of approximately 200 LEAs) a professional assignment information form (PAIF) for each teacher. LEAs will provide the same form to CDE, and the information on the PAIF will be captured by CALPADS. Therefore, total continuing existing LEA program costs are unchanged at \$20.3 million.

The business process change brought on by CALPADS requires a standardized data collection processes. These changes may result in shifting costs of data collection from program areas to data management or information technology areas.

The CDE assumes that continuing annual test vendor costs will be 10 percent less than existing annual test vendor costs. Instead of submitting student demographic and program participation data to test vendors (during the “pre-ID” process), LEAs will submit this same information to CALPADS. This relieves test vendors from performing this activity. Also, test vendors would be relieved from having to provide LEAs with the ability to review and update student demographic and program participation data. This function will be provided by CALPADS. Because the CDE does not yet have current test vendor costs, the CDE does not yet include projected annual continuing test vendor costs.

Adding together OE&E, LEA, and test vendor costs for purposes of the EAW, the CDE estimates annual “other” continuing existing program costs at \$56.5 million.

Budget Justification for Student Records Transfer

K-12 Records Transfer

The CDE requests a total of \$350,000 for CSIS to support programming costs to: (1) augment the current CSIS system to enable student requests for transcripts authenticated by their K-12 schools of attendance; and (2) simply the existing system’s user interface to address the needs of less technically proficient, site-based staff.

CCCTran

The CDE requests a total of \$292,000 to build out CCCTran to enable transfer of student records from all California high schools to the over 100 California Community Colleges. The California Community Colleges have committed \$4.2 million to Phase 1 of CCCTran, including five years of operation for the entire CCC system and exchange with all their trading partners. The following chart shows the budget and resources necessary to accomplish the enhancements to CCCTran necessary to support K-12 to 13/14 transfer and evaluation. Building this capacity will enable statewide longitudinal data analysis for students K-14. This project, because of its scope and scale, could easily become a national demonstration model.

Budget and Resources for K-12 to 13/14: Electronic Records Exchange and Evaluation

Resource	Services	Budget
Vendor	Programming development: Views, format translations, indexing, access controls, transmission, functional enhancements, performance management, security	\$190,000
	Licenses, software, database, utilities	25,000
	Hardware and communication expansions	20,000
CCCCO	Project management consulting services	44,200
	Design committee expenses	12,000
	Supplies, copies, postage	800
Total		\$292,000

EAW #1: Existing System /Baseline Cost Worksheet

EXISTING SYSTEM/BASELINE COST WORKSHEET

Department: Education

All costs to be shown in whole (unrounded) dollars.

Date Prepared: 04/22/2005

Project: California Longitudinal Pupil Achievement Data System (CALPADS)

	FY 2005/06		FY 2006/07		FY 2007/08		FY 2008/09		FY 2009/10		FY 2010/11		SUBTOTAL	
	PYs	Amts	PYs	Amts	PYs	Amts								
Continuing Information														
Technology Costs														
Staff (salaries & benefits)	2.2	144,083	2.2	144,083	2.2	144,083	2.2	144,083	2.2	144,083	2.2	144,083	13.2	864,498
Hardware Lease/Maintenance														0
Software Maintenance/Licenses		0		0		0		0		0		0		0
Contract Services		0		0		0		0		0		0		0
Data Center Services		0		0		0		0		0		0		0
Agency Facilities		0		0		0		0		0		0		0
Other		22,000		22,000		22,000		22,000		22,000		22,000		132,000
Total IT Costs	2.2	166,083	2.2	166,083	13.2	996,498								
Continuing Program Costs:														
Staff	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	148.8	13,391,556
Other		60,496,049		60,496,049		60,496,049		60,496,049		60,496,049		248,000		302,728,245
Total Program Costs	24.8	62,727,975	24.8	2,479,926	148.8	316,119,801								
TOTAL EXISTING SYSTEM COSTS	27.0	62,894,058	27.0	2,646,009	162.0	317,116,299								

Budget Justification

EAW #2: Proposed Alternative

PROPOSED ALTERNATIVE Implement Integrated Longitudinal Data Collection and Repository System

Date Prepared: 04/22/2005

Department: Education

All Costs Should be shown in whole (unrounded) dollars.

Project: California Longitudinal Pupil Achievement Data System (CALPADS)

	FY 2005/06		FY 2006/07		FY 2007/08		FY 2008/09		FY 2009/10		FY 2010/11		SUBTOTAL	
	PYs	Amts	PYs	Amts										
One-Time IT Project Costs														
Staff (Salaries & Benefits)	0.5	40,392	3.9	342,577	9.4	823,697	0.4	35,589	0.0	0	0.0	0	14.2	1,242,255
Hardware Purchase		0		0		0		0		0		0		0
Software Purchase/License		0		304,600		0		0		0		0		304,600
Telecommunications														0
Contract Services														
Software Customization		0		652,708		4,327,758		193,624		0		0		5,174,090
Project Management		205,864		235,273		242,625		51,466		0		0		735,228
Project Oversight		31,086		98,438		290,132		98,438		0		0		518,094
IV&V Services		0		0		0		0		0		0		0
Other Contract Services		306,892		166,091		136,700		0		0		0		609,683
TOTAL Contract Services		543,842		1,152,510		4,997,215		343,528		0		0		7,037,095
Data Center Services				0		828,597		0		0		0		828,597
Agency Facilities														0
Other		5,000		39,000		94,000		4,000		0		0		142,000
Total One-time IT Costs	0.5	589,234	3.9	1,838,687	9.4	6,743,509	0.4	383,117	0.0	0	0.0	0	14.2	9,554,547
Continuing IT Project Costs														
Staff (Salaries & Benefits)	0.0	0	0.0	0	0.0	0	2.6	187,093	5.9	433,568	5.3	384,068	13.8	1,004,729
Hardware Lease/Maintenance		0		0		0		0		0		0		0
Software Maintenance/Licenses		0		0		0		76,150		76,150		76,150		228,450
Telecommunications		0		0		0		0		0		0		0
Contract Services		0		0		0		1,011,580		1,213,896		1,213,896		3,439,372
Data Center Services		0		0		0		805,700		966,840		966,840		2,739,380
Agency Facilities		0		0		0		0		0		0		0
Other		0		0		0		26,000		59,000		53,000		138,000
Total Continuing IT Costs	0.0	0	0.0	0	0.0	0	2.6	2,106,523	5.9	2,749,454	5.3	2,693,954	13.8	7,549,931
Total Project Costs	0.5	589,234	3.9	1,838,687	9.4	6,743,509	3.0	2,489,640	5.9	2,749,454	5.3	2,693,954	28.0	17,104,478
Continuing Existing Costs														
Information Technology Staff	2.2	144,083	2.2	144,083	2.2	144,083	2.2	144,083	2.2	144,083	2.2	144,083	13.2	864,498
Other IT Costs		22,000		22,000		22,000		22,000		22,000		22,000		132,000
Total Continuing Existing IT Costs	2.2	166,083	13.2	996,498										
Program Staff	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	24.8	2,231,926	148.8	13,391,556
Other Program Costs		60,496,049		60,496,049		60,496,049		58,498,646		56,501,244		56,501,244		352,989,281
Total Continuing Existing Program Costs	24.8	62,727,975	24.8	62,727,975	24.8	62,727,975	24.8	60,730,572	24.8	58,733,170	24.8	58,733,170	148.8	366,380,837
Total Continuing Existing Costs	27.0	62,894,058	27.0	62,894,058	27.0	62,894,058	27.0	60,896,655	27.0	58,899,253	27.0	58,899,253	162.0	367,377,335
TOTAL ALTERNATIVE COSTS	27.5	63,483,292	30.9	64,732,745	36.4	69,637,567	30.0	63,386,295	32.9	61,648,707	32.3	61,593,207	190.0	384,481,813
INCREASED REVENUES		0		0		0		0		0		0		0

Timeline

Key Dates and Deliverables

CALPADS Project Phases and Key Dates			
Stage	Phase/Stage Name	Start	End
Phase I: Software Vendor Procurement and Contract Approval			
Stage 1	RFP Vendor Solicitation and Selection	Mar 15, 2005	Aug 17, 2005
Stage 2	IPOC Solicitation and Selection	Mar 15, 2005	Apr 6, 2006
Stage 3	CALPADS Detailed Requirements Definition	Aug 18, 2005	Nov 14, 2005
Stage 4	RFP Development	Oct 18, 2005	Mar 14, 2006
Stage 5	Control Agency RFP Review and Approval	Mar 15, 2006	May 24, 2006
Stage 6	Systems Integration Vendor Evaluation and Selection	May 25, 2006	Jan 11, 2007
Stage 7	Contract Approval	Jan 12, 2007	Apr 9, 2007
Stage 8	Business Process Improvement Vendor Solicitation and Selection	Apr 9, 2007	Jun 15, 2007
Phase II: System Development and Implementation			
Stage 1	Project Start-up	Apr 11, 2007	Apr 25, 2007
Stage 2	Systems Analysis and Confirmation (Gap Analysis)	Apr 18, 2007	May 16, 2007
Stage 3	Systems Design	May 17, 2007	Sep 10, 2007
Stage 4	Data Conversion Software Development	Sep 18, 2007	Jan 11, 2008
Stage 5	Systems Development	Aug 27, 2007	Dec 28, 2007
Stage 6	Systems and Integration Testing	Dec 31, 2007	Mar 21, 2008
Stage 7	User Acceptance Testing	Mar 24, 2008	May 16, 2008
Stage 8	Pilot and Implementation	May 19, 2008	Aug 8, 2008