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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.).

<b>Application for Federal Assistance SF-424</b>		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: 12/4/2009		4. Applicant Identifier:
5a. Federal Entity Identifier:		* 5b. Federal Award Identifier: N/A
<b>State Use Only:</b>		
6. Date Received by State:		7. State Application Identifier:
<b>8. APPLICANT INFORMATION:</b>		
* a. Legal Name: Georgia Department of Education		
* b. Employer/Taxpayer Identification Number (EIN/TIN): 586002042		* c. Organizational DUNS: 806743159
<b>d. Address:</b>		
* Street1:	205 Jesse Hill Drive	
Street2:		
* City:	Atlanta	
County:	Fulton	
State:	GA	
Province:		
* Country:	USA	
* Zip / Postal Code:	30334	
<b>e. Organizational Unit:</b>		
Department Name: Office of Technology Services		Division Name: Information Technology
<b>f. Name and contact information of person to be contacted on matters involving this application:</b>		
Prefix:	* First Name:	Robert
Middle Name:		

\* Last Name: Swiggum

Suffix:

Title: Georgia LDS Project

Organizational Affiliation:

Georgia Department of Education

\* Telephone  
Number:

(404)869-1011

Fax Number:

(404)651-9503

\* Email: RSWIGGUM@DOE.K12.GA.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:**

NA

Title:

N/A

**13. Competition Identification Number:**

Title:

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

Entire State of Georgia

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

Georgia LDS Project

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: GA

\* b. Program/Project: All

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

**Attachment:**

Title :

File :

**17. Proposed Project:**

\* a. Start Date: 4/1/2010

\* b. End Date: 12/31/2012

**18. Estimated Funding (\$):**

a. Federal	\$ 14515480
b. Applicant	\$
c. State	\$
d. Local	\$
e. Other	\$
f. Program Income	\$
g. TOTAL	\$ 14515480

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

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

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

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

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

Yes  No

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

**\*\* I AGREE**

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

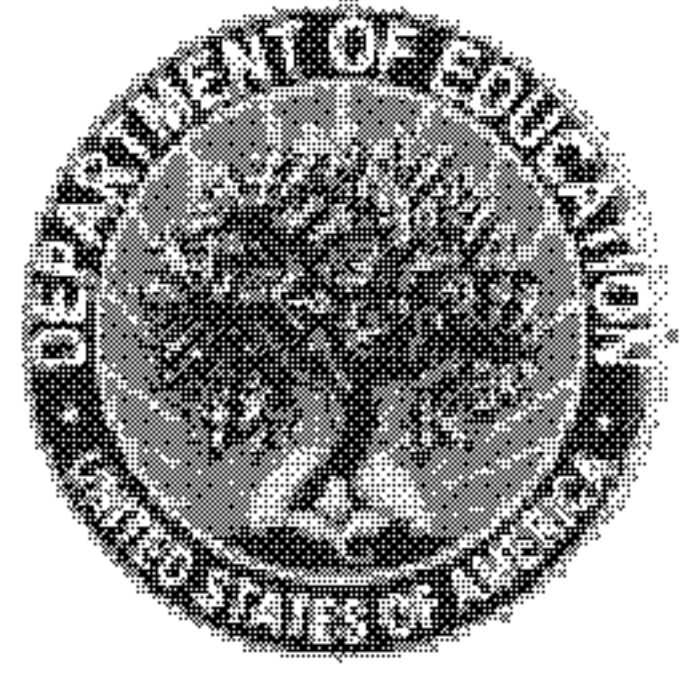
**Authorized Representative:**

Prefix:	* First Name:	Elizabeth	
Middle Name:			
* Last Name:	Webb		
Suffix:			
Title:	Director, Innovative Academic Programs Division		
* Telephone Number:	(404)651-7275	Fax Number:	(404)651-8507
* Email:	EWEBB@DOE.K12.GA.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:  
Georgia 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	\$ 2,500,162	\$ 2,500,162	\$ 2,143,012	\$ 0	\$ 0	\$ 7,143,336
2. Fringe Benefits	\$ 999,998	\$ 999,998	\$ 857,148	\$ 0	\$ 0	\$ 2,857,144
3. Travel	\$ 5,000	\$ 5,000	\$ 5,000	\$ 0	\$ 0	\$ 15,000
4. Equipment	\$ 1,500,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,500,000
5. Supplies	\$ 600,000	\$ 400,000	\$ 200,000	\$ 0	\$ 0	\$ 1,200,000
6. Contractual	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 600,000	\$ 600,000	\$ 600,000	\$ 0	\$ 0	\$ 1,800,000
9. Total Direct Costs (lines 1-8)	\$ 6,205,160	\$ 4,505,160	\$ 3,805,160	\$ 0	\$ 0	\$ 14,515,480
10. Indirect Costs*	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 6,205,160	\$ 4,505,160	\$ 3,805,160	\$ 0	\$ 0	\$ 14,515,480

**\*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:

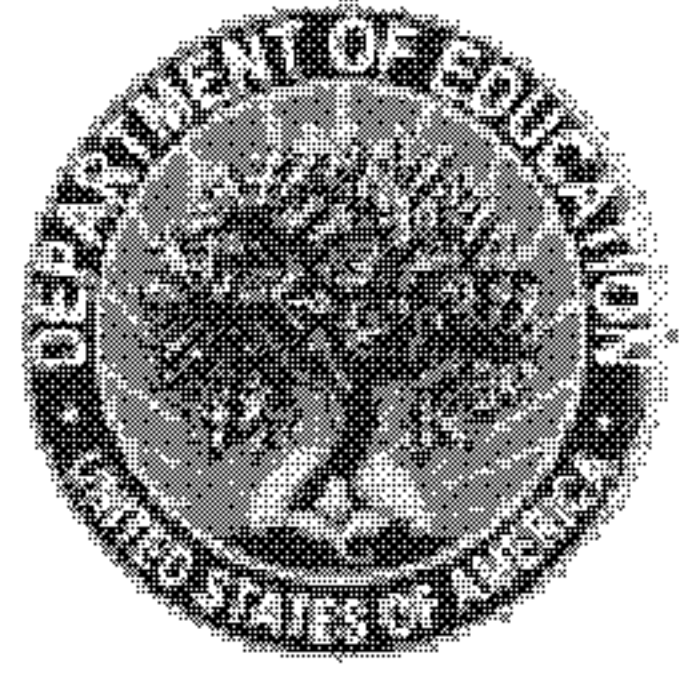
Period Covered by the Indirect Cost Rate Agreement: From: \_\_\_/\_\_\_/\_\_\_ To: \_\_\_/\_\_\_/\_\_\_ (mm/dd/yyyy)

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

(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 \_\_\_\_\_%





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

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:  
 Georgia Department of Education

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

**SECTION B - BUDGET SUMMARY**  
**NON-FEDERAL FUNDS**

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

## ASSURANCES - NON-CONSTRUCTION PROGRAMS

Standard Form 424B (Rev.7-97)

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

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

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

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

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



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

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

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

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

**Signature of Authorized Certifying Representative:**

**Name of Authorized Certifying Representative:** Bob Swiggum

**Title:** Chief Information Officer

**Date Submitted:** 12/01/2009

### Disclosure of Lobbying Activities

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

<b>1. Type of Federal Action:</b> <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	<b>2. Status of Federal Action:</b> <input type="checkbox"/> Bid/Offer/Application <input checked="" type="checkbox"/> Initial Award <input type="checkbox"/> Post-Award	<b>3. Report Type:</b> <input type="checkbox"/> Initial Filing <input type="checkbox"/> Material Change <b>For Material Change only:</b> Year: 0 Quarter: 0 Date of Last Report:
<b>4. Name and Address of Reporting Entity:</b> <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier, if known: 0 Name: N/A Address: City: State: Zip Code + 4: -  <b>Congressional District, if known:</b>	<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b> Name: Address: City: State: Zip Code + 4: -  <b>Congressional District, if known:</b>	
<b>6. Federal Department/Agency:</b> U. S. Department of Education	<b>7. Federal Program Name/Description:</b> Statewide Longitudinal Data Systems  CFDA Number, if applicable: 84.384A	
<b>8. Federal Action Number, if known:</b>	<b>9. Award Amount, if known:</b> \$0	
<b>10. a. Name of Lobbying Registrant</b> (if individual, last name, first name, MI): N/A Address: City: State: Zip Code + 4: -	<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI): N/A Address: City: State: Zip Code + 4: -	
<b>11.</b> 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: Robert Swiggum Title: Chief Information Officer Applicant: Georgia Department of Education Date: 11/30/2009	
<b>Federal Use Only:</b>		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

Georgia Department of Education

### PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Prefix:                      First Name: Robert    Middle Name:

Last Name: Swiggum    Suffix:

Title: Chief Information Officer

Signature: \_\_\_\_\_    Date: 12/01/2009

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

**1. Project Director:**

Prefix:	* First Name: Robert	Middle Name:	* Last Name: Swiggum	Suffix: Sr.
---------	-------------------------	--------------	-------------------------	----------------

Address:

* Street1:	205 Jesse Hill Drive
Street2:	
* City:	Atlanta
County:	Fulton
* State:	GA* Zip / Postal Code: 30334 * Country: USA

* Phone Number (give area code) (404)869-1011	Fax Number (give area code) (404)651-9503
--	--

Email Address:

RSWIGGUM@DOE.K12.GA.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: **Abstract** Pages: **1** Uploaded File: **\\gtcrsan2\Falcon\Docs\am294\Desktop\IES\Abstract\_LDS.pdf**



## **Project Abstract: Georgia Longitudinal Data System (GLDS)**

The Georgia Alliance of Education Agency Heads (AEAH) was created by Governor Perdue in 2006 and consists of the state's seven education-related agencies. The Alliance agencies are: the Department of Early Care and Learning (Pre-K), Department of Education (K-12), Technical College System of Georgia, University System of Georgia, Georgia Student Finance Commission, Professional Standards Commission, and the Governor's Office of Student Achievement. The Alliance is charged with collaborating on policies and programs that will prepare our students for the opportunities and challenges of the 21st century. The AEAH has identified multiple goals and strategies for improving the quality of education in Georgia, focusing on preparation for postsecondary education and transition into the workforce. However, to measure the effectiveness of the Alliance objectives, longitudinal data are needed that currently do not exist in Georgia.

In March 2009, the Georgia Department of Education (GADOE) was awarded \$8.9 million from the Institute of Education Sciences Statewide Longitudinal Data Systems grant (Georgia's "Chronicle" project). These funds are primarily designed to automate, streamline, enhance, and manage the data collection and reporting activities for the state's K-12 system. Additionally, it provided funds to develop and prepare for the linking of data with other state education partners. This application will complement and build upon the work started under the previous IES grant. Additionally, this proposal aligns with the opportunities and expectations of the Race to the Top Grant for which Georgia will apply, and also with the outcomes and expectations of the College and Career Ready Policy Institute (CCRPI) of which Georgia is a participant

Presently we are performing ad-hoc data matching of a longitudinal-nature using manual extracts and rudimentary matching criteria. These matches are typically performed to meet singular reporting needs, are time consuming, and provide limited information from which to make informed decisions. A statewide longitudinal data system (LDS) is needed to effectively measure outcomes, as well as provide continuous improvement, transparency, and accountability. This system will also serve as a resource for the seven educational agencies to track a student's academic history, thus contributing toward a seamless educational system.

The outcomes of this project include (1) the design, development, and implementation of a robust student-level, dimensional, P-20 LDS linking student, teacher, and teacher-preparedness information; (2) advanced data matching algorithms to ensure accurate matching of students from multiple source systems; and (3) development of a Decision Support System that will provide primary user-level access to the library of reports and information needed for decision making.

# Project Narrative

## Project Narrative - Project Narrative

Attachment 1:

Title: **Narrative\_LDS** Pages: **28** Uploaded File: \\gtrcsan2\Falcon\Docs\am294\Desktop\IES\Narrative\_LDS.pdf

## **Project Narrative**

### **(a) Need for Project**

Georgia's application for grant support of the development and completion of a statewide longitudinal P-20 data system is the product of the combined efforts of the state's education agencies: Georgia Department of Education (GADOE); University System of Georgia (USG); Technical College System of Georgia (TCSG); Department of Early Care and Learning (DECAL); Georgia Student Finance Commission (GSFC); Professional Standards Commission (PSC); and the Governor's Office of Student Achievement (GOSA). These agencies have formed an Alliance of Educational Agency Heads (AEAH), established in 2005, that shares five announced and agreed upon common educational goals: (1) Increase high school graduation rate, decrease high school drop-out rate, and increase postsecondary enrollment rate; (2) Strengthen teacher quality, recruitment and retention; (3) Improve workforce readiness skills; (4) Develop strong educational leaders, particularly at the building level, and; (5) Improve the SAT/ACT scores of Georgia students. The need for this support can be described in terms of supplementing Georgia's manifold efforts to improve its current education data collection efforts.

Georgia's efforts to improve its educational system throughout the entire educational P-20 to work pipeline depend on accurately and systematically describing in data both the educational process and the results of that process: student progression through the system and the ultimate success of students in endeavors for which they were prepared by the educational process. Data to inform those descriptions come from information collections primarily designed to support the day-to-day educational enterprise. These short-run business uses of data are important, but the sum of daily activities also leads to the ultimate end of education – student preparation. What follows is a description of Georgia's existing data collection efforts, our strengths and current data improvement activities, and the weaknesses of the data that requires additional work that must be done for us to develop, construct, and later maintain a longitudinal data system that supports local, state and national needs. Finally, Georgia is a participant in the College and Career Ready Policy Institute (CCRPI) which is a competitively awarded grant designed to provide technical assistance to the nation's leading states to help them move from good to great in the following policy areas: goals, assessment, accountability, supports and interventions, pathways and models, and data. Within the CCRPI, Georgia has chosen to focus primarily on goals, assessment, accountability, and data; with the guiding principle that data is central to all other areas. The goals of the CCRPI align very well with the goals of the work proposed with this IES grant application as well as the Race To The Top program. The three opportunities are interrelated and complement one another regarding P20 longitudinal data systems. We continue with a brief summary of what our longitudinal data

system will be able to do if our request for funds is approved under the terms of this application.

### *An Overview of Georgia's Existing Data Collections*

The GADOE has worked in recent years to improve its K-12 data collections as a means of improving student outcomes. The most pressing data needs have been associated with the requirements on state student achievement mandated by the No Child Left Behind Act (NCLB), especially year-to-year progress on test results and measures related to high school graduation rates and school attendance. These K-12 data collections also support the state's full-time-equivalent-student based Quality Basic Education Act funding formula and provide data for program identification with a subsequent basis for the evaluation of state programs. Collections come from student information systems used in the 182 school systems and their 2,000+ schools. The student and business information systems used in Georgia's public schools are not standardized, but instead are purchased from a variety of vendors whose implementation in particular schools is frequently customized for the school.

The improvement of these K-12 collections will be supported by the development of Chronicle, the GADOE project designed to increase the frequency of data collections to better ensure the quality and timely availability of K-12 data. The main goal of Chronicle will be the production of formative data to improve instruction and the application of educational services. In performing these functions, data will also be generated to better calculate dropout rates and in tracking K-12 students, including students who may leave the state. Chronicle will also generate higher quality data that will become part of the P-20 data within the State Longitudinal Data System (SLDS).

The USG collects extensive institutional data on student enrollment, course-taking, remediation, and program participation as well as broader programmatic and faculty information. Its data collections are supported by its institutional student information system and various business systems. Standardization of software (Banner) exists in most of the USG except in the flagship institution, the University of Georgia, which uses its own legacy system. The USG has historically been able to provide system wide high school feedback summary reports to Georgia high schools on the progress of high school graduates within the USG.

The TCSG similarly collects extensive institutional data on student enrollment, course-taking, remediation and program participation as well as programmatic and faculty information. TCSG data collections are supported by common applications like Banner in the case of student information. While both TCSG and USG rely on Banner software, different data definitions and coding require data normalization in order to obtain comparable data. TCSG has also attempted to assess the linkage between participation in TCSG programs and the labor market.

The DECAL administers Georgia's voluntary pre-kindergarten for four-year-olds through a variety of public and private providers. Data collections within DECAL will provide data related to the nature and quality of services delivered to students in the program as well as student and teacher information. DECAL has chosen to adopt the GADOE's Georgia Testing Identifier (GTID) to facilitate student matches and ensure availability of data to assess the effects of its programs and program providers, including the qualifications of pre-kindergarten teachers and the various curricula offered and their relationships to subsequent student progress. This decision will aid in matching these students with students in the public education system.

The GSFC collects complete transcript data for all Georgia public and private high school graduates. This collection of data includes course-taking and grade histories for all high school grades (grades 9-12), and includes school grading and grade-weighting practices. The agency, through its GAcollge411.org mentor site, sends transcript data on behalf of students to Georgia colleges to which the students have applied. As required by state law, GSFC calculates grade point averages for all students using a common calculation method for purposes of determining student eligibility for the HOPE Scholarship, Georgia's merit-based scholarship. The GSFC also collects information on the use of state scholarship and grant programs by students within the state in both public and private institutions and for a few out-of-state colleges with which the state has a reciprocity agreement.

The PSC, as the agency responsible for teacher licensure, collects information on the educational background of all teachers licensed by Georgia, as well as information on all teacher preparation programs within the state. Additionally, PSC (with GADOE) collects information on Georgia public school teacher assignments, training and experience and salaries through the CPI (Certified/Classified Personnel Information) collections.

The GOSA is the agency responsible for collecting data from agencies and publishing data reflecting student achievement in the state of Georgia's P-20 educational system for accountability purposes. Its contributions to data collection include a linkage to data contained in the National Student Clearinghouse (NSC), which includes student attendance data for approximately 92% of all college students in the United States. By linking graduates to NSC data, GOSA has been able for the first time to publish systematic data on postsecondary participation by college for Georgia's public school graduates.

Given our current collections, the shared vision for a Georgia LDS involves the collection of data from business systems within education agencies (often obtained from school or school system level business systems) and the cleansing and storage of that data in agency-specific data warehouses. Data from the data warehouses will periodically be transferred to a P-20 data staging operation where data will be transformed and normalized for inclusion in the P-20 data warehouse. The state's longitudinal data system may be described as the entire chain of



collections from school to P-20 data warehouse, including links to labor and employment data. Reports and data extracts to provide information for education policy decision-makers or to summarize the educational process will come from the standardized data in the P-20 warehouse.

*Shortcomings in Current Data Collection and Reporting Efforts that must be Addressed in Building a Longitudinal Data System*

There is no agreed upon P-20 data model for the Georgia LDS, and the development of such a model will require an initial audit of potential data elements to be used in that system and a gap analysis of what remains to be done to improve data.

The elements and data element definitions may be well-known to Georgia agency data collectors and to those who supply the elements at the school/system/data provider level, but their presence, consistency over time and accuracy must be thoroughly explored before elements can be used as the basis of a longitudinal data system. The result of this data audit process will be to construct a P-20 model that is consistent with internal needs and with state and national reporting requirements. The results may also establish the need for modifications in the current data collections. This gap analysis will form the basis for a continuous data improvement model, including training for agency staff, by which data will be periodically audited in the light of changing requirements, such as data to support RTTT strategies. This process will be necessary to meet the requirements of capabilities two<sup>1</sup> and six<sup>2</sup> for state longitudinal data systems.

*There is not a standard agreed upon method of matching students who move from or transition to another educational level or from education providers in one sector to another.*

Past efforts to link data from various educational agencies have involved idiosyncratic data matching methods that have yielded mixed results. Within the GADOE, the standardization of identifiers for student testing purposes (the GTID, an algorithm based identifier created by the GADOE) has made significant headway in tying together data for Georgia students who stay in

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<sup>1</sup> “The system must facilitate and enable the exchange of data among agencies and institutions within the State and between States so that data may be used to inform policy and practice. Such a system would 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.”

<sup>2</sup> “The system must ensure the quality and integrity of data contained in the system”

the K-12 public sector, but there is still a residual problem in that the GTID is not used by students in all sectors and at all levels. The most common identifier, the student Social Security Number, is still used by most of the agencies involved in data collection efforts, including the GADOE, although other identifiers are used as well. Because of this, and because the LDS will require student records that join together data generated in different agencies, places and times, research on the most effective and efficient way to link student data must be undertaken so that a series of matching techniques may be used to build an LDS that identifies and links students with a very low percentage of unlinked data. This student data matching methodology can include data elements such as school, school system, address, date of birth, course-taking matches, and other data elements currently collected at the agency level. Once the matching process is specified, managers of the LDS can begin to put in place a series of data cleansing routines that will be necessary to periodically update and maintain the system, and a means of identifying students with a unique identifier for use in identifying matched students for the purpose of consolidating student records and for no other purpose. This single statewide student identifier is a required element<sup>3</sup> in state longitudinal data systems as described in the America COMPETES Act. Similarly, the ability to match students across the divides in the educational pipeline into postsecondary education is another required element that is currently incomplete in Georgia that will be satisfied upon completion of this work<sup>4</sup>.

Finally, a uniform method of tracking students from the educational system into employment and labor markets must be developed in order to assess the effects of education on the workplace, on the affluence of students related to their educational preparation and experiences, and on their needs for subsequent re-training and continuing education. Work in these areas that has previously been done in Georgia (in TCSG and by USG) has not been systematic enough for a true longitudinal data system with better student matching methods.

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<sup>3</sup> “ A unique statewide student identifier that does not permit a student to be individually identified by users of the system (except as allowed by Federal and State law).”

<sup>4</sup> “ Data that provide information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework.”

*There is need for research on the best and most secure way to provide reports and data from the P-20 data warehouse to the various users: parents, teachers, school and system administrators, policy-makers, state and federal agencies, researchers and the general public.*

Once the P-20 data model is developed and implemented and student matches have allowed for the development of consolidated student records a method for data reporting and data transfer must be developed. These methods should reflect the data needs of the various stakeholders in the educational system while safeguarding the privacy of students and teachers whose data is in the system. These methods will be in addition to any data transfer methods for formative purposes contained in the agency warehouses which are part of the LDS, like the data used by GADOE's Chronicle Student Profile system. The perfection of the student data matching methodology will enable postsecondary results data to be made available to inform both state and local education decision-making, a capability required of state longitudinal data systems<sup>5</sup>.

*Summary: The Functioning of Georgia's Longitudinal Data System Upon Final Construction Under the Terms of this Grant Application*

The state of Georgia has been tracking student achievement and success through interagency agreements for some years. Investigating and assessing how policies and policy changes affect post-secondary enrollment rests on our ability to track progression down to the student level. In addition to student level trend analysis, the state has developed a teacher preparation database to support the ability to analyze in-state post secondary teacher education programs.

This grant allows the infrastructure of the longitudinal data system (LDS) to be established as a series of operation data store (ODS) extractions into a dimensional data base. Currently the various education agencies utilize secure flat-file transfer utilities (FTU) and varied load processes for matching students between agencies from pre-K to post-secondary. Even with the long willingness to share data among the agencies, there has been no seamless way to merge and match data. Measuring outcomes through the education systems and into the labor force via the transferred flat file process requires vast resources. The matching process needed to uniquely identify students once their information is transferred between and among the various agencies is convoluted and tedious. This process begs the establishment and

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<sup>5</sup> "The system must enable data to be easily generated for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students."

implementation of a unique identifier to streamline and improve the process and facilitate more timely integration and interfacing of information among these agencies. The time needed to match students will be reduced with an identifier unique to Georgia. Such a unique identifier should adhere to any federal, state or locally mandated rules or legislation for protecting the student's identify.

The LDS will require data management to ensure quality and validity of the data. Incorporating data from seven agencies into one system for student tracking and reporting will require the creation a cleansing area for managing and ensuring data quality as well as a reporting layer to facilitate end user reporting. To begin, the warehouse the data elements need to be inventoried and normalized. Upon normalizing the data, an extraction process with a matching algorithm can be applied to place the data in the proper dimensions. Between departments a standardization of elements, either through a transfer or reference table, and appropriate data and metadata management software would need to be acquired and utilized to allow for a truly functioning longitudinal system.

Creating a LDS will allow for longitudinal studies to be performed. The analyses now performed with the departments sharing data consists more of cross sectional and repeated measures, but is not a true longitudinal analysis. These analyses would measure student transitions between grades and departments, teacher effectiveness, and provide data for decision making. Reporting from one system will provide the State the ability to identify and follow federal metrics in a timely manner and adjust policy to improve performance. Parents, teachers, and administrators will be granted differing roles through a business intelligence tool to follow the achievement of their students.

The increased complexity to comply with federal, state, and local districts' reporting needs and analysis due to separate systems has pushed the need for a unified data warehouse in Georgia. In addition to reporting, automated exchanges of data are needed for timeliness and cleansing. Collecting the data at certain time periods allows for scheduled reports to run for validation purposes. The current manual method of matching data between departments limits the ability to validate data and fix issues rapidly. Validation currently occurs only when running reports, thus some reports are withheld past deadlines due to not knowing the data issues until seeing the results.

*Some of the key features that will be supported by Georgia's proposed Longitudinal Data System that are not supported by existing resources and/or activities include the following.*

The creation of systematic data on course-taking patterns for graduates of public and private high schools and their effects on postsecondary progress variables such as hours attempted, hours earned, grades, choice of major, progression within the postsecondary system, etc.

Effects of teachers related variables (certification level, experience, preparation, qualities related to the preparation program, etc.) on student achievement within the P-12 and on postsecondary progress variables such as hours attempted, hours earned, grades, choice of major, progression within the postsecondary system, etc.

Linkages between educational experiences (participation in programs, coursework, etc.) and eventual workforce-related variables.

Please See Appendix C for more information on Georgia's current status regarding the capabilities and elements outlined in Section IV of the RFA.

## **(b) Project Outcomes Related to System Requirements and Implementation**

The specific outcomes envisioned for the Georgia Longitudinal Data System project are:

Outcome 1: Development of the Data System

1.1: Data Audit and Analysis

1.2: Data Model and Data Architecture

1.3: Extraction-Transformation-Load (ETL) process

Outcome 2: Improvement of Data Matching Algorithm Across Agencies

Outcome 3: Create a Decision Support System for the GLDS

3.1 Creation of initial high-level public reports that address the high school to college transition.

3.2 Document user reporting needs and functionality for all types and levels of user.

3.3 Evaluate business intelligence, dashboard, and reporting tools.

3.4 Build reporting layer access and security.

3.5 Build new reports according to user needs documented in Outcome 3.2.

### ***Outcome 1: Development of the Data System***

#### ***1.1 Data Audit and Analysis***

The GLDS will be fed from elements originally collected from business users of data that are transmitted at a polled point-in-time collection. While the points-in-time vary according to the collection type, their frequency determines the effort necessary to clean and square the data with previously collected data. For example, K-12 data collections depend on data obtained



