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 # R384A100018

Closing Date: DEC 04, 2009
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# Application for Federal Assistance SF-424

** Version 02 **

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## State Use Only:

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<th>6. Date Received by State:</th>
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<tr>
<td></td>
<td>State SLDS Grant</td>
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## 8. APPLICANT INFORMATION:

<table>
<thead>
<tr>
<th>* a. Legal Name:</th>
<th>Mississippi Department of Education</th>
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<table>
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<tr>
<th>* b. Employer/Taxpayer Identification Number (EIN/TIN):</th>
<th>* c. Organizational DUNS:</th>
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<tbody>
<tr>
<td>646000758</td>
<td>809399694</td>
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## d. Address:

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<thead>
<tr>
<th>* Street1:</th>
<th>359 North West Street</th>
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</thead>
<tbody>
<tr>
<td>Street2:</td>
<td>Post Office Box 771</td>
</tr>
<tr>
<td>* City:</td>
<td>Jackson</td>
</tr>
<tr>
<td>County:</td>
<td>Hinds</td>
</tr>
<tr>
<td>State:</td>
<td>MS</td>
</tr>
<tr>
<td>Province:</td>
<td></td>
</tr>
<tr>
<td>* Country:</td>
<td>USA</td>
</tr>
<tr>
<td>* Zip / Postal Code:</td>
<td>39205</td>
</tr>
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## e. Organizational Unit:

<table>
<thead>
<tr>
<th>Department Name:</th>
<th>Division Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Department of Education</td>
<td>Office of Research and Statistics</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Prefix:</th>
<th>Mr.</th>
<th>* First Name:</th>
<th>John</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Name:</td>
<td>O</td>
<td></td>
<td></td>
</tr>
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</table>
**Application for Federal Assistance SF-424**  

9. **Type of Applicant 1: Select Applicant Type:**
   - A: State Government

10. **Name of Federal Agency:**
    - U.S. Department of Education

11. **Catalog of Federal Domestic Assistance Number:**
    - 84.384A

12. **Funding Opportunity Number:**
    - ED-GRANTS-072909-001

13. **Competition Identification Number:**
    - Title:
    - Institute of Education Sciences;(IES) Grant Program for Statewide Longitudinal Data Systems Recovery Act Program (ARRA) CFDA 84.384A

14. **Areas Affected by Project (Cities, Counties, States, etc.):**
All 82 counties within the state of Mississippi

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

Mississippi Integrated Education and Workforce Longitudinal Data System: A Management Tool to Improve Student Achievement and Economic Competitiveness

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: MS-002
* b. Program/Project: MS-ALL

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

**Attachment:**
Title :
File :

**17. Proposed Project:**
* a. Start Date: 10/10/2010
* b. End Date: 9/30/2013

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

a. Federal  $ 10004006  
b. Applicant  $ 0  
c. State  $ 92061  
d. Local  $ 0  
e. Other  $ 0  
f. Program Income  $ 0  
g. TOTAL  $ 10096067

* **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 12/4/2009.
[ ] 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 [X] 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: Mr. * First Name: John
Middle Name: O
* Last Name: Gilbert
Suffix:

Title: Director, Office of Educational Accountability

* Telephone Number: (601)359-5254 Fax Number: (601)359-1748

* Email: JGILBERT@MDE.K12.MS.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**

---

**Name of Institution/Organization:**  
Mississippi Department of Education

---

**SECTION A - BUDGET SUMMARY**

**U.S. DEPARTMENT OF EDUCATION FUNDS**

<table>
<thead>
<tr>
<th>Budget Categories</th>
<th>Project Year 1(a)</th>
<th>Project Year 2 (b)</th>
<th>Project Year 3 (c)</th>
<th>Project Year 4 (d)</th>
<th>Project Year 5 (e)</th>
<th>Total (f)</th>
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<td>1. Personnel</td>
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<td>$0</td>
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<td>2. Fringe Benefits</td>
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<td>4. Equipment</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$10,000</td>
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<tr>
<td>5. Supplies</td>
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<td>$0</td>
<td>$0</td>
<td>$6,000</td>
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<td>6. Contractual</td>
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<td>7. Construction</td>
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<td>8. Other</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<td>9. Total Direct Costs</td>
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<td>$2,298,748</td>
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<td>$0</td>
<td>$9,145,289</td>
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<td>(lines 1-8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10. Indirect Costs*</td>
<td>$456,111</td>
<td>$186,524</td>
<td>$216,082</td>
<td>$0</td>
<td>$0</td>
<td>$858,717</td>
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<td>11. Training Stipends</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>12. Total Costs (lines 9-11)</td>
<td>$5,318,359</td>
<td>$2,170,817</td>
<td>$2,514,830</td>
<td>$0</td>
<td>$0</td>
<td>$10,004,006</td>
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*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? [X] Yes  [ ] No
2. If yes, please provide the following information:
   - Period Covered by the Indirect Cost Rate Agreement: From: 7/1/2009 To: 6/30/2010 (mm/dd/yyyy)
   - Approving Federal agency: [X] ED  [ ] Other (please specify): ______________ The Indirect Cost Rate is 9.4%
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%

ED Form No. 524
### U.S. DEPARTMENT OF EDUCATION

**BUDGET INFORMATION**

**NON-CONSTRUCTION PROGRAMS**

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization: Mississippi 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

<table>
<thead>
<tr>
<th>Budget Categories</th>
<th>Project Year 1(a)</th>
<th>Project Year 2 (b)</th>
<th>Project Year 3 (c)</th>
<th>Project Year 4 (d)</th>
<th>Project Year 5 (e)</th>
<th>Total (f)</th>
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<td>1. Personnel</td>
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<td>$ 13,459</td>
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<td>$ 66,901</td>
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<td>2. Fringe Benefits</td>
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<td>$ 0</td>
<td>$ 17,250</td>
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<td>3. Travel</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
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<td>$ 0</td>
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<tr>
<td>4. Equipment</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
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<td>$ 0</td>
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<tr>
<td>5. Supplies</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
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<td>$ 0</td>
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<td>6. Contractual</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
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<td>7. Construction</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
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<td>8. Other</td>
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<td>$ 0</td>
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<td>$ 0</td>
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<td>$ 0</td>
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<td>12. Total Costs (lines 9-11)</td>
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<td>$ 92,061</td>
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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 of 1975 (42 U.S.C. "6101 et seq.), which prohibits discrimination on the basis of age; (e) the Equal Pay Act of 1963 (29 U.S.C. "206 et seq.), which prohibits discrimination in payment of wages on the basis of sex; (f) the Civil Rights Act of 1968 (42 U.S.C. "3601 et seq.), which prohibits discrimination because of race, color, religion, or national origin in the sale, rental, or financing of housing; (g) the Fair Housing Act of 1968 (42 U.S.C. "3601 et seq.), which prohibits discrimination because of race, color, religion, or national origin in the sale, rental, or financing of housing; (h) the Americans with Disabilities Act of 1990 (42 U.S.C. "12101 et seq.), which prohibits discrimination in employment, education, public services, transportation, communications, and facilities on the basis of disability; (i) the Age Discrimination in Employment Act of 1967 (29 U.S.C. "621 et seq.), which prohibits discrimination in employment on the basis of age; (j) the Americans with Disabilities Act of 1990 (42 U.S.C. "12101 et seq.), which prohibits discrimination in employment, education, public services, transportation, communications, and facilities on the basis of disability; (k) the Equal Employment Opportunity Act of 1972 (42 U.S.C. "2000e et seq.), which prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin; (l) the Civil Rights Act of 1957 (42 U.S.C. "2000 et seq.), which prohibits discrimination in public accommodations; (m) the Civil Rights Act of 1964 (42 U.S.C. "2000e et seq.), which prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin; (n) the Civil Rights Act of 1978 (42 U.S.C. "3601 et seq.), which prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin; (o) the Civil Rights Act of 1964 (42 U.S.C. "3601 et seq.), which prohibits discrimination in public accommodations.


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; and (d) evaluation of flood hazards in floodplains in accordance with EO 11998; (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. 93-529); 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.

<table>
<thead>
<tr>
<th>Signature of Authorized Certifying Representative:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Authorized Certifying Representative: John O. Gilbert</td>
</tr>
<tr>
<td>Title: Director of Educational Accountability</td>
</tr>
<tr>
<td>Date Submitted: 12/03/2009</td>
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Disclosure of Lobbying Activities

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

<table>
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<tr>
<th>1. Type of Federal Action:</th>
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<tr>
<td>[], Contract</td>
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| 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. |

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Name: John O. Gilbert
Title: Director of Educational Accountability
Applicant: Mississippi Department of Education
Date: 12/03/2009

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 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 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.

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ED 80-0013  03/04

PR/Award # R384A100018  e10
### SUPPLEMENTAL INFORMATION
REQUIRED FOR
DEPARTMENT OF EDUCATION GRANTS

#### 1. Project Director:

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<td>Mr.</td>
<td>John</td>
<td>O</td>
<td>Gilbert</td>
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**Address:**

* Street1: 359 North West Street

* Street2:

* City: Jackson

* County: Hinds

* State: MS

* Zip / Postal Code: 39205

* Country: USA

* Phone Number (give area code) (601)359-5540

* Fax Number (give area code) (601)359-1748

**Email Address:**

JGILBERT@MDE.K12.MS.US

#### 2. Applicant Experience

- Novice Applicant  [ ] Yes  [X] No  [ ] Not applicable

#### 3. Human Subjects Research

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

[ ] Yes  [X] 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: MS-SLDS Project Abstract Pages: 1 Uploaded File: MS-SLDS Project Abstract.pdf
Project Abstract

Mississippi Integrated Education and Workforce Longitudinal Data System: A Management Tool to Improve Student Achievement and Economic Competitiveness

Since 2004, Mississippi has made considerable progress toward the development and establishment of a statewide integrated education and workforce longitudinal data system. Today, the system relies on strong political leadership, common vision and mission, sustainable partnerships, and inclusive governance and management plan for data sharing. It also relies on a data clearing house containing education and workforce data back to 2001 that is managed by a group with the expertise in data management and analysis, technology, and software development necessary to produce useful, accurate, reliable, and timely information. The data come from systems managed by the Mississippi Department of Education, State Board of Community and Junior Colleges (and its fifteen member institutions), Institutions of Higher Learning (and its eight member institutions), Mississippi Department of Employment Security, Mississippi Department of Human Services, Mississippi Department of Rehabilitation Services, and Mississippi Department of Corrections. Many education and workforce leaders have recognized the importance and the value of such a system as it has been used to generate information to inform policymakers and stakeholders on student achievement and workforce outcomes.

While the current model has served the state well over the last five years, it is not without limitations in regard to the latest national standards. The system has limited interoperability; that is, data can be made available on request from the data warehouse upon receiving written permission from the owner of the data. Reports can be generated on outcomes with the current system, but they are quite time-consuming. There is no statewide mechanism that facilitates easy, timely, efficient and reliable interoperability between state and local data systems. While each entity has its own internal quality control for data integrity, there is no statewide policy for data quality assurance. Several system partners need infrastructure upgrades for data collection, exchange, and reporting. Some data elements specific to the America COMPETES Act are not readily available in distinct fields despite the availability of the data within the system. Finally, the system lacks the necessary data to link PK with P-20.

With the help of additional funds, the state is committed to completing and institutionalizing a statewide, integrated education and workforce longitudinal data system, as set forth by the RFA. It is the intent of Mississippi to achieve the following outcomes: (1) Include all missing data elements as prescribed by the America COMPETES Act; (2) Create a relational database linking all education (K-20) and workforce data through a unique common identifier that does not permit an individual to be identified by users of the system; (3) Develop an online one-stop portal that will provide access to the relational database and make the system universally interoperable; (4) Develop the hardware and software capacity for building and hosting the relational database and the one-stop portal; (5) Upgrade each partner with the appropriate infrastructure and technology for data collection, storage, and use; (6) Develop and adopt a statewide, comprehensive policy on data quality assurance; (7) Train state and local personnel on data entry and use to facilitate full adoption and effective use of the system; and (8) Include all the necessary data to link PK with K-20.

The State Workforce Investment Board (SWIB) will have oversight of data ownership and stewardship over the course of the project. It will also coordinate activities with a project director, two project managers (IT project manager and project system development manager), and a data council. The council will provide subject matter expertise at all levels and appropriate research knowledge.
Project Narrative

Project Narrative - Project Narrative

Attachment 1:
Title: MS-SLDS Project Narrative Pages: 30 Uploaded File: MS-SLDS Project Narrative.pdf
MISSISSIPPI INTEGRATED EDUCATION AND WORKFORCE LONGITUDINAL DATA SYSTEM:
A MANAGEMENT TOOL TO IMPROVE STUDENT ACHIEVEMENT AND ECONOMIC COMPETITIVENESS
Project Narrative Summary

Since 2004, Mississippi has made considerable progress toward the development and establishment of a statewide integrated education and workforce longitudinal data system. Today, the system relies on strong political leadership, common vision and mission, sustainable partnerships, and inclusive governance and management plan for data sharing. It also relies on a data clearing house containing education and workforce data back to 2001 that is managed by a group with the expertise in data management and analysis, technology, and software development necessary to produce useful, accurate, reliable, and timely information. The data come from systems managed by the Mississippi Department of Education, State Board of Community and Junior Colleges (and its fifteen member institutions), Institutions of Higher Learning (and its eight member institutions), Mississippi Department of Employment Security, Mississippi Department of Human Services, Mississippi Department of Rehabilitation Services, and Mississippi Department of Corrections. Many education and workforce leaders have recognized the importance and the value of such a system as it has been used to generate information to inform policymakers and stakeholders on student achievement and workforce outcomes.

While the current model has served the state well over the last five years, it is not without limitations in regard to the latest national standards. The system has limited interoperability; that is, data can be made available on request from the data warehouse upon receiving written permission from the owner of the data. Reports can be generated on outcomes with the current system, but they are quite time-consuming. There is no statewide mechanism that facilitates easy, timely, efficient and reliable interoperability between state and local data systems. While each entity has its own internal quality control for data integrity, there is no statewide policy for data quality assurance. Several system partners need infrastructure upgrades for data collection, exchange, and reporting. Some data elements specific to the America COMPETES Act are not readily available in distinct fields despite the availability of the data within the system. Finally, the system lacks the necessary data to link PK with P-20.

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Mississippi Integrated Education and Workforce Longitudinal Data System:
A Management Tool to Improve Student Achievement and Economic Competitiveness

A. Need for Project

Introduction

An individual’s education level is most often the primary determinant of his or her quality of life. The relatively low level of education in Mississippi is the primary reason for the state’s low average income, high rates of obesity, teenage pregnancies, infant mortality, and an array of other problems. We know education is the key to ameliorating many of these problems. Mississippi’s education needs are greater and resources are less than in any other state. This dictates that we become more efficient and effective with our limited resources. To be sure, a well-designed, integrated education and workforce longitudinal data system will help Mississippi allocate education and workforce resources in a more efficient and effective way with an eye toward improving educational achievement and economic competitiveness.

In the effort to better serve the needs of the public and to meet state and federal reporting requirements, education and workforce entities, more than ever, have a need for efficiently exchanging information and large amounts of raw data. Integrated information and data is one of the most crucial business functions in and across organizations, for it provides a comprehensive mechanism to track progress of and identify best practices in education and workforce initiatives.

To complete and institutionalize Mississippi’s current integrated longitudinal data system along the national standards prescribed by this RFA, the state has a critical need to address two general limitations:

- **Limited Interoperability**
  - Data in the current system are stored in separate files and physical environments.
  - Data and information cannot be easily exchanged across system partners.
  - Data collection and management infrastructure needs to be upgraded for several system partners.

- **Data Gaps in Fields and Quality Assurance**
  - Some data elements specific to the America COMPETES Act are not readily available in distinct fields despite the availability of the data within the system.
  - Lack of data to link PK with P-20
  - A statewide comprehensive standard for data quality has not been developed or adopted.
Training for data quality assurance is needed across system partners.

Over the course of this project, these two general limitations will be overcome by achieving eight objectives aimed at meeting all the required data elements and establishing efficient and reliable interoperability that will improve the overall utility, accuracy, reliability, and timeliness of the data.

- Include all missing data elements as prescribed by the America COMPETES Act.
- Include all the necessary data to link PK with P-20
- Create a relational database linking all education and workforce data through a unique common identifier that does not permit an individual to be identified by users of the system.
- Develop an online one-stop portal that will provide access to the relational database and make the system universally interoperable.
- Develop the hardware and software capacity for building and hosting the relational database and one-stop portal.
- Upgrade each partner with the appropriate infrastructure and technology for data collection, storage, and use.
- Develop and adopt a statewide, comprehensive policy on data quality assurance.
- Train state and local personnel on data entry and use to facilitate full adoption and effective use of the system.

Mississippi is in an excellent position to complete and institutionalize a statewide, integrated education and workforce longitudinal data system, as set forth by the RFA. The state is committed to accomplishing this and has strong political leadership, a common vision and mission, sustainable partnerships, and an inclusive governance and management plan for data sharing. The state has also developed and implemented a data clearing house containing education and workforce data back to 2001 managed by a group with the expertise in data management and analysis, technology, and software development necessary to produce useful, accurate, reliable, and timely information. Most importantly, in the last few years, many education and workforce leaders have recognized the importance and the value of such a system, as it has been used to generate information to inform policymakers and stakeholders on student achievement and workforce outcomes.

The general blueprint for the system envisioned by Mississippi in this application is illustrated in Figure 1 (see page 3). First, this model illustrates how data from all system partners—education and workforce entities—will be transferred to the clearing house. Data will continue to come to the clearing house from systems managed by the Mississippi Department of Education, State
Board of Community and Junior Colleges (and its fifteen member institutions), Institutions of Higher Learning (and its eight member institutions), Mississippi Department of Employment Security, Mississippi Department of Human Services, Mississippi Department of Rehabilitation Services, Mississippi Department of Corrections, Mississippi Department of Health, and Mississippi Department of Mental Health. PK-12 data will be augmented with data from all education and workforce entities in the state. Second, in this process, unique individual-level identifiers will be created to replace Social Security Numbers and other personal identifiers. These data will then be inventoried, mapped, and used to create a relational database, which will be updated as new data are made available. Third, a Web-based interface will be developed through which the relational database can be accessed, queried, and analyzed by system partners and other stakeholders. A security protocol based on user permission that will clearly articulate what data will be accessible to which user and for what purposes will be instituted.

**Figure 1: Mississippi Model**

The full implementation of this model will allow Mississippi to:

- Generate and make available accurate, reliable, and timely data.
- Support informed decision making at all levels of the education and workforce system.
- Increase the efficiency and effectiveness with which data will be analyzed to support the continuous improvement of education and workforce services and outcomes.
- Promote a clear research agenda to examine factors that will help improve student achievement, close achievement gaps, improve quality of instruction, and promote economic competitiveness.
- Support state and federal accountability systems and public reporting.
Background

Since 2004, Mississippi has made considerable progress toward the development and establishment of a statewide integrated education and workforce longitudinal data system. The National Governors Association recognized Mississippi’s model as one of the most innovative and effective data systems in the country. That is, from the outset, Mississippi recognized that establishing links between data systems is not enough to create a coherent, effective, and sustainable state longitudinal data system. A successful model relies on: (1) strong political leadership, (2) a common vision and mission, (3) sustainable partnerships, and (4) an inclusive governance and management plan for data sharing.

Strong political leadership. When Haley Barbour became governor of Mississippi in 2004, he worked with the State Legislature to pass the Mississippi Comprehensive Workforce Training and Education Act of 2004. The act created an environment conducive to forging and supporting a unified, performance-based education and workforce system. The adoption of common goals and performance measures by all education and workforce partners and the establishment of the Integrated Longitudinal Education and Workforce Performance Management System are two of the most significant outcomes of the act. More recently, the State Legislature passed the Children First Act of 2009, with the goal of providing a quality education to every student through an accountable, transparent, and data-driven system.

A common vision and mission. The state’s political environment and cooperation between multiple stakeholders have led to the development of a common vision and mission.

Vision: To create a world-class education system that gives students the knowledge and skills to be successful in college and the workforce and flourish as parents and citizens.

Mission: To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community and to integrate education, training, and workforce services into a data-driven system that is flexible and dynamic enough to rapidly adapt to changes in social and economic conditions to prepare Mississippians with the education and skills necessary to maintain and increase economic competitiveness in the state.

Sustainable partnerships. Like the rest of the nation, Mississippi’s education sectors have traditionally operated independently. But in the last few years, there has been a realization that these systems must be interconnected to provide for seamless transitioning if the state wants to improve student achievement and increase economic competitiveness. Indeed, the jobs of the future will require some form of college credential along with specialized skills. As a result, the state’s education and workforce entities have built partnerships ultimately resulting in Mississippi joining the NGA’s consortium of states agreeing to jointly develop and adopt, by September 2010, a common set of internationally benchmarked PK-12 standards that align high school curricula and assessments to make sure that students are on track to achieve ACT College Readiness Benchmarks and work-ready expectations. Among education sectors, these partnerships are currently used to address the following common issues: (1) increasing high school and college graduation rates; (2) reducing the average number of years to complete a
college degree; (3) facilitating successful transitions from two-year to four-year colleges; (4) improving teacher quality, (5) offering a rigorous course of study in sciences, technology, engineering, and mathematics (STEM); (6) cooperating with industry experts, museums, universities, or other STEM-capable community partners to prepare and assist teachers in integrating STEM across grades and disciplines; and (7) preparing more students for advanced study and careers in STEM fields. These institutions are also partnered with the workforce system to ensure that our students are workforce-ready.

**An inclusive governance and management plan for data sharing.** A successful data system rests upon a governance structure that involves both state and local stakeholders in the system’s design and implementation. Therefore, the governance goal in Mississippi was to identify the entities responsible for the operations of the statewide longitudinal data system and to include a common understanding of data ownership, management, confidentiality, and access. In this respect, the State Workforce Investment Board, along with its partners, functions as the main body for the governance and oversight of data usage across multiple systems. As part of the state’s commitment to establishing a longitudinal data system, the governor issued an executive order to ensure compliance with state and federal regulations and lay the groundwork for institutionalization of the system. Education and workforce entities have also shown their commitment to establishing the system by sharing their data as prescribed by memorandums of understanding (MOUs). These MOUs allow each partner to retain ownership and oversight of its shared data. To date, MOUs for data sharing are in place for the Mississippi Department of Education, State Board of Community and Junior Colleges (and its fifteen members), Institutions of Higher Learning (and its eight members), Mississippi Department of Employment Security, Mississippi Department of Human Services, Mississippi Department of Rehabilitation Services, and Mississippi Department of Corrections.

In collaboration with education and workforce partners, the State Workforce Investment Board developed a management plan to overcome technical differences and ensure data security. The general strategy was to adopt the data warehouse model to accommodate differences in management information systems. This model was also used to facilitate development of common standards, data structure, and data format. Because the system is cooperative, it belongs to all partners and resides in a neutral location managed by the National Strategic Planning & Analysis Research Center (nSPARC) at Mississippi State University. nSPARC’s infrastructure and technical expertise in data management and analysis, technology, and software development ensures data security and integrity of the system.

**Current Systems and Limitations**

Each education and workforce entity involved in the establishment of the longitudinal data system has its own distinct management information system. These systems were originally designed to meet annual reporting requirements, not to track progress over time. However, they all collect relevant data that can be linked to build a longitudinal data system that examines student progress and outcomes over time and determines if students are college- and workforce-ready.
Student-level data can be linked to teachers, and teachers can be linked to information on certification and preparation programs. PK-12 student data can also be linked to examine transitions from high school to post-secondary education. PK-20 data, in turn, can be linked to examine participation in workforce programs and transitions into the labor market. Finally, the state has the data necessary to produce reporting progress on the metrics established by the State Fiscal Stabilization Fund and reporting requirements included in the EDFacts data collection reporting system.

While the current model has served the state well over the last five years, it is not without limitations in regard to the latest national standards. The system has limited interoperability; that is, data can be made available on request from the data warehouse upon receiving written permission from the owner of the data. Reports can be generated on outcomes with the current system, but they are quite time-consuming. There is no statewide mechanism that facilitates easy, timely, efficient and reliable interoperability between state and local data systems. While each entity has its own internal quality control for data integrity, there is no statewide policy for data quality assurance. Several system partners need infrastructure upgrades for data collection, exchange, and reporting. Some data elements specific to the America COMPETES Act are not readily available in distinct fields despite the availability of the data within system partners. Finally, there is a lack of data to link PK with P-20.

The current data warehouse includes data from systems maintained by:

**Mississippi Department of Education (MDE).** MDE currently maintains and facilitates several statewide databases that collect information at the student, teacher, administrator, school, district, and state levels. The backbone of this system is referred to as MSIS (Mississippi Student Information System). Other databases maintained by MDE include those for Teacher Licensure, Mississippi Online Technology Evaluation, Migrant Information System, special education, English language learners, homeless, and student assessment.

In 2009, MDE was awarded a longitudinal data grant. The overall objective of this grant is to inventory and map MDE data for integration with MSIS. Accomplishing this objective will improve overall data quality within MSIS and facilitate the link of MSIS with postsecondary and workforce data, which is the focus of this proposed project.

As the backbone of the MDE data system, MSIS provides for the electronic collection and storage of comprehensive data on public school teachers, administrators, students (PK-12), and school board members, going back as far as the 2001-2002 academic year. MSIS also allows for the electronic transfer of student records from one school district to another. Data are collected on a daily and monthly basis. MSIS is designed to accept an XML file submission of specific student and personnel data elements from a district. On a monthly basis, each district builds an XML file that is submitted to a holding area where MSIS runs a series of checks. Upon completion of all checks, a report is produced for each district to review and approve. When the report is approved, MSIS automatically moves the data from the virtual holding area to the MSIS final database.
One of the major limitations of MSIS is that its originally intended purpose was to collect data from local school districts to meet reporting requirements at the state and federal levels. MSIS was never envisioned as a longitudinal data system, but it will be a great feeder system for a longitudinal system that is interoperable and capable of tracking progress and outcomes over time.

**Institutions of Higher Learning (IHL).** In Mississippi, there are eight public universities, and each university collects its own data. The data files within the IHL system originate with the individual institutions. Institutions generate these files according to mutually agreed-upon data definitions and submit them according to predetermined file layouts and reporting deadlines. The IHL office edits these data files, ensuring the data are both accurate and historically consistent. Any data file found to be unsatisfactory is returned to the reporting institution for revision. In some cases this back-and-forth process can occur several times, which is both burdensome and inefficient. Institutions typically have twenty (20) working days to finalize their data. Data are considered to be preliminary during this cycle and become final once the institution and IHL deem the data to be acceptable. The IHL database includes files on students, enrollment, courses, outcomes, remedial education, and degrees. IHL also has a database on faculty and staff of every university and data on the GEAR UP Mississippi program, which is designed to address alignment and adequate preparation of high school students for success in postsecondary education. Over the last five years, data have been inventoried and mapped, and data dictionaries have been created for each database of this agency.

**State Board of Community and Junior Colleges (SBCJC).** SBCJC is the coordinating agency for the 15 community and junior colleges of Mississippi. Each college has its own management information system and collects its own data. Colleges submit the following files to the SBCJC at the end of each semester (summer, fall, and spring): (1) student, (2) course, (3) student schedule, and (4) instructor. Each college also submits an annual graduation file. In addition to the files reported to the SBCJC, the community colleges report quarterly workforce training data to the Workforce Performance Management System mandated by the State Workforce Investment Board. They also submit annual reports on career and technical students to the Mississippi Department of Education, as required by the federal Perkins Act. Finally, SBCJC administers the Adult Basic Education program. Over the past five years, data have been inventoried and mapped, and data dictionaries have been created for each database of this agency. Additional data elements will be required to inform a statewide longitudinal data system. Those elements will have to be added to the college and agency systems.

SBCJC’s current system for data collection is outdated and relies on a third-party vendor to convert college file uploads into database files that are then downloaded for access by SBCJC staff charged with enrollment verification and research. The system does not have a sufficient means of pre-submission error validation and no cross-file validations (e.g., course and instructor). As a result, the process is cumbersome and routinely results in lengthy delays in the verification of student admission and attendance records required to certify college records as official. A complete system upgrade, including hardware, software, and programming, is needed to create a more efficient and manageable in-house data collection mechanism that would ensure valid, reliable, and timely data collection required for a longitudinal data system.
Mississippi Department of Employment Security (MDES). MDES is the primary agency for the delivery of employment and workforce services in the state. The agency provides eight databases containing more than 100 files for all the employment training and service programs it administers. The backbone of this system is the Wage Records Database, which contains quarterly wage and employment information on all covered employees in Mississippi, and the Business Tax Database, which contains information on industry classifications, number of employees, geographic location, and taxes for all businesses in the Mississippi Covered Employment System. An additional six databases provide detailed demographic, economic, geographic, and payment information for all individuals applying for and receiving unemployment insurance benefits, as well as for individuals receiving employment training and job services through the Wagner-Peyser, Workforce Investment Act, Summer Youth, Trade, and Rapid Response programs. Over the last five years, data have been inventoried and mapped, and data dictionaries have been created for each database of this agency.

Mississippi Department of Human Services (MDHS). MDHS provides data from its public assistance database, which contains information on all individuals participating in the agency’s TANF and SNAP programs. The database is comprised of seven files, which contain detailed information on the demographic, economic, and geographic characteristics of clients and cases, level of benefits received, and reasons for case closures. This agency will also coordinate the collection of data from the Child Care Information System (CCIS processes child care certificates) and early childhood development.

Mississippi Department of Rehabilitation Services (MDRS). MDRS provides information on training and education services for disabled individuals. One individual-level file comprises the MDRS training database and includes demographic, economic, geographic, and disability characteristics of individuals, as well as type of training, education, and technology assistance provided.

Mississippi Department of Corrections (MDOC). MDOC provides information on all offenders housed in state, regional, county, and private prisons in Mississippi and on paroled and probated offenders. Five offender-level files comprise the MDOC database: (1) offender demographics, occupational characteristics, and location of conviction; (2) type of offense committed and sentencing; (3) location of incarceration; (4) expected time of release and release status; and (5) training and education programs in which offenders enroll.

Current data warehouse model. Data from each entity are transferred to the clearing house at nSPARC. Each file is independently managed and stored. nSPARC protects information in all forms, for which it is the custodian, and maintains a robust, proactive, and evolving information security program. This program protects information from a variety of threats and stresses the importance of multi-layer protection. Through staff orientation, Institutional Review Board for the Protection of Human Subjects (IRB) certification, university information security certification, and regular staff meetings, each nSPARC staff member is aware of, committed to, and accountable for his or her role in the overall protection of critical and sensitive information.

In addition to personal accountability, nSPARC identifies best practices to ensure ongoing protection of information and timely and appropriate responses in the event of an information
security breach. In the interest of ongoing security, specific details regarding steps taken to ensure data and system integrity are not disclosed. nSPARC does, however, operate in a restricted access environment and maintains a “clean room” for all management and analysis of sensitive data. Random security audits are conducted to maintain data and system integrity.

All data transferred to nSPARC for management and analysis are governed by MOUs that establish specific terms, conditions, and limitations on the use of custodial data. Furthermore, all sensitive data for which nSPARC is the custodian are transferred via a secure Web server that relies on HTTPS Protocol. Uploaded data are encrypted using SSL/TLS with a 128-bit key. Once received, all files are automatically encrypted using an RSA 4096-bit key and moved to a secure offline location for storage. All primary identifiers (e.g., names, street addresses, telephone numbers, and identification numbers) are stripped from datasets once unique alternate identification codes have been assigned. Information security policies and procedures are continually reviewed and evolve in response to changing information security technologies, requirements, and threats.

Under the auspices of the Governor’s Office and the State Workforce Investment Board, the current integrated system has been used to address four questions of interest to all education and workforce partners:

1. Are Mississippians able to secure employment after receiving training or completing postsecondary degrees?

2. Are Mississippians engaging in education and skill development better able to retain employment over time?

3. Do Mississippians get better pay after receiving training or completing postsecondary degrees?

4. Do Mississippians who receive training and degrees meet the education and job skill demands of business and industry?

By linking college data with employment data, we are able to determine workforce outcomes for four-year college graduates by university, college, discipline, and/or other variables. Our data show that approximately 80 percent of college graduates are able to obtain employment within one year of graduation and that those with business and marketing degrees are in high demand in the state. We also know that our graduates’ first jobs are predominantly entry-level and pay an average of $30,000 a year. Because we are able to track graduates over time, we know our graduates’ wages increase, on average, by 60 percent within five years as a result of gaining necessary skills while on the job. After five years, their wages increase, on average, three to five percent each subsequent year. The data also show that 10 percent of four-year college graduates, upon receiving degrees, seek job skill development through community colleges or career technical programs.

The system has also been successfully used to track two-year college enrollees by college and degree as they transfer to four-year colleges or enter the workforce. By linking high school data
with college and employment data, we are beginning to examine how preparation in high school affects success in postsecondary education and the workforce. A special focus will be placed on students who need remedial education and job skill development and on linking student assessment data, IHL data, and teacher licensure data in regard to the state’s IHL and alternate route teacher and administrator preparation programs. Data from other education and workforce entities can also be managed and analyzed to track participants and measure progress and outcomes by program (WIA, TANF, Corrections, etc.), type of training (on-the-job training, career readiness, etc.), location, funding source, and/or other variables.

**Current data warehouse limitations.** Data are stored in independent silos maintained in physically distinct environments. While the various databases contain individual-level data that can be linked by common identifiers, storing data in this way increases the effort required to design and conduct cross-system analyses because files have to be managed and linked one by one. Another limitation is that data stored in the warehouse cannot be readily accessed by or exchanged between education and workforce entities.

**Plan of action to address limitations.** A relational database that can be accessed through an online one-stop portal will eliminate the inefficiencies and limitations of the current data warehouse model and allow partners to access more robust and timely information on their programs and the system as a whole.

Over the course of this project, the relational database will be developed based on specific requirements for data quality, reporting, and analysis. In order to create a unified, enterprise/statewide data architecture to fulfill partner, agency, federal reporting, and research needs, several components will require specification, including the data model, data dictionary, data integrity and business rules, quality assurance procedures, and OLAP data structures. The data architecture will be implemented using an enterprise-level relational database system (e.g., Oracle or DB2) to provide the full range of features and functionality required for the backend of the Web portal system.

As part of the development of the data architecture, nSPARC will create an inventory of data collected by all partners and perform an analysis to identify the requirements for the development of the relational database. Based on the results of this analysis, nSPARC will identify where data collection programs and procedures require revision and upgrading, make recommendations, identify solutions, and implement upgrades as required.

A key feature of the integrated system will be a one-stop, FERPA-compliant, Web-based business intelligence portal, which will feature customized J2EE applications, developed by nSPARC, to allow for easy automated analysis as well as complex ad hoc reporting. Programmers will design methods for data reporting and presentation using SAS Business Intelligence software, which will offer a wide variety of reports, tables, charts, graphs, and other products to meet the information needs of one-stop portal users and facilitate the development of transparent reporting mechanisms to meet reporting requirements of federal ARRA programs. SAS Business Intelligence software also allows the user to conduct various types of statistical analysis. Data extraction and exporting will be based on standardized XML formatting to ensure the highest level of interoperability and sharing with system partners.
Security will be provided on multiple levels, including SSL encryption, user-specific data access controlled via user accounts, and access control lists (ACLs) for all data. System security features will be designed and implemented to ensure secure access by authorized personnel only, with all reporting features in compliance with FERPA and other state and federal law. This directory and role-based approach to security will allow nSPARC to accommodate future growth of the integrated system and ensure interoperability with all partners.

The hardware platform of the integrated system will be built around the x86 architecture for easy accessibility, portability, and scalability to meet user demands. Servers will operate on the Linux platform to further maximize the reliability and operability of the integrated system. Moreover, we will optimize our operational capacity and efficiency by incorporating virtualization and cloud computing as part of the system’s implementation.

The State Data Center, operated by the Mississippi Department of Information Technology Services (ITS), will provide application hosting services for the proposed longitudinal data system.

Data Elements and Gaps

A unique statewide student identifier. Currently, there is not a unique student identifier, other than the Social Security Number, common across all education and workforce entity data. While each system might have its own unique non-identifiable ID, these IDs are not common across the system. To overcome this limitation, nSPARC has developed an algorithm that uses the SSN as the base for creating a 10-digit unique identifier. This procedure is being used successfully in the current data warehouse system and will be the method to create a statewide unique identifier that enables tracking individuals over time and across programs.

Student-level enrollment, demographic, and program participation information. These data elements are currently present in individual education and workforce entity data.

Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs. These data elements are not directly captured in the current data system; however, with cross-program analysis through the current data warehouse system, those transitions can be identified, and the appropriate fields can be created, as illustrated in Figure 2.
Current data also allow for tracking transitions from the workforce to education and workforce programs. For those in the workforce, the state has adopted a sector-based strategy where participants are directed to the appropriate education and job skill development pathway. This model is illustrated in Figure 3 on page 13. Following this general model, individuals in the workforce are first screened to see if they meet minimum education requirements.

The capacity to communicate with higher education data systems. This capacity technically exists in the current system via cross-program analysis and will be fully automated with the establishment of the statewide unique identifier and the implementation of the relational database.

A State data audit system assessing data quality, validity, and reliability. Currently, each system has its own audit process. With the establishment of the enterprise-wide data architecture, a statewide data audit system will be developed and adopted. This will include a campaign to ensure statewide understanding of what constitutes “data quality” under the longitudinal data system envisioned in this application. Training will be provided to ensure the use of standardized procedures for data entry and data transfer.
Yearly test records of individual students with respect to amendments under section 1111(b) of the Elementary and Secondary Education Act of 1965. These data elements are currently present in all education and workforce entity data.

Information on students not tested, by grade and subject. Technically, this information can be determined in the system, but there is no data element that directly captures this information. This element will be developed as part of the proposed project.

A teacher identifier system with the ability to match teachers to students. The system currently has this capacity throughout K-20.

Student-level transcript information, including information on courses completed and grades earned. Technically, all the data elements necessary to generate an e-transcript in the state are collected at the district level but are not currently included in MSIS. The information is in the process of being included. Course and credit information for courses taken while enrolled as a student in Mississippi is captured; elements of transfer credits received are captured at the district level.

Student-level college readiness test scores. This element is in the process of being included. The MDE has requested student-level data from ACT (taken by more than 90 percent of a graduation cohort) for 2009.
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. Technically, this information is available but is not captured by a specific data element. Furthermore, while four-year college data include elements that capture the number of students enrolled in remedial coursework, two-year colleges currently lack this capacity. Thus, two-year colleges will add fields to fully capture this information along with additional fields related to time-to-degree and degree-intent.

Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education. Of special interest to this project is the inclusion of data from early childhood education and programs. In this respect, the governor has set up the State Early Childhood Advisory Committee to identify all the data necessary to evaluate early childhood programs and interventions. The committee has already developed a list of all data points that should be included in the development of the alignment system. It also completed a pilot program in 2008-2009 to determine if a unique identifier given to a child while in an early care and education program would be “caught” by the MSIS system when the child enters public kindergarten. More than 90 percent of the participating children were correctly identified at the beginning of the 2008 school year. Currently, PK programs in public schools are piloting a quality rating system specific to state guidelines for programs serving four-year-olds.

During the duration of this project, data will also be secured from the Mississippi Department of Health (MDH) and the Mississippi Department of Mental Health (MDMH). MDH is responsible for the state’s special education program serving children 0-3. First Steps is an MDH program providing services to children 0-3 who are at risk of having a developmental delay. MDMH provides outpatient services to children ages 2-4. These are community-based services for children with emotional delays. The Early Intervention/Child Development program serves children 0-5 who have mental retardation/developmental disabilities or are at risk of developing a developmental delay. Data collected in this program are transferred to MDE for continued services to children 3 and older. MDH is also responsible for licensing early care and education centers across the state and enforcing program violations. MDH also provides services through its Maternal and Child Health Bureau to babies and mothers that are at risk of health and cognitive delays as a result of problems related to pregnancy and/or delivery. Mississippi will engage partners from MDH and MDMH to incorporate the data collected in related programs into the state’s longitudinal data system.

B. Project Outcomes Related to System Requirements and Implementation

Outcomes: System Capabilities

- **Relational database** – Leveraging a relational database model will enhance the process of normalizing data from disparate systems with functions, unique to relational database design, that support select, project, relational join, and division operations. Of similar value is the relational database support of dynamic views, which is not a part of the physical schema but is rather dynamic. Therefore, altering the data in a table alters the data depicted by the view. To that end, views can subset data, join and simplify multiple
relations, dynamically hide complexity in the data, and reduce data storage requirements. Of similar import to the effort to develop a longitudinal data system resides in the superior security features of a relational database. A relational database supports access permissions, which allow the database administrator to implement need-based permissions to the access of the data in the database tables. Relational databases support the concept of users and user rights, thus meeting the security needs of databases. Relations are associated with privileges like create, grant, select, insert, and delete privileges, which authorize different users for corresponding operations on the database. Lastly, use of a relational database offers vital advantages including performance, power, and support of new hardware technologies, provides support for the implementation of distributed systems, and is highly scalable.

- **Standardized XML format** – Utilizing a standardized XML format underscores the well-accepted use of XML as a means to model components of information systems, with those components automatically constructing themselves around what has been expressed in XML. XML brings a number of powerful capabilities to information modeling: heterogeneity, where each record can contain different data fields; extensibility, where new types of data can be added at will and do not need to be determined in advance; and flexibility, where data fields can vary in size and configuration from instance to instance. Lastly, XML imposes no restrictions on data; each data element can be as long or as short as necessary. Thus, changes are accommodated by modifying the underlying XML, and information system components adjust themselves accordingly without the need for reprogramming.

- **Online one-stop portal** – The online one-stop portal provides a full range of data products and services for users who demand precise, accurate results while making information faster, easier, and less expensive to obtain. With defined users and roles, the portal allows content to be tailored for specific purposes while simultaneously providing users with the ability to generate their own highly customized reports, thus empowering them well beyond traditional means. By delivering information to users based on predefined roles, the one-stop portal provides a degree of personalization, ensuring that users only receive information relevant to their needs. Users are included in the process of personalizing portal content—both in terms of navigation preferences and content offerings—to maximize the effectiveness with which the one-stop portal meets user requirements. In addition, the one-stop portal provides users with a rich set of business intelligence tools to help them mine a wealth of data in innovative ways. For future applications, the one-stop portal is an important feature of the larger data system, as it will provide a high degree of flexibility and changeability for adding, modifying, and removing features and functionality as requirements change.

- **Comprehensive list of reports and analyses relevant to promoting accountability, student achievement, and workforce outcomes** – Reports will provide accurate data and information to schools to improve instructional and administrative decision making and provide accurate and timely data to parents and other stakeholders to gauge progress toward educational achievement and workforce outcomes.
• **Infrastructure to implement relational database and one-stop portal for data collection, analysis, and transfer** – Establish infrastructure to support system implementation (e.g., relational database and one-stop portal) and upgrade infrastructure that will allow system partners to effectively meet or exceed contemporary best practices for data collection, management and use and help align data collection efforts with reporting and output requirements.

**Outcomes: Data Fields and Quality Assurance**

• **Inclusion of all data elements required by the America COMPETES Act** – This will allow Mississippi to fully comply with state and federal reporting requirements.

• **Inclusion of prekindergarten and other early childhood data** – This will allow the state to assess how early intervention relates to children’s success. Therefore, it will allow the state to better align early childhood development with educational and workforce development.

• **Statewide policy for data quality assurance** – This will improve the implementation of procedures for protecting the security, confidentiality, and integrity of data at the local and state levels.

• **Certified trainers and skill enhancement for improving data quality** – This will help assure there is consistency in the validity and reliability of data collected across all system partners. Training will also help to ensure appropriate use of the system and information generated from it. Training will also help to develop analytical skills for strategic planning and problem solving.

**Benefits**

In practical terms, the completion and institutionalization of the proposed longitudinal data system will result in multiple benefits relevant to improving student achievement and economic competitiveness in the state.

• **Ability to track and accurately measure progress in a timely fashion.**

  The system will provide timely and relevant information to education and workforce stakeholders that will allow teachers, principals, and parents to monitor student progress on a continuous basis. This capability will also allow agencies to identify best practices and measure return on investment in terms of programs and interventions. It will also allow for the identification and assessment of trends and examine how well different subgroups are performing by teacher, schools and geographic areas.

• **Ability to provide classroom level student performance data.**
The system will provide continual feedback to classroom teachers and school administrators to assess individual student progress toward learning objectives, changes in student performance, indications of need for remediation, etc.

- **Ability to examine education and workforce outcomes.**

  The system will provide timely and relevant information that will allow the state to better align high school credentials and college and workforce expectations. This alignment will generate information relevant to increasing graduation rates across the board, reducing the number of years to complete a college degree, and articulating two-year college programs with four-year college programs and workforce demands.

- **Ability to implement warning systems.**

  The system will provide timely and relevant information that will allow the state to develop predictive models for high school dropouts. Similarly, predictive analytical models can be derived for identifying schools at risk of becoming underperforming.

- **Ability to increase efficiency.**

  The system will provide timely and relevant information that will allow the state to identify and adopt best practices, reduce duplication of efforts, and align resources across funding streams.

- **Ability to establish a clear research agenda.**

  The system will allow institutions to make data available and accessible to researchers to evaluate the effectiveness of instructional materials, strategies, and approaches for different types of students and provide unlimited capabilities for research aimed at professional development, curriculum redesign, program evaluation, etc. Specifically, the data will help address important questions such as:

  How many children are at risk of having poor performance? How can we target an appropriate level of early intervention services to at-risk children? What personal and contextual factors are associated with at-risk children?

  Does pre-K education influence the ability of a child to do well through K-12?

  What quality standards in early childhood settings are most correlated with K-12 success (e.g., third-grade test scores, low retention rates, exiting special education)?

  Do children with different demographic backgrounds respond differently to early childhood programs?

  Are disadvantaged children more likely to attend early childhood programs more than one year?
Which teacher preparation programs best prepare our children?

Is the ACT score a reliable measure for college success? If so, what score range is most likely to be associated with college success?

System Development Plan

To achieve the aforementioned outcomes and benefits, a three-phase development plan will be implemented. These phases include (1) discovery phase, (2) construction phase, and (3) deployment phase.

Discovery Phase – During this phase, the groundwork for system development is performed. The key tasks include:

- Data Inventory – Data analysts identify and document a detailed inventory of all data to be included in the system.

- Requirements and Specifications - Programmer/analysts, database administrators, and subject matter experts work together to identify system requirements for security access and control, reports, data management, and the user interface.

- Design and Analysis – The one-stop portal is designed based on requirements and specifications identified by the development team. During this step, test cases are created, tested, and analyzed as part of the design refinement process.

- Planning – Following completion of the design and analysis step, the development team begins planning for the construction and deployment of the one-stop portal.

Construction Phase – The one-stop portal is actually built and tested by the development team.

- Iterative development

Construction of the portal will consist of a series of iterations as illustrated in Figure 4 (see page 19). Each iteration includes a feature backlog populated with specifications and test cases defined during the discovery phase. One of the benefits of iterative development is that once an iteration is complete, the software is in a deployable state.
**Deployment Phase** – The one-stop portal is moved into a production environment where it can be accessed by actual users.

- Building the Information Technology Infrastructure – preparing for deployment of the one-stop portal by identifying and equipping the system’s physical space with the requisite electrical, cooling, and networking equipment.

- Hardware Installation and Configuration – preparing servers, storage devices, and failover systems for the one-stop portal.

- Software Installation and Configuration – installing all of the requisite software, from operating systems to applications, to get the one-stop portal system online and operational.

- Training – preparing IT administrators, system operators, and users to use and manage the one-stop portal system.

The State Data Center, operated by the Mississippi Department of Information Technology Services (ITS), will provide application hosting services for the proposed longitudinal data system.
C. Timeline for Project Outcomes

Figure 6 on page 26 reports the detailed timeline for the activities required to produce the proposed outcomes. First-year activities will be geared primarily to meet the following outcomes:

- Relational database
- Standardized XML format
- Comprehensive list of reports and analyses relevant to promoting accountability, student achievement, and workforce outcomes
- Inclusion of all data elements required by the America COMPETES Act
- Inclusion of prekindergarten and other early childhood data
- Updated infrastructure for data collection, analysis, and transfer

Second- and third-year activities will be undertaken to achieve the remaining proposed outcomes:

- Online one-stop portal
- Statewide policy for data quality assurance
- Certified trainers and skill enhancement for improving data quality

By achieving these milestones, we will build a relational database that will be accessible through an online one-stop portal by the end of the project’s duration. We will also design and adopt a statewide policy on data quality assurance. Completing the training element of the project will enhance data quality in respect to collection, entry, and use at all levels.

D. Project Management and Governance Plan

The project will be managed within the context of an already well-established organizational structure. Since 2004, the State Workforce Investment Board has taken the charge of establishing longitudinal data in Mississippi. One of SWIB’s primary roles is to provide oversight for data use, with an emphasis on ensuring that data are used within the law (e.g., FERPA). This function is exercised by the board’s executive committee, comprised of the state superintendent of education, executive director of SBCJC, commissioner of higher education, and representatives from other system partners. Under this structure, data sharing is governed by MOUs that describe how data can be used within the overall scope of the statewide longitudinal data system. Each partner retains ownership of its shared data and specific oversight for its use. Another role of SWIB is to ensure continuity and sustainability of the system by getting support from the Governor’s Office, State Legislature, and all stakeholders using the system.

In its effort to be inclusive, SWIB also reaches out to other stakeholders, including local and regional boards. This function is exercised by a data council made up of individuals who have intimate knowledge of the data at both the local and state levels. Several council members also bring the perspectives of particular stakeholders to the board, such as those of parents, teachers, superintendents, and local communities. Other council members bring research expertise in the areas of education and workforce development.
Over the years, SWIB has secured the necessary technical resources and expertise for the design and implementation of the longitudinal data system. Specifically, the board relies on expertise provided by the Mississippi Department of Information Technology Services (ITS) for hardware and software infrastructure hosting. SWIB also relies on a university research group that provides expertise for data modeling, software development, and data analysis. Finally, SWIB relies on community and junior colleges and state universities for curriculum development and training in the areas of data collection, entry, and analysis.

Building on the current organizational structure, the governance and management plan is illustrated in Figure 5. Following this model, SWIB will continue to have oversight of data ownership and stewardship. The board will also coordinate activities with the project director, two project managers, and the data council. Under this structure, the project director’s main responsibility is to ensure that all tasks necessary to achieve the anticipated outcomes are on target and within the prescribed goals of the project. The director will be assisted by two project managers (IT project manager and project system development manager).

**Figure 5: Governance and Management Structure**

![Governance and Management Structure Diagram](image)

**IT project manager.** The main role of the IT project manager is to ensure compatibility and interoperability of the acquired hardware and software infrastructure. He will also serve as an advisor during the installation and testing of the hardware and software infrastructure as the proposed system becomes fully operational. Finally, because the proposed system will reside at the State Data Center, operated by ITS, the IT project manager will coordinate with the other project manager throughout the development phase of the online one-stop portal so that it is designed within accepted, statewide standards.
Project system development manager. The project system development manager will be responsible for the development of the data model, architectural design, and development of the online one-stop portal. He will be responsible for identifying all the needs and requirements for the development of the overall system. He will also identify and provide the appropriate personnel for the development and construction of the online one-stop portal (two database administrators, five programmers, and five data analysts).

Both project managers will work in consultation with the data council throughout the duration of this project. The council will provide subject matter expertise at all levels and appropriate research knowledge. The two project managers will also coordinate activities for the development of the statewide data quality assurance policy and curriculum and training activities. Specifically, they will work with community and junior colleges and universities for the curriculum and training pieces of the project.

E. Staffing

The project will have a project director, project manager, data quality counselor, and other key personnel.

Project director: Mr. John Gilbert. Mr. Gilbert is the Director of Educational Accountability for the Mississippi Department of Education. The Office of Educational Accountability is responsible for monitoring and reviewing programs and providing information, recommendations and an annual assessment to the Legislature, Governor, Mississippi Commission on School Accreditation and the State Board of Education. As the project director, he will be responsible for providing overall direction to the project and ensuring that appropriate resources are available for the success of the project. The director provides advice and oversight to the group and has special responsibilities in respect to the data that will be included in the relational database. Another responsibility will be to ensure that the infrastructure is appropriate for achieving the objectives and goals of the project. Finally, he will provide overall leadership to the establishment and institutionalization of the longitudinal database.

IT project manager: Dr. Craig Orgeron. Dr. Orgeron is the Director of Strategic Services for the Mississippi Department of Information Technology Services (ITS). In this role, Dr. Orgeron aids in the coordination and support of information systems planning efforts of ITS and state agencies and institutions through client planning, infrastructure planning, and emerging technology initiatives. He has participated in numerous government information technology task forces and committees, such as the Digital Signature Committee, the Electronic Government Task Force, and the Governor’s Commission on Digital Government, which led to the implementation of the enterprise electronic government in Mississippi. He will assist the project director and project manager in the development of the infrastructure necessary for the development and maintenance of the system.

Project system development manager: Dr. Domenico “Mimmo” Parisi. Dr. Parisi is professor and director of nSPARC. He has expertise in the development of relational databases and software development. Since 2004 he has provided leadership for over 30 statewide projects and he has an extensive knowledge of education and workforce program in the state and the nation.
He has designed and implemented a statewide workforce performance management system. He has a national reputation and works with several other states in this area. He will ensure that all requirements for the development and implementation of the enterprise-wide data architecture are met. He will provide oversight and assistance for the development of the online one-stop portal and the development of the policy for quality data assurance.

**Data council.** This group will be comprised of 12 subject matter experts who have been actively involved in the development of the state longitudinal data system over the past five years. This group will provide guidance and oversight on data requirements and business processes for the development of the enterprise-wide data architecture and the online one-stop portal interface, along with the business intelligence. These individuals include:

- **Mr. Chris Christmas:** Bureau Director II at the Mississippi Department of Human Services. He is responsible for data collection, reporting, and analysis in relation to the TANF and SNAP programs. He also conducts economic analysis for caseload management.

- **Dr. Jill Dent:** Director of the Office for Children and Youth at the Mississippi Department of Human Services. She is responsible for the management of the Child Care Certificate Program and the Quality Enhancement Program through the Administration for Children and Families and other training and technical assistance programs to increase the quality of child care programs in the state.

- **Dr. Cathy Grace:** Professor of Education at Mississippi State University, Director of the Early Childhood Institute and National Center for Rural Early Childhood Learning Initiatives, and Chair of the Mississippi Early Childhood Advisory Committee.

- **Dr. Dwight Hare:** Associate Director of the Research Curriculum Unit at Mississippi State University. He has coordinated efforts for curriculum development and evaluation and Mississippi school redesign.

- **Dr. LaNell Kellum:** Senior Research Associate for the Stennis Institute of Government at Mississippi State University. She currently provides technical assistance to MDE regarding the state’s Race to the Top proposal.

- **Ms. Wanda Land:** Workforce Specialist at the Mississippi Development Authority. She is the link between economic development and workforce development and ensures that all of the resources of the workforce system are utilized in economic develop efforts supporting new and existing businesses.

- **Ms. Jeanine Lily:** Director of the Office of Grant Management (OGM) for the Mississippi Department of Employment Security. OGM is the state administrator for Workforce Investment Act (WIA) funds and is responsible for managing WIA grants and other federally funded employment service and training initiatives. She is also responsible for data collection and reporting.
• **Ms. Audrey MacAfee:** Director of Management Information Systems at the Mississippi Department of Corrections. She is responsible for IT project planning, network systems analysis, local and wide area network implementation and support, data communications support, Internet and Intranet access, software, hardware, equipment purchasing and allocation, technical support of installed hardware/software, PC/printer repairs, virus repairs, and equipment transfers/moves. Other responsibilities include departmental microcomputer policies, standards, and procedures.

• **Mr. Bob McDonald:** Director of Business Development Services and WIA Activities. He acts as liaison to partner agencies, fiscal agents, private businesses, and other organizations involved with the Workforce Investment Act and oversees agency activities involving job development with employers and job placement of clients who have successfully completed the Vocational Rehabilitation Program. His prior experience was with the Mississippi Department of Education, Office of Vocational Education, in the area of Special Federal Programs such as CETA and JTPA.

• **Dr. Phil Pepper:** Dr. Phil Pepper serves as the State Economist for Mississippi and as the Assistant Commissioner for Policy Research and Planning for the Mississippi Institutions of Higher Learning. He is responsible for the compilation and distribution of analysis of university and system data to the system’s governing Board, the Legislature, and various other agencies responsible for policy decisions and accountability reporting.

• **Mr. Ken Thompson:** Director of the Office of Research and Statistics at the Mississippi Department of Education. He is responsible for data collection, analysis, and reporting for state and federal accountability for Mississippi's K-12 schools and districts.

• **Dr. Debra West:** Deputy Executive Director of the State Board of Community and Junior Colleges. She is responsible for SBCJC research and planning capabilities and the integration of information technology for data collection, management, and analysis.

**MDE key personnel.** This group will assist in accomplishing specific tasks within MDE.

• **Mr. John Gilbert:** Director of Educational Accountability at the Mississippi Department of Education. He will be the project director and will be responsible for providing overall direction to the project and ensuring that appropriate resources are available for the success of the project.

• **Mr. Ken Thompson:** Director of the Office of Research and Statistics at the Mississippi Department of Education. He is responsible for data collection, analysis, and reporting for state and federal accountability for Mississippi's K-12 schools and districts.

• **Ms. Jolene Miesse:** Lead Business Systems Analyst at the Mississippi Department of Education. She has more than 20 years of programming and development experience and is responsible for assisting school districts in submitting accurate data to MSIS and collecting and submitting federal reporting.
• **Ms. Deborah Donovan;** Lead Business Systems Analyst at the Mississippi Department of Education. She has extensive experience in developing client server and Web-based applications and is responsible for data collection and reporting for the State Performance Plan and Annual Performance Report.
### Figure 6: Project Timeline

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Project Narrative

Project Narrative - Appendix A, Optional Attachments
Project Narrative

Project Narrative - Appendix B Resumes of Key Personnel

Attachment 1:
Title: MS-SLDS Appendix B Pages: 17 Uploaded File: MS-SLDS Appendix B.pdf
JOHN O. GILBERT, CPA

EDUCATION

Bachelor of Professional Accountancy, Mississippi State University, 1983
Certified Public Accountant, State of Mississippi, 1986, Certificate No. 3264
Continuing Professional Education - In order to maintain CPA licensure, forty (40) hours of continuing professional education (CPE) must be taken each year. I have participated in 40 hours or more of CPE since 1986.

CAREER SUMMARY

MISSISSIPPI DEPARTMENT OF EDUCATION  August, 2009 - Present
Director of Educational Accountability
* Serves as Director of:
  • Office of Educational Accountability
  • Office of Communications
  • Office of Internal Accountability
* Responsible for reports presented to the Legislature, Governor and State Board of Education.
* Responsible for monitoring and reviewing programs developed under the Education Reform Act and the Mississippi Adequate Education Program Act of 1994.
* Assess the impact on school districts of new education programs.
* Monitor the implementation of the accountability rating system and the performance classification models in all school districts. Makes necessary assessments with recommendations to the Commission on School Accreditation, State Board of Education and the Legislature.

Deputy State Auditor
* Serve as Deputy to the State Auditor
* Responsible for the Audit, Investigative and Administrative Divisions
* Serve as Legislative Liaison for the Department
* Responsible for the successful passage of key Audit Legislation during the 2008 and 2009 Legislative Sessions. Key components of this Legislation are as follows:

2008 Session
• Helped secure increase in billable hourly rate from $12.50 to $30.00.
• Helped design and secure passage of the Intern Program for the Office of the State Auditor
• Helped design and secure passage of Legislation that authorized offering the Becker CPA Review Program through payroll deduction
• Obtained increase in budget transfer authority in the OSA 2009 Appropriation bill
• Helped obtain funding for numerous projects such as TeamMate Electronic Workpaper software that will eventually result in a 25% – 30% increase in audit efficiency for OSA Audits.

2009 Session
• Helped design and secure passage of innovative Municipal Audit Legislation
• Helped design and secure passage of increased Surety Bond Coverage for Local governments
MISSISSIPPI STATE SENATE

Secretary of the Senate

- Managed the day to day operations of the Senate.
- Coordinated Senate Bill Referral Process with Lt. Governor Amy Tuck.
- Supervised all staff of the State Senate.
- Advised Senate Rules Committee on all Policy Issues.
- Ensured the smooth operation of the Senate during Floor deliberations.
- See attached list of Accomplishments.

GOVERNOR'S OFFICE

Director of Administration / Fiscal Policy Advisor

- Directed all fiscal affairs of the Governor's Office.
- Advised Governor on State Fiscal Policy.
- Tracked Legislative Bills which affected the State Budget and other Fiscal areas of State Government.
- Assisted in the development of the Governor's State Budget.

MISSISSIPPI DEPARTMENT OF ARCHIVES AND HISTORY

Business Manager

- Managed the fiscal affairs of the Department.
- Developed the budgets for all divisions of the Department.
- Responsible for accounts payable and payroll of the Department.
- Supervised all accounting operations of the Department.
- Served as Legislative Liaison for the Department.
- Responsible for the successful passage of key Legislation. Key components of this Legislation are as follows:
  - Designed and secured passage of legislation that earmarked the interest earned on a $10 million portion of the Abandoned Property Fund in the State Treasury for the rehabilitation of historic properties.
  - Secured the only State Funded Construction Preplanning Project passed during the current year for the new William L. Winter Archives and History Building.
  - Helped design and secure funding for the construction of the new William L. Winter Archives and History Building.

MS DEPARTMENT OF REHABILITATION SERVICES

Director of Financial Management

- Reported to the Executive Director and served as an intricate part of the Senior Management Team.
- Provided Leadership and Supervision.
- Supervised all accounting, financial reporting and purchasing functions for the Department. These areas are staffed by approximately 34 employees.
- Supervised the Division of Budget. The Department receives funding from many sources including federal, state and third party matching funds. All budgets for the Department total in excess of $75 million.
- Supervised the Division of Leases, and Cooperative Agreements. This Division coordinates the preparation of all leases for office space throughout the state; coordinates the preparation of all professional service contracts and writes all cooperative agreements and establishment grants for the Department. This Division also maintains a database for tracking all of these agreements.
- Supervised the Division of Administrative Services. This Division is responsible for all building maintenance, janitorial services, the MDRS supply warehouse, mailroom, property and equipment inventories, telephone services and procurement, and copy machine leases. This Division is staffed with 11 employees.
- Prepared, maintained and made revisions to the Department's Cost Allocation Plan.
- Consulted with Legislative leaders on appropriations for the Department.
* Consulted with agency Executive Director and other staff members on financial matters of the Department.
* Severed as Chairman of the Relocation Work Group. This consisted of organizing a team of professionals from all areas of the Department in order to determine space needs and incorporate the needs into a Request for proposals (RFP). I evaluated all bids from property owners and made recommendations to the Executive Director. In addition, worked with the Architect, contractor, Bureau of Buildings and the State Fiscal Officer during the lease-purchase and renovations of a 110,000 square foot building, with an appraised value of approximately $10,000,000. The lease-purchase of the old MFC Building in Madison, MS was the first of its kind in the history of Mississippi state government.

MS LEGISLATIVE BUDGET OFFICE

Budget Officer: 1986 - 1991
* Advised the chairman of the Senate Appropriations Committee on budget matters.
* Provided assistance to all senators on budget matters.
* Prepared Senate appropriations bills and amendments to House and Senate bills.
* Assisted Senate attorneys on legislation affecting the state budget.
* Special projects as assigned.

* Prepared budget recommendations on selected state agencies.
* Assisted Senate and House Appropriations Committees in determining funding levels for selected state agencies.

MS STATE DEPARTMENT OF AUDIT

Auditing Accountant, Senior 1983 - 1986
* Conducted financial and legal compliance audits on large medium and small state agencies.

Auditing Accountant, Intermediate
* Assisted higher level auditors conduct financial and legal compliance audits.
* Conducted financial and legal compliance audits of small state agencies.

Auditing Accountant, Assistant
* Assisted higher level auditors conduct financial and legal compliance audits of state agencies.

ACTIVITIES

Member of American Institute of Certified Public Accountants (AICPA)

Member of Mississippi Society of Certified Public Accountants (MSCPA)

Member of the Association of Governmental Accountants (AGA)

Member of the Mississippi State Accountancy Program Advisory Committee

Member of Highland Colony Baptist Church in Ridgeland, MS
Executive Board Member of the Ridgeland High School Athletic Booster Club (Secretary in 2008-2009, 11th Grade Representative in 2007-2008, 10th Grade Representative in 2006-2007, and Secretary in 2005-2006).

Head Coach for Madison Ninety-Sixers USSSA Select Baseball Team (12 year olds, 13 year olds and 14 year olds).

Assistant Coach for the Jackson Ninety-Sixers Junior Baseball Team (15-18 year olds)
ABBREVIATED CURRICULUM VITA
CRAIG P. ORGERON, Ph.D.

OFFICE:
MS Department of Information Technology Services
301 North Lamar Street, Suite 508
Jackson, MS 39201
(601) 359-2689
craig.orgeron@its.ms.gov

CURRENT POSITION:
DIRECTOR, STRATEGIC SERVICES DIVISION
MISSISSIPPI DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES

EDUCATION:
MISSISSIPPI STATE UNIVERSITY, Doctor of Philosophy (Ph.D.), Public Policy and Administration, May 2008.
ELECTIVE CONCENTRATION: Research Methods
DISSERTATION TITLE: Evaluating Citizen Adoption and Satisfaction of E-Government in Mississippi
(Doug Goodman, Ph.D., Chair)
MISSISSIPPI STATE UNIVERSITY, Master of Public Policy and Administration (M.P.P.A.), December 2001.
MISSISSIPPI STATE UNIVERSITY, Bachelor of Business Administration (B.B.A.), Major in Business Information Systems and Quantitative Analysis, August 1989.

PROFESSIONAL EXPERIENCE:
2009-PRESENT DIRECTOR, STRATEGIC SERVICES DIVISION
MS DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES
2007-2009 DEPUTY DIRECTOR, STRATEGIC SERVICES DIVISION
MS DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES
2004-2007 ENTERPRISE ARCHITECT
MS DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES
1998-2004 EMERGING TECHNOLOGY COORDINATOR
MS DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES.
1997-1998 INFORMATION TECHNOLOGY PLANNER
MS DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES
1994-1997 SYSTEMS ANALYST
L.M. BERRY COMPANY, A BELL SOUTH ADVERTISING AND PUBLISHING COMPANY SUBSIDIARY
1989-1993 COMMUNICATIONS-COMPUTER SYSTEMS STAFF OFFICER
EGLIN AIR FORCE BASE
UNITED STATES AIR FORCE

ACADEMIC EXPERIENCE:
2009 ADJUNCT ASSISTANT PROFESSOR
DEPARTMENT OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION
MISSISSIPPI STATE UNIVERSITY

COURSE(S) TAUGHT:
- Systems in Public Administration – Three hours lecture. Role of automated, computer-based systems in government; their impact on the workplace, government institutions, and the governmental systems; selected topical applications.

Craig P. Orgeron, Ph.D.
ABBREVIATED CURRICULUM VITA
CRAIG P. ORGERON, Ph.D.

PROFESSIONAL CERTIFICATION/TRAINING:


MISSISSIPPI STATE PERSONNEL BOARD. Mississippi Certified Public Manager Training Program (C.P.M.), Graduated, November 1999. Program accredited by the National Certified Public Manager Consortium.

UNITED STATES AIR FORCE COMMUNICATION-COMPUTER SYSTEMS OFFICER COURSE. Keesler Air Force Base, Mississippi, Graduated, February 1990.

PUBLICATIONS:


PROFESSIONAL SERVICE:

2009 NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCIO) – FEDERAL COST ALLOCATION AND REGULATORY REFORM WORKING GROUP.

NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCIO) – LEGACY SYSTEMS AND MODERNIZATION WORKING GROUP.

NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCIO) – STATE CONNECTIVITY AND BROADBAND WORKING GROUP.

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 – MISSISSIPPI BROADBAND TASK FORCE – APPOINTED BY GOVERNOR HALEY BARBOUR.

TASK FORCE TO STUDY UNIFORMITY IN REAL PROPERTY RECORDINGS – APPOINTED BY DAVID L. LITCHLITER, EXECUTIVE DIRECTOR, MISSISSIPPI DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES.

2009 – BIOS ADVISORY BOARD, MISSISSIPPI STATE UNIVERSITY, COLLEGE OF BUSINESS AND INDUSTRY, DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS.

2008 – MASTER IN PUBLIC POLICY AND ADMINISTRATION (MPPA) ADVISORY COMMITTEE, MISSISSIPPI STATE UNIVERSITY, COLLEGE OF ARTS AND SCIENCES, DEPARTMENT OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION.

2008 NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCIO) – HEALTH IT

Craig P. Orgeron, Ph.D.
ABBREVIATED CURRICULUM VITA
CRAIG P. ORGERON, Ph.D.

WORKING GROUP.


2007  MISSISSIPPI DEPARTMENT OF PUBLIC SAFETY, OFFICE OF HOMELAND SECURITY – DATA FUSION CENTER ADVISORY COUNCIL.

2007  NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCO) – REAL ID WORKING GROUP, APRIL – MAY.


2006  NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCO) – ENTERPRISE INFRASTRUCTURE AND SERVICES COMMITTEE.

2006 – 2007  MULTI-STATE SHARING AND ANALYSIS CENTER (MS-ISAC) – LEGISLATIVE WORKGROUP.

2005  NATIONAL ASSOCIATION OF STATE CHIEF INFORMATION OFFICERS (NASCO) – TRANSFORMATION AND INNOVATION COMMITTEE.

2003 – PRESENT  MISSISSIPPI COORDINATING COUNCIL FOR REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEMS – SERVED AS SUPPORT STAFF FOR THE DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES.

2003  TASK FORCE ON LOCAL GOVERNMENT INFORMATION SYSTEMS – SERVED AS SUPPORT STAFF FOR THE DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES.


SELECTED HONORS AND AWARDS:

AWARDED SPECIAL ACHIEVEMENT IN GEOGRAPHIC INFORMATION SYSTEMS, ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE, INC., 2007.

AWARDED MEMBERSHIP TO PI ALPHA ALPHA NATIONAL HONOR SOCIETY FOR PUBLIC ADMINISTRATION, 2003.


AWARDED CERTIFICATE OF DESIGNATION, MISSISSIPPI CERTIFIED PUBLIC MANAGER PROGRAM, 1999.


AWARDED REGULAR COMMISSION IN THE UNITED STATES AIR FORCE, MISSISSIPPI STATE UNIVERSITY, 1989.


Domenico “Mimmo” Parisi

Professor and Director
Mississippi State University

National Strategic Planning & Analysis Research Center
P.O. Box 6027 / 203 Robert Louis Jones Circle
Mississippi State, MS 39762
Phone: 662-325-9242 / Fax: 662-325-1310
E-mail: mimmo.parisi@nsparc.msstate.edu

EDUCATION

The Pennsylvania State University, Ph.D.; Rural Sociology and Applied Statistics, 1998
The Pennsylvania State University, M.A.; Rural Sociology and Community Development, 1995
The Catholic University of Piacenza, Italy, Laurea/M.A.; Agronomy and Agricultural Economics, 1992

EXPERIENCE

Mississippi State University

- 2008 to present. Director, National Strategic Planning & Analysis Research Center and Professor of Sociology
- 2004 to present. Director, State Workforce Integrated Performance System, State Workforce Investment Board
- 2004-2008. Coordinator, Workforce, Economic, & Community Development Research Unit and Associate Professor of Sociology
- 1998-2003. Co-Coordinator, Unit for Community and Environmental Studies and Assistant Professor of Sociology

PROFESSIONAL EXCELLENCE SUMMARY

- Respected scientist, administrator, and practitioner focused on achieving exceptional results to improve the quality of life in Mississippi
- Nationally recognized expert and leader in exemplifying, articulating, promoting, and expanding the Land-Grant mission
- Developed the blueprint for an innovative strategic approach in Mississippi to create a unique results-oriented statewide integrated workforce system comprised of all 15 community colleges and seven state agencies along with their regional and local offices
- Contributed to the success of MSU and Mississippi by building a progressive research program aligning university, industry, and government resources and establishing strong public-private partnerships
- Trusted leader for state wide economic initiatives, strategic planning, and financial management to promote practises that meet the state’s workforce needs while creating access to good jobs for workers across the state and local regions
- Recognized for consensus building and identifying, attracting, and working side-by-side with talented and highly motivated individuals to achieve established goals
- Award-winning scholar with 51 publications, 36 research grants totaling to $19,734,362, 47 professional presentations at national and international conferences, actively involved in various national and international organizations, and actively engaged in various international, national, regional, and university committees

SELECTED AWARDS AND HONORS

- Excellence in Extension and Public Service Award, Rural Sociological Society, 2008
- Ralph E. Powe Research Excellence Award, Mississippi State University, 2004
- Early Career Award, Rural Sociological Society, 2001

SELECTED COMMITTEES AND APPOINTMENTS

- National Governors Association, Member of Mississippi Policy Academy on Sector Strategies, 2008-
- Momentum Mississippi, Member of the Working Group for the Economic Steering Committee, 2008-
• Mississippi House of Representatives, Select Committee on Poverty, Member of the Working Group for the Poverty Task Force, 2008-
• Rural Sociological Society Membership Committee, Chair, 2008
• Alabama-Mississippi Sociological Association, President, 2007
• University of Catania, Italy, Co-Chair of International Ph.D. Program in Human Sciences, 2006-
• Rural Sociological Society, Program Chair of Annual Meeting, 2004
• United States Department of Agriculture, Program Manager of Phase I and Phase II Small Business Innovation Research Rural and Community Development Program, 2004

PROFESSIONAL AND SCHOLARLY ASSOCIATIONS

• Rural Sociological Society
• Population Association of America
• Southern Sociological Society
• Southern Rural Sociological Association
• Mid-South Sociological Association
• American Sociological Association
• International Association for Society and Natural Resources
• Society for the Study of Social Problems
• Alabama-Mississippi Sociological Association
• Community Development Society

SELECTED RECENT PUBLICATIONS AND REPORTS


**SELECTED FUNDED RESEARCH PROJECTS**


Gill, Duane A. and Domenico Parisi. “Asset Building and Community Development in Mississippi.” Mississippi Agricultural and Forestry Experiment Station, Mississippi State University. $300,000. Funding Period: October 2004 – October 2009.

**SELECTED PROFESSIONAL PRESENTATIONS/PAPERS**

Ambinakudige, Shrinidhi, Domenico Parisi, and Michael Taquino. 2009. “Inter-County Migration in the United States: Who is Gaining, Who is Losing?” Presented at the annual meetings of the Rural Sociological Society, July 30-August 2, Madison, WI.


Kenneth Lee Thompson
(b)(6)
kthompson@mde.kl2.ms.us

Objective

A position of leadership in the provision of a quality education for all children.

Profile

- 14+ years of experience in Mississippi K-12 education.
- Ability to direct complex projects from concept to fully operational status.
- Goal-oriented individual with strong leadership capabilities.
- Organized, highly motivated, and detail-directed problem solver.
- Proven ability to work in unison with staff, community, and government officials.

Education

B.S., Mathematics, University of Southern Mississippi

Employment

Director, Office of Research and Statistics, Mississippi Department of Education, Jackson, MS
- 2009-
  - Responsible for federal & state accountability
  - Responsible for compliance with federal and state accountability legislation, State Board of Education Accountability policy and needs in the area of accountability.
  - Responsible for publishing accountability.
  - Responsible for ensuring continuous intensive research to stay abreast of applicable changes to programs.
  - Responsible for USDE/NGA cohort completion/graduation/dropout rates annually.
  - Responsible for training in interpretation and use of accountability results.
  - Respond to ad-hoc requests for data analysis and research.
  - Manage day-to-day operations of the Office of Research and Statistics

Director of Accountability Systems, Mississippi Department of Education, Jackson, MS
- 2007-2009
  - Ensure that state and Federal accountability models are run accurately.
  - Consult/work with stakeholders to ensure reporting requirements are met.
  - Develop and administer procedures to ensure compliance with federal and state legislation requirements for reporting state and Federal accountability data.
  - Fulfill data requests as required.
  - Develop and provide formal documentation of supported applications and/or projects.
  - Continue intensive research to stay abreast of applicable changes to programs.

MSIS Director, Mississippi Department of Education, Jackson, MS
- 2006-2007
  - Worked with offices throughout the Department of Education.
  - Led all districts to completion prior to deadline for first time.
  - Made public reports available online for the first time.
  - Established dialogue between the Department of Education and school districts.
MS Project Manager/E-Rate Consultant, The Contact Network dba InLine, Jackson, MS 2004-2006
- Lead person on all MS projects.
- Deployed and oversaw maintenance on fiber and wireless wide area networks.
- Deployed and oversaw maintenance of district firewalls.
- Deployed and maintained over 150 video conferencing sites.

State E-Rate Coordinator/MIS Help Desk Supervisor, Mississippi Department of Education, Jackson, MS 2000-2004
- Responsible for overall maintenance of CHS, Greymont, Foley Street, and Schools for Deaf/Blind networks.
- Responsible for interpreting, analyzing, and disseminating E-Rate legislation to all school districts resulting in approximately $35 million in funding per year.
- Acted as liaison between school districts and federal administrators of E-Rate program.
- Responsible for Cisco Networking Academies.
- Liaison between Office of Management Information Systems and Office of Educational Technology.
- Assisted with the development of MSIS.
- Assisted with the administration of the Technology Literacy Challenge Fund grant.
- Assisted with the development and approval of district technology plans.
- Contributed to the development of the state technology plan.
- Contributed to the organization of the annual state technology trade show.

Technology Coordinator, Pearl River County School District, Carriere, MS 1995-2000
- Responsible for the installation and maintenance of the district network, PCs, software, and inventory.
- Responsible for district E-Rate.
- Responsible for district Cisco Networking Academy.
- Acted as Liaison between district and Stennis Space Center volunteers during installation of local area networks.
- Provided professional development to district employees on technology-related topics.
- Partnered with the Workforce Development division of Pearl River Community College to provide on-going training.

Secondary Math Teacher, Pearl River County School District, Carriere, MS 1995-1996
- Attained highest scores on the state Algebra I test.
- Taught Pre-Algebra and Algebra I.
- Presented at MS Association of Mathematics Teachers.
- Received grant to purchase computers for classroom.
- First teacher to integrate computers into curriculum.
- Conducted fund-raisers to supplement technology grant.

Management/Analyst, Morrison’s Inc., Mobile, AL 1983-1994
- Directed recruitment and retention of staff of 70+ employees.
- Trained, supervised and evaluated staff, coached improvement management skills.
- Resulted in multilateral staff achievement of work objectives.
- Managed assets in excess of $5 million.
- Conducted research and advised retail establishments in methods to improve both quality and efficiency.
- Worked on development of retail data collection system including research into efficiency and quality of data.

Data Analyst, US Naval Oceanographic Office, Bay St. Louis, MS 1981-1985
- Conducted research on navigation paths in relation to ocean contours.
<table>
<thead>
<tr>
<th>Professional/Social Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Council of Chief State School Officers, Accountability Systems Reporting and Reporting state collaborative project</td>
</tr>
<tr>
<td>Council of Chief State School Officers, Education Information Management Advisory Council</td>
</tr>
<tr>
<td>Licensed MS Educator, License Number 154570</td>
</tr>
<tr>
<td>National Council for Teachers of Mathematics</td>
</tr>
<tr>
<td>International Society for Technology in Education</td>
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<tr>
<td>Mississippi Educational Computing Association</td>
</tr>
<tr>
<td>State E-Rate Coordinators Alliance Delegate</td>
</tr>
<tr>
<td>Corporate E-Rate Representative</td>
</tr>
<tr>
<td>Cisco Networking Academy State Representative,</td>
</tr>
<tr>
<td>• Los Angeles, 2001</td>
</tr>
<tr>
<td>• San Diego, 2002</td>
</tr>
<tr>
<td>• Orlando, 2003</td>
</tr>
<tr>
<td>Cisco Certified Network Associate</td>
</tr>
<tr>
<td>Cisco Certified Academy Instructor</td>
</tr>
<tr>
<td>President's Task Force on BroadBand Deployment, Washington DC</td>
</tr>
<tr>
<td>Delegate, Telecommunications and Infrastructure Task Group, Southeastern Regional Education Board</td>
</tr>
<tr>
<td>Sigma Phi Epsilon Fraternity Alumnus</td>
</tr>
<tr>
<td>University of Southern Mississippi Alumni Association</td>
</tr>
</tbody>
</table>
Jolene Miesse
(b)(6)
jemiesse@mde.k12.ms.us

SUMMARY
20 years programming and development experience

COMPUTER SKILLS

Languages
- COBOL
- JCL
- FOXPRO 2.5
- Visual FOXPRO 3.0
- Oracle

Software
- Crystal Reports
- Oracle Discover 3.1
- Oracle Report Builder 6i
- PVCS Version Manager
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Word

EXPERIENCE

Lead Business Systems Analyst October 2007 - Present
- Assisted school districts in submitting accurate data to MSIS (Mississippi Student Information System).
- Collect and submit data for Federal Reporting.

Senior Programmer Analyst July 2000 – October 2007
- Maintained 2 internal systems in Visual FoxPro 3.0.
- Assisted school districts in submitting accurate data to MSIS (Mississippi Student Information System).
- Created and tested new reports for state data collection system using Oracle Report Builder.
- Did ad hoc reports using Crystal Reports, Oracle Discoverer, and Oracle Report Builder.
• Worked with MDE staff in analysis, design, and implementation of enhancements to MSIS.

**Programmer Analyst II**


• Maintained 5 internal systems in Visual FoxPro 3.0.
• Maintained 3 internal systems in FoxPro 2.5.
• Assisted school districts in submitting accurate data.
• Resource analyst on MSIS project.
• Worked with MDE staff in analysis, design, and implementation of enhancements of mainframe and PC based systems.

**DP Systems Analyst IV**


*Mississippi Department of Education*

• Maintained 5 internal systems in Visual FoxPro 3.0.
• Maintained 3 internal systems in FoxPro 2.5.
• Maintained payroll and accounting systems using COBOL and JCL.
• Worked with MDE staff in analysis, design, and implementation of enhancements of mainframe and PC based systems.

**DP Systems Analyst III**

October 1990 – April 1996

*Mississippi Department of Education*

• Student Level database team member.
• Assisted in maintaining school district personnel system (FoxPro).
• Assistant Manager on MAS project (FoxPro 2.5).
• Assisted in writing payroll system specifications.
• Maintained payroll and accounting systems using COBOL and JCL.
• Worked with other MDE staff in analysis, design, and implementation of enhancements of mainframe and PC based systems.

**DP Systems Analyst II**

September 1988 – September 1990

*Mississippi Department of Education*

• Maintained COBOL programs, JCLs, CICS programs, and SAS programs.
• Developed new COBOL programs as needed.
• Worked with users to develop system requirements.

**DP Programmer III**

January 1988 – August 1988

*Mississippi Department of Education*

• Maintained COBOL programs, and JCLs for MDE systems.
• Developed new COBOL programs and JCLs as needed.

**Patient Accounts Supervisor**

May 1986 – December 1987

*UMC School of Dentistry*

• Supervised Patient Accounts personnel.
• Dealt with patients and dental students.
• Did daily reports and monthly reports.
• Analyzed patients’ accounts.
•Compiled bi-weekly payroll and maintained leave records.

**Fiscal Specialist**
*October 1981 – December 1983*

*UMC Dietary Department*
• Purchased food and supplies for Dietary department.
• Did daily reports and filing.
• Compiled bi-weekly payroll and maintained leave records.

**Accounts Payable Clerk**
*June 1980 – October 1981*

*UMC Accounts Payable Office*
• Dealt with vendors and various hospital departments.
• Prepared vouchers for payment.

**EDUCATION**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mississippi University for Women</td>
<td>May 1979</td>
</tr>
<tr>
<td>B.S. - Accounting</td>
<td></td>
</tr>
<tr>
<td>Mississippi State University</td>
<td>January 1986</td>
</tr>
<tr>
<td>Master of Computer Science</td>
<td></td>
</tr>
</tbody>
</table>
Summary of Qualifications

I am a Lead Business Systems Analyst with the Mississippi Department of Education and have experience in a number of contemporary technologies and business processes. I possess a bachelor’s degree in computer science from the University of Southern Mississippi. I have served as an analyst, programmer, and software engineer in the military and education fields. I am currently responsible for the State Performance Plan and Annual Performance Report data collection and reporting for the Mississippi Department of Education. I have extensive experience in developing client server and web-based applications using a variety of development tools including Oracle 6, Oracle 9i, HTML, PL/SQL, and Java.

Other Experience

Senior Consultant Ciber, Inc. April 2006 – August 2009
- Maintained and supported several IT systems including the special education portion of MSIS
- Developed software using Oracle Developer Forms and Reports
- Developed database procedures and functions using PL/SQL
- Created ad hoc queries and reports using SQL
- Created documentation and performed requirements gathering
- Other systems supported include a Grants Management project for MDE and a college matching and search application for junior and community college students

Technical Specialist United States Federal Government December 2003 – April 2005
- Oracle Developer for the NAVAIR Support Equipment Management System
- Designed, implemented, and tested web-based inventory tracking application using the Oracle Developer Suite
- Attended customer meetings to gather new requirements and performed analysis of those requirements
- Maintained online help system using Robohelp software
- Management of risk assessment and identification within the project

- Provided Oracle programming support to the NAVAIR Support Equipment Management System

Programmer University of Southern Mississippi October 2002 – May 2003
- OpenGL programmer for the Computer Science Department
- Conducted research for the High Performance Visualization Laboratory in collaboration with the John C. Stennis Space Center

Technical and Business Skills

- **Programming:** SQL/PLSQL, C/C++, Java, OpenGL, HTML, XML, Object Oriented Principles
- **Operating Systems:** Windows 95/98/ME/NT/2000/XP, Unix
- **Applications:** Oracle Developer Suite, Macromedia RoboHelp, Microsoft Office 97/2000/XP, Merant PVCS, SSH Secure Shell
- **Business Processes:** SW-CMM, CMMI, Lean Six Sigma, Project Risk Management, Function Point Counting, Team Building Principles
• **Certifications:** Lean Six Sigma Green Belt, Federal Government Contracting Officer Representative

• **Security Clearance:** Unclassified Sensitive

**Education**

University of Southern Mississippi  
Hattiesburg, MS

• B.S. Computer Science
• Graduated May 2003 with Honors
• GPA 3.63
Project Narrative

Project Narrative - Appendix C Current Status of State's Longitudinal Data System

Attachment 1:
Title: MS-SLDS Appendix C Pages: 4 Uploaded File: MS-SLDS Appendix C.pdf
## Appendix C: Current Status of State’s Longitudinal Data System

<table>
<thead>
<tr>
<th>Statewide Longitudinal Data System Requirements</th>
<th>Current Status</th>
<th>Relevant Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data System Capabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The system must enable States to examine student progress and outcomes over time, including students’ preparation to meet the demands of postsecondary education, the 21st century workforce, and the Armed Forces. Such a system must include data at the individual student level from preschool through postsecondary education and into the workforce (e.g., employment, wage, and earnings information).</td>
<td>While the system does not currently track progress over time, system partners currently collect relevant data points that can be linked to build a longitudinal data system that examines student progress and outcomes over time and determines if students are college- and workforce-ready. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and an online one-stop portal and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>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.</td>
<td>The current system has limited interoperability as data are stored in independent silos maintained in physically distinct environments and cannot be readily accessed by or exchanged between system partners. There is also no statewide mechanism in place to assure data quality through standard data structures, data formats, and data definitions. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a relational database with a standard data structure, data format, and data dictionary, a standardized XML format, a statewide policy for data quality assurance, an online one-stop portal and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>The system must link student data with teachers, i.e., it must enable the matching of teachers and students so that a given student may be matched with the particular teachers primarily responsible for providing instruction in various subjects.</td>
<td>Relevant data points are collected by system partners that can be linked to match students and teachers. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and an online one-stop portal.</td>
</tr>
<tr>
<td>The system must enable the matching of teachers with information about their certification and teacher preparation programs, including the institutions at which teachers received their training.</td>
<td>Relevant data points are collected by partners that can match teachers with their certification and preparation routes. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and an online one-stop portal.</td>
</tr>
<tr>
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</tr>
<tr>
<td>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.</td>
<td>This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and an online one-stop portal and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>The system must ensure the quality and integrity of data contained in the system.</td>
<td>This capacity currently exists.</td>
<td></td>
</tr>
<tr>
<td>The system must provide the State with the ability to meet reporting requirements of the Department, especially reporting progress on the metrics established for the State Fiscal Stabilization Fund and the reporting requirements included in the EDFacts data collection and reporting system.</td>
<td>The capacity currently exists to produce reporting progress on the metrics established by the State Fiscal Stabilization Fund and reporting requirements included in the EDFacts data collection reporting system.</td>
<td></td>
</tr>
</tbody>
</table>

**Data System Elements**

<table>
<thead>
<tr>
<th>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)</th>
<th>Currently there is not a unique statewide student identifier common across all partner data. A method is in use to generate a unique ID and will be further developed under a grant awarded pursuant to this competition.</th>
<th>Creation of a statewide relational database with a standard data structure, data format, and data dictionary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student-level enrollment, demographic, and program participation information</td>
<td>These data elements are currently present in individual partner data.</td>
<td></td>
</tr>
<tr>
<td>Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs</td>
<td>These data elements are not directly captured in the current system; however, with cross-program analysis, the transitions can be identified, and the appropriate fields can be created. This capacity will be further developed under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The capacity to communicate with higher education data systems</td>
<td>This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database and an online one-stop portal.</td>
</tr>
<tr>
<td>A State data audit system assessing data quality, validity, and reliability</td>
<td>Currently, each data system has its own audit process. Under a grant awarded pursuant to this competition, a statewide data audit system will be developed and adopted.</td>
<td>Creation and adoption of a statewide policy for data quality assurance and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>Yearly test records of individual students with respect to assessments under section 1111(b) of the Elementary and Secondary Education Act of 1965</td>
<td>These data elements are currently present in all education and workforce entity data.</td>
<td></td>
</tr>
<tr>
<td>Information on students not tested, by grade and subject</td>
<td>This information can be determined in the system, but there is no data element that directly captures it. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>A teacher identifier system with the ability to match teachers to students</td>
<td>The system currently has this capacity throughout K-20</td>
<td></td>
</tr>
</tbody>
</table>

Appendix C
<table>
<thead>
<tr>
<th>Student-level transcript information, including information on courses completed and grades earned</th>
<th>This information can be determined in the system and the information is in the process of being included. Current development is supported with an existing grant from the Institute.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student-level college readiness test scores</td>
<td>This element is in the process of being included. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary.</td>
</tr>
<tr>
<td>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</td>
<td>This information is available but is not captured by a specific data element. This capacity will be further developed or improved under a grant awarded pursuant to this competition.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and training to help ensure appropriate use of the system and information generated from it.</td>
</tr>
<tr>
<td>Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education</td>
<td>Additional system partners and data elements will be integrated into the system under a grant awarded pursuant to this competition including early childhood data from human services, the department of health and mental health.</td>
<td>Creation of a statewide relational database with a standard data structure, data format, and data dictionary and inclusion of data of special interest. Training will be conducted to help ensure appropriate use of the system and information generated from it.</td>
</tr>
</tbody>
</table>
Project Narrative

Project Narrative - Appendix D Letters of Support

Attachment 1:
Title: MS-SLDS Appendix D Pages: 9 Uploaded File: MS-SLDS Appendix D.pdf
November 10, 2009

Dr. Tom Burnham  
Superintendent of Education  
Mississippi Department of Education  
P.O. Box 771  
Jackson, MS 39205

Dear Dr. Burnham:

As Governor of the State of Mississippi, I am committed to promoting an integrated state longitudinal data system to improve student success and build a competitive workforce for the jobs of the future to improve the quality of life for all Mississippians.

After all, we instinctively know that education is the number one quality of life issue and the number one economic development issue for our state. Therefore, it is incumbent upon Mississippi to ensure that we have a comprehensive mechanism in place that tracks the progress of current education, labor, workforce, and related program policies. Monitoring these programs through an integrated system will be a huge asset as Mississippi strives to develop educational policies with an eye toward enhancing educational opportunities and attracting more and better jobs to our state.

Under the American Recovery and Reinvestment Act, states are able to apply for competitive grant funding to develop comprehensive P-20 longitudinal data systems, including data from areas of government such as secondary and postsecondary education, workforce, and labor. My office has been working in conjunction with a team of key stakeholders including representatives from your office, as well as the State Workforce Investment Board, Institutions of Higher Learning, Department of Information Technology, Department of Human Services, State Board for Community and Junior Colleges, and others to develop a system that does not duplicate, but builds on existing data infrastructure. I am committed to supporting the project described in the grant application developed by the aforementioned team and submitted to the U.S. Department of Education.

We look forward to continuing our collaboration with education, labor, workforce, and other stakeholders in this important effort. Should you need any further assistance, please do not hesitate to contact members of my staff, Johnny Franklin or Rebekah Staples, at 601-359-3150.

Sincerely,

Haley Barbour

POST OFFICE BOX 139 · JACKSON, MISSISSIPPI 39205 · TELEPHONE: (601) 359-3150 · FAX (601) 359-3741 · www.governor.state.ms.us
November 19, 2009

Dr. Tom Burnham  
Superintendent of Education  
Mississippi Department of Education  
P.O. Box 771  
Jackson, MS 39205

Dear Dr. Burnham:

The State Workforce Investment Board is excited about the opportunity to collaborate with your agency for completing and institutionalizing our current integrated state longitudinal education and workforce system. As you know, the governor’s office and the board have used the system as a management tool to improve student success and build a competitive workforce for the jobs of the future and the quality of life for all Mississipians.

We strongly support the Mississippi Department of Education joining the state’s effort. With the addition of K12, the system can better identify and address the state’s needs to successfully foster, at the state and local levels, a culture in which data is valued and used to inform decisions. This system remains a priority for Mississippi and we are committed to the project described in the grant application submitted to the U.S. Department of Education. The SWIB will provide support to integrate K12 data into the existing 13-20/Workforce data currently part of the Integrated Longitudinal Education and Workforce Performance Management System.

We look forward to collaborating with you and your agency in this important effort. Should you need any further assistance, please do not hesitate to contact me.

Sincerely,

Larry Otis  
Chair
November 20, 2009

Dr. Tom Burnham
Superintendent of Education
Mississippi Department of Education
Post Office Box 771
Jackson, Mississippi 39205

Dear Dr. Burnham:

Mississippi’s public four-year university system is fully committed to participating in the development and use of an integrated state longitudinal data system.

From a broad perspective, this system will provide the information we need to measure individual growth from early childhood to the adult workplace. It will allow us to focus our scarce (and becoming scarcer) resources on educational practices that are most successful and cost-effective relative to maximizing the capacity of our people.

At the university level, the proposed grant will provide a previously missing key to our ability to tailor higher education offerings to both the capacity of the individual student and the demands of the workplace. Our use of the information from the proposed data system will result in an increase in higher education enrollment, higher persistence rates, graduation rates and an overall higher capacity of our graduates. The ability to follow our graduates’ progression, by university and discipline, to the workplace will provide university accountability measures that we have never had.

I pledge cooperation and participation from Mississippi’s public universities as we proceed with this effort. The short and long-term efficiencies and outcome measurements that can be derived from a Mississippi longitudinal data system demand our full support.

Sincerely,

Hank M. Bounds
Commissioner of Higher Education

HMB/jk
STATE BOARD FOR
COMMUNITY AND JUNIOR COLLEGES

November 13, 2009

Dr. Tom Burnham
Superintendent of Education
Mississippi Department of Education
P.O. Box 771
Jackson, MS 39205

Dear Dr. Burnham:

The Mississippi State Board for Community and Junior Colleges (SBCJC) is pleased to offer support for the development of an integrated Statewide Longitudinal Data System. Please accept this letter as confirmation of the SBCJC’s commitment to partner with the Mississippi Department of Education and other stakeholders in the development and management of the system.

Over the past several years, the SBCJC has participated in the Integrated Longitudinal Education and Workforce Performance Management System, which was developed to assess the quality of workforce training in Mississippi. Integrating K-12 data with the 13-20 data that is part of the current Workforce Performance Management System will provide the linkages necessary to improve student performance, assess program alignment, and close the achievement gap on all educational levels.

We are committed to the project described in the grant application you are submitting to the U.S. Department of Education, and believe it will provide the mechanism through which we can make informed decisions regarding educational policy and practice in the State of Mississippi. If you require additional information, please call me.

Sincerely,

Eric Clark
Executive Director
November 13, 2009

Dr. Tom Burnham  
Superintendent of Education  
Mississippi Department of Education  
P.O. Box 771  
Jackson, MS 39205

Dear Dr. Burnham:

Mississippi Gulf Coast Community College (MGCCC) is committed to promoting an integrated state longitudinal data system to improve student success and build a competitive workforce for the jobs of the future to improve the quality of life for all Mississippians.

Over the past several years, MGCCC has been part of the Integrated Longitudinal Education and Workforce Performance Management System developed under the auspices of the State Workforce Investment Board and we strongly support the Mississippi Department of Education joining the state’s effort. With the addition of K12, the system can better identify and address the state’s needs to successfully foster, at the state and local levels, a culture in which data is valued and used to inform decisions. This system remains a priority for Mississippi and we are committed to the project described in the grant application submitted to the U.S. Department of Education. MGCCC will provide support to integrate K12 data into the existing 13-20/Workforce data currently part of the Integrated Longitudinal Education and Workforce Performance Management System.

We look forward to collaborating with the Mississippi Department of Education and other education and workforce stakeholders in this important effort. Should you need any further assistance, please do not hesitate to contact me.

Sincerely,

Willis H. Lott, Ed.D.
Mississippi Department of Employment Security

Haley Barbour  
Governor

Les Range  
Executive Director

Dr. Tom Burnham  
Superintendent of Education  
Mississippi Department of Education  
P. O. Box 771  
Jackson, MS  39205

Dear Dr. Burnham:

The Mississippi Department of Employment Security (MDES) is responsible for the oversight and operation of WIN Job Centers located across the state. As an employment and training state agency, we recognize the importance of collaborating with other workforce partners to provide services to job seekers and employers.

WIN Job Centers offer to youths, adults and dislocated workers job search assistance, resume preparation, veterans’ services, training, education, job industry data, employment bonds and equal opportunity information. These centers also provide to employers, business registration, employee job training, wage reporting, job placement assistance, layoff preparation and unemployment insurance tax filing. All services of the WIN Job Centers are free of charge to job seekers and employers.

Over the past several years, MDES has been part of the Integrated Longitudinal Education and Workforce Performance System. This system was developed under the auspices of the State Workforce Investment Board and we strongly support the Mississippi Department of Education joining the state’s efforts. With the addition of K-12 the system can better identify and address the state’s needs to successfully foster a culture in which data is valued and used to make informed decisions. This system remains a priority for Mississippi and we are committed to the project described in the grant application submitted to the U. S. Department of Education. MDES will provide support to integrate K-12 data into the existing 13-20/Workforce data currently part of the Integrated Longitudinal Education and Workforce Performance Management System.

We look forward to collaborating with the Mississippi Department of Education and other education and workforce stakeholders in this important effort. If additional information is needed, please feel free to contact my office at 601-321-6107 or by email at lrange@mdes.ms.gov.

Sincerely,

Les Range  
Executive Director

LR/bh

*Increasing Employment in Mississippi*

Henry J. Kirksey Building  •  1235 Echelon Parkway  •  Jackson, Mississippi 39213  
Post Office Box 1699  •  Jackson, Mississippi 39215-1699  •  (601) 321-6000  •  FAX (601) 321-6004  
MDES is an Equal Employment Opportunity Employer
November 20, 2009

Dr. Tom Burnham
Superintendent of Education
Mississippi Department of Education
Post Office Box 771
Jackson, Mississippi 39205

Dear Dr. Burnham:

The Mississippi Department of Human Services (MDHS) is committed to promoting an integrated state longitudinal data system to improve student success and build a competitive workforce for the jobs of the future to improve the quality of life for all Mississippians.

Over the past several years, the MDHS has been part of the Integrated Longitudinal Education and Workforce Performance Management System developed under the auspices of the State Workforce Investment Board and we strongly support the Mississippi Department of Education joining the state’s effort. With the addition of K12, the system can better identify and address the state’s needs to successfully foster, at the state and local levels, a culture in which data is valued and used to inform decisions. This system remains a priority for Mississippi and we are committed to the project described in the grant application submitted to the U.S. Department of Education. The MDHS will provide support to integrate K12 data into the existing 13-20/Workforce data currently part of the Integrated Longitudinal Education and Workforce Performance Management System.

We look forward to collaborating with the Mississippi Department of Education and other education and workforce stakeholders in this important effort. Should you need any further assistance, please do not hesitate to contact me at 601-359-4457.

Sincerely,

Don Thompson
November 18, 2009

Mississippi Department of Education
Attn: Dr. Tom Burnham, Superintendent
P. O. Box 771
Jackson, MS 39205

Dear Dr. Burnham:

The Mississippi Department of Corrections (MDOC) is committed to promoting an integrated state longitudinal data system to improve student success and build a competitive workforce for the jobs of the future to improve the quality of life for all Mississippians.

Over the past several years, the MDOC has been part of the Integrated Longitudinal Education and Workforce Performance Management System developed under the auspices of the State Workforce Investment Board and we strongly support the Mississippi Department of Education joining the state’s effort. With the addition of K12, the system can better identify and address the state’s needs to successfully foster, at the state and local levels, a culture in which data is valued and used to inform decisions. This system remains a priority for Mississippi and we are committed to the project described in the grant application submitted to the U.S. Department of Education. The MDOC will provide support to integrate K12 data into the existing 13-20/Workforce data currently part of the Integrated Longitudinal Education and Workforce Performance Management System.

We look forward to collaborating with the Mississippi Department of Education and other education and workforce stakeholders in this important effort.

Should you need any further assistance, please do not hesitate to contact me.

Sincerely,

Christopher B. Epps
Corrections Commissioner
State of Mississippi
November 19, 2009

Dr. Tom Burnham
Superintendent of Education
Mississippi Department of Education
P.O. Box 771
Jackson, MS 39205

Dear Dr. Burnham:

The Mississippi Department of Rehabilitation Services is committed to promoting an integrated state longitudinal data system to improve student success and build a competitive workforce for the jobs of the future to improve the quality of life for all Mississippians.

Over the past several years, the Mississippi Department of Rehabilitation Services has been part of the Integrated Longitudinal Education and Workforce Performance Management System developed under the auspices of the State Workforce Investment Board and we strongly support the Mississippi Department of Education joining the state’s effort. With the addition of K-12, the system can better identify and address the state’s needs to successfully foster, at the state and local levels, a culture in which data is valued and used to make informed decisions. This system remains a priority for Mississippi and we are committed to the project described in the grant application submitted to the U.S. Department of Education. The Mississippi Department of Rehabilitation Services will provide support to integrate K-12 data into the existing 13-20/Workforce data that is currently part of the Integrated Longitudinal Education and Workforce Performance Management System.

We look forward to collaborating with the Mississippi Department of Education and other education and workforce stakeholders in this important effort. Should you need any further assistance, please do not hesitate to contact me.

Sincerely,

[Signature]
H.S. McMillan
Executive Director
Mississippi Department of Rehabilitation Services
Budget Narrative

Budget Narrative - Budget Justification

Attachment 1:
Title: MS-SLDS Proposal Budget Narrative Pages: 9 Uploaded File: MS-SLDS Proposal Budget Narrative.pdf
BUDGET BREAKDOWN BY PROJECT OUTCOME

The estimated cost for the project outcomes related to system requirements and implementation are expected to be $2,868,056 for creating the relational database, standardizing the data sharing format, creating a comprehensive list of reports and necessary data elements, and creating a statewide policy for data quality assurance. These outcomes are all interrelated and activities to accomplish them will occur concurrently with one another. The expected cost for creating the one-stop online portal is $2,330,678. This includes the activities directly related to the application development for the Web-based interface. The expected cost for infrastructure to support system implementation in regards to the relational database and one-stop portal for data collection, analysis, and transfer is $3,590,269. This includes the cost for all hardware and software infrastructure upgrades for creating the relational database, hosting the online one-stop portal, and those necessary for partners to integrate data into the system. Finally, the expected cost for the training component is $356,286. This includes curriculum development, training the trainers, and training personnel in the field to assure there is consistency in the validity and reliability of data collected across all system partners.

The total direct cost for all project outcomes is approximately $9,145,289. The indirect cost related to these direct costs is estimated to be $858,717 over the three year grant period. The total estimated budget for the three year grant is $10,004,006.

Following is a breakdown of the detailed costs that make up the above totals for the proposed project.

PERSONNEL

The Mississippi Department of Education project budget for the Statewide Longitudinal Data System grant provides for the services of several key MDE personnel over the duration of the project.

Mr. John Gilbert, Director of Educational Accountability and Project Director, is part of the Department’s executive team and reports to the State Board of Education. He will provide overall leadership for the project and will dedicate approximately 5% FTE to project activities each year. However, his salary will be contributed in-kind and covered by state general funds from the Mississippi Department of Education.

An Assistant Project Director will manage the day-to-day tasks and coordination of the project. MDE does not currently have staff that can take on the role of Assistant Project Director in addition to current responsibilities. Thus, MDE will hire to fill this position. The Assistant
Project Director will devote 100% FTE to the project each year and will be charged with keeping the project on task and on time.

Deborah Donovan, Jolene Miesse, and Ken Thompson all have significant experience in working with MDE's data systems including the Mississippi Student Information System (MSIS). Ms. Donovan and Ms. Miesse (Lead Business Analysts) will provide their expertise in special education and MSIS. In year one, when there will be many data definition and related activities, they will devote 20% FTE to the project. In years two and three, when their activities will be related to review, feedback, and approval, they will devote 10% FTE to the project. Since Ms. Donovan and Ms. Miesse are funded through IDEA funds, a portion of their time to provide non-special education specific support will be covered by grant funds. It is expected that 50% of their time will be in-kind and 50% grant supported. Mr. Thompson's (Director of the Office of Research and Statistics) expertise will only be needed during the first year of the project. He will devote 20% FTE in the first year, which will be in-kind and covered by state general funds from the Mississippi Department of Education.

The total amount for personnel is projected to be $300,616 covered by grant funds and $66,901 contributed in-kind covered by other funds.

**FRINGES**

The fringe benefit rate for all employees included on the grant accounts for a full package of benefits that consists of (a) Social security; (b) Medicare; (c) State Retirement; (d) Health insurance (e) Life Insurance; (f) Unemployment Insurance; and (g) Worker's Comp. The rate is based on individual salaries for each of the staff. The rates are as follows: 23.89% for the Project Director; 25.7% for the Assistant Project Director; 25.21% for the Director of the Office of Research and Statistics; 27.21% for one Lead Business Systems Analyst; and 28.41% for the other Lead Business Systems Analyst. The total projected fringe benefit amount for the project is $77,796 covered by the grant and $17,250 for the amount to be contributed in-kind and covered by other funds.

**TRAVEL**

The travel budget will cover travel throughout the state of Mississippi for purposes of the grant. It will also cover out-of-state travel for technical conferences including the two day meeting each year in Washington, DC that two senior project staff will attend to discuss accomplishments, problems encountered, and possible solutions and improvements. The projected travel cost is $10,000 each year throughout the grant period for a total of $30,000.

**EQUIPMENT**

Since MDE plans to hire to fill the Assistant Project Director position, it will be necessary to purchase equipment needed for a new office such as a computer, printer, desk, chair and other
necessary office furniture and equipment. All of this equipment will be purchased in the first year of the grant and is estimated to cost $10,000.

**SUPPLIES**

Office supplies related to the project include paper, folders, and other basic supplies that will be needed for presentation and reports related to the project. This budget will also cover office supplies needed for the new office. The total projected cost for supplies is $2,000 per year for a total of $6,000 for the grant period.

**CONTRACTUAL**

The contractual line item in the budget includes an amount for MDE to cover the cost of items such as telecommunications, rent, postage, and other contractual services that are related to the grant. The cost related to such items for MDE is estimated to be $9,400 per year for a total of $28,200 over the grant period.

The contractual line item also includes estimates for contracts that the MDE plans to enter into with other agencies throughout the state in order to develop the Statewide Longitudinal Data System. The agencies that the MDE plans to contract with include the Mississippi ITS (State ITS), the State Board for Community and Junior Colleges (SBCJC), Mississippi Institutions for Higher Learning (IHL), and Mississippi State University on behalf of its National Strategic Planning and Analysis Research Center (nSPARC). Each anticipated subcontractor has submitted a budget for the costs they expect to incur to complete their specific part of the project. The narratives to support each of their spreadsheets are as follows:

**STATE ITS**

The Mississippi Department of Information Technology Services (ITS) will need to make infrastructure enhancements to ensure the successful completion of the Statewide Longitudinal Data System in Mississippi. The infrastructure enhancements include hardware and software purchases along with installation and maintenance for the new equipment.

**FY 2010**

The hardware ITS will need to purchase to support system implementation for the Statewide Longitudinal Data System includes four Sun SPARC Enterprise T5440 Servers at a total of $440,000, two Sun Datacenter InfiniBand Switches at a total of $150,000, a Sun Storage 6580 Array with 24 TB storage capacity at $220,000, and a Sun StorageTek SL8500 Modular Library System for backups at $200,000. The total for hardware in year one is estimated to be $1,010,000.

The software ITS will need to purchase includes eight licenses of Oracle Enterprise at $47,500 each, eight Oracle Server annual maintenance support agreements at $10,450 each, eight Oracle RAC licenses at $23,000 each, eight Oracle RAC annual maintenance agreements at $5,060...
each, SAS Business Intelligence Enterprise software at $250,000, and Symantec NetBackup software at $6,000. The software total for year one is estimated to be $944,080.

Accompanying services for the hardware and software for the Statewide Longitudinal Data System include Sun Microsystems Professional Services for initial hardware setup and configuration at $75,000 and 12Mb network bandwidth at $6,250 per month.

The total amount budgeted for ITS year one of the Statewide Longitudinal Data System is approximately $2,104,080.

**FY 2011**

ITS does not anticipate any hardware needs for year two but will need to renew maintenance agreements to ensure systems are properly cared for including eight Oracle Server annual maintenance support agreements at $10,450 each, eight Oracle RAC annual maintenance agreements at $5,060 each, SAS Business Intelligence Enterprise annual maintenance at $20,000, and Symantec NetBackup annual maintenance at $1,000. The software total for year two is estimated to be $145,080. The system will also require 12Mb network bandwidth at $6,250 per month during year two.

The total amount budgeted for ITS for year two of the Statewide Longitudinal Data System is estimated to be $220,080.

**FY 2012**

ITS does not anticipate any hardware needs for year three but will need to continue renewing maintenance agreements to ensure systems are properly cared during this time. This includes eight Oracle Server annual maintenance support agreements at $10,450 each, eight Oracle RAC annual maintenance agreements at $5,060 each, SAS Business Intelligence Enterprise annual maintenance at $20,000, and Symantec NetBackup annual maintenance at $1,000. The software total for year three is estimated to be $145,080. The system will also continue to require 12Mb network bandwidth at $6,250 per month during year three.

The total amount budgeted for ITS for year three of the Statewide Longitudinal Data System is estimated to be $220,080.

The total State ITS budget estimate for all three years is $2,544,240.

SBCJC

**FY 2010**

The SBCJC will need to make various infrastructure enhancements to support system implementation to ensure the successful completion of the Statewide Longitudinal Data System in Mississippi. The infrastructure enhancements include data collection and analysis, hardware and infrastructure purchases, installation and maintenance costs, and modifications to the
existing student information systems of each of Mississippi’s 15 Community Colleges. The data collection and analysis features include 35 reports, three main action screens, 50 maintenance screens, seven special maintenance pages, one user maintenance screen, database refactoring, project management, testing, training and documentation. The cost of each of these features is based on the estimated number of days each feature will take to complete at $100 per hour. The total number of estimated days necessary to incorporate all of these features into the infrastructure enhancements is 438 (3,504 hours). At $100 per hour, the total cost for data collection and analysis is estimated to be $350,400.

In order to make the necessary infrastructure enhancements, the SBCJC will need to purchase hardware and software as well as pay for its installation and maintenance and data migration. The anticipated hardware purchases include two Dell EqualLogic PS6000X, Mainstream Performance 10K SAS Drives at $55,900 each, one HP Blade Server with chassis and Vmware at $130,837, four memory upgrades to 64 GB at $7,199 each, and a three year HP maintenance support agreement for around the clock call-to-repair services for $18,846. The cost of first year software maintenance is estimated to be 15% of the total cost of data collection and analysis for a total of $52,500, and the cost for hardware installation and data migration is estimated to be $41,500. The total cost for infrastructure enhancements is estimated to be $734,679.

The SBCJC will also incur costs in the first year to make modifications to the existing student information systems (SIS) that are currently in operation at each of Mississippi’s 15 community and junior colleges. It is estimated that it will take 80 man hours per community or junior college, and the cost is $200/per hour for a total of $240,000.

The total amount budgeted for year one of the Statewide Longitudinal Data System is approximately $974,679.

FY 2011

After the data system is up and running, the SBCJC will need to cover costs for training. Training during year two will include curriculum development for certifying trainers. The cost is estimated to be $7000, which is based upon the average cost for the month-long curriculum development process at the Research and Curriculum Unit at Mississippi State University.

All of the SBCJC’s trainers will need to be certified before they begin training others. There should be two certified trainers per community college district. We will hold one certification session at a central location. The cost will be $50 per hour and the session will last five days (40 hours) for a total cost of $2,000.

The SBCJC will cover travel and lodging costs for 30 trainees. The cost is estimated to be $100 per day (for five days) for a total of $15,000. Training supplies include the cost for printing and materials and are estimated to be $2,000. The total cost for training certification is approximately $19,000, and the total budget estimate for year two of the project is $26,000.
FY 2012

The budget for year three of the project covers the cost that will be incurred to actually conduct the training sessions for school districts, community colleges, and universities throughout the state of Mississippi. The minimum targeted trainees are as follows:

- 152 school districts * 2 people per district = 304 school district personnel
- 15 community & junior colleges * 2 people per CJC = 30 CJC personnel
- 8 public colleges/universities * 2 people per college/university = 16 college/university personnel
- Other designated entities (MDES, MDA, IHL, SBCJC, Pre-K, MDE, Governor's Office, etc.) = 20 others

TOTAL: 370 people to be trained

SBCJC plans to conduct four training sessions for each of the 15 community and junior colleges throughout the state. The sessions will be five days long (40 hours) and the instructor cost is estimated to be $50 per hour for a total of $120,000.

We will conduct two centrally located training sessions for participants for the various state agencies in Mississippi. These will also be five day sessions at $50 per hour for a total of $4,000.

Training supplies include printing and materials to be used at each of the sessions and is estimated to cost $2000 per session. We plan to have a total of 60 sessions for a total of $120,000.

The SBCJC will also cover the travel costs for the estimated 370 trainees. Each trip is estimated to be 100 miles roundtrip and the mileage rate is 0.555 cents per mile. The total estimated cost for travel for the trainees is $20,535.

The SBCJC total budget estimate for year three of the Statewide Longitudinal Data System project is $264,535, and the total budget estimate for all three years is $1,265,214.

IHL

The Mississippi Institutions of Higher Learning (IHL) will need to make infrastructure enhancements to support system implementation to ensure the successful completion of the Statewide Longitudinal Data System in Mississippi. The infrastructure enhancements include hardware and software purchases along with software development and training costs. All these costs will be incurred in year one of the project. IHL will also devote 50% FTE of the Director of Institutional Research and Technology to the project each year.

FY 2010

The hardware IHL will need to purchase for the Statewide Longitudinal Data System includes one server to upgrade existing capacity at an estimated cost of $10,000. Backup software to
accompany the upgraded server will be purchased and installed at an estimated cost of $15,000. The total for hardware and software in year one is estimated to be $25,000.

IHL will also need to develop a secure SSL connection to enhance the secure sharing of data between the eight public institutions and the IHL office. The estimated cost for the secure SSL connection is $15,000.

IHL will also need to develop an institutional edit program to ensure the success of the Statewide Longitudinal Data System. Development costs for the executable, stand alone edit program to be used by the eight public institutions to edit institutional data prior to submitting to the IHL system office is estimated to be $45,000. Once the edit program is developed and deployed, training of institutional representatives using the new edit program will be needed to ensure efficient operation. The cost of training the institutional users is estimated to be $15,000. The total cost for developing the edit program and training users is estimated to be $60,000.

The total amount budgeted for IHL for year one of the Statewide Longitudinal Data System is approximately $146,125 ($100,000 for infrastructure enhancements and the remainder for salary and fringe for the Director of Institutional Research and Technology).

FY 2011

To ensure the successful completion of the Statewide Longitudinal Data System in Mississippi IHL will devote 50% FTE of the Director of Institutional Research to the project in year two. His salary and fringe is estimated to be $46,125 for year two of the project.

FY 2012

To ensure the successful completion of the Statewide Longitudinal Data System in Mississippi IHL will devote 50% FTE of the Director of Institutional Research to the project in year three. His salary and fringe is estimated to be $46,125 for year three of the project.

The total three year budget estimate for IHL is $238,375

nSPARC

Based on similar projects that nSPARC has completed in the past, they anticipate the need for 15 staff persons including a Director, an Associate Director, an IT Project Manager, two Database Administrators, five Programmers, a Senior Data Analyst, and four Data Analysts.

FY 2010

The amount budgeted for nSPARC is based on estimated man hours that will be devoted to the project and a rate per hour for each staff person. During the first year of the grant, the Director and the Associate Director are each expected to spend 1040 hours on the project, while all other staff persons are each expected to devote 1872 hours to the project. The anticipated cost per hour for each of the positions are as follows: $102 for the Director; $88 for the Associate
Director; $66 for the IT Project Manager; $109 for two Database Coordinators ($54.50 each); $252 for five Programmers ($50.40 each); $67 for the Senior Data Analyst; and $188 for four Data Analysts ($47 each). The total budget estimate for nSPARC for year one of the project is $1,474,304.

FY 2011

The amount budgeted for nSPARC is based on estimated man hours that will be devoted to the project and a rate per hour for each staff person. During the second year of the grant, the Director and the Associate Director are each expected to spend 1040 hours on the project, while all other staff persons are each expected to devote 1872 hours to the project. The anticipated cost per hour for each of the positions are as follows: $107 for the Director; $92 for the Associate Director; $70 for the IT Project Manager; $114 for two Database Coordinators ($57 each); $264 for five Programmers ($52.80 each); $70 for the Senior Data Analyst; and $198 for four Data Analysts ($49.50 each). The total budget estimate for nSPARC for year two of the project is $1,547,312.

FY 2012

The amount budgeted for nSPARC is based on estimated man hours that will be devoted to the project and a rate per hour for each staff person. During the third year of the grant, the Director and the Associate Director are each expected to spend 1040 hours on the project, while all other staff persons are each expected to devote 1872 hours to the project. The anticipated cost per hour for each of the positions are as follows: $112 for the Director; $97 for the Associate Director; $73 for the IT Project Manager; $120 for two Database Coordinators ($60 each); $277 for five Programmers ($55.40 each); $74 for the Senior Data Analyst; and $207 for four Data Analysts ($51.75 each). The total budget estimate for nSPARC for year three of the project is $1,623,232.

The total estimated cost for the contract with nSPARC over the grant period is $4,644,848.

The total amount of contractual obligations anticipated for the three year grant period is $8,720,877.

CONSTRUCTION

There are no anticipated construction costs associated with this grant.

OTHER

There are no anticipated costs for this grant that will fall under the “other” category.

INDIRECT COSTS

The MDE has a current Indirect Cost Rate Agreement that has been approved by the US Department of Education. The approved rate under this agreement is 9.4% of Modified Total
Direct Costs and is effective July 1, 2009 through June 30, 2010. Modified Total Direct Costs consist of all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts. Modified total direct costs shall exclude equipment and flow-through money. The base amount for year one is calculated as follows: $4,862,248 - $10,000 = $4,852,248, where $4,862,248 = Total Direct Costs, and $10,000 = Equipment
The projected indirect cost for year one is $456,111

The base amount for year two is $1,984,293, which is the same as Total Direct Costs because MDE does not anticipate the need for any equipment during year two. The projected indirect cost for year two is $186,524.

The base amount for year three is $2,298,748 which is the same as Total Direct Costs because MDE does not anticipate the need for any equipment during year three. The projected indirect cost for year three is $216,082.

The total projected indirect cost for the three year grant period is $858,717.

TRAINING STIPENDS

MDE does not anticipate the need for any training stipends. All costs for training will be subcontracted through the State Board for Community and Junior Colleges (SBCJC).

TOTAL COSTS

Year 1 = \$5,318,359
Year 2 = \$2,170,817
Year 3 = \$2,514,830
3 Year Total = \$10,004,006
Budget Narrative

Budget Narrative - ED 524 Section C Spreadsheet

Attachment 1:
Title: MS-SLDS Budget Spreadsheets Pages: 6 Uploaded File: MS-SLDS Budget Spreadsheets.pdf
## US DEPARTMENT OF EDUCATION

**BUDGET INFORMATION**

**NON-CONSTRUCTION PROGRAMS**

## SECTION A - BUDGET SUMMARY

**US DEPARTMENT OF EDUCATION FUNDS**

### BUDGET CATEGORIES

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<tr>
<th>Category</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>TOTAL BUDGET</th>
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<td>Project Director ($139,500 @ 5% FTE In-kind)</td>
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<td>Director of the Office of Research and Statistics ($100,200 @ 20% FTE In-kind)</td>
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<td>Lead Business Systems Analyst ($70,156 @ 10% FTE + 10% FTE In-kind for Year 1)</td>
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<td>$70,156 @5% FTE + 5% FTE In-Kind for Years 2 &amp; 3</td>
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<td>Project Director (23.89% of Salary - In Kind)</td>
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<tr>
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<td>$ 10,000</td>
<td>$ 10,000</td>
<td>$ 30,000</td>
</tr>
<tr>
<td><strong>4. EQUIPMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items necessary for new office</td>
<td>$ 10,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL EQUIPMENT</strong></td>
<td>$ 10,000</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 10,000</td>
</tr>
<tr>
<td><strong>5. SUPPLIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Supplies</td>
<td>$ 2,000</td>
<td>$ 2,000</td>
<td>$ 2,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL SUPPLIES</strong></td>
<td>$ 2,000</td>
<td>$ 2,000</td>
<td>$ 2,000</td>
<td>$ 6,000</td>
</tr>
<tr>
<td><strong>6. CONTRACTUAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDE</td>
<td>$ 9,400</td>
<td>$ 9,400</td>
<td>$ 9,400</td>
<td>$ 28,200</td>
</tr>
<tr>
<td>STATE ITS</td>
<td>$ 2,104,080</td>
<td>$ 220,080</td>
<td>$ 220,080</td>
<td>$ 2,544,240</td>
</tr>
<tr>
<td>STATE BOARD FOR COMMUNITY AND JUNIOR COLLEGES</td>
<td>$ 974,679</td>
<td>$ 26,000</td>
<td>$ 264,535</td>
<td>$ 1,265,214</td>
</tr>
<tr>
<td>MISSISSIPPI INSTITUTIONS OF HIGHER LEARNING</td>
<td>$ 146,125</td>
<td>$ 46,125</td>
<td>$ 46,125</td>
<td>$ 238,375</td>
</tr>
<tr>
<td>MISSISSIPPI STATE UNIVERSITY (On behalf of its nSPARC)</td>
<td>$ 1,474,304</td>
<td>$ 1,547,312</td>
<td>$ 1,623,232</td>
<td>$ 4,644,848</td>
</tr>
<tr>
<td><strong>TOTAL CONTRACTUAL</strong></td>
<td>$ 4,708,588</td>
<td>$ 1,848,917</td>
<td>$ 2,163,372</td>
<td>$ 8,720,877</td>
</tr>
<tr>
<td><strong>7. CONSTRUCTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CONSTRUCTION</strong></td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td><strong>8. OTHER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL OTHER</strong></td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td><strong>9. TOTAL DIRECT COSTS (Lines 1-8)</strong></td>
<td>$ 4,852,248</td>
<td>$ 1,984,293</td>
<td>$ 2,298,748</td>
<td>$ 9,145,289</td>
</tr>
<tr>
<td><strong>Modified Total Direct Costs</strong></td>
<td>$ 4,852,248</td>
<td>$ 1,984,293</td>
<td>$ 2,298,748</td>
<td>$ 9,135,289</td>
</tr>
<tr>
<td><strong>10. INDIRECT COSTS (9.4% of Modified Total Direct Costs)</strong></td>
<td>$ 456,111</td>
<td>$ 186,524</td>
<td>$ 216,082</td>
<td>$ 858,717</td>
</tr>
<tr>
<td><strong>11. TRAINING STIPENDS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12. TOTAL COSTS (Lines 9-11)</strong></td>
<td>$ 5,318,359</td>
<td>$ 2,170,817</td>
<td>$ 2,514,830</td>
<td>$ 10,004,006</td>
</tr>
</tbody>
</table>
## BUDGET CATEGORIES

### 1. PERSONNEL

<table>
<thead>
<tr>
<th>Position</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director ($139,500 @ 5% FTE In-kind)</td>
<td>$6,975</td>
<td>$6,975</td>
<td>$6,975</td>
<td></td>
</tr>
<tr>
<td>Director of the Office of Research and Statistics ($100,200 @ 20% FTE In-kind)</td>
<td>$20,040</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lead Business Systems Analyst ($70,156 @ 10% FTE + 10% FTE In-kind for Year 1)</td>
<td>$7,016</td>
<td>$3,508</td>
<td>$3,508</td>
<td></td>
</tr>
<tr>
<td>$70,156 @5% FTE + 5% FTE In-kind for Years 2 &amp; 3</td>
<td>-</td>
<td>$2,976</td>
<td>$2,976</td>
<td></td>
</tr>
<tr>
<td>Lead Business Systems Analyst ($59,524 @ 10% FTE + 10% FTE In-kind for Year 1)</td>
<td>$5,952</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>$59,524 @5% FTE + 5% FTE In-kind for Years 2 &amp; 3</td>
<td>-</td>
<td>$2,976</td>
<td>$2,976</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL PERSONNEL</strong></td>
<td>$39,983</td>
<td>$13,459</td>
<td>$13,459</td>
<td><strong>$66,901</strong></td>
</tr>
</tbody>
</table>

### 2. FRINGE BENEFITS

<table>
<thead>
<tr>
<th>Position</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director (23.89% of Salary - In Kind)</td>
<td>$1,666</td>
<td>$1,666</td>
<td>$1,666</td>
<td></td>
</tr>
<tr>
<td>Director of the Office of Research and Statistics (25.21% of Salary In-kind)</td>
<td>$5,052</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Lead Business Systems Analyst (27.21% of Salary)</td>
<td>$1,909</td>
<td>$955</td>
<td>$955</td>
<td></td>
</tr>
<tr>
<td>(27.21% of Salary)</td>
<td>-</td>
<td>$845</td>
<td>$845</td>
<td></td>
</tr>
<tr>
<td>Lead Business Systems Analyst (28.41% of Salary)</td>
<td>$1,691</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>(28.41% of Salary)</td>
<td>-</td>
<td>$845</td>
<td>$845</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL FRINGE BENEFITS</strong></td>
<td>$10,318</td>
<td>$3,466</td>
<td>$3,466</td>
<td><strong>$17,250</strong></td>
</tr>
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</table>

### 3. TRAVEL

- In-State and Out-of-State

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 4. EQUIPMENT

- Items necessary for new office

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 5. SUPPLIES

- Office Supplies

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 6. CONTRACTUAL

- MDE

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| State ITS | - |
| State Board for Community and Junior Colleges | $- |
| Mississippi Institutions of Higher Learning | $- |
| Mississippi State University (On behalf of its nSPARC) | $- |
| **TOTAL CONTRACTUAL** | - | - | - |

### 7. CONSTRUCTION

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 8. OTHER

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 9. TOTAL DIRECT COSTS (Lines 1-8)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>$50,301</td>
<td>$16,925</td>
<td>$16,925</td>
<td><strong>$84,151</strong></td>
</tr>
</tbody>
</table>

- Modified Total Direct Costs

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>$50,301</td>
<td>$16,925</td>
<td>$16,925</td>
<td><strong>$84,151</strong></td>
</tr>
</tbody>
</table>

### 10. INDIRECT COSTS (9.4% of Modified Total Direct Costs)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4,728</td>
<td>$1,591</td>
<td>$1,591</td>
<td><strong>$7,910</strong></td>
</tr>
</tbody>
</table>

### 11. TRAINING STIPENDS

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 12. TOTAL COSTS (Lines 9-11)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>$55,029</td>
<td>$18,516</td>
<td>$18,516</td>
<td><strong>$92,061</strong></td>
</tr>
</tbody>
</table>
## State ITS Cost analysis for MDE

### FY 2010

<table>
<thead>
<tr>
<th>HARDWARE</th>
<th>Quantity</th>
<th>Cost</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun SPARC Enterprise TS440 Server 8-Core 2 x 1.6 GHz</td>
<td>2</td>
<td>$100,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Sun SPARC Enterprise TS440 Server 8-Core 4 x 1.6 GHz</td>
<td>2</td>
<td>$120,000</td>
<td>$240,000</td>
</tr>
<tr>
<td>Sun Datacenter InfiniBand Switch 72</td>
<td>2</td>
<td>$75,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Sun Storage 6580 Array</td>
<td>1</td>
<td>$220,000</td>
<td>$220,000</td>
</tr>
<tr>
<td>Sun StorageTek SL8500 Modular Library System</td>
<td>1</td>
<td>$200,000</td>
<td>$200,000</td>
</tr>
<tr>
<td><strong>TOTAL HARDWARE</strong></td>
<td></td>
<td></td>
<td><strong>$1,010,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOFTWARE</th>
<th>Quantity</th>
<th>Cost</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Enterprise Server License</td>
<td>8</td>
<td>$47,500</td>
<td>$380,000</td>
</tr>
<tr>
<td>Oracle Enterprise Server Annual Maintenance</td>
<td>8</td>
<td>$10,450</td>
<td>$83,600</td>
</tr>
<tr>
<td>Oracle RAC License</td>
<td>8</td>
<td>$23,000</td>
<td>$184,000</td>
</tr>
<tr>
<td>Oracle RAC Annual Maintenance</td>
<td>8</td>
<td>$5,060</td>
<td>$40,480</td>
</tr>
<tr>
<td>SAS Business Intelligence Enterprise Software</td>
<td>1</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Symantec NetBackup Software</td>
<td>1</td>
<td>$6,000</td>
<td>$6,000</td>
</tr>
<tr>
<td><strong>TOTAL SOFTWARE</strong></td>
<td></td>
<td></td>
<td><strong>$944,080</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>Months</th>
<th>Cost per Month</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Bandwidth (12 Mb)</td>
<td>12</td>
<td>$6,250</td>
<td>$75,000</td>
</tr>
<tr>
<td>Sun Microsystems Professional Services (for initial hardware set up and configuration)</td>
<td></td>
<td></td>
<td>$75,000</td>
</tr>
<tr>
<td><strong>TOTAL SERVICES</strong></td>
<td></td>
<td></td>
<td><strong>$150,000</strong></td>
</tr>
</tbody>
</table>

**TOTAL BUDGET ESTIMATE**                           **$2,104,080**

### FY 2011

<table>
<thead>
<tr>
<th>SOFTWARE</th>
<th>Quantity</th>
<th>Cost</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Enterprise Server Annual Maintenance</td>
<td>8</td>
<td>$10,450</td>
<td>$83,600</td>
</tr>
<tr>
<td>Oracle RAC Annual Maintenance</td>
<td>8</td>
<td>$5,060</td>
<td>$40,480</td>
</tr>
<tr>
<td>SAS Business Intelligence Enterprise Annual Maintenance</td>
<td>1</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Symantec NetBackup Annual Maintenance</td>
<td>1</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>TOTAL SOFTWARE</strong></td>
<td></td>
<td></td>
<td><strong>$145,080</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>Months</th>
<th>Cost per Month</th>
<th>Cost</th>
</tr>
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<tbody>
<tr>
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<td>$75,000</td>
</tr>
<tr>
<td><strong>TOTAL SERVICES</strong></td>
<td></td>
<td></td>
<td><strong>$75,000</strong></td>
</tr>
</tbody>
</table>

**TOTAL BUDGET ESTIMATE**                           **$220,080**

### FY 2012

<table>
<thead>
<tr>
<th>SOFTWARE</th>
<th>Quantity</th>
<th>Cost</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Enterprise Server Annual Maintenance</td>
<td>8</td>
<td>$10,450</td>
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<tr>
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<td>8</td>
<td>$5,060</td>
<td>$40,480</td>
</tr>
<tr>
<td>SAS Business Intelligence Enterprise Annual Maintenance</td>
<td>1</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Symantec NetBackup Annual Maintenance</td>
<td>1</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>TOTAL SOFTWARE</strong></td>
<td></td>
<td></td>
<td><strong>$145,080</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>Months</th>
<th>Cost per Month</th>
<th>Cost</th>
</tr>
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<tbody>
<tr>
<td>Network Bandwidth (12 Mb)</td>
<td>12</td>
<td>$6,250</td>
<td>$75,000</td>
</tr>
<tr>
<td><strong>TOTAL SERVICES</strong></td>
<td></td>
<td></td>
<td><strong>$75,000</strong></td>
</tr>
</tbody>
</table>

**TOTAL BUDGET ESTIMATE**                           **$220,080**

**THREE YEAR BUDGET ESTIMATE**                     **$2,544,240**
## State Board for Community & Junior Colleges Cost Analysis for MDE

### FY 2010

#### INFRASTRUCTURE ENHANCEMENTS

**Data Collection and Data Analysis**

<table>
<thead>
<tr>
<th>Features</th>
<th>Estimated</th>
<th>Man Days</th>
<th>Cost per Hour</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3S Reports</td>
<td>54</td>
<td></td>
<td>$100</td>
<td>$43,200</td>
</tr>
<tr>
<td>3 Main action screens</td>
<td>22</td>
<td></td>
<td>$100</td>
<td>$17,600</td>
</tr>
<tr>
<td>50 maintenance screens</td>
<td>81</td>
<td></td>
<td>$100</td>
<td>$64,800</td>
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<tr>
<td>7 special maintenance pages</td>
<td>18</td>
<td></td>
<td>$100</td>
<td>$14,400</td>
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<tr>
<td>User maintenance screen</td>
<td>4</td>
<td></td>
<td>$100</td>
<td>$3,200</td>
</tr>
<tr>
<td>System setup screen</td>
<td>4</td>
<td></td>
<td>$100</td>
<td>$3,200</td>
</tr>
<tr>
<td>Database refactoring</td>
<td>29</td>
<td></td>
<td>$100</td>
<td>$23,200</td>
</tr>
<tr>
<td>Project management, testing, training</td>
<td>108</td>
<td></td>
<td>$100</td>
<td>$86,400</td>
</tr>
<tr>
<td>Testing</td>
<td>59</td>
<td></td>
<td>$100</td>
<td>$47,200</td>
</tr>
<tr>
<td>Training and Documentation</td>
<td>59</td>
<td></td>
<td>$100</td>
<td>$47,200</td>
</tr>
</tbody>
</table>

**TOTAL DATA COLLECTION & DATA ANALYSIS**  
$350,400

**Hardware and Infrastructure**

| Quantity | Dell EqualLogic PS6000X, Mainstream Performance 10K SAS Drives | 2          | $55,900.00 | $111,800 |
| Quantity | HP Blade Servers/chasis/Vmware                                  | 1          | $130,837   | $130,837 |
| Quantity | Memory upgrade to 64 GB                                         | 4          | $7,199.00  | $28,796  |
| Quantity | HP 3 Year 6-hour 24x7 call-to-repair Modular Cooling System HW Support | 1          | $18,846.00 | $18,846  |

**TOTAL HARDWARE &INFRASTRUCTURE**  
$290,279

**Installation and Maintenance**

| Quantity | First Year Software Maintenance (15%)                       | 1          | $52,500.00 | $52,500 |
| Quantity | HW Installation & Data Migration                            | 1          | $41,500.00 | $41,500 |

**TOTAL INSTALLATION & MAINTENANCE**  
$94,000

**TOTAL INFRASTRUCTURE ENHANCEMENTS**  
$734,679

**COLLEGE COSTS**

| Modifications of existing Student Information Center Per Community College (x's 15) | 80.00 | $200 | $240,000 |

**TOTAL COLLEGE COSTS**  
$240,000

**TOTAL BUDGET ESTIMATE**  
$974,679

### FY 2011

**Curriculum Development**  
$7,000

**Training Certification**

| One Certification Session at one Central Location | 40 | $50 | $2,000 |
| Travel/lodging costs for trainees (30 People x $100/day x 5 days) |  |  | $15,000 |
| Training Supplies (Printing, materials, etc.) |  |  | $2,000 |

**TOTAL CERTIFICATION COSTS**  
$19,000

**TOTAL BUDGET ESTIMATE**  
$26,000

### FY 2012

**Training**

| 4 Training Sessions/College (x's 15 Community Colleges = 60 Sessions) | 40 | $50 | $120,000 |
| 2 "Other Entity" Training Sessions (Centrally Located) | 40 | $50 | $4,000 |
| Training Supplies (Materials, printing, etc. - $2,000/Session x 60 Sessions) |  |  | $120,000 |
| Travel Costs for Trainees (100 miles roundtrip x 370 people x .555 cents per mile) |  |  | $20,535 |

**TOTAL TRAINING COSTS**  
$264,535

**TOTAL BUDGET ESTIMATE**  
$264,535

**THREE YEAR BUDGET TOTAL**  
$1,265,214
## Mississippi Institutions of Higher Learning Cost Analysis for MDE

<table>
<thead>
<tr>
<th>FY 2010</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
</tr>
<tr>
<td>Director of Institutional Research and Technology ($75,000 @ 50% FTE)</td>
<td>$37,500.00</td>
</tr>
<tr>
<td>TOTAL PERSONNEL</td>
<td>$37,500.00</td>
</tr>
<tr>
<td><strong>Fringe</strong></td>
<td></td>
</tr>
<tr>
<td>Director of Institutional Research and Technology (23% of Salary)</td>
<td>$8,625.00</td>
</tr>
<tr>
<td>TOTAL FRINGE BENEFITS</td>
<td>$8,625.00</td>
</tr>
<tr>
<td><strong>Enhancements to IHL Data Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>Institutional Edit Program</td>
<td></td>
</tr>
<tr>
<td>Development costs</td>
<td>$45,000.00</td>
</tr>
<tr>
<td>Training Costs</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>TOTAL INSTITUTIONAL EDIT PROGRAM</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>SECURE SSL CONNECTION</td>
<td>$15,000.00</td>
</tr>
<tr>
<td><strong>Hardware and Backup Software</strong></td>
<td></td>
</tr>
<tr>
<td>Server to upgrade software</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Backup Software and Installation</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>TOTAL HARDWARE &amp; BACKUP SOFTWARE</td>
<td>$25,000.00</td>
</tr>
<tr>
<td><strong>TOTAL BUDGET ESTIMATE</strong></td>
<td>$146,125.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY 2011</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
</tr>
<tr>
<td>Director of Institutional Research and Technology ($75,000 @ 50% FTE)</td>
<td>$37,500.00</td>
</tr>
<tr>
<td>TOTAL PERSONNEL</td>
<td>$37,500.00</td>
</tr>
<tr>
<td><strong>Fringe</strong></td>
<td></td>
</tr>
<tr>
<td>Director of Institutional Research and Technology (23% of Salary)</td>
<td>$8,625.00</td>
</tr>
<tr>
<td>TOTAL FRINGE BENEFITS</td>
<td>$8,625.00</td>
</tr>
<tr>
<td><strong>TOTAL BUDGET ESTIMATE</strong></td>
<td>$46,125.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY 2012</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
</tr>
<tr>
<td>Director of Institutional Research and Technology ($75,000 @ 50% FTE)</td>
<td>$37,500.00</td>
</tr>
<tr>
<td>TOTAL PERSONNEL</td>
<td>$37,500.00</td>
</tr>
<tr>
<td><strong>Fringe</strong></td>
<td></td>
</tr>
<tr>
<td>Director of Institutional Research and Technology (23% of Salary)</td>
<td>$8,625.00</td>
</tr>
<tr>
<td>TOTAL FRINGE BENEFITS</td>
<td>$8,625.00</td>
</tr>
<tr>
<td><strong>TOTAL BUDGET ESTIMATE</strong></td>
<td>$46,125.00</td>
</tr>
</tbody>
</table>

**THREE YEAR BUDGET TOTAL**

|            | $238,375.00 |
# nSPARC Cost Analysis for MDE

## FY 2010

<table>
<thead>
<tr>
<th>Contractual Services</th>
<th>Cost Per Hour</th>
<th>Estimated Hours</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>$ 102</td>
<td>1040</td>
<td>$ 106,080</td>
</tr>
<tr>
<td>Associate Director</td>
<td>$ 88</td>
<td>1040</td>
<td>$ 91,520</td>
</tr>
<tr>
<td>IT Project Manager</td>
<td>$ 66</td>
<td>1872</td>
<td>$ 123,552</td>
</tr>
<tr>
<td>2 Database Administrators</td>
<td>$ 109</td>
<td>1872</td>
<td>$ 204,048</td>
</tr>
<tr>
<td>5 Programmers</td>
<td>$ 252</td>
<td>1872</td>
<td>$ 471,744</td>
</tr>
<tr>
<td>Senior Data Analyst</td>
<td>$ 67</td>
<td>1872</td>
<td>$ 125,424</td>
</tr>
<tr>
<td>4 Data Analysts</td>
<td>$ 188</td>
<td>1872</td>
<td>$ 351,936</td>
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<tr>
<td><strong>TOTAL BUDGET ESTIMATE</strong></td>
<td></td>
<td></td>
<td><strong>$ 1,474,304</strong></td>
</tr>
</tbody>
</table>

## FY 2011

<table>
<thead>
<tr>
<th>Contractual Services</th>
<th>Cost Per Hour</th>
<th>Estimated Hours</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>$ 107</td>
<td>1040</td>
<td>$ 111,280</td>
</tr>
<tr>
<td>Associate Director</td>
<td>$ 92</td>
<td>1040</td>
<td>$ 95,680</td>
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<tr>
<td>IT Project Manager</td>
<td>$ 70</td>
<td>1872</td>
<td>$ 131,040</td>
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<tr>
<td>2 Database Administrators</td>
<td>$ 114</td>
<td>1872</td>
<td>$ 213,408</td>
</tr>
<tr>
<td>5 Programmers</td>
<td>$ 264</td>
<td>1872</td>
<td>$ 494,208</td>
</tr>
<tr>
<td>Senior Data Analyst</td>
<td>$ 70</td>
<td>1872</td>
<td>$ 131,040</td>
</tr>
<tr>
<td>4 Data Analysts</td>
<td>$ 198</td>
<td>1872</td>
<td>$ 370,656</td>
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<tr>
<td><strong>TOTAL BUDGET ESTIMATE</strong></td>
<td></td>
<td></td>
<td><strong>$ 1,547,312</strong></td>
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</tbody>
</table>

## FY 2012

<table>
<thead>
<tr>
<th>Contractual Services</th>
<th>Cost Per Hour</th>
<th>Estimated Hours</th>
<th>Cost to MDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>$ 112</td>
<td>1040</td>
<td>$ 116,480</td>
</tr>
<tr>
<td>Associate Director</td>
<td>$ 97</td>
<td>1040</td>
<td>$ 100,880</td>
</tr>
<tr>
<td>IT Project Manager</td>
<td>$ 73</td>
<td>1872</td>
<td>$ 136,656</td>
</tr>
<tr>
<td>2 Database Administrators</td>
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<td>1872</td>
<td>$ 224,640</td>
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<tr>
<td>5 Programmers</td>
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<tr>
<td>Senior Data Analyst</td>
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<td>$ 138,528</td>
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<tr>
<td>4 Data Analysts</td>
<td>$ 207</td>
<td>1872</td>
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<td><strong>TOTAL BUDGET ESTIMATE</strong></td>
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</tr>
</tbody>
</table>

**THREE YEAR BUDGET TOTAL**

$ 4,644,848