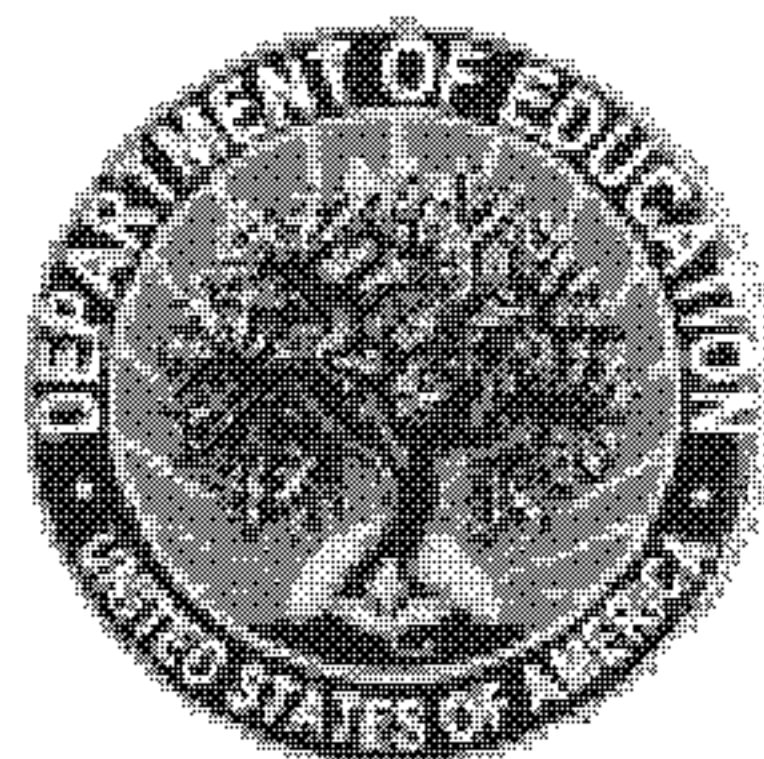


U.S. Department of Education

Washington, D.C. 20202-5335



APPLICATION FOR GRANTS UNDER THE

**STATEWIDE LONGITUDINAL DATA SYSTEM RECOVERY ACT GRANTS
CFDA # 84.384A
PR/Award # R384A100025**

Closing Date: DEC 04, 2009

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

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission	* 2. Type of Application:* If Revision, select appropriate letter(s):	
<input type="checkbox"/> Preapplication	<input checked="" type="checkbox"/> New	
<input checked="" type="checkbox"/> Application	<input type="checkbox"/> Continuation	* Other (Specify)
<input type="checkbox"/> Changed/Corrected Application	<input type="checkbox"/> Revision	

* 3. Date Received:	4. Applicant Identifier:
12/4/2009	

5a. Federal Entity Identifier:	* 5b. Federal Award Identifier:
	n/a

State Use Only:

6. Date Received by State:	7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Delaware Department of Education

* b. Employer/Taxpayer Identification Number (EIN/TIN):	* c. Organizational DUNS:
516000279	878892124

d. Address:

* Street1:	401 Federal Street Suite 2
Street2:	Townsend Building
* City:	Dover
County:	Kent
State:	DE
Province:	
* Country:	USA
* Zip / Postal Code:	19901

e. Organizational Unit:

Department Name:	Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:	Dr.	* First Name:	Bruce
Middle Name:	E		

* Last Name: Dacey

Suffix:

Title: Education Associate

Organizational Affiliation:

* Telephone Number: (302)735-4140 Fax Number: (302)739-4221

* Email: BDACEY@DOE.K12.DE.US

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

10. Name of Federal Agency:

U.S. Department of Education

11. Catalog of Federal Domestic Assistance Number:

84.384A

CFDA Title:

Statewide Longitudinal Data System Recovery Act Grants

*** 12. Funding Opportunity Number:**

NCES 09-02

Title:

Grants for Statewide, Longitudinal Data Systems under the American Recovery and Reinvestment Act of 2009

13. Competition Identification Number:

Title:

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

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

Delaware's Autoated System for Educational Reporting (DASER)Grant Proposal

Attach supporting documents as specified in agency instructions.

Attachment:

Title :

File :

Attachment:

Title :

File :

Attachment:

Title :

File :

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: DE

* b. Program/Project: DE

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

Attachment:

Title :

File :

17. Proposed Project:

* a. Start Date: 7/1/2010

* b. End Date: 9/30/2013

18. Estimated Funding (\$):

a. Federal	\$ 6005034
b. Applicant	\$ 988850
c. State	\$ 0
d. Local	\$ 0
e. Other	\$ 0
f. Program Income	\$ 0
g. TOTAL	\$ 6993884

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

a. This application was made available to the State under the Executive Order 12372 Process for review on 12/3/2009.

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

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

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

Yes No

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

** I AGREE

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

Authorized Representative:

Prefix: Ms. * First Name: Lillian

Middle Name:

* Last Name: Lowery

Suffix:

Title: Secretary of Education

* Telephone Number: (302)735-4000 Fax Number: (302)739-7668

* Email: LLOWERY@DOE.K12.DE.US

* Signature of Authorized Representative:

* Date Signed:

Application for Federal Assistance SF-424

Version 02

*** Applicant Federal Debt Delinquency Explanation**

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



U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
Delaware Department of Education

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

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

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2. Fringe Benefits	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
3. Travel	\$ 6,700	\$ 7,700	\$ 7,700	\$ 0	\$ 0	\$ 22,100
4. Equipment	\$ 152,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 152,000
5. Supplies	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
6. Contractual	\$ 2,464,150	\$ 1,558,800	\$ 1,559,640	\$ 0	\$ 0	\$ 5,582,590
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 83,448	\$ 83,448	\$ 0	\$ 0	\$ 0	\$ 166,896
9. Total Direct Costs (lines 1-8)	\$ 2,706,298	\$ 1,649,948	\$ 1,567,340	\$ 0	\$ 0	\$ 5,923,586
10. Indirect Costs*	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 2,706,298	\$ 1,649,948	\$ 1,567,340	\$ 0	\$ 0	\$ 5,923,586

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

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

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

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

Period Covered by the Indirect Cost Rate Agreement: From: 7/1/2008 To: 6/30/2009 (mm/dd/yyyy)

Approving Federal agency: ED Other (please specify): _____ The Indirect Cost Rate is 5.4%

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

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



U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
Delaware Department of Education

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

SECTION B - BUDGET SUMMARY

NON-FEDERAL FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	\$ 368,750	\$ 368,750	\$ 248,750	\$ 0	\$ 0	\$ 986,250
2. Fringe Benefits	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
3. Travel	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
4. Equipment	\$ 2,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,000
5. Supplies	\$ 200	\$ 200	\$ 200	\$ 0	\$ 0	\$ 600
6. Contractual	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
9. Total Direct Costs (lines 1-8)	\$ 370,950	\$ 368,950	\$ 248,950	\$ 0	\$ 0	\$ 988,850
10. Indirect Costs	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 370,950	\$ 368,950	\$ 248,950	\$ 0	\$ 0	\$ 988,850

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Standard Form 424B (Rev.7-97)

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

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

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

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

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

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

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

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

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

Signature of Authorized Certifying Representative:

Name of Authorized Certifying Representative: Lillian Lowery Ed. D.

Title: Secretary of Education

Date Submitted: 12/03/2009

Disclosure of Lobbying Activities

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

1. Type of Federal Action: <input type="checkbox"/> Contract <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Loan <input type="checkbox"/> Loan Guarantee <input type="checkbox"/> Loan Insurance	2. Status of Federal Action: <input type="checkbox"/> Bid/Offer/Application <input type="checkbox"/> Initial Award <input type="checkbox"/> Post-Award	3. Report Type: <input type="checkbox"/> Initial Filing <input type="checkbox"/> Material Change For Material Change only: Year: 0 Quarter: 0 Date of Last Report:
4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier, if known: 0 Name: n/a Address: City: State: Zip Code + 4: - Congressional District, if known:	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Name: Address: City: State: Zip Code + 4: - Congressional District, if known:	
6. Federal Department/Agency:	7. Federal Program Name/Description: CFDA Number, if applicable:	
8. Federal Action Number, if known:	9. Award Amount, if known: \$0	
10. a. Name of Lobbying Registrant (if individual, last name, first name, MI): n/a Address: City: State: Zip Code + 4: -	b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): n/a Address: City: State: Zip Code + 4: -	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Name: Lillian Lowery, Ed. D. Title: Secretary of Education Applicant: Delaware Department of Education Date: 12/03/2009	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

CERTIFICATION REGARDING LOBBYING

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

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

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

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

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

Statement for Loan Guarantees and Loan Insurance.

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

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

APPLICANT'S ORGANIZATION

Delaware Department of Education

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Prefix: First Name: Lillian Middle Name:

Last Name: Lowery Suffix:

Title: Secretary of Education

Signature: _____

Date:

12/03/2009

ED 80-0013

03/04

**SUPPLEMENTAL INFORMATION
REQUIRED FOR
DEPARTMENT OF EDUCATION GRANTS**

1. Project Director:

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
Dr.	Bruce	E	Dacey	

Address:

* Street1:	401 Federal Street Suite 2
Street2:	Townsend Building
* City:	Dover
County:	Kent
* State:	DE* Zip / Postal Code: 19901 * Country: USA

* Phone Number (give area code)	Fax Number (give area code)
(302)735-4140	(302)739-4221

Email Address:

BDACEY@DOE.K12.DE.US

2. Applicant Experience

Novice Applicant Yes No Not applicable

3. Human Subjects Research

Are any research activities involving human subjects planned at any time during the proposed project period?

Yes No

Are ALL the research activities proposed designated to be exempt from the regulations?

Yes Provide Exemption(s) #:

No Provide Assurance #, if available:

Please attach an explanation Narrative:

Attachment:

Title :

File :

Project Narrative

Project Narrative - Project Abstract

Attachment 1:

Title: Pages: **0** Uploaded File: **G:\Longitudinal Grant 2009\ProjectAbstract.doc**

PROJECT ABSTRACT

Title: Delaware's Automated System for Educational Reporting (DASER)

Main Contact: Bruce E. Dacey, Ed. D.

Description: The Delaware Department of Education (DDOE) has an abundance of data, but needs to improve in the many areas such as integrating data between preschool, K to 12, post-secondary institutions, and workforce development. Delaware state agencies, colleges and universities, and pre-school institutions need help in making their data systems compatible with the DDOE. The technology architecture (data structures/tables and applications) has evolved rather than been designed from a long term vision. As a result, the applications (eSchoolPlus, DELSIS and the data warehouse) are not optimized around a comprehensive data model that fosters easy expansion and use. Delaware is like a lot of other states in that we have limited funds and staff to make all of the changes needed to more effectively meet federal requirements. In addition Delaware is uniquely situated to be a model data system for the country.

For this and many other reasons, Delaware intends to apply for the Statewide Longitudinal Data Systems Grant to improve our systems structure for state and federal reporting, P-20 data integration, as well as set the standard for data systems around the country. Based on continuous feedback from our local school districts and charter schools, as well as the NCES Forum, EdFacts, and the Data Quality Campaign, Delaware will focus on the following areas. We will build with our agency partners a Client ID system to match clients among and between agencies to better serve them from pre-school to adulthood. We will make our system interoperable with other agencies, states, and systems by documenting the Information Systems Architecture. We will move from 'stovepipes' to a unified client management system data warehouse which will create standard codes, definitions, programming skills, ad hoc and programmed reports. This system will be enveloped around a new identify management system. Finally we propose to introduce an electronic transcript exchange system which will seamlessly communicate with instate and out of state colleges and workforce organizations.

Budget Request:

Year 1: \$2,704,298.00
Year 2: \$1,649,948.00
Year 3: \$1,650,788.00
Total: \$6,005,034.00

Project Narrative

Project Narrative - Project Narrative

Attachment 1:

Title: Pages: **0** Uploaded File: **G:\Longitudinal Grant 2009\ProjectNarrative.doc**

(a) Need for Project

Delaware is recognized nationally as possessing one of the country's most sophisticated and robust state longitudinal data systems. In fact, Delaware is one of a few states to possess all ten elements of the Data Quality Campaign's Ten Essential Elements of a Longitudinal Data System. Currently the Department of Education is responsible for education reporting for all public schools in Delaware. This includes 19 school districts and 18 charter schools. Together they serve more than 124,000 students.

The Department of Education accomplishes its reporting functions through the use of several disparate systems. These systems include the current State Longitudinal Data System called the Delaware Student Information System (DELSIS) and a statewide pupil accounting system called eSchoolPLUS from Sungard Pentamation. DELSIS is used to assign a unique student identifier that follows a student through their public K through 12 education careers and allows the Department of Education to link student information with other relevant data. DELSIS contains longitudinal data on students that dates back to 1994. eSchoolPLUS is hosted at the Department of Education in Dover, Delaware. Data from eSchoolPLUS populates a statewide consolidation database which contains near real-time data on every public school student in Delaware. This consolidated database is called eSchoolMaster and contains information such as student attendance, discipline, grades, schedules, state test scores, college readiness test scores (SAT and ACT), demographics, etc. Our statewide pupil accounting system together with DELSIS forms the basis for tracking student movements between schools and districts and is also used by the DDOE program managers, specifically Title 1, ELL, special education, and assessment.

Even though the various DDOE program managers who work with the school districts pay a great deal of attention to the quality of the data contained in the system, Delaware's current system is not perfect. DDOE currently spends many man-hours gathering, sorting, verifying, and generating reports for Federal agencies, state agencies, school districts, teachers, and parents. Although the data is available, the mechanism for performing these tasks is a manual, time consuming process. Also, the current Delaware SLDS lacks maturity in the areas of early childhood, the 21st Century workforce, post secondary, and the armed forces. DDOE plans to develop a new system that integrates past data, currently collected data, and data from other agencies and present it in a cohesive portal that will provide authentication and reporting for all DDOE customers ranging from the public stakeholders, to teachers, to parents of current students. This new system would be called the Delaware Automated System for Education Reporting (DASER) and would provide stakeholders with user-friendly access to information from the two primary components of the DDOE Education Longitudinal Data System: the K-12 Instructional Warehouse and the Enterprise Longitudinal Data Warehouse.

DASER would bridge the gap between the potential for data driven decision making and the actual delivery through the use of a dynamic reporting framework. Development of DASER would permit DDOE to improve on three key data system requirements identified in this competition, specifically, the first, second and fifth capabilities. First, it will enhance DDOE's

ability to analyze student-level data from pre-kindergarten through high school. It will also inform success and readiness for postsecondary education, the 21st Century workforce and the Armed Forces. Second, the grant will support the development of system interoperability between contributing state agencies as well as between Delaware and other states, in order to inform policy based on successful practices. Finally, DDOE intends to develop its capability for the expedient delivery of user-friendly data on student achievement and growth to school leaders, teachers, parents, and other key stakeholders so that all parties will receive the same timely and cogent data being used to drive continuous improvement and decision-making in Delaware's schools.

In order to fulfill the goals of DASER, several subsystems must be developed in order to link the K-12 Instructional Data Warehouse and the Enterprise Longitudinal Data Warehouse. Listed below is a brief description of each subsystem (more detail follows).

- **Client ID Crosswalk Subsystem:** This subsystem of DASER will collect and store different agency client identifiers and store them for matching and identification purposes. It will reduce the redundancy of data maintained by agencies and allow agencies to use current identification systems in conjunction with systems from other agencies.
- **Interoperability:** By using the above subsystem, DASER will allow the exchange of data among agencies and institutions within the State and between States to inform policy and practice. In order to ensure effective utilization, training is a key component in the use of this system and the project will include ongoing instruction for district data officials.
- **Client Management Subsystem Information Layer:** This subsystem will create a unified data processing and reporting system enveloped by an enterprise identity system. This subsystem is the workhorse of the back-end that brings all of the varied data and subsystems together into a larger warehouse with the needed metadata to provide DDOE and its customers with relevant reporting.
- **Enterprise Identity Management and Portal Subsystem:** This subsystem will ensure compliance with FERPA regulations, create confidence in our state partners that data will be safe and secure, and strengthen the DDOE user validation and authentication for access to different levels of data and sets of applications. It will provide distributed administration of the complex user roles and relationships to organizations necessary to provide appropriate access to confidential student data.
- **Enterprise Reporting Subsystem:** Data must be used, not merely collected, to answer critical questions about outcomes and performance, particularly at crucial transition points in the education pipeline. In addition, an ad-hoc reporting subsystem will be created which utilizes the Enterprise Identity Management System to validate user access and then determine what data can be used for reporting.
- **Student Record and Transcript Data Exchange Subsystem:** This subsystem will benefit Local Education Agencies (LEAs), State Education Agencies (SEAs) and the federal government by providing a common framework for student transcripts that will provide meaningful data from Pre-K through entry into the work force.

Delaware has been working on school reform and developing its education longitudinal data system in tandem with its reform efforts for many years. The Delaware Vision 2015 Plan and corresponding Vision Network is an example of the innovation public, private and civic stakeholders who have collaborated to implement Delaware's nationally acclaimed plan to develop a world-class public education system. The Vision Network presently boasts the participation of twenty-five schools, including three charter schools, and serves nearly 20,000 students. These Vision Network partners recognize the need for change and volunteered to focus on the critical areas of leadership and instruction. The Vision Network partners receive, among other things, training on how to use student data to drive decision-making and to adjust instruction to meet students' individual needs. DDOE's present Secretary of Education, Dr. Lillian Lowery, was formerly Superintendent of a Vision Network school district.

Delaware has also made gains by viewing its education pipeline through a P-20 lens. The Delaware P-20 Council was established in 2003 by Governor Ruth Ann Minner's Executive Order 47 and placed in statute in 2005. The Council's overall goal is to establish a logical progression of learning from early childhood to post-secondary education by reducing the need for remediation and with particular attention paid to transition points within the education pipeline. Delaware's P-20 Council has been one of the nation's most active and effective. The P-20 Council benefits from interagency cooperation and representation from state leaders, higher education, and Delaware's business community. Among its many successes, the P-20 Council proposed Delaware's more rigorous graduation requirements that were adopted by the State Board of Education. In addition, the P-20 Council recognized the need for increased data linkages between agencies and sectors to inform its decision making. The P-20 Data Committee was formed by the Council to establish the P-20 Data Cube, linking student level K-12 data to student- and course-level higher education data. The P-20 Data Cube is populated with data from both public and private sector institutions of higher education in Delaware.

Governor Jack Markell, upon his election in 2008, challenged DDOE to transform the public education system. Governor Markell views education as the cornerstone for Delaware's economic growth and quality of life for its citizenry. DDOE has presented the Markell Administration with a new strategic plan in support of this goal. The Delaware Department of Education Innovation Action Team Strategic Plan for the Delaware Public Education System is structured into Five Strategic Goals, each targeting key areas within the overall education system. The five key areas are: 1) Standards and Assessments, 2) Longitudinal Data Systems, 3) Teacher Quality, 4) Low-Performing Schools, and 5) Effective, Efficient Service Delivery. The Plan was developed over several weeks with input from diverse teams of stakeholders. These teams represented each of the Five Strategic Goals of the plan. The teams were asked to identify the most crucial objectives and strategies that would have the greatest impact on improvement in Delaware's public education system and lead it to serve as a model for the nation. In building its longitudinal data systems the DDOE Plan focuses on actions that will build

on existing data systems, including even more value-added data from other state agencies. Specifically, DDOE committed itself to engage in a concentrated initiative to increase the focus on data-driven decision-making in every area of school planning, from teachers to principals to district leaders to parents. This initiative represents a challenge for DDOE: that DDOE will significantly improve the extent to which it uses its sophisticated and robust data to support the assurances of the DDOE Plan. To this end, DDOE will build the data governance structures and processes that will ensure data is used more robustly, is more inclusive and is more accessible by more stakeholders.

The DASER system will serve as the core for all of our longitudinal data collections and include data from early childhood, kindergarten through high school, higher education, and career/workforce development. DDOE can address the weaknesses in the scope of its present Data Warehouse and reporting capabilities by linking the existing K-12 Instructional Data Warehouse with an expanded interagency Enterprise Longitudinal Data Warehouse. In its present systems, DDOE Technology Management and Design has identified the following weaknesses:

- The LDS currently does not include any workforce/labor data.
- There is little data on out-of-state college enrollment.
- K-12 reports are cumbersome to access and not user friendly.
- Reports do not answer the questions posed by a wide enough cross-section of stakeholders.
- We have limited data on Early Childhood.
- There is no cross-agency identity tracking method, making it hard to track students services and outcomes.

DASER's success in providing the information that will drive the continuous improvement called for in the DDOE Strategic Plan depends on putting inter- and intra-agency governance structures in place. These structures will address these weaknesses in addition to fostering interagency collaboration, robust use of data, privacy protection, and research and analysis. Strong outputs are expected by stakeholders and will be delivered when all system components and governance structures are in place.

Delaware Proven Success and Ability to Sustain the System

In 2005 Delaware possessed five of the 10 essential elements of a State Longitudinal Data System as defined by the Data Quality Campaign. After several years of hard work, we expanded our SLDS to encompass all ten elements in 2007. Delaware is unique in that we have several statewide data systems which support our ability to link students, teachers, and schools. The systems we have in place that provide a wealth of core data are:

- Statewide Pupil Accounting System that make use of unique student identifiers.
- Statewide Payroll System for tracking teachers and administrators across districts and schools.

- Statewide financial system which can be used to track expenditures across districts and schools.
- Statewide teacher licensure system with unique teacher and administrator identification.
- Longitudinal testing warehouse which contains test data back to 1997.

Once DASER and its subsystems have been designed, built, and implemented, we will re-direct current staff to maintaining the systems. We have implemented strong application development tracking processes to ensure that bugs are fixed and enhancements are planned for and fixed on a regular basis. All of our currently running data collections systems are routinely evaluated for needed maintenance, enhancements and updates, which are all scheduled annually. Given our successful track record with EDEN/EDFacts Reporting, and the expansion over time of our longitudinal data systems, we have the capacity to deliver DASER on time and to ensure its success and sustainability for the future.

(b) Project Outcomes Related to System Requirements and Implementation

Project Outcome 1: Client ID Crosswalk Subsystem

The Client ID Crosswalk Subsystem of DASER is central to resolving current issues of service fragmentation and would provide more stringent privacy protection of individuals and families by removing the possibility that any one agency would need to work with another's unit-record identifiers. Tiered levels of access to DASER will be more easily managed and the data elements that each access level has will be more finely tuned. Data governance structures will inform developers which stakeholders may use specific data elements and/or determine if access must be handled within the framework of informed client consent. Once complete and operational, the Client ID Crosswalk Subsystem would eliminate tasks that involve the manual matching of disparate identifiers in the present Enterprise Longitudinal Data Warehouse to produce reports that unify data elements. As this system reaches maturity, the level of sophistication of the information generated by the Enterprise Longitudinal Data Warehouse and accessed through DASER will increase dramatically. The Client ID Crosswalk Subsystem is the driver that will permit DASER to deliver a more comprehensive view of the totality of factors affecting an individual student's learning to instructional personnel. Other stakeholders will be able to see aggregated measures that are pertinent to their particular interests and roles in the education pipeline.

Tasks/Outputs – Client ID Crosswalk Subsystem

1. Build a layer of information above both the Enterprise Longitudinal Data Warehouse and the K-12 Instructional Data Warehouse that holds student-client identifiers (e.g. Department of Health and Social Services, Department of Education, Services for Children, Youth and Their Families, institutions of higher education). This layer is unlikely to reside on DDOE servers, given the multi-agency ownership of the Enterprise Longitudinal Data System. A location at the Delaware Department of Technology and Information is anticipated.
2. Determine validation and normalization techniques that will ensure efficient cross-agency identification and optimal functionality.
3. Assign responsibility for the management of the subsystem to the appropriate governing entity.
4. Test the ability of the Client ID Crosswalk Subsystem to track children receiving services across state agencies.

The Client ID Crosswalk Subsystem is the engine that drives DASER. It also performs the "policing" role of authenticating logins to DASER and pulling together the appropriate data elements in a user-friendly, graphical "dashboard" format. If this application for federal SLDS funds is successful, application development will be able to commence by the third quarter of the first year, with deployment, testing and maintenance plans in place by the end of the first year.

Project Outcome 2: Interoperability

State and district data personnel must be informed and trained on the data standards that the repositories behind DASER will utilize. An enterprise metadata dictionary is a foundational component that will be formalized and consolidated from the separate and disparate data dictionaries that are now maintained both within DDOE and among the external agencies that contribute data to the Enterprise Longitudinal Data Warehouse. The four assurances from the State Fiscal Stabilization Fund (SFSF), and the seven capabilities and 12 elements from the American Competes Act for our existing education longitudinal data require a sustainable policy, process and on-line application to access and manage our data definitions and align them to national standards. DDOE has a recently updated its enterprise metadata dictionary, but as yet has not incorporated interagency data definitions. The data dictionary does have the capacity to produce gap analysis reports for the requirements of specific reporting exercises (e.g. EDFACTS). In addition, an information systems architecture (ISA) is needed to bring together into a single resource guide all of the policies, procedures, standards, templates and processes that must be established and followed in order to permit the continuity of DASER and its components as personnel change within DDOE and the contributing agencies. A detailed data flow and process map will be created to describe how data are collected, stored and accessed across all internal and external administrative units. Much of this is presently documented within the DDOE K-12 Instructional Data Warehouse, but updating will be needed as DASER develops. Assignment of the monitoring and management of this effort will be made to the appropriate data governance entity. Finally we must be able to communicate clearly to our stakeholders what our policies and procedures are regarding the confidentiality of student-client data.

Tasks/Outputs – Interoperability

1. Develop a logical entity relationship diagram (ERD) design of the logical structure of the databases.
2. Develop an online metadata dictionary with statewide standard definitions and codes aligned with national standards.
3. Design and document an enterprise relational data model for DDOE and all agencies, organizations and school districts.
4. Develop policies and procedures to support interoperability by using standard data structures, formats and data definitions to ensure linkage and connectivity among the various levels and types of data.
5. Develop a sustainable policy guide and reference document consolidating laws, regulations, guidelines, policies, etc. related to the collection, storage, access, use and destruction of data.
6. Commence documentation of all quantitative, longitudinal statistics and/or indicators (e.g. dropout rate) and other key facts (e.g. disaggregation by school name).

Project Outcome 3: Client Management Subsystem Information Layer

The Client Management Subsystem Information Layer will create a unified K-12 instructional data processing and reporting subsystem enveloped by an enterprise identity subsystem. The K-12 Instructional Data Warehouse is comprised of a pupil accounting system offering several dashboards to districts, teachers and parents. Centrally managed applications support several core reporting functions at the district level. More in-depth information is provided by a number of data marts under the K-12 Instructional Data Warehouse umbrella. If this application is successful, SLDS funds will accelerate the development of the Client Management System Data Warehouse information layer. This layer will authenticate users via an enterprise identity management system and permit them access to data elements residing on their assigned tier-level of access. At completion, users will not be limited to information based in a particular module, cube or data mart, but rather data elements across both the K-12 Instructional Data Warehouse and the Enterprise Longitudinal Data Warehouse, as deemed appropriate by their assigned tier-level of access. SLDS funds will enable DDOE to expedite development of a layer of information that is intra- and inter-agency in nature, yet appears to the user as a seamless repository of data.

INFORMATION LAYERS		
Client Management System Information Layer		
Intra-Agency Information Layer K-12 Instructional Data Warehouse		Inter-Agency Information Layer Enterprise Longitudinal Data Warehouse Layer
Pupil Accounting	Information/Reporting	Repositories
eSchoolPlus -School/District Enrollment -School Status -Student Achievement -NCLB Measures	EDEN/ED FACTS	Children's Services
IEPPlus -Individualized Special Education	Adequate Yearly Progress	Finance and Personnel
Teacher WorkStation -Integrated Gradebook -Assignment Tracking -Attendance Management -Communication with Parent(s)	Unit Count (Finance)	Health and Social Services
Home Access Center -Children's Grades -Attendance -Assignments -Discipline	Data Marts -Delaware State Testing Program -District Finance -DE Educational Personnel Sys. -School Profiles -DSTP Participation	Department of Labor

Tasks/Outputs – Client Management Subsystem Information Layer

1. Develop and implement processes to continually evaluate how data is collected and used.
2. Create a data framework for capturing essential early childhood indicators.
3. Align post-secondary first-year course competencies with K-12 courses to reduce postsecondary remediation.
4. Build capacity within DDOE for planning, research and analysis in order to develop reporting mechanisms that can be used for program evaluation.
5. Link teachers with the postsecondary teacher preparation programs that prepared them for the classroom and compare with student achievement.
6. Integrate Drop-Out Prevention system, with its indicators of at-risk students.
7. Link P-20 data to workforce needs.
8. Link postsecondary outcomes to K-12 curriculum and achievement data.
9. Link P-20 data with National Student Clearinghouse data for a more complete view of student postsecondary enrollment activity such as college transfer activity, time-to-degree and student readiness and persistence in higher education.
10. Build new data repositories that integrate and link student, staff, school facility and financial data.
11. Develop and implement methodologies for data validation and reliability processes.
12. Develop and implement the Individual Student Profile based on stakeholder feedback during Innovation Action Team meetings (Summer, 2009). Organize focus groups to solicit recommendations to improve and/or expand the information included on the profiles.
13. Create data transformation systems as needed to seamlessly import data from external agencies.
14. Develop training that orients educators, parents and policy makers to available data and how it informs continuous school and instructional improvement.
15. Develop a communications and outreach strategy to raise awareness of available data and how DDOE is designing it to inform continuous school improvement.

Project Outcome 4: Enterprise Identity Management and Portal Subsystem

The Enterprise Identity Management and Portal Subsystem of DASER is the gatekeeper to the Client Management Information Layer. The functionality of this subsystem is to provide for the automated administration of complex user roles and relationships necessary to provide appropriate access to confidential student data among diverse stakeholders. The Enterprise Identity Management and Portal Subsystem is the mechanism that will ensure access to student-level data complies with FERPA, to assure partners that data will be safe and secure. This subsystem will also leverage a statewide enterprise portal to provide Delaware educators with Web 2.0 capabilities to publish and share curriculum content, communicate with groups of other educators, and participate in on-line discussion groups with others who share common

interests. A recent analysis by ESP Solutions Group identified three primary directory systems that DDOE must maintain over its present information layers. First, the K-12 Active Directory is a statewide LDAP forest structure used by districts and the DDOE staff to provide basic network and Windows authentication. Second, the eSchoolPLUS Active Directory is a single central LDAP structure used to provide eSchoolPLUS users with authentication and authorization. Third, the DDOE Single Sign-On system which is internally developed and used by 20,000 users to provide authentication for applications with limited-access specifications. Funds received as a result of a successful SLDS Grant application will enable DDOE to begin development immediately on the Enterprise Identity Management and Portal Subsystem, which harness and unify the three primary authentication systems that will secure the data comprising the Client Management System Information Layer described in Project Outcome #3.

Tasks/Outputs – Enterprise Identity Management and Portal Subsystem

1. Establish a unified Active Directory encompassing in all DDOE information layers.
2. Establish a relational directory showing relationships among users and resources.
3. Establish provisioning that allows administrators to monitor access rights and privileges to ensure the security of resources and user privacy and minimizes vulnerability of systems to security breaches and abuse.
4. Establish a directory manager which allows administrators to set access rights for individual users as well as groups.
5. Establish a single sign-on point of entry to the Client Management Subsystem Information Layer, permitting users anytime access to information in formats of their choosing to facilitate analysis for decision-making.
6. Establish communication and collaboration connections for interactive tools such as meeting services, real-time polls, chats, whiteboard, etc.
7. Establish online community sites that are a location with customized views and specific content for particular groups of users.

Project Outcome 5: Enterprise Reporting

DDOE recognizes that assembling data into repositories is only the first step in promoting the use of data to support continuous improvement in Delaware's schools. DDOE intends to improve both the quality and content of its data reporting, as well as furnish training to educators on how to use data reports to improve classroom outcomes. DDOE must develop its data analysis capacity in order to be able to communicate to educators and decision makers how to interpret data so that they are able to use data effectively as they access our data portals independently to meet their own real-time needs. Professional development for educators who have not previously been data consumers is a crucial component in using data systems. In order to arm educators with information that will foster transformational change, it is imperative that DDOE build reporting capacity. This becomes even more urgent as DDOE introduces the new Delaware Comprehensive Assessment System (DCAS) with its summative and formative components.

DDOE is aware of areas where improvements can be made. An analysis of our reporting capabilities by ESP Solutions Group found that reports and statistical data are indeed posted on the DDOE web site, but there is little guidance on how to interpret the reports and datasets. In many cases, data are not presented in longitudinal tables, thus making it difficult to recognize changes over time. Graphical views are not available and there is often a delay in posting reports and datasets after the underlying data becomes available. Perhaps most importantly, few online tools are provided to make it convenient for external stakeholders and educators to produce ad-hoc queries. Finally, few online tools are offered specifically to teachers. Having acknowledged these weaknesses, it is notable that DDOE is recognized as a leader in ED FACTS reporting. Staff capacity has limited the ability of DDOE to apply the same leadership for the benefit of all of its stakeholders. However, reporting metrics for State Fiscal Stabilization Funds require that DDOE ramp up its reporting capabilities and expand the scope of its instructional reporting to include data elements from external agencies. Funds attained from a successful SLDS Grant proposal will permit DDOE to quickly build the staff capacity to develop more effective reporting on presently available data.

Tasks/Outputs – Enterprise Reporting

1. Design a reporting system to track student growth and progress in order to foster continuous improvement over time.
2. Develop common course coding, GPA calculations, attendance definitions and other standards to facilitate comparisons across schools and districts.
3. Create targeted reports for policymakers, educators, parents and students.
4. Collaborate with researchers to explore effective data presentation and reporting methodologies.
5. Create student profile reports that draw on the full spectrum of Client Management Information Layer data.
6. Create a user interface where an individual student's rate of growth is demonstrated and can be correlated with demographic indicators and state expectations.
7. Create a user interface for parents where individual student progress can be viewed in user-friendly formats.
8. Create user-friendly reports for educators based on indicators that suggest students who may be at risk of dropping out of high school.
9. Create reports that evaluate and rate internal and external intervention programs.
10. Create reports that benchmark Delaware students against national and international metrics.
11. Develop reports that accompany data linkages teachers and teacher preparation programs and suggested impact on classroom outcomes.
12. Reports that demonstrate P-20 alignment with workforce needs.

13. Make available in DASER reports from an expanded Correlates of Achievement Data-Based Indicator System (CoA)¹ to include additional data elements: 1) Health & individual indicators 2) Teacher-level indicators (e.g. attendance) 3) Student mobility 4) Longitudinal data 5) Use of Technology in the classroom. Provide ongoing professional development on how to use the system.
14. Develop reporting mechanisms that will aid in making school and district resource allocations.
15. Develop professional development and training on report interpretation and ongoing communications strategy on available and emerging reporting capabilities.

Project Outcome #6 – Student Record and Transcript Data Exchange Subsystem

DDOE is well-positioned to implement a Student Record and Transcript Data Exchange Subsystem. The statewide pupil accounting system, eSchoolPLUS, maintains transcript data for all secondary students and produces PDF transcripts for use by postsecondary institutions. DDOE has long desired to move beyond the current state-of-the-art transcript production and develop a system that will transfer transcript *data* from inter-connected eSchoolPLUS clients, other pupil accounting systems, colleges, universities or workplace applications. The interoperability of this subsystem will be supported by standard data structures, data formats, and data definitions to ensure linkage and connectivity among varied data formats and hierarchies. DDOE sees this initiative not only as a mechanism to revolutionize the transfer of transcript information, thereby increasing convenience among all users, but *will also serve as a mechanism to drive the necessary buy-in throughout K-12 and postsecondary education to adopt statewide standards in regard to standard data types, data definitions, formats and even GPA calculations*. Statewide common course codes, GPA calculations and student attendance definitions would follow as a logical step in automating the movement of student transcript data. In addition, *since all eSchoolPLUS clients are required to produce transcripts that include the DDOE unique student identifier, we anticipate greatly improved data linkages with the state public and private institutions of higher education as well as improved linkages with workforce data*. If this application for SLDS funds is successful, initial planning could begin immediately, followed by the identification of a state-approved IT consulting firm that would augment DDOE staff by furnishing additional application developers and programmers. Furthermore, by

¹ The Correlates of Achievement Data-Based Indicator System (CoA) was created in 2005 and represents a joint partnership between DDOE and the University of Delaware Research & Development Center and the Delaware Academy for School Leadership (DASL). CoA is based on ETS' Parsing the Achievement Gap report (<http://www.ets.org/Media/Research/pdf/PICPARSING.pdf>, <http://www.ets.org/Media/Research/pdf/PICPARSINGII.pdf>), a research synthesis of indicators that affect student achievement. CoA was made available to school and district administrators with the goal of providing them with a user-friendly data system to help them make decisions to improve their schools and with the specific intent to aid in closing the achievement gap among various student groups. Current indicators included in the system focus on student curriculum, teacher experience and preparation, class size, student engagement, suspension and student attendance. Administrators have thus far found CoA to be informative and useful in their school planning and improvement efforts. The Parsing the Achievement Gap II report shows that little has changed in the achievement gaps between subgroups, indicating that work still needs to be done to close achievement gaps. In addition, an expansion of CoA would provide an opportunity to determine if trends indicate that schools are changing over time in regard to these indicators. Determining which additional indicators are available now in Delaware and how they would be collected and reported would be a logical exercise to include in DDOE's overall initiative to develop and expand enterprise reporting.

documenting each development component of the Student Record and Transcript Data Exchange Subsystem, DDOE would be able to share the technology with other states who are contemplating similar systems.

Tasks/Outputs – Student Record and Transcript Data Exchange Subsystem

1. Implement a subsystem capable of generating transcript data for exchange between all public PreK-12 schools and districts and among the institutions of higher education in Delaware.
2. Create and deploy the Delaware Transcript Center application, with appropriate levels of access and activities for school, district, postsecondary and public users.
3. Create state data standards for student record and transcript data.
4. Adopt a statewide course classification system aligned with the Secondary School Course Classification System, School Codes for the Exchange of Data (SCED) system and will be capable of meeting the requirements for linking teachers and students and measuring academic growth for use in this and other DASER system applications described in this document.
5. Develop and provide in-person and online training modules for the various types of users.

(c) Timeline

Project Outcome 1: Client ID Crosswalk Subsystem Timeline

Year	Completion Quarter	Activities
1	1	The Health Education and Workforce Council meets to solidify support for DASER and define agency expectations of the system.
1	1	Agency heads will designate staff to serve on Enterprise Data Warehouse Committee, which will drive and manage development and determine standards for interoperability.
1	1	Agency heads will designate staff to serve on Enterprise Data Warehouse Research and Development Committee, which will develop a preliminary research agenda and processes for requesting and using data for ad hoc research projects.
1	1	Early Childhood Data Committee will meet to define and develop a work plan for consolidating desired data elements into a cube.
1	2	Define a project scope with clear objectives for collecting interagency data. Determine feasibility statuses for the desired contributions from the various agencies and identify any regulatory roadblocks that need to be addressed. Interview agency staff as necessary.
1	3	Document all requirements and recommendations for addressing obstacles. Prepare reports as needed to Health, Education and Workforce Council and other stakeholders (ongoing).
1	4	Add to metadata and architecture models. Select and design technology, data, and business intelligence applications. Design databases. Deploy application, test and establish maintenance plan.
2	1	Develop database queries that will track children receiving services across state agencies. Prepare standard reports that meet the needs of stakeholders (e.g. to help make resource allocation decisions). Prepare reports with findings for the Health, Education and Workforce Council (ongoing).
2	4	Analyze data to determine where relationships exist between services received and possible links to student achievement. Report as required.

Project Outcome 2: Interoperability Timeline

Year	Completion Quarter	Activities
1	1	Develop a logical entity relationship diagram (ERD) design of the logical structure of the databases.
1	4	Develop an online metadata dictionary with statewide standard definitions and codes aligned with national standards.
1	4	Develop policies and procedures to support interoperability by using standard data structures, data formats and data definitions to ensure linkage and connectivity among the various levels and types of data.
2	1	Develop database queries that will track children receiving services across state agencies. Prepare standard reports that meet the needs of stakeholders (e.g. to help make resource allocation decisions). Prepare reports with findings for the Health, Education and Workforce Council (ongoing).
2	4	Design and document an enterprise relational data model for the DDOE and all agencies, organizations and school districts.
2	4	Document all quantitative statistics and/or indicators (e.g. dropout rates) and other key facts (e.g. disaggregation by school name).
2	4	Analyze data to determine where relationships exist between services received and possible links to student achievement. Report as required.
3	4	Add to metadata and architecture models. Select and design technology, data, and business intelligence applications. Design databases. Deploy application, test and establish maintenance plan.
3	4	Produce a sustainable, policies and procedures manual documenting and consolidating laws, regulations, guidelines, policies, etc., related to the collection, storage, access, use and destruction of data.
3	3	Document all requirements and recommendations for addressing obstacles. Prepare reports as needed to Health, Education and Workforce Council and other stakeholders (ongoing).

Project Outcome 3: Client Management Subsystem Information Layer Timeline

Year	Completion Quarter	Activities
1	1	Develop processes to continually evaluate how data is collected and used.
1	1	Link P-20 data with National Student Clearinghouse data for a more complete view of student postsecondary enrollment activity such as college transfer activity, time-to-degree and student readiness and persistence in higher education.
1	2	Integrate Drop-Out Prevention system, with its indicators of at-risk students.
1	2	Develop the Individual Student Profile based on stakeholder feedback during Innovation Action Team meetings (Summer, 2009). Organize focus groups to solicit recommendations to improve and/or expand the information included on the profiles.
1	4	Build capacity within DDOE for planning, research and analysis in order to develop reporting mechanisms that can be used for program evaluation.
1	4	Create a data framework for capturing essential early childhood indicators.
1	4	Link teachers with the postsecondary teacher preparation programs that prepared them for the classroom and compare with student achievement.
1	4	Develop training that orients educators, parents and policy makers to available data and how it informs continuous school and instructional improvement.
1	4	Develop a communications and outreach strategy to raise awareness of available data and how DDOE is designing it to inform continuous school improvement.
2	4	Link P-20 data to workforce needs.
2	4	Link postsecondary outcomes to K-12 curriculum and achievement data.
2	4	Develop training that orients educators, parents and policy makers to available data and how it informs continuous school and instructional improvement.
3	4	Create data transformation systems as needed to seamlessly import data from external agencies.
3	4	Build new data repositories that integrate and link student, staff, school facility and financial data.

Project Outcome 4: Enterprise Identity Management and Portal Subsystem Timeline

Year	Completion Quarter	Activities
1	4	Establish a unified Active Directory overlying all DDOE information layers.
1	4	Establish relational directory that shows relationships among users and resources.
1	4	Establish directory manager which allows administrators to set access rights for individual users as well as groups
2	2	Establish a single sign-on point of entry to the Client Management System Information Layer, permitting users anytime access to information in formats of their choosing to facilitate analysis for decision-making.
2	4	Establish customized views for specific user-types.
3	4	Establish communication and collaboration connections for interactive tools such as meeting services, real-time polls, chats, whiteboard, etc.
3	4	Establish online community sites that are a location with specific content and customized views for particular groups of users.

Project Outcome 5: Enterprise Reporting Timeline

Year	Completion Quarter	Activities
1	1	Create a student profile report with indicators such as achievement, growth, attendance, school mobility and other data elements. Release online dashboard format of student profile when appropriate.
1	1	Collaborate with researchers to begin development of reports that can be used immediately to impact instructional outcomes and foster school improvement (ongoing).
1	1	Commence educator training and professional development plans on available reporting. Plan future needs and communication venues to reach all stakeholders.
1	4	Define needs. Determine available reporting capabilities and prioritize future development based on need and emerging data availability. Collect requirements.
2	2	Begin development of metadata, architecture models and build reporting modules.
2	4	Standardize statewide course codes, GPA calculations, attendance and others measures to promote comparison across districts and schools.
2	4	Create reporting modules that inform policy makers, educators, teachers and parents with appropriate data.
2	4	Develop reporting module that links student and staff data with facility and financial data to aid in more effective resource allocation.
3	4	Expand Correlates of Achievement Data-Based Indicator System to include interagency indicators. Develop corresponding professional development and training.
3	4	Research how P-20 data can be used to show relative alignment with state workforce needs. Create accompanying reports and add to appropriate reporting modules.

Project Outcome #6 Student Record and Transcript Data Exchange Subsystem Timeline

Year	Completion Quarter	Activities
1	1	Form an advisory committee comprised of 8-12 public school district and higher education representatives to provide guidance and oversee the project, tentatively named the Delaware Transcript Center system.
1	1	Upon receiving Delaware’s approval of the proposed project scope, the National Transcript Center (acting on DDOE’s behalf), will facilitate initial discussions surrounding basic transcript formats and other compatibility requirements and respond to technical concerns.
1	2	Advisory committee produces an initial Delaware Transcript Center data specification document.
1	3	Analyze SCED handbook.
1	3	Hire/designate a curriculum-scheduler staffperson.
1	3	Make modifications to current data systems.
1	3	Develop district training methodologies and materials.
1	3	<p>District communication and registration plan commences.</p> <p><u>Within 30 days of approval of project plan</u></p> <ol style="list-style-type: none"> 1. “Coming Soon” document explaining key features, attributes and benefits is distributed to all districts, regional education agencies and data service centers. 2. Release a joint press release with a quotation, to state, local and industry media from the Secretary of Education or Deputy declaring the benefits and cost-savings of the system. <p><u>Within 60 days of approval of project plan</u></p> <p>Frequently Asked Questions distributed to districts, regional education centers, data service centers, K-12 Instructional Data Warehouse Governance Council and the Enterprise Data Warehouse Governance Council. FAQ’s include information about data security policies and FERPA compliance.</p> <p><u>Within 90 days of approval of project plan</u></p> <p>Distribute a data specifications sheet to all districts, regional education centers and data service centers.</p>
1	4	Code and train district staff in four districts.
1	4	Refine training manual and materials.
1	4	Compare state course equivalent codes among different districts and recode as necessary.
1	4	The Delaware Transcript Center web site will be created, launched and branded using DDOE logos and graphics. The National Transcript Center will provide DDOE with a design prior to launch with mock-up approval. In order to accustom a pilot group of guidance counselors and registrars to the Delaware Transcript Center,

		initial functionality will permit participating districts to send and receive PDF-formatted records and transcript, with no data support.
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Project Outcome #6 Student Record and Transcript Data Exchange Subsystem Timeline - Continued

1	4	Data specifications are published and circulated to LEAs, schools, districts and postsecondary institutions.
1	4	Pearson will commence programming for the Delaware Transcript Center that adds functionality permitting the receipt and transmittal of student record and transcript data.
1	4	Pearson initiates contact with public postsecondary institutions and encourages usage of the Delaware Transcript Center.
2	3	Code and train remaining districts and charter schools.
2	3	Begin setups and loading of data for eSchoolPLUS state course coding system in the course catalog.
2	3	Revise training materials.
2	3	Establish process for annual review of training materials and review and update of state course equivalents.
3	4	Pearson will host Delaware Transcript Center webinars and provide online video tutorials to registered PreK-12 school and district end users. Users will have access to the Delaware Transcript Center web site that includes PDF User Manuals and FAQs.

(d) Project Management and Governance Plan

Data Governance

DDOE is prepared to build on its track record of competent data stewardship of its K-12 Instructional Data Warehouse and prepared to implement intra-agency data governance processes that will facilitate the use of data in fostering continuous improvement across the Delaware public education system. Furthermore, DDOE will seek the necessary support from the Executive and Legislative Branches of Delaware state government to implement the interagency data governance structures needed to deliver collaborative data for research and analysis. Delaware Code presently requires the Cabinet-level agency heads from the Department of Education, Department of Labor, Department of Health and Social Services, and Department of Services for Children, Youth and Their Families to collaborate on issues and research of mutual interest. Drawing on the spirit of this mandate, DDOE intends to recommend implementation of two standing councils to establish a comprehensive data governance plan that encompasses both the K-12 Instructional Data Warehouse (intra-agency) and the Enterprise Longitudinal Data Warehouse (inter-agency) components that will comprise the new DASER system.

K-12 Instructional Warehouse Governance Council – Oversee governance of K-12 Instructional Data Warehouse component of DASER.

Responsibilities: Monitor progress on DASER and guide its development.

Membership: Director, DDOE Technology Management and Design, DDOE Data Managers, DDOE Work-Group Directors, University of Delaware’s Delaware Academy for School Leadership Director.

- **K-12 Data Warehouse Policy Committee:**
Responsibilities: Interoperability and policy-making regarding the compliant usage and access of K-12 Instructional Data. Identifies data elements needed. Develops training plans for DDOE and district personnel on DASER.
Membership: DDOE and District Data Stewards.
- **K-12 Instructional Data Warehouse Research and Development:**
Responsibilities: Drive and build capacity within DDOE for K-12 Instructional Data analysis and recommend reports and other venues for communicating results to stakeholders.
Membership: DDOE and District Data Coordinators.
- **Pupil Accounting Coordinators Committee:**
Responsibilities: Coordinate data collection, reporting and training on the K-12 Pupil Accounting System.
Membership: District Pupil Accounting Data Coordinators.

Health Education and Workforce Council (HEWC) – Oversee governance of the Enterprise Longitudinal Data Warehouse component of DASER. Define relationships between disparate data sets (e.g. social services and education data), and prioritize what will be studied and measured and how it will be reported. Align data integration activities with state goals. Appoint appropriate personnel to related data governance subcommittees.

Membership: Cabinet-Level officials from agencies who contribute data to the Enterprise Longitudinal Data Warehouse (state agencies, external service providers, institutions of higher education).

Responsibilities: Identifies needs requiring Cabinet-level support in building the Enterprise Longitudinal Data Warehouse so that it meets the needs of each respective agency's stakeholders. Appoints members, coordinates activities of and hears reports from the following sub-committees:

- **Early Childhood Data Committee**

Responsibilities: Serves as a resource on available early childhood data and coordinates the elements necessary to build the Early Childhood Data Cube within the Enterprise Longitudinal Data Warehouse.

Membership: Co-Chairs (One from DDOE Technology Management and Design (TMD), One from an Early Childhood agency), Data Stewards from the state agencies with primary early childhood care and education responsibilities.

- **Enterprise Data Warehouse Committee**

Responsibilities: Interagency linkage and interoperability within the Enterprise Longitudinal Data Warehouse.

Membership: Co-chairs (One from DDOE TMD, One from agency external to DDOE), Interagency Data Stewards.

- **Enterprise Data Warehouse Research and Development Committee**

Responsibilities: Consider Enterprise Longitudinal Data Warehouse data requests. Build a robust research agenda that meets the needs of DDOE Plan Goals as well as the needs of both DDOE and interagency stakeholders with information dissemination coordinated primarily through DASER.

Membership: Chair, Interagency Data Coordinators, researchers and analysts, including institutions of higher education and other state agencies.

Project Outcome 1: Client ID Crosswalk Subsystem Project Management and Governance Plan

System Development: Enterprise Data Warehouse Committee (Inter-Agency collaboration), Director, DDOE Technology Management & Design (DDOE TMD), Database Manager (DDOE TMD), Programmers (DDOE TMD & Contracted), Security Administrator (DDOE TMD), Server Administrators, Delaware Department of Technology and Information.

Early Childhood Data Cube: Early Childhood Data Committee (Inter-Agency Data Stewards and Coordinators), Director, DDOE TMD, Database Administrator (DDOE TMD), Security Administrator (DDOE TMD).

System Reports & Queries: Enterprise Data Warehouse Research and Development Committee (Inter-Agency data users, analysts and researchers), Database Administrator.

Location, Development Activities – Client ID Crosswalk Subsystem: Primarily DDOE TMD.

Project Outcome 2: Interoperability Project Management and Governance Plan

Overall oversight: Director, DDOE Technology Management and Design

Interoperability Policies: Enterprise Data Warehouse Committee (Inter-Agency collaboration), Director, DDOE Technology Management & Design (TMD), Database Manager (DDOE TMD), Programmers (DDOE TMD & Contracted), Security Administrator (DDOE TMD), Server Administrator, (DDOE TMD), DDOE ED FACTS Coordinator, DDOE Wiki Coordinator, Delaware DTI Server and Data System Administrators, Contracted Programmers and Developers.

Location, Interoperability Policy Development, Testing – Interoperability: Primarily DDOE TMD.

Project Outcome 3: Client Management Subsystem Information Layer Project Management and Governance Plan

Overall oversight: Director, DDOE Technology Management and Design.

Component Management:

Data Evaluation Processes

K-12 Instructional Data Warehouse Governance Council, K-12 Instructional Data Warehouse Development Committee, DDOE TMD staff, External contractors.

Early Childhood Data Cube Development

K-12 Instructional Data Warehouse Development Committee, Early Childhood Data Cube Committee, DDOE Database Manager, DDOE Information Security Officer, DDOE Information Resource Manager, Early Childhood Agency Personnel.

Course Competency Alignment

Delaware P-20 Council, DDOE Curriculum Development Workgroup, Statewide Curriculum Cadre.

Research, Analysis and Reporting Strategies and Processes

K-12 Instructional Data Warehouse Governance Council, K-12 Instructional Data Warehouse Research and Development Sub-Committee.

Link Teachers & Teacher Preparation Programs

K-12 Instructional Data Warehouse Governance Council, K-12 Instructional Data Warehouse Research and Development Sub-Committee, Professional Accountability Workgroup.

Drop Out Prevention System Integration

DDOE Applications Manager, DDOE Database Manager, DDOE Information Resource Manager, Policy Analyst, State Board of Education, P-20 Council.

Link P-20 to Workforce Needs

Delaware P-20 Council, Department of Labor, Delaware Economic Development Office, Health Education and Workforce Council.

Link P-20 Performance to K12 Curriculum and Achievement

Delaware P-20 Council, Assessment and Standards Workgroup, K-12 Instructional Data Warehouse Research and Development Sub-Committee, External Education Research Contractor.

Link P-20 Data with National Student Clearinghouse Data

Delaware Higher Education Commission Data Analyst, Delaware P-20 Council, DDOE Information Resource Manager, DDOE Database Manager, DDOE Applications Manager.

Link Student Data with School Facility and School Finance Data

DDOE TMD Database Administrator, DDOE Financial Management Work Group, External Contractor, DDOE Information Resource Manager, DDOE Database Manager, DDOE Applications Manager.

Data Validation and Reliability

K-12 Instructional Data Warehouse Development Committee, DDOE Database Manager, DDOE Applications Manager, External Contractor.

Student Profile Report

Director, DDOE Pupil Accounting Data Manager, K-12 Instructional Data Warehouse Research and Development Sub-Committee.

Data Transformation Systems

DDOE Applications Manager, DDOE Database Manager, External Contractor.

Training and Professional Development

K-12 Instructional Data Warehouse Development Subcommittee, DESS.

Communications and Outreach Strategy

K-12 Instructional Data Warehouse Development Subcommittee, DDOE Pupil Accounting Coordinator, Policy Analyst – State Board of Education.

Location – Client Management Subsystem Information Layer Activities: DDOE.

Project Outcome 4 Enterprise Identity Management and Portal Subsystem Project Management and Governance Plan

Overall oversight: Director, DDOE Technology Management and Design.

Unified Active Directory, relational directory, directory manager, customized views: DDOE Network Manager, DDOE Security Administrator, DDOE Applications Coordinator, DDOE Server Administrators, DDOE Database Managers, DDOE Pupil Accounting Coordinator, K-12 Data Policy Committee, Enterprise Data Warehouse Committee, and External Contractor.

Customized Views, Web 2.0 functionality, online communities: Director, DDOE Technology Management and Design, DDOE Network Manager, DDOE Security Administrator, DDOE Applications Coordinator, DDOE Server Administrators, DDOE Database Managers, DDOE Pupil Accounting Coordinator, K-12 Data Policy Committee, Enterprise Data Warehouse Committee, Stakeholder Focus Groups as needed, External Contractor.

Location – Enterprise Identity Management and Portal Subsystem: DDOE.

Project Outcome 5: Enterprise Reporting Project Management and Governance Plan

Overall oversight: Director, DDOE Technology Management and Design.

Create a Student Profile Report: Director, DDOE Technology Management and Design, DDOE Pupil Accounting Coordinator, Educator Focus Groups.

Define needs and capabilities: K-12 Instructional Data Warehouse Research and Development

Training, Professional Development, Communication Plan: Director, DDOE Technology Management and Design, DESS, DDOE Pupil Accounting Coordinator, DDOE Applications Coordinator, Educator Focus Groups.

Metadata, architecture models, report development: External Contractor

Statewide course codes, GPA, attendance: Director, DDOE Technology Management and Design, DDOE Applications Coordinator, DDOE Pupil Accounting Coordinator, Curriculum Management and Design Workgroup.

Reporting Modules: Director, DDOE Technology Management and Design, DDOE Applications Coordinator, DDOE Pupil Accounting Coordinator, External Contractor, Stakeholder Focus Groups as needed.

Parent, Student User Interface: Director, DDOE Technology Management and Design, DDOE Applications Coordinator, DDOE Pupil Accounting Coordinator, External Contractor, Stakeholder Focus Groups as needed.

P-20 Alignment to workforce needs: DDOE Applications Coordinator, P-20 Council, Enterprise Longitudinal Data Warehouse Research and Development Committee

Correlates of Achievement System expansion: DDOE Pupil Accounting Coordinator, DDOE Applications Coordinator, DDOE Information Security Officer, DDOE Information Resources Manager, Health Education and Labor Council, Enterprise Longitudinal Data Warehouse Committee, K-12 Longitudinal Data Warehouse Policy Committee, Enterprise Longitudinal Data Warehouse Research and Development Committee, K-12 Longitudinal Data Warehouse Research and Development Committee, Early Childhood Data Committee, University of Delaware Research and Development Center, Delaware Academy for School Leadership, School and District Data Managers and Administrators.

Location – Enterprise Reporting Activities: DDOE (report and applications development), Districts, Schools, University of Delaware Research and Development Center.

Project Outcome #6 – Student Record and Transcript Data Exchange Subsystem Project Management and Governance Plan

Overall oversight: Director, DDOE Technology Management and Design

Develop, test and train on Student Record and Transcript Data Exchange Subsystem: DDOE Pupil Accounting Coordinator (Project Manager), DDOE Applications Coordinator, DDOE Network Administrator, DDOE Information Security Administrator, K-12 Instructional Data Warehouse Governance Council, Enterprise Longitudinal Data Warehouse Council, External Contractor(s), User Focus Groups as needed, DESS, Curriculum Development Workgroup, State Board of Education Policy Analyst.

Location – Student Record and Transcript Data Exchange Subsystem development: Primarily DDOE, training activities at schools, districts, regional service and data centers, institutions of higher education.

(e) Staffing

The following organizations and individuals will be primarily responsible for the accomplishment of the projects identified in this application for SLDS funds:

Delaware Department of Education

The Delaware Department of Public Instruction (DPI) was created in 1925. In 1997, the Delaware General Assembly passed legislation modifying DPI by making it a cabinet-level agency and changing its name to the Delaware Department of Education (DDOE). The position of State Superintendent was supplanted by the position of Secretary of Education, who serves at the pleasure of the Governor.

Secretary of Education

Dr. Lillian M. Lowery was appointed Secretary of Education in 2009 by Governor Jack Markell. Dr. Lowery holds a Doctorate in Education degree from Virginia Polytechnic Institute and State University, a master's degree in Education from the University of North Carolina at Charlotte and a Bachelor of Arts degree from North Carolina Central University. Prior to her appointment, Dr. Lowery served as Superintendent of the Christina School District in Wilmington. Before arriving in Delaware, Dr. Lowery was the Assistant Superintendent of Cluster VII for Fairfax County Public Schools in Fairfax, Virginia. She also served two years as an Area Administrator for Fort Wayne Community Schools in Fort Wayne, Indiana. She has seven years experience as a school building administrator and taught middle and high school English for 17 years in school districts in Virginia and North Carolina.

Delaware Department of Education Structure

DDOE is presently comprised of four branches: 1) Administration and Innovation, 2) Curriculum and Instructional Support, 3) Finance and Services, and 4) Career/Adult Education and Consolidated Programs. The Career/Adult Education and Consolidated Programs Branch provide leadership and oversight for statewide administrative and instructional technology. Administrative technology is assigned to the Technology Management and Design Work Group.

The Technology Management and Design Work Group will be primarily responsible for carrying out the activities of this grant.

Delaware Department of Education Technology Management and Design Work Group

The mission of the Technology Management and Design Work Group is to collect, organize and facilitate access to accurate and current data in order to provide schools, districts, DOE program managers and other consumers of education data with easy access to information that is needed to make informed decisions. The guiding principles for the Technology Management and Design Work Group are to : 1) Collect data centrally at DDOE as much as is feasible, 2) Improve the quality of educational decision making by providing accurate and timely

information to stakeholders and 3) Improve the quality of reporting mechanisms and provide user-friendly access to databases and reports.

The Technology Management and Design Work Group is staffed with personnel having expertise in database management, programming, project management, reporting, help desk and other areas that serve to furnish DDOE with a full range IT services. The Director manages a budget that includes system and hardware maintenance, software and application upgrades and the new acquisition software and hardware. The Technology Management and Design Work Group have the support of and the assistance of the Secretary of Education's Cabinet and Administrative Council in carrying out the activities of the SLDS-funded project. In addition, statewide resources such as the Curriculum Cadre, Pupil Accounting Coordinators, Delaware Department of Technology and Information, Principals Academy, P-20 Council, State Board of Education and others.

Associate Secretary for Career/Adult Education and Consolidated Programs

Dr. Michael Owens is the present Associate Secretary for Career/Adult Education and Consolidated Programs at DDOE. Dr. Owens has been a Delaware educator for more than 30 years. Dr. Owens' resume is attached.

Anticipated Time Allocation to SLDS Grant Activities, Dr. Michael Owens: 5%

Director, Technology Management and Design Work Group

Robert Czeizinger is the Director of Technology Management and Design at DDOE. He graduated from Wilmington College with a Master's of Science degree in Public Administration in 1999. He has worked in the IT field in the areas of information resource management, project lead and IT department management for more than 26 years. He has worked at DDOE for 15 years. Mr. Czeizinger is responsible for managing DDOE's data collection efforts as well as maintaining DDOE's technology infrastructure and the work group's personnel.

Anticipated Time Allocation to SLDS Grant Activities, Robert Czeizinger: 25%

Education Associate, Pupil Accounting

Bruce Dacey is the Education Associate, Pupil Accounting for DDOE and assigned to the Technology Management and Design Work Group. Dr. Dacey will serve as Project Manager for the SLDS Grant. Prior to serving in his present role at DDOE, Dr. Dacey was a teacher and administrator in Delaware for 26 years. He has a Doctorate in Education from Wilmington University and holds MCSE and MCT certifications. Bruce has extensive knowledge and experience with the SLDS and has served in leadership roles in national and state professional organizations.

Anticipated Time Allocation to SLDS Grant Activities, Dr. Bruce Dacey: 50%

Education Associate, Application Development Management

Jeff Fleming serves in the role of Manager of Application Development. He has served in

various capacities in technology and data management at the Department of Education for 10 years and holds a Master's of Science Degree in Public Administration from Wilmington University. Mr. Fleming has extensive experience managing external contracts for programming services to offer the SLDS Grant project.

Anticipated Time Allocation to SLDS Grant Activities, Jeff Fleming: 30%

Education Associate, Information Resource Management

Matthew Wright is the Education Associate, Information Resource Management at the Technology Management and Design Work Group. Mr. Wright has a Master's of Science of Business Management and a Bachelor of Science Degree in Information Resource Management. Mr. Wright has worked for DDOE for eight years and manages all aspect of the computer systems and data center.

Anticipated Time Allocation to SLDS Grant Activities, Matthew Wright: 10%

Education Associate, Information Security

Paul Pond is the Information Security Officer for DDOE. He graduated from Wilmington University in 2008 with a Bachelor of Science Degree in Computer and Network Security. Mr. Pond has worked in technology for 27 years, including 20 years while in military service and 7 years as a civilian network engineer. He is responsible for developing, implementing and enforcing the policies, standard, guidelines and processes used to ensure the departmental systems and school district data are secured from internal and external threats and from natural disaster.

Anticipated Time Allocation to SLDS Grant Activities, Paul Pond: 25%

Policy Analyst, Delaware State Board of Education

Judi Coffield is the Policy Analyst for the Delaware State Board of Education and serves as staff for the Delaware P-20 Council. Judi completed her undergraduate work at West Liberty State College (WV), where she graduated with honors. She earned a Master's Degree in Instruction and Doctorate Degree in Educational Leadership at the University of Delaware. Judi has 23 years of experience in education ranging from classroom teacher to building, district and state level administration.

Anticipated Time Allocation to SLDS Grant Activities, Judi Coffield: 10%

Data Analyst, Delaware Higher Education Commission

Alan Phillips is the Data Analyst for the Delaware Higher Education Commission, a division of the Delaware Department of Education, where he has worked for 11 years. He is the Chair of the P-20 Data Committee, which is charged with collecting the data for the P-20 Data Cube. He is presently working on a Master's of Science in Higher Education Administration with a concentration in Institutional Research.

Anticipated Time Allocation to SLDS Grant Activities, Alan Phillips: 25%