APPLICATION FOR GRANTS UNDER THE

STATEWIDE LONGITUDINAL DATA SYSTEM RECOVERY ACT GRANTS
CFDA # 84.384A
PR/Award # R384A100045

Closing Date: DEC 04, 2009
**Table of Contents**

Forms

1. Application for Federal Assistance (SF-424) ...................................................... e1
2. Standard Budget Sheet (ED 524) ............................................................................ e5
3. SF 424B - Assurances Non-Construction Programs ........................................... e7
4. Disclosure of Lobbying Activities ....................................................................... e9
5. ED 80-0013 Certification ...................................................................................... e10
6. Dept of Education Supplemental Information for SF-424 .................................. e11

Narratives

1. Project Narrative - (Project Narrative - Project Abstract...) ............................... e12
   Indiana P-20 LDS 2G: Project Abstract ................................................................ e13
2. Project Narrative - (Project Narrative - Project Narrative...) ............................ e14
   Indiana P-20 LDS: The Next Generation (2G) .................................................... e15
3. Project Narrative - (Project Narrative - Appendix A, Optional Attach......) ........ e45
   Appendix A ........................................................................................................... e46
4. Project Narrative - (Project Narrative - Appendix B Resumes of Key P......) ...... e53
   Appendix B ........................................................................................................... e54
5. Project Narrative - (Project Narrative - Appendix C Current Status o......) ....... e65
   Appendix C ........................................................................................................... e66
6. Project Narrative - (Project Narrative - Appendix D Letters of Support...) ........ e70
   Appendix D ........................................................................................................... e71
7. Budget Narrative - (Budget Narrative - Budget Justification...) ....................... e76
   Budget Narrative-Budget Justification ................................................................ e77
8. Budget Narrative - (Budget Narrative - ED 524 Section C Spreadsheet...) ......... e81
   Ed 524 Section C Spreadsheet .............................................................................. e82

This application was generated using the PDF functionality. The PDF functionality automatically numbers the pages in this application. Some pages/sections of this application may contain 2 sets of page numbers, one set created by the applicant and the other set created by e-Application's PDF functionality. Page numbers created by the e-Application PDF functionality will be preceded by the letter e (for example, e1, e2, e3, etc.).
**Application for Federal Assistance SF-424**

* 1. Type of Submission
  - Preapplication
  - Application
  - Changed/Corrected Application

  * 2. Type of Application:
    - New
    - Continuation
    - Revision

* 3. Date Received:
  12/4/2009

5a. Federal Entity Identifier:

5b. Federal Award Identifier:
  84.384

**State Use Only:**

6. Date Received by State:

7. State Application Identifier:

**8. APPLICANT INFORMATION:**

* a. Legal Name:
  Indiana Department of Education

* b. Employer/Taxpayer Identification Number (EIN/TIN):
  356000158

* c. Organizational DUNS:
  824799209

d. Address:

  - Street1: Room 229 State House
  - City: Indianapolis
  - County:
  - State: IN
  - Province:
  - Country: USA
  - Zip / Postal Code: 46204

e. Organizational Unit:

  Department Name: Information Technology
  Division Name: Data Analysis, Collection, and Reporting

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

  Prefix: Dr.  * First Name: Molly
  Middle Name:
Last Name: Chamberlin

Title: Director, Data Analysis, Collection, and Reporting

* Telephone Number: (317)234-6849

* Fax Number: (317)233-6326

* Email: MCHAMBER@DOE.IN.GOV

**Application for Federal Assistance SF-424**

**Version 02**

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

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

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

11. Catalog of Federal Domestic Assistance Number:
    84.384A

    CFDA Title:
    Statewide Longitudinal Data System Recovery Act Grants

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

    Title:

13. Competition Identification Number:
    84-384A2009-1

    Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):
15. Descriptive Title of Applicant's Project:
Indiana P-20 LDS: The Next Generation (2G)

Attach supporting documents as specified in agency instructions.

Attachment:
Title :
File :

Attachment:
Title :
File :

Attachment:
Title :
File :

Application for Federal Assistance SF-424

16. Congressional Districts Of:
* a. Applicant: IN-all
* b. Program/Project: IN-all

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

Attachment:
Title :
File :

17. Proposed Project:
* a. Start Date: 6/1/2010
* b. End Date: 5/31/2013

18. Estimated Funding ($) :

a. Federal $14673733
b. Applicant $0
c. State $1800000
d. Local $0
e. Other $0
f. Program Income $0
g. TOTAL $16473733

19. Is Application Subject to Review By State Under Executive Order 12372 Process?
[ ] a. This application was made available to the State under the Executive Order 12372 Process for review on .
[ ] b. Program is subject to E.O. 12372 but has not been selected by the State for review.
[ ] c. Program is not covered by E.O. 12372.

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

** 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.

<table>
<thead>
<tr>
<th>Authorized Representative:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefix:</td>
</tr>
<tr>
<td>Mr.</td>
</tr>
<tr>
<td>* First Name:</td>
</tr>
<tr>
<td>Jason</td>
</tr>
<tr>
<td>Middle Name:</td>
</tr>
<tr>
<td>* Last Name:</td>
</tr>
<tr>
<td>Thacker</td>
</tr>
<tr>
<td>Suffix:</td>
</tr>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Chief Information Officer</td>
</tr>
<tr>
<td>* Telephone Number:</td>
</tr>
<tr>
<td>(317)232-0807</td>
</tr>
<tr>
<td>Fax Number:</td>
</tr>
<tr>
<td>(317)233-6326</td>
</tr>
<tr>
<td>* Email:</td>
</tr>
<tr>
<td><a href="mailto:JTHACKER@DOE.IN.GOV">JTHACKER@DOE.IN.GOV</a></td>
</tr>
<tr>
<td>* Signature of Authorized Representative:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>* Date Signed:</td>
</tr>
</tbody>
</table>

Application for Federal Assistance SF-424

* 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.
Name of Institution/Organization: Indiana Department of Education

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

SECTION A - BUDGET SUMMARY

<table>
<thead>
<tr>
<th>U.S. DEPARTMENT OF EDUCATION FUNDS</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>
</tr>
</thead>
<tbody>
<tr>
<td>1. Personnel</td>
<td>$228,206</td>
<td>$228,206</td>
<td>$228,206</td>
<td>$0</td>
<td>$0</td>
<td>$684,618</td>
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<tr>
<td>2. Fringe Benefits</td>
<td>$79,872</td>
<td>$79,872</td>
<td>$79,872</td>
<td>$0</td>
<td>$0</td>
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<td>3. Travel</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$0</td>
<td>$0</td>
<td>$30,000</td>
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<tr>
<td>4. Equipment</td>
<td>$417,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$417,500</td>
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<tr>
<td>5. Supplies</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>6. Contractual</td>
<td>$4,774,000</td>
<td>$4,889,000</td>
<td>$3,399,000</td>
<td>$0</td>
<td>$0</td>
<td>$13,062,000</td>
</tr>
<tr>
<td>7. Construction</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>8. Other</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$0</td>
<td>$0</td>
<td>$150,000</td>
</tr>
<tr>
<td>9. Total Direct Costs (lines 1-8)</td>
<td>$5,559,578</td>
<td>$5,257,078</td>
<td>$3,767,078</td>
<td>$0</td>
<td>$0</td>
<td>$14,583,374</td>
</tr>
<tr>
<td>10. Indirect Costs*</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$0</td>
<td>$0</td>
<td>$90,000</td>
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<tr>
<td>11. Training Stipends</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>12. Total Costs (lines 9-11)</td>
<td>$5,589,578</td>
<td>$5,287,078</td>
<td>$3,797,078</td>
<td>$0</td>
<td>$0</td>
<td>$14,673,374</td>
</tr>
</tbody>
</table>

*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: 7/1/2007 To: 6/30/2010 (mm/dd/yyyy)
   Approving Federal agency: [X] ED  [ ] Other (please specify): __________________ The Indirect Cost Rate is 0%
3. For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:
   [X] 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**

Expiration Date: 02/28/2011

Name of Institution/Organization: Indiana 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

<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>
</tr>
</thead>
<tbody>
<tr>
<td>1. Personnel</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>2. Fringe Benefits</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>3. Travel</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>4. Equipment</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>5. Supplies</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>6. Contractual</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>7. Construction</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>8. Other</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>9. Total Direct Costs</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
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</tr>
<tr>
<td>(lines 1-8)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10. Indirect Costs</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>11. Training Stipends</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
<tr>
<td>12. Total Costs (lines 9-11)</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
<td>$ 0</td>
</tr>
</tbody>
</table>
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


10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. "1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. "7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-529); 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. "1712 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

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

7. Will comply, or has already complied, with the requirements of Titles II and III of the uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with the provisions of the Hatch Act (5 U.S.C. "1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

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

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. "2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. "4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

Signature of Authorized Certifying Representative:

Name of Authorized Certifying Representative: Jason Thacker

Title: Chief Information Officer

Date Submitted: 12/04/2009
Disclosure of Lobbying Activities

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

<table>
<thead>
<tr>
<th>1. Type of Federal Action:</th>
<th>2. Status of Federal Action:</th>
<th>3. Report Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Contract</td>
<td>[ ] Bid/Offer/Application</td>
<td>[ ] Initial Filing</td>
</tr>
<tr>
<td>[X] Grant</td>
<td>[X] Initial Award</td>
<td>[ ] Material Change</td>
</tr>
<tr>
<td>[ ] Cooperative Agreement</td>
<td>[ ] Post-Award</td>
<td></td>
</tr>
<tr>
<td>[ ] Loan</td>
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<tr>
<td>[ ] Loan Guarantee</td>
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<td>For Material Change only:</td>
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<tr>
<td>[ ] Loan Insurance</td>
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<td>Year: 0</td>
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<table>
<thead>
<tr>
<th>4. Name and Address of Reporting Entity:</th>
<th>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[X] Prime</td>
<td>Name:</td>
</tr>
<tr>
<td>[ ] Subawardee</td>
<td>Address:</td>
</tr>
<tr>
<td>Tier, if known: 0</td>
<td>City:</td>
</tr>
<tr>
<td>Name: Indiana Department of Education</td>
<td>State:</td>
</tr>
<tr>
<td>Address: Room 229 State House</td>
<td>Zip Code + 4: 46204-</td>
</tr>
<tr>
<td>City: Indianapolis</td>
<td>Congressional District, if known:</td>
</tr>
<tr>
<td>State: IN</td>
<td></td>
</tr>
<tr>
<td>Zip Code + 4: -</td>
<td></td>
</tr>
</tbody>
</table>

| 6. Federal Department/Agency: Institute of Education Sciences |
| 7. Federal Program Name/Description: Grants for Statewide Longitudinal Data S |
| 8. Federal Action Number, if known: |
| 9. Award Amount, if known: $0 |

| 10. a. Name of Lobbying Registrant (if individual, last name, first name, MI): | b. Individuals Performing Services (including address if different from No. 10a): |
| Address:                                                                      | Address:                                                                         |
| City:                                                                         | City:                                                                            |
| State:                                                                        | State:                                                                          |
| Zip Code + 4: -                                                               | Zip Code + 4: -                                                                 |

| 11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure. |
| Name: Jason Thacker                                                             |
| Title: Chief Information Officer                                               |
| Applicant: Indiana Department of Education                                     |
| Date: 12/04/2009                                                               |

Federal Use Only:
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-L LL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

APPLICANT'S ORGANIZATION
Indiana Department of Education

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE
Prefix: First Name: Jason  Middle Name: 
Last Name: Thacker  Suffix: 
Title: Chief Information Officer

Signature: Date: 12/04/2009

ED 80-0013  03/04
**SUPPLEMENTAL INFORMATION REQUIRED FOR DEPARTMENT OF EDUCATION GRANTS**

1. **Project Director:**

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<thead>
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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: Indiana P-20 LDS 2G: Project Abstract Pages: 0 Uploaded File: C:\Documents and Settings\mchamber\My Documents\Longitudinal Data Systems Grant\Indiana P-20 LDS 2G_abstract.doc
Project Abstract

The Indiana Department of Education (IDOE) plans to use funds from the Statewide Longitudinal Data System Grant to ensure that its SLDS project, titled Indiana P-20 LDS: The Next Generation (2G), is fully able to meet all required systems capabilities and elements under the America COMPETES Act.

The proposed project will allow Indiana to improve data exchange and linkages, data interoperability, and data accessibility for informed decision making. With Indiana LDS 2G, Indiana will build on the success it has had with its 2007 SLDS grant (Indiana P-20 LDS). Under its current grant, Indiana has worked toward making data available to classroom teachers through its Learning Connection project; creating an enterprise data warehouse; piloting data linkages with workforce and higher education; increasing data quality and reducing redundancy; and improving data governance.

The first goal of the project is the realization of an automated, real-time data exchange solution, allowing for two-way data exchange (from schools to IDOE, and from IDOE to schools); promoting data interoperability, higher quality data, and timelier access to relevant data. In addition, it will decrease burden around manual data reporting and validation, freeing up district resources to focus on data quality and data usage for student achievement. By accomplishing this goal, Indiana will achieve the outcomes of supporting interoperability by using standard data structures, formats, and definitions; more accurately linking student and teacher data; further ensuring the overall quality and integrity of data; and increasing the ability of the state to provide timely and accurate data for federal reporting.

The second project goal is that student-level transcript data are available for secure exchange; data are standardized and interoperable in that a single transcript format is used and state and local course codes are mapped to SCED; and PK-12 and higher education data are fully linked and integrated through a transcript repository, allowing for quicker, more seamless student transitions, diploma auditing, high school feedback reports, and evaluation. By achieving this goal, Indiana will achieve the outcomes of fully integrating K-12 and higher education data, as well as being able to examine student progress over time, provide data on successful transitions, and provide information necessary to address alignment and preparation for postsecondary success.

The third goal of the project is to increase timely and secure access to data (especially at the classroom level), as well as to build the capacity of local educators to utilize data and provide data-driven instruction, resulting in increased student achievement. Indiana will build on its Learning Connection project to include additional longitudinal data (including postsecondary data), further data analysis tools, and targeted professional development around data-driven instruction. By achieving this goal, Indiana will achieve the outcomes of enabling data to be generated for continuous improvement and decision making and providing information about successful student transition.

Indiana is confident that the achievement of its core project goals will attain the ultimate vision of a P-20 data system that supports informed decision making for all stakeholders, ultimately resulting in increased achievement and attainment statewide.
Project Narrative

Project Narrative - Project Narrative

Attachment 1:
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Table of Contents

PROJECT NARRATIVE

A). NEED FOR THE PROJECT

   Capabilities of IDOE’s Current SLDS and Progress Toward Meeting Requirements ................................................................. 1
   Limitations of the Current System and Project Need .................................................................................................................. 7
   Automated Real-Time Data Exchange and Data Interoperability ................................................................................................. 7
   E-Transcript, Transcript Repository, and Transcript Standardization .......................................................................................... 9
   The Learning Connection and Public Web Enhancements ....................................................................................................... 11
   Summary of Needs ............................................................................................................................................................................ 13

B). PROJECT OUTCOMES RELATED TO SYSTEM REQUIREMENTS AND IMPLEMENTATION ...................................................... 13

   Core Element One: Data Interoperability and Statewide Capacity for Automated, Real-Time Data Exchange Between IDOE and Schools ........................................................................................................... 14
   Core Element Two: Full Integration of K-12 and Postsecondary Data with E-Transcript Exchange, E-Transcript Repository, and Transcript Standardization ......................................................... 15
   Core Element Three: Timely and Secure Access to Data and an Increase in Local-Level Capacity for Data Driven Instruction ....................................................................................................................... 16
   Evaluation ....................................................................................................................................................................................... 17

C). TIMELINE FOR PROJECT OUTCOMES ........................................................................................................................................ 17

   Core Element One: Data Interoperability and Statewide Capacity for Automated, Real-Time Data Exchange Between IDOE and Schools ........................................................................................................... 18
   Core Element Two: Full Integration of K-12 and Postsecondary Data with E-Transcript Exchange, E-Transcript Repository, and Transcript Standardization ......................................................... 19
   Core Element Three: Timely and Secure Access to Longitudinal Data and an Increase in Local-Level Capacity for Data Driven Instruction ....................................................................................................................... 19

D). PROJECT MANAGEMENT AND GOVERNANCE PLAN .................................................................................................................. 21

   Governance Structure ......................................................................................................................................................................... 21
   Project Management .......................................................................................................................................................................... 23

E). STAFFING .................................................................................................................................................................................... 24

   Additional Agency Support .................................................................................................................................................................. 24
   Project Personnel and Resources ...................................................................................................................................................... 24
   Subject Matter Experts/Data Stewards ........................................................................................................................................... 28
   Contract Support ................................................................................................................................................................................. 28
   External Development Teams/Vendors .......................................................................................................................................... 28
   External Evaluator ............................................................................................................................................................................. 29
Project Narrative

a). Need for the Project

The vision of the proposed project is to make full use of Indiana’s P-20 education data system as an exchange tool for informed decision making for all stakeholders, resulting in increased achievement and attainment statewide. Grant funds will allow the Indiana Department of Education (IDOE) to achieve its vision of a fully functional P-20 data exchange system. Such a system will meet all America COMPETES requirements and capabilities, including but not limited to enhancing linkages between K-12, higher education, and the workforce; availability of robust course completion data; implementation of a real-time automated data exchange solution with SIF-compliant interoperability standards; and, perhaps most importantly, the ability to share data with stakeholders (such as educators, parents, and policymakers) in a clear and usable, yet secure and FERPA-compliant manner.

The proposed system will allow Indiana to address requirements of the State Fiscal Stabilization Fund, especially around data exchange and matching capabilities across K-12 and higher education institutions; increased data quality and availability through real-time, secure data access and exchange; the facilitation of data review and analysis at the classroom level; data interoperability; increased data integration, including the ability to link teachers to students in real time and examine course completion and course taking patterns; reduction in data entry and reporting burden for school districts, resulting in more time to focus on data quality and high quality classroom instruction; and improved functions for longitudinal analysis from pre-kindergarten into the workforce. While Indiana has had success in implementing projects that will help realize all requirements and capabilities of a longitudinal data system, ARRA funds being requested through this proposal will help Indiana’s longitudinal data system achieve its full utility.

Currently, Indiana has completed or is in progress to complete eight of the twelve required elements of the America COMPETES Act (elements 1-2 and 4-8). Additionally, Indiana has completed all K-12 aspects of element 3 (student-level information about the points at which students exit, transfer in and out, and drop out of or complete P-16 programs). Indiana has begun preliminary work on elements 7 (course completion data), 11 (transition to postsecondary education), and 12 (other information necessary to address alignment and preparation).

Indiana received a SLDS grant in 2007. IDOE has been successful at implementing a number of initiatives through this grant. IDOE’s 2007 SLDS grant efforts have focused on providing data to teachers at the classroom level through the Learning Connection (described below); piloting data linkages between K-12, higher education, and the workforce; developing a data warehouse; developing and implementing a data governance system (data stewards, data sharing agreements, and data request processes); and increasing data quality and reducing data redundancy.

Using grant funds, Indiana developed the first iteration of a teacher tool (portal) called the Learning Connection. A free service to Indiana educators, the Learning Connection provides secure access to key student achievement data while serving as a common platform for lesson planning, curriculum design, and collaboration.

Once completed, the Learning Connection will promote customization and personalized access to data and classroom materials. Teachers will have rights to see student-level data for students they serve and will be able to provide their colleagues with guest access to class materials, but not to data about students in those classes. Teachers will have the ability to subscribe to content
from educational organizations beyond their school (e.g., professional organizations, education service centers, etc.). School and district administrators will have access to data at the level of their organization (i.e., school or district). Administrator accounts will also have the ability to create users and manage permissions. District administrators will be able to assign users to appropriate schools. Parents and students will be able to access information produced within the portal and shared publicly on the Web (however, no student-level information will be presented in an unsecured environment). At the discretion of the school or district, parents and students may receive additional login access to profiles of student achievement. Educational organizations may also use the portal as a means of working with pre-service and practicing teachers. These organizations will have accounts with rights that parallel those of schools but with no access to students or their information.

In addition to making data more available to educators, the state has also undertaken steps to reduce data reporting redundancy and increase data integrity through its data steward program. There are 29 data stewards responsible for data collections from key programs, including Title I, special education, accreditation, alternative education, and McKinney-Vento homeless. Data stewards participate in monthly meetings as well as quarterly small group trainings. When a data steward’s collection is open, s/he is responsible for reviewing data summary reports and contacting IT staff with any data that may appear to be inaccurate. Data stewards are also responsible for sharing information with other data stewards about their data collections and reviewing relevant data for federal reporting through EDFacts. Currently the data steward program is at the state level only; however, recently IT staff and data stewards have begun piloting a series of WebEx trainings for local level personnel around data collections and data quality. Ultimately, the desire is that the WebEx trainings become a certification program for data stewards at the local level. To further increase data quality, IDOE has implemented additional data validation checks, exception reports, and post-collection summary reports. To reduce data redundancy, IDOE has reviewed all of its student-level data collections through a Web service call STN (Student Test Number) Application Center (described in detail below) and removed all data fields determined to be unnecessary or redundant (collected elsewhere). Through this project, IDOE removed over 45 fields. IDOE is also currently undertaking a project to inventory all of its non-STN data collections, eliminate those that are no longer necessary or redundant, and identify whether collections can be moved to the STN Application Center.

Under its current grant, IDOE has also begun efforts to create an enterprise data warehouse. Detailed information about the data warehouse project is provided below, in the Capabilities section. IDOE has also begun to work toward matching K-12 data to data collected by the Indiana Commission for Higher Education (CHE) and Indiana’s Department of Workforce Development (DWD).

While current efforts are promising, there is much additional work to be done in order to meet all of the requirements and demonstrate all of the capabilities of a fully functional statewide longitudinal data system. Timely access to data and data exchange remains an issue, as IDOE’s data collection system currently collects data only at periodic intervals throughout the year; therefore, real-time data collection and reporting is nearly impossible. Additionally, IDOE requires school districts to submit data manually, using the STN Application Center; moreover, interoperability standards are not in place. The implementation of a vertical interoperability solution which allows for automated, real-time data exchange while meeting SIF interoperability standards would reduce the burden on school districts of manually validating and reporting data.
In addition, the real-time nature of the data exchange would improve data quality by allowing for frequent and timely data validation and exception reports.

The IDOE and its partner agencies (DWD, Department of Workforce Development and CHE, Commission for Higher Education) also aim to increase the state’s P-20 infrastructure by enhancing its e-transcript initiative to include college to college XML transcript exchange. Moreover, the IDOE plans to support the creation of a transcript repository with a number of reporting capabilities, including the production of high school feedback reports and diploma audits. The transcript repository will be populated with both high school and postsecondary data and will also facilitate the matching of data between K-12 and postsecondary. Finally, IDOE will increase the interoperability of its transcript data by mapping its state and local course codes to SCED (School Codes for the Exchange of Data).

**Capabilities of IDOE’s Current SLDS and Progress Toward Meeting Requirements**

IDOE has made significant progress toward meeting the requirements of a robust SLDS, both using federal funding through the SLDS grant project, as well as using state and other funding. For a synopsis of IDOE’s progress toward meeting requirements, as well as funding sources, refer to Appendix C. This section will discuss IDOE’s progress toward meeting requirements, as well as its plans for further progress in fully meeting requirements using ARRA funds.

Using its Student Test Number (STN), a unique identifier that is not associated with Social Security Number (SSN) or any other type of official identification, IDOE currently maintains a fairly large repository of longitudinal data. Using STN, school districts upload data through the STN Application Center, a Web service. IDOE collects data on student demographics (including limited English proficiency and homeless status), program participation (such as Title I, special education, alternative education, and career and technical education), performance on various assessments, students not tested and reasons for not testing, dropout and mobility, and graduation, as well as post-secondary plans. Since the STN allows for tracking students across multiple years (across a student’s entire K-12 career), IDOE was able to implement a graduation cohort calculation earlier than most states. The graduation cohort rate was used officially for the first time in 2005-2006. In terms of assessment data, IDOE receives data at the student level for ISTEP+ (state standardized assessment), LAS Links (LEP assessment), ISTAR (Indiana’s alternate assessment), End of Course Assessments, ACT, SAT, AP, and (beginning in January 2010) PSAT. Finally, IDOE has also used student-level data collected to create an at-risk indicator tool. The tool, housed within the STN Application Center (described below), identifies eighth grade students who may be at risk of not graduating, based on failing ISTEP+ for two consecutive years (7th and 8th grade); retention in the same grade (8th grade to 8th grade); high mobility (number of schools attended in the past four years); and attendance rate.

Student-level data (as well as teacher- and administrator-level data) are uploaded to IDOE from local educational agencies (LEAs), accredited non-public schools, and freeway schools.¹ IDOE’s mechanism for receiving school data is a Web application called STN Application Center. LEAs load data at specified periods of the year, according to published file specifications, in csv, positional, or XML format. At the time of data upload, Application Center performs a variety of data quality checks and validations, according to the specific requirements for each data collection. Cross-field and cross-collection validations are performed and individual records (or entire files) not meeting requirements are rejected with error messages and instructions for correction. Additionally, post-collection summary and exception reports are made available to

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¹ Freeway schools are defined in Indiana Code 20-26-15
schools submitting files for review. Post-collection reports are available at the student, school, and district levels. District superintendents (and charter school leaders or principals of non-public schools and freeway schools) are required to provide final signoff on data before collections are considered complete. IDOE is currently at 100% for its EdFacts submissions; as such, the state is now primarily focused on increasing the quality and accuracy of data submitted for federal reporting.

Two years ago, IDOE created its School Personnel Number (SPN), a unique identifier for certified personnel. The first data collection using SPN was conducted at the beginning of this year (2009-2010) using the Certified Employees/Certified Positions reports that are collected through the STN Application Center. The reports allow IDOE to identify teacher-level elements such as teacher demographics (race/ethnicity, age, and sex), as well as teacher experience (years of experience in the school, district, and state; highest degree obtained; and experience prior to employment as a certified teacher); teacher salary (regular and supplemental); and teacher assignment (course, level, and number of periods and pupils taught). In addition, IDOE’s teacher licensure system (PCATS) also utilizes SPN, so IDOE can connect teacher demographic and assignment information to licensure and certification type, PRAXIS scores, and pre-service education institution. At present, IDOE does not connect SPN data to STN (student-level) data; however, it has plans to institute a teacher-student data collection at the end of the 2009-2010 school year, as well as to improve that collection with more timely exchange of data utilizing its proposed automated real-time data exchange (described later in this application).

As indicated in the previous section, IDOE’s current SLDS grant funds have been used, in part, to create The Learning Connection, a tool designed to make data accessible to parents and educators in a secure manner. The Learning Connection will be publicly released in January 2010; however, a number of districts have already requested access and have begun using the Learning Connection. With role-based access, this resource is expected to become the central point of connection between the classrooms, homes, schools and districts, and educational organizations in Indiana. The Learning Connection is being constructed to comply with the technical frameworks already in place at the IDOE. The Learning Connection will depend on data from multiple source systems, including student- and teacher-level data, such as student assignments, assessment results, and course completion data.

IDOE has had its student- and teacher-level data collection in place since 2002; as such, the state maintains large quantities of student- and teacher-level data. Recognizing that it needed better mechanisms of storing and reporting those data, as well as making data available and promoting its quality and usage, IDOE applied for and received a grant for its P-20 SLDS project in 2007. A variety of projects designed to meet the requirements of a fully functional SLDS have been put in place using those funds, as well as in-kind support from IDOE staff in the IT area and other areas of the Department. One of the major initiatives of the current IDOE SLDS project is the creation of a data warehouse. IDOE still maintains a number of disparate systems, and data collected are housed in various data stores that are not clearly defined, nor are the data appropriately validated and cleaned. The data warehouse will be a central repository for IDOE data (the “single source”), providing for higher data quality and integrity. In addition, IDOE is reviewing a number of end-user and business intelligence tools to act as the presentation area of the data warehouse, allowing users to effectively query and analyze the data.

IDOE recognizes that simply having a data warehouse will not ensure that stakeholders find it useful or even access data from it for program evaluation, instructional improvement, and data-driven policymaking. As such, a data warehouse must be created with its stakeholders in mind.
To begin its data warehouse project, IDOE interviewed and surveyed a variety of stakeholders (both internal and external, including policymakers, educators, researchers, and IDOE staff). Using this feedback, IDOE identified a set of 31 key questions (called “key performance indicators” or KPIs) that ideally could be answered by accessing data from the warehouse, using business intelligence reporting tools (see Appendix A for the 31 KPIs). Data sets needed to answer the KPIs have been identified, and IDOE is working to create the data marts to be loaded into the warehouse. Once data have been loaded into the warehouse, a series of reports will be created to be reviewed by key stakeholders. When content and format of reports have been approved, they will be made available (some publicly, some not, depending on the level of data presented). IDOE has additional plans to provide targeted professional development to end-users on how to use data to answer the 31 KPIs as well as to use the data warehouse to further provide student-level longitudinal data to teachers and administrators using the Learning Connection.

Moreover, IDOE intends to build on existing partnerships with institutions of higher education (as well as to institute new relationships) to provide professional development and “on the job” training for educators on how to analyze data and use it for benchmarking and evaluation, as well as differentiating and improving instruction to benefit student learning. Furthermore, in order to ensure that reports made available through the data warehouse and Learning Connection are sufficient to meet stakeholder needs, IDOE plans to continually obtain feedback from educators, policymakers, and researchers. Finally, IDOE will evaluate the effectiveness of its professional development to ensure that it has resulted in increases in data-driven instruction and data-driven policymaking that lead to increased student achievement and school attainment.

Under its current SLDS grant, IDOE has been working to make data more available to stakeholders, while ensuring compliance with FERPA. The Learning Connection is one mechanism that is designed to share data with educators. In addition, a large quantity of aggregated (non-identifiable) data is available on IDOE’s school accountability Website (called Accountability System for Academic Progress, ASAP). Users can query school- and district-level variables, such as enrollment, graduation cohort rates, demographics, assessment results (including AP, ACT, SAT, and ISTEP+), instructional time, average teacher experience, student/teacher ratios, and much more. Recognizing that researchers often need data at a more granular level, IDOE’s IT and legal staff have worked together to create data sharing agreement templates and to formalize data sharing policies (including cell suppression rules). IDOE also has a data request process, using SharePoint, in which IDOE users can log internal and external data requests. Requests are reviewed by the IDOE data reporting team, and data sharing agreements are entered into as necessary. The data request system allows IDOE data reporting staff to track the type and frequency of requests, as well as the turnaround time for filling requests.

Under its current grant, IDOE has also begun work to link P-20 data. At present, IDOE has not yet done much data matching with early childhood programs, other than state funded early childhood programs and special education early childhood programs. Currently, IDOE collects student-level data on children participating in the First Steps program (where these students are assigned Student Test Numbers, STNs, which then carry over with them into K-12 education); children participating in Title 1 preschool programs; children participating in pre-K special education programs (children ages three through five); and children participating in pre-school programs offered by school districts. All of these programs utilize STN, which allows for later linkages with K-12 data. IDOE has not yet worked with its Head Start, Even Start, or daycare or non-state funded preschool programs to discuss data linkages. In the next year, IDOE does plan to begin discussions with Head Start and Even Start programs to allow those programs to assign
STNs to students they are serving. IDOE has had preliminary discussions with Family and Social Services Administration (FSSA), which administers daycare programs, on how to connect early childhood and K-12 data, but no specific plans are in place at this time to move forward with data matching for these programs.

Efforts to link P-12 data (P data includes preschool data currently collected by IDOE, as described above) with higher education and the workforce are underway, however. A major focus of IDOE’s current SLDG grant is continuing to bridge data gaps between K-12, higher education, and the workforce. Efforts to link data with higher education and the workforce have been facilitated through IDOE’s, Commission for Higher Education (CHE)’s, and Department of Workforce Development (DWD)’s participation in the IWIS (Indiana Workforce and Education Intelligence System) project. IDOE has provided in-kind support through participation in the IWIS steering committee and dedicating the time of a programmer to match adult education data with workforce data. Through IWIS, Indiana is working toward providing a comprehensive data warehouse that acts as a repository for secure workforce, postsecondary, and K-12 education data. Using the data housed in IWIS, reports will be generated and research and evaluation can be facilitated. Higher education currently has a number of reports that have been generated through the project. IDOE has matched adult education data with DWD and CHE, and those data (de-identified) have been placed in the IWIS warehouse for an evaluation of adult education. IDOE next plans to share career and technical education (CTE) data with CHE and DWD to begin to identify the impact of CTE participation. The next step will be identifying the mechanisms by which K-12 education data can be connected to both postsecondary and workforce data, although K-12 education uses STN (student test number) and postsecondary and workforce uses SSN.

Enhancing data connections with higher education and workforce will be key to begin to answer IDOE’s KPIs and to create reports to demonstrate whether students are prepared for postsecondary education and the job market. In addition to the IWIS project, IDOE is proposing to use ARRA funds to enhance its e-transcript system for easier high school to college transcript exchange, as well as college to college e-transcript exchange. In addition, IDOE plans to build an e-transcript repository with ARRA funds. Through the repository, reports can be generated for high schools that provide them with feedback on student performance in higher education, as well as providing IDOE with information on numbers of students needing remediation, the extent to which certain course-taking patterns are preparing students for higher education success, types of courses taken in college, and persistence in higher education.

In addition to linking data, IDOE is also looking at ways of making it easier for school districts to report and manage K-12 data. In this project proposal, IDOE plans to examine ways of automating data exchange between the state and schools. The state recognizes that the amount of data collected, as well as the frequency with which it must be collected, is ever increasing, due to additional federal and state data reporting requirements, as well as additional desire for more student-level data to inform classroom instruction and facilitate program evaluation. As such, the burden associated with manually uploading data to the STN Application Center continues to increase, providing additional costs to districts, as well as sometimes compromising the validity and integrity of data submitted. Furthermore, manual upload is not necessarily conducive to real-time data collection and reporting, which is important for data-driven instruction, evaluation, and student information exchange. The manual upload of data also does not allow IDOE to easily push data it receives back down to district. This may be problematic because although IDOE has attempted to build error checks and validations into its Application Center, data validation can be
difficult for districts and schools, because data are submitted relatively infrequently (usually quarterly or less frequently). More frequent exchange of data will help resolve these issues by leading to more frequent data validation reports and more frequent opportunities for schools to correct data, while at the same time the automation of data exchange will reduce reporting and data entry burden at the local level.

Increasing the ease and frequency with which it collects data, as well as enhancing its e-transcript initiative (described later in this section), IDOE will also facilitate two of the remaining components of the Data Quality Campaign (DQC) and America Competes Act core requirements that IDOE has not yet fully achieved. As of December of 2009, although IDOE has a unique teacher identifier (the School Personnel Number, or SPN), IDOE does not yet have a well-established mechanism for connecting teachers to students, nor for obtaining course completion data and student grades. Although IDOE plans to pilot a course completion and teacher-student link data collection at the end of the 2009-2010 school year (using its STN application center and manual data uploads), IDOE knows that more frequent data collection, as well as more frequent validations, will result in better and more accurate course completion data. The e-transcript repository that IDOE proposes to build with ARRA funding would also facilitate the reporting of course completion data, course taking patterns, whether students take remedial work in postsecondary, and postsecondary success, while automated real-time data exchange would allow IDOE to obtain more timely information on teacher-student linkages (currently, the collection occurs only once per year).

Limitations of the Current System and Project Need

Despite progress that has been made through initiatives funded by its current Statewide Longitudinal Data Systems grant, Indiana has additional needs that cannot be addressed by efforts currently underway. Activities proposed in this grant will allow Indiana to achieve its vision of a fully functional, truly P-20 data system. IDOE has broken its SLDS project request into three elements. The first is primarily focused on increasing the interoperability, quality and availability of P-12 data, as well as reducing the burden of data reporting, while the second is focused on increasing data exchange and data interoperability with higher education and workforce, as well as creating reporting capabilities for secondary and postsecondary institutions with tools such as diploma auditing and high school feedback reports. Finally, the third element is focused on making P-20 data available to educators (student-level data) and researchers, policymakers, and the public (aggregated or de-identified data) in a secure manner, as well as providing professional development to increase educators’ capacity to offer differentiated, data-driven instruction. This section details Indiana’s needs for meeting the requirements and capabilities of a SLDS, as well as how its proposed projects will meet those needs.

Automated Real-Time Data Exchange and Data Interoperability

In 2009, Indiana’s General Assembly passed a law requiring IDOE to collect real-time student enrollment and attendance data from K-12 institutions by January 1, 2010. Although IDOE plans to meet that requirement using its STN Application Center student-level data reporting system, data reporting will be manual and will require much effort on the part of local school districts. As such, IDOE has been examining ways to reduce the burden of real-time data reporting on school districts. In addition, IDOE recognizes that nightly data exchange would increase the frequency with which IDOE could share data (with educators, policymakers, and researchers), as well as the accuracy of data maintained by the state. By reducing the burden of manual data upload, IDOE will free up time at the local level that can instead be focused on increasing data quality
and using data for policymaking and high quality classroom instruction. Data collected will be stored by IDOE in its data warehouse and will be securely shared with educators through the Learning Connection and with researchers and policymakers through BI reporting tools (aggregated data) and data sharing agreements (de-identified student-level data). Moreover, IDOE is examining mechanisms through which it could also push data collected back down to the local level, to ease the burden of data entry on districts and to facilitate student data and record exchange.

As indicated in the previous section, currently IDOE relies on manual data upload to its STN Application Center. IDOE has created data layouts and file specifications for all required data, and IDOE has attempted to minimize reporting burdens on school districts by eliminating as many redundant data fields as possible. However, data are collected only at certain times during the year, and as a result, some redundancy in data collection is necessary. Because data collection is only periodic, in some cases school districts must report data on students from the previous school year at the beginning of the next school year (for example, dropout and mobility data are collected once, October 1 of the year following the previous school year); as such, data lag and real-time reporting is not a possibility. In many cases, the data lag hinders the quality of the data reported. Despite error checks, validations, and exception reports that have been built into the STN Application System, errors and conflicts still abound. In some cases, because the reporting is occurring at the end of the year, the person inputting the data into the system cannot rectify errors with a student’s record (because, for example, s/he doesn’t know why the student was reported as in a much lower grade or with a different special education exceptionality eight months ago). Real-time data exchange, including daily exception, validation, and audit reports, would allow districts to make changes on a daily basis with much fresher data. In addition, all data transmission is done manually, through file upload. School districts have expressed concern that the manual file upload creates a large burden on school districts’ minimal IT staff resources; with the new requirement to collect real-time data, school districts are even more worried about the burden it will place on them. Moreover, although data layouts have been defined, school districts in Indiana use multiple SIS vendors. As such, Indiana has not clearly defined data structures, formats, and definitions, so Indiana not only lacks interoperability between school districts, but also interoperability with the state and with other agencies (such as higher education).

Envisioned with automated, real-time data exchange is a solution that will reduce burden on schools’ resources, while at the same time increasing the quality of the data collected by the IDOE. IDOE will be able to make better data available to teachers and administrators through the Learning Connection, and by housing real-time data in its data warehouse, researchers and policymakers, as well as IDOE staff, will be able to access timely aggregated and de-identified data. Moreover, by pushing reported data back down to school districts’ information systems, data entry burden will be reduced, and high quality data will be more readily available to school districts. By virtue of the real-time nature of the automated data exchange, school personnel will also receive audit, error, and exception reports in a timelier manner, allowing personnel to review and correct information in real time.

The automated data exchange will also make it easier for educators and administrators to facilitate student transition. In many cases, educators have expressed that it is very difficult to obtain timely student-level information for highly transient students. Automated data exchange will allow educators to obtain, in a FERPA-compliant manner, data such as attendance, student course schedules and course completion, discipline, and assessment. In addition, data from the
K-12 automated data exchange can be uploaded into the transcript repository (see the next section) and securely matched with higher education data. Further, student to teacher data linkages will be more accurate, because real-time teacher-student assignments will be able to be identified, reviewed, and checked for accuracy.

The automated data exchange solution that Indiana is seeking must allow for the movement of large data sets from districts to the state, and from the state back to districts. Indiana desires the ability to make data movement on-demand (such as via Web services); in addition, districts must be able to call up data from the state. The ultimate desire is to minimize the burdensome impact of data movement and data reporting on districts. Indiana has been researching an SOA based solution with ESB capabilities to handle data movements between districts and the state in the form of file-based transfers, Web applications, Web services, or SIF agents (where applicable, although only a handful of districts in Indiana use SIF agents/ZIS). The SOA-based solution offers integrated security with communications via SSL (Secure Socket Layer) encrypted network connection (HTTPS) and Web services security via XML schema validation, SQL Injection handling, etc.

IDOE will also use this opportunity to create standardized data structures, formats, and data definitions across all local educational agencies (LEAs) in the state in order to facilitate data exchange. Data structures will be SIF compliant, which would provide flexibility to work with other states in the future. Standardized structures and formats will also facilitate data exchange with postsecondary institutions, as each level (PK-12 and postsecondary) will have a clear understanding of data structures and data being exchanged. To further facilitate data exchange between secondary institutions and postsecondary education, as well as postsecondary to postsecondary institutions, and to promote interoperability, IDOE is also requesting funds to expand its e-transcript initiative and create a transcript repository, as well as to standardize transcripts and map courses to SCED; this portion of the project is described in the next section.

The IDOE is in the process of conducting a capacity assessment of its districts for the implementation of real-time automated data exchange. A Request for Proposal (RFP) was released on November 30th to identify a vendor to conduct the capacity assessment. The assessment will identify the current status of student information systems at the local level (approximately thirty vendors operate throughout the state); perceived burden around utilizing the current data submission process; level of stakeholder buy-in for automated data exchange; needs, capacity, and challenges among vendors and local districts around real-time automated data exchange; and key risks and benefits as perceived by local stakeholders for real-time automated data exchange.

IDOE will use information from the assessment to determine which districts and vendors have immediate or near immediate desire and capacity for automated data exchange, as well as which districts and vendors may struggle with the implementation. IDOE will structure the roll-out of its automated data exchange solution based on this information.

**E-Transcript, Transcript Repository, and Transcript Standardization**

Indiana began its e-transcript initiative in 2005. Working with Docufide, the vendor selected through an RFP process, the initiative has provided an easy and secure mechanism for high schools to electronically process and deliver transcripts to participating Indiana public and private post-secondary institutions. Although initial adoption of e-transcript began slowly, each year of implementation, IDOE and CHE (the Commission for Higher Education) have seen steady increases in the number of e-transcripts requested and submitted. Indiana’s ultimate goal
is universal usage of e-transcript in all schools and for all students across the state (100% of high schools and 100% of public and private post-secondary institutions).

In order to ensure that all capabilities and requirements of a SLDS are in place in Indiana, IDOE, along with its partner agency, the Commission for Higher Education (CHE), has determined that additional work is needed on the Indiana e-transcript initiative, including facilitating college to collect e-transcript exchange, high school to college transcript exchange, automated GED transcript exchange. Moreover, creating a transcript repository with reporting capabilities will facilitate data exchange between secondary and postsecondary institutions, as well as allow for diploma auditing, course-taking pattern auditing, and high school feedback reports. Finally, mapping local and state course codes to SCED (School Codes for the Exchange of Data) will promote data interoperability (especially with other states, which do not use Indiana’s course codes but may use SCED) and will further standardize Indiana’s transcript. The proposed project will continue Indiana’s current e-transcript initiative and will allow the state to continue to offer e-transcript at no cost to schools.

As noted earlier, Indiana has struggled to match K-12 data with postsecondary data because of a lack of a standard student-level identifier. Through the e-transcript project (including the plans to standardize the e-transcript), these issues will be much more easily resolved. The standardized e-transcript will include the STN. Using the proposed system, schools can securely upload transcripts to the transcript repository. Data are stored as XML, allowing for direct delivery to authorized users. Transcripts will meet transcript standards (PESC/XML and SIF 2.x r1). Transcripts are delivered to authorized users in the preferred format (PDF, PESC XML, or TS130 EDI) and method (secure download, SFTP, or Web services). All transmissions are secure and encrypted, with a unique ID, and data can be accessed only by authorized users. Transcripts can easily be shared between participating K-12 schools, secondary schools and postsecondary institutions, and postsecondary institutions to other postsecondary institutions. In addition to being used by high schools and postsecondary institutions for transcript data exchange, the repository can also be used by K-12 institutions to upload student course information, which can then be securely accessed by another school (if, for example, a student has moved). Once Indiana has its real-time automated data exchange system in place, it will likely no longer be necessary for K-12 institutions to utilize the batch upload. However, the phase in of real-time automated data exchange will take three years. The transcript repository solution will allow schools that are in later phases of implementation to still have the capability of automatically exchanging student records. Moreover, IDOE will still be able to glean reports on course-level data even during the phase in of real-time.

By building a transcript repository, Indiana will further facilitate the exchange of transcript data, as well as enhance the ability to match data between secondary schools and higher education. The transcript repository is populated with transcripts from bulk uploads from participating postsecondary schools, as well as from the IDOE’s data warehouse (providing data from the automated, real-time data exchange); each time transcript data are uploaded, the database is updated to have the most current transcript on file for the student. A number of custom reports can be created from the transcript repository, using the standardized transcript fields (such as student demographics, courses passed/failed and courses currently being taken; credits and grades earned; SCED course ID; diploma type, etc.). Because the STN will be included on the e-transcript, as well as data loaded from IDOE (and will be used by both K-12 and higher education), reports can also be bi-directional (e.g., higher education reports can include high
school attended as well as higher education performance). Transcript data from the repository can also be extracted and loaded into the IDOE data warehouse. Because data will include the same identifier (the STN), this will allow for backtracking all the way to kindergarten, if the student was enrolled in a public or accredited non-public school in Indiana as a kindergartener (it could also include preschool, if the student was enrolled in a preschool program that uses STN).

Although easy transcript exchange will be very positive for Indiana secondary and postsecondary institutions, for true data interoperability, the transcripts must also be standardized down to the course level (course name, number of credits, etc.). Working with its selected vendor, IDOE will translate secondary school transcript data to standardized data, including course, level, and credit. Courses will be translated to the National Center for Education Statistics’ Secondary School Course Classification System, School Codes for the Exchange of Data (SCED). Per NCES, the adoption of the SCED standard will enable comparison of courses among districts and states (allowing even for interstate comparisons); encourage interoperability of student information and data management systems; and reduce the cost and burden of transcript studies.

IDOE will utilize a vendor-developed interface for mapping its state and local course codes to SCED. Indiana already has state course codes that must be used by all school districts; however, in addition to the state course codes, districts may simultaneously use their own course codes. Using the developed interface, state or local personnel can enter state or local course codes, credits, sequence, and level; then, from a dropdown menu, users select the appropriate SCED course name and subject. The field is then automatically populated with course description.

IDOE will also work with its selected vendor to create diploma audits. The diploma audit will show school personnel and students their progress toward meeting diploma requirements. Diploma audits will include progress in Indiana Core 40 courses as well as estimated GPA. Reports can also be extracted that can show aggregated course performance and percentage of students on track to complete minimum course requirements for a Core 40 diploma at each Indiana high school. Data can be reported back to high schools and also used for accountability tracking.

Using data from the K-12 automated data exchange, and coupling that initiative with the e-transcript project (including building a transcript repository and standardizing transcripts and course codes), Indiana will be in a position not only to link high school and college data, but also to provide feedback reports to high schools, high school counselors, and teachers on student performance in higher education. Data could also be used at the K-12 level to more closely focus instruction and alignment to better prepare students for postsecondary education. Indiana will also be able to generate reports on course completion and course taking patterns, as well as to analyze the impact of course taking patterns on college success. Moreover, because e-transcripts will utilize a standard, universal student ID (the STN), Indiana will be able to track the number and percentage of students who take remedial course work, student performance in the freshman year of college and beyond, and the number and percentage of students completing college. Using the universal ID and backtracking to data stored in IDOE’s data warehouse, Indiana will be able to track student performance back to kindergarten (or preschool, where applicable). Finally, through its IWIS project, Indiana will further be able to link data into the workforce, providing feedback reports to colleges on student performance in the workforce.

The Learning Connection and Public Web Enhancements
Although IDOE does make quite a bit of data available to the public on its public Website, data are aggregated (for security reasons) and the data reporting mechanisms currently used by IDOE are not designed to provide classroom-level, longitudinal information to teachers and administrators.

In order to provide more hands-on data directly to educators, IDOE has used SLDS funding from its current grant to create The Learning Connection, a tool designed to make data available to educators in a secure manner. In addition, The Learning Connection is a tool that allows educators to share lesson plans and lesson tips with other educators, as well as allowing parents to access information from their child’s teacher.

The Learning Connection is a Microsoft.NET 3.5 based application that is built using an ASP.NET web application and Web services on top of a SQL server. The Learning Connection consists of three tiers, with layers for Presentation, Services for Business Logic and Integration, and Data Access. The separation of these layers allows for a more secure and flexible system that can be scaled and maintained over time.

Because Learning Connection houses student-level data, security is paramount. A variety of security mechanisms are employed at the endpoints of the Learning Connection architecture to ensure that proper security is applied. All traffic to and from Learning Connection is encrypted using Secure Socket Layers (SSL). User accounts are locked out after three consecutive failed login attempts, and user passwords expire based on a set time interval. Access to sensitive student-level data can be audited by recording information about who accessed the data and when.

Envisioned with the next phase of the project (Learning Connection Phase Two) are further enhancements to The Learning Connection, including adding additional longitudinal data sets (currently, assessment data such as ISTEP+ are in The Learning Connection) and integrating IDOE’s electronic IEP system (called ISTART7) into the Learning Connection. IDOE also plans to expand the functionality of Learning Connection to allow districts to upload their own data (such as grade books, district-level assessments, etc.). Funds from the grant will also be used to build analysis tools and custom reporting functions into Learning Connection and add higher education data (obtained through the IWIS project and transcript repository) into Learning Connection.

IDOE also recognizes that simply making data available to educators does not necessarily mean that educators will be able to use data for informed decision making at the classroom and school levels, as well as to differentiate instruction in order to meet student needs. As such, IDOE plans to partner with universities to provide targeted “on the job” training to teachers on using Learning Connection for data-driven instruction and translating that into classroom success. IDOE will also utilize university support to evaluate the effectiveness of Learning Connection in promoting data-driven instruction and increasing student achievement. IDOE has already garnered support from Indiana University (Indiana Business Research Center) and University of Indianapolis (Center for Excellence in Leadership of Learning) and plans to reach out to other organizations and universities as well.

IDOE also envisions creating a certification training process, much like Oregon’s DATA project. The Oregon DATA project certification program, according to Oregon DATA Project’s Website, “was created for educators interested in teaching others how to use data to improve student
achievement.” IDOE would like to pursue a similar, “train the trainer” model to scale its professional development statewide.

In addition to using Learning Connection to provide secure and FERPA-compliant data to educators, IDOE also recognizes that it must make the aggregated (public) data that it shares more user-friendly, intuitive, and easy to interpret. As such, IDOE plans to enhance its public Website with better querying tools, data that are more clearly defined (including data definitions for data posted on the site and extractable data), and more frequent updates (using data collected through the real-time data exchange). Moreover, by virtue of its e-transcript project, IDOE will be able to provide aggregated postsecondary feedback data to high schools (such as percentage of students at each high school completing one year of college, percentage of students from each high school needing remediation, etc.).

**Summary of Needs**

In order to link students to teachers, collect and report data on student course completion, increase the accuracy and integrity of IDOE data (including data used for federal reporting), and reduce data reporting burden, IDOE proposes to create an automated, real-time data exchange system. Such a system will not only increase data quality, but will also increase the amount and type of data available to be shared with educators, administrators, researchers, and the public.

In order to achieve all required systems capabilities and requirements of a fully robust and functional SLDS, IDOE must expand its ability to exchange data with institutions of higher education and across those institutions, to examine student preparation for and success in higher education, as well as into the workforce. IDOE’s proposed transcript exchange system and transcript repository, coupled with data collected through automated real-time data exchange, will be leveraged with its current work with Commission for Higher Education and Department of Workforce Development on the IWIS project to enable IDOE’s SLDS to meet this need.

In order to make more and better data available to educators, in a mechanism that promotes data-driven instruction, diploma auditing, and feedback to counselors and teachers, IDOE needs to expand its Learning Connection project to enter Phase Two, which will allow for additional custom reporting, high school feedback reports, and will promote professional development partnerships between researchers and educators. Moreover, IDOE will revamp its public Website to make aggregated data more user-friendly and more up to date by utilizing data obtained through real-time data exchange and adding postsecondary feedback data.

The implementation of these three core elements (automated, real-time data exchange with clearly defined data elements and data models; e-transcript exchange with a transcript repository, reporting capabilities, and diploma auditing; and enhancements to Learning Connection and the public Web) will allow Indiana to achieve all required elements and capabilities of a Statewide Longitudinal Data System.

**b). Project Outcomes Related to System Requirements and Implementation**

Indiana has worked with a number of stakeholders to determine its objectives for its current proposal. Stakeholders who have been involved in determining both Indiana’s needs, as well as its core elements for the proposed project, include local-level educators; educator associations (such as the state teachers, principals, superintendents, and school boards associations); researchers; policymakers; IDOE staff; and other state agencies, such as the Commission for Higher Education and the Department of Workforce Development.
The ultimate goal of IDOE’s project is a P-20 data exchange solution that allows Indiana to achieve its vision to make full use of its P-20 education data system as a tool for informed decision making by all stakeholders, resulting in better K-12 student achievement, increased college persistence and success, and improved workforce readiness and accomplishment for the economy of both Indiana and the nation.

As noted in the needs section, IDOE has broken its project proposal into three core elements, which are the three core outcomes that it expects from its proposed project. The section below describes the objectives of the proposed project for each core element, as well what Indiana expects to accomplish through the implementation of the objectives in terms of full realization of required data system capabilities and required data system elements, as described in the America COMPETES Act. Specific timelines for each objective and core outcome are provided in the subsequent timeline section.

**Core Element One: Data Interoperability and Statewide Capacity for Automated, Real-Time Data Exchange Between IDOE and Schools**

Goal: Automated, real-time data exchange (IDOE can pull data from schools, as well as push data back down) using clearly defined data structures, formats, and definitions, allowing for higher quality data and more timely access to relevant data, as well as decreasing burden around manual data reporting and validation, freeing up district resources to focus on data quality and data usage for student achievement.

Indiana envisions that its real-time project will be implemented in four phases, with the preliminary phase including completion of an RFP and identification of a vendor for the implementation of automated real-time data exchange, as well as identification of pilot districts for implementation of the pilot project. After the preliminary phase has been completed, phase two will focus on increasing capability to 60% of districts; phase three will increase capability to 80% of districts; and phase four will increase capability to 100% of districts. Phase one will be accomplished by the end of year one; phase two by the end of year two; and phase three and four by the end of year three.

**Objective 1:** Utilize information from capacity assessment (described in the needs section) to identify pilot districts for interoperability pilot project, as well as to select districts and vendors for each phase of the real-time project.

**Objective 2:** Release Request for Proposal (RFP) for pilot project; select vendor.

**Objective 3:** Complete pilot project with selected districts and vendors. IDOE estimates that approximately one to three vendors will be selected, representing approximately 40% of Indiana’s school districts.

**Objective 4:** Review lessons learned from pilot project and complete phase two implementation with next set of vendors and districts. At the end of this phase, up to 60% of districts are capable of automated real-time data exchange.

**Objective 5:** Implement phase three of real-time project, with 80% of schools and districts capable of automated real-time data exchange at the end of this phase.

**Objective 6:** Implement final phase of real-time project (focusing on independent schools and schools with home-grown student information systems), with 100% of schools having real-time automated data exchange capabilities.

**Requirements and Capabilities Outcomes:** By accomplishing the objectives for Core Element One, Indiana will fully realize required data system capabilities of supporting interoperability by using standard data structures, formats, and definitions; more fully linking student and teacher
data; further ensuring the quality and integrity of data; and increasing the ability of the state to provide timely and accurate data for federal reporting. Moreover, Indiana will meet required data system elements by enhancing its data quality and having more timely access to matched student and teacher records. Automated real-time data exchange will also facilitate access to more timely and accurate data for local-level educators, in addition to timely and accurate data to drive research and policy agendas.

**Core Element Two: Full Integration of K-12 and Postsecondary Data with E-Transcript Exchange, E-Transcript Repository, and Transcript Standardization**

**Goal:** Student-level transcript data are available for secure exchange; state and local codes are standardized and mapped to SCED; and P-20 data are fully linked through a transcript repository, allowing for quicker, more seamless student transitions, diploma auditing, high school feedback reports, and evaluation.

Indiana envisions that this project will promote seamless transitions for students, especially from high school to college and from college to college. Additionally, Indiana will use data extracted from the transcript repository to enhance its IWIS project (described in the needs section), which is designed to be a data repository with reporting capabilities that links K-12, higher education, and workforce data. The project will be implemented in three phases: objectives one through three will be accomplished by the end of year one; objective four by the end of year two; and objectives five, six, and seven by the middle to end of year three.

**Objective 1:** Vendor to create a full-service electronic transcript exchange system (including transcript repository with reporting capabilities) is identified.

**Objective 2:** Reports to be created from transcript repository are identified.

**Objective 3:** Transcript exchange system and transcript repository are implemented and functional (including reports created).

**Objective 4:** State and local courses are mapped to SCED to standardize transcripts and diploma audit system is created.

**Objective 5:** Data are extracted from transcript repository (K-12 course completion and post-secondary course data); full integration of K-12 and higher education data is achieved, including high school feedback reports and diploma audits. Full integration means that each student record from public postsecondary education can be integrated with K-12 data, to the extent feasible.

**Objective 6:** Integrated higher education and K-12 data are matched with workforce data in IWIS and reports are created.

**Objective 7:** Aggregated postsecondary feedback data are posted on the IDEO public Website (e.g., percent of students enrolled in remedial coursework for each high school, percent of students completing one year of college, etc.).

**Requirements and Capabilities Outcomes:** By completing all objectives of Core Element Two, Indiana will fully achieve the data system capabilities of examining student progress and outcomes over time (especially in higher education and the workforce); facilitating the exchange of data among agencies and institutions within the state; and enabling Indiana with the ability to more accurately meet federal data reporting requirements. Additionally, achievement of Core Element Two objectives will allow Indiana to fully meet data system requirements of P-16 education program participation and completion: linkage with and across higher education data systems; student-level transcript information; and data on student transition to higher education and the workforce.
Core Element Three: Timely and Secure Access to Data and an Increase in Local-Level Capacity for Data Driven Instruction

**Goal:** Secure school- and classroom-level access to a variety of real-time student-level data, as well as the ability to customize views and reports based on additional school- and district-level data, in addition to an increase in data-driven instruction and informed decision making for increased student achievement.

Indiana envisions that element three will be implemented in several phases, with full completion by the end of year three of the grant. Objectives one and two will be completed by the end of year one, while objectives three through six will be accomplished by the end of year two. Objectives seven and eight will be achieved by the end of year three.

Data analysis and teaching tools to be developed in this second iteration of Learning Connection (see the needs section for a description of accomplishments made in the first iteration) will include specific reports for teachers identifying standards to cover based on student needs. Professional development will be provided in two ways: first, statewide—Web-Ex trainings, videos, and conferences will be offered on how to use Learning Connection data and reporting tools for data-drive instruction. Second, targeted professional development will be offered to Indiana’s identified lowest achieving schools. Utilizing state universities and other organizations, Indiana will create partnerships for providing professional development on using specific Learning Connection reports for data-driven instruction; providing differentiated instruction based on identified student needs; and evaluating the impact of Learning Connection on educators and their ability to implement truly differentiated, data-driven instruction.

**Objective 1:** The Learning Connection is expanded to include electronic student-level IEP data.

**Objective 2:** Working with stakeholders, additional data sets are identified to load into the Learning Connection from the IDOE data warehouse; data are loaded and desired reports to be created and displayed using the data are also identified and provided.

**Objective 3:** The functionality of Learning Connection is expanded to allow districts to upload district-level assessment data.

**Objective 4:** Indiana’s at-risk indicator tool is enhanced to utilize additional longitudinal data available in Learning Connection and provide educators with a customized, secure, and accurate student-level at-risk report.

**Objective 5:** Data analysis tools and additional custom reports are built into the Learning Connection to facilitate data analysis by educators.

**Objective 6:** Targeted professional development and evaluation is provided to selected schools (as well as statewide).

**Objective 7:** Post-secondary feedback data at the individual student and aggregated level are available in Learning Connection, for educators (student-level) and the public (aggregated level).

**Objective 8:** IDOE’s public Website is revamped to include data definitions, more frequently updated data, additional report querying tools, and aggregated postsecondary feedback reports.

**Requirements and Capabilities Outcomes:** By achieving the objectives described in Core Element Three, Indiana will meet the required system capability of examining student progress and outcomes over time, as well as enabling data to be easily generated for data-driven decision making and school improvement. Additionally, Indiana will meet the system element requirement of providing information on the extent to which students successfully transition to postsecondary education.
Evaluation

In addition to activities described in the Core Elements (above), Indiana will reserve funds for rigorous formative and summative evaluation of grant project activities. IDOE will select its external evaluator through an RFP process. The independent evaluator will likely be a research university or research institution. The evaluator will be responsible for helping IDOE create a logic model with identified outcomes, inputs, activities, and measurement indicators that will allow IDOE to know whether it is on track to achieve its goals, as well as the impact that the achievement of objectives is expected to have. The evaluator will be expected to collect baseline data, as well as a variety of stakeholder input data at the beginning of the grant period and at various points throughout the grant. Stakeholder input will include Web-based surveys and interviews. IDOE will set performance targets for each phase and element of the project. Throughout the formative phases of the project, IDOE will work with its evaluator to ensure that project tasks are being implemented with fidelity and are achieving (or are on track to achieve) the desired results. Evaluation will also include end-of-year reports and a final project report (along with project debriefing) to help the IDOE and its stakeholders analyze the progress and impact that its SLDS project has made.

c). Timeline for Project Outcomes

As described above, Indiana has broken its SLDS proposal into three core elements. Although broken into three elements, each element will be implemented simultaneously, with the ultimate goal of full implementation of each objective of all three elements by the end of the third year of the SLDS grant. This section provides detailed information for each activity that will be completed to accomplish each core element (core outcome); accomplishment of each core element will result in Indiana’s SLDS meeting all required system elements and capabilities. Timelines provided below assume that states would receive SLDS funds in June of 2010. Appendix A provides a management plan in chart form. As described in the next section, governance and project management, all SLDS activities will ultimately be approved by the IDOE’s Project Oversight Committee (also called the IDOE Management Team). However, day to day operations of the SLDS grant project will be overseen by the SLDS steering committee, also described in the governance and project management section. When the SLDS steering committee is listed as the responsible party, this assumes that the steering committee will be responsible for ensuring that the task has been completed, and also implies that IDOE staff (such as developers, project managers, DBAs, subject matter experts etc.) will be involved. The project management and governance section provides more detail about the makeup of the SLDS steering committee, as well as more detail about subject matter experts and other entities listed in this section.

As noted in the Needs section of this application, outcomes and objectives to be accomplished using funds being sought are not currently supported by Indiana’s 2007 SLDS grant. Core Element One will be used to initiate a real-time data exchange solution. While data obtained through this initiative will enhance Indiana’s 2007 SLDS grant data warehouse project (by allowing IDOE to populate the warehouse with timelier data), the project will also reduce manual data reporting burden on districts and support data interoperability, which is not currently supported by Indiana’s data system. Core Element Two will enhance linkage projects that IDOE has begun with higher education and the workforce. However, IDOE’s current SLDS grant has focused on pilot data linkages; implementation of a transcript repository will allow IDOE to achieve full integration with public institutions of higher education. Moreover, because IDOE’s 2007 SLDS efforts have focused on pilot linkages, high school feedback reports, analyses of
course-taking patterns, and analyses of post-secondary success have not been possible. Core Element Three will expand upon work already begun with the 2007 SLDS grant for the Learning Connection. However, objectives for the Learning Connection under the 2007 SLDS grant were focused on providing teachers with the ability to communicate with other teachers about general, standards-based lessons, as well as to obtain assessment data and reports on student achievement. The next iteration of the Learning Connection, to be supported in the 2G project (using ARRA/SLDS funding) will take Learning Connection to the next level, including providing more focused, differentiated lessons; targeted professional development; and additional longitudinal data for educators.

Core Element One: Data Interoperability and Statewide Capacity for Automated, Real-Time Data Exchange Between IDOE and Schools

Objective 1: Utilize information from capacity assessment (described in the needs section) to identify pilot districts for interoperability pilot project, as well as to select districts and vendors for each phase of the real-time project.
   Date to be accomplished: June-August 2010
   Responsible parties: capacity assessment vendor; SLDS steering committee; STN advisory council

Objective 2: Release Request for Proposal (RFP) for pilot project; select vendor
   Date to be accomplished: September-December 2010
   Responsible parties: SLDS steering committee; Indiana Department of Administration; IDOE subject matter experts

Objective 3: Complete pilot project with selected real-time vendor and districts and SIS vendors (IDOE estimates that approximately one to two vendors will be selected, representing approximately 40% of Indiana’s districts).
   Date to be accomplished: December 2010-June 2011
   Responsible parties: real-time vendor; SLDS steering committee; selected SIS vendors; selected pilot districts; IDOE subject matter experts

Objective 4: Review lessons learned from pilot project and complete phase two implementation with next set of vendors and districts (at the end of this phase, up to 60% of districts are capable of automated real-time data exchange).
   Date to be accomplished (review lessons learned): June-August 2011
   Responsible parties (review lessons learned): real-time vendor; SLDS steering committee; selected SIS vendors and panel of selected pilot districts; IDOE subject matter experts
   Date to be accomplished (phase two implementation): September 2011-June 2012
   Responsible parties (phase two implementation): real-time vendor; SLDS steering committee; phase two SIS vendors and phase two districts; IDOE subject matter experts

Objective 5: Implement phase three of real-time project, with 80% of schools and districts capable of automated real-time data exchange at the end of this phase.
   Date to be accomplished: July 2012-January 2013
   Responsible parties: real-time vendor; SLDS steering committee; phase three SIS vendors and districts; subject matter experts

Objective 6: Implement final phase of real-time project (focusing on independent schools and schools with home-grown student information systems), with 100% of schools having real-time automated data exchange capabilities.
   Date to be accomplished: December 2012-May 2013
Responsible parties: real-time vendor; SLDS steering committee; phase four SIS vendors and districts; subject matter experts

Core Element Two: Full Integration of K-12 and Postsecondary Data with E-Transcript Exchange, E-Transcript Repository, and Transcript Standardization

Objective 1: Vendor to create a full-service records electronic transcript exchange system (including transcript repository with reporting capabilities) is identified.
  Date to be accomplished: June-August 2010
  Responsible parties: Indiana Department of Administration; SLDS steering committee and IDOE subject matter experts; Commission for Higher Education

Objective 2: Reports to be created from transcript repository are identified.
  Date to be accomplished: August-October 2010
  Responsible parties: vendor; SLDS steering committee and IDOE subject matter experts; partner agencies; STN advisory council; educator fellows (see project management and governance section for more information on STN advisory council, educator fellows, and partner agencies)

Objective 3: Transcript exchange system and transcript repository are implemented and functional (including reports created).
  Date to be accomplished: September 2010-May 2011
  Responsible parties: vendor; SLDS steering committee; partner agencies

Objective 4: State and local courses are mapped to SCED to standardize transcripts and create diploma auditing capabilities.
  Date to be accomplished: May 2011-May 2012
  Responsible parties: vendor; SLDS steering committee; IDOE subject matter experts; partner agencies; educator fellows

Objective 5: Data are extracted from transcript repository (K-12 course completion and postsecondary course data); full integration of K-12 and higher education data is achieved, including high school feedback reports and diploma audits. Full integration means that each student record from public postsecondary education can be integrated with K-12 data, to the extent feasible.
  Date to be accomplished: May 2011-May 2013
  Responsible parties: vendor; SLDS steering committee; IDOE subject matter experts; partner agencies; educator fellows

Objective 6: Integrated higher education and K-12 data are matched with workforce data in IWIS and reports are created.
  Date to be accomplished: May 2011-May 2013
  Responsible parties: SLDS steering committee; IWIS team and partner agencies

Objective 7: Aggregated postsecondary feedback data are posted on the IDOE public Website (e.g., percent of students enrolled in remedial coursework for each high school, percent of students completing one year of college).
  Date to be accomplished: January 2013-May 2013
  Responsible parties: SLDS steering committee; IDOE subject matter experts

Core Element Three: Timely and Secure Access to Longitudinal Data and an Increase in Local-Level Capacity for Data Driven Instruction

Objective 1: The Learning Connection is expanded to include electronic student-level IEP data.
  Date to be accomplished: June 2010-January 2011
Responsible parties: SLDS steering committee; Learning Connection vendor; Learning Connection steering committee; IDOE subject matter experts; educator fellows

Objective 2: Working with stakeholders, additional data sets are identified to load into the Learning Connection from the IDOE data warehouse; data are loaded and desired reports to be created and displayed using the data are also identified and provided.
Date to be accomplished: June 2010-May 2011
Responsible parties: SLDS steering committee; Learning Connection vendor; Learning Connection steering committee; IDOE data warehouse team; IDOE subject matter experts; educator fellows

Objective 3: The functionality of Learning Connection is expanded to allow districts to upload district-level assessment data.
Date to be accomplished: May 2011-June 2012
Responsible parties: SLDS steering committee; Learning Connection vendor; Learning Connection steering committee; IDOE subject matter experts; educator fellows

Objective 4: Indiana’s at-risk indicator tool is enhanced to utilize additional longitudinal data available in Learning Connection and provide educators with a customized, secure, and more accurate student-level at-risk report.
Date to be accomplished: May 2011-June 2012
Responsible parties: SLDS steering committee; Learning Connection vendor; Learning Connection steering committee; IDOE subject matter experts; educator fellows

Objective 5: Data analysis tools and additional custom reports are built into the Learning Connection to facilitate data analysis by educators.
Date to be accomplished: May 2011-June 2012
Responsible parties: SLDS steering committee; Learning Connection vendor; Learning Connection steering committee; IDOE subject matter experts; educator fellows; partner agencies

Objective 6: Targeted professional development and evaluation is provided to selected schools (as well as statewide)
Date to be accomplished: August 2010-June 2012
Responsible parties: SLDS steering committee; IDOE subject matter experts; partner agencies

Objective 7: Post-secondary feedback data at the individual student and aggregated level are available in Learning Connection, for educators (student-level) and the public (aggregated level)
Date to be accomplished: June 2012-May 2013
Responsible parties: SLDS steering committee; IDOE subject matter experts; Learning Connection vendor; Learning Connection steering committee; educator fellows; partner agencies

Objective 8: IDOE’s public Website is revamped to include data definitions, more frequently updated data, additional report querying tools, and aggregated postsecondary feedback reports.
Date to be accomplished: June 2010-May 2013
Responsible parties: SLDS steering committee; IDOE subject matter experts; partner agencies
d). Project Management and Governance Plan

Indiana recognizes that its efforts will not be successful without a clearly defined governance structure; moreover, IDOE recognizes that it must include multiple agencies and partners in its SLDS efforts. Indiana will take care to ensure that all relevant stakeholders are involved in some capacity in decision-making for activities proposed in this grant application. Activities proposed in this grant application will be managed in a similar way to activities that are being conducted under the current SLDS grant that Indiana receives.

Governance Structure

All IDOE project activities are governed by a Project Oversight Committee (POC), also called the IDOE senior management team, which is chaired by Todd Huston, the Chief of Staff for the Indiana Department of Education. The POC also includes the Chief Information Officer of the Indiana Department of Education, Jason Thacker. If awarded funds through this grant, Jason will also act as Project Sponsor of the proposed SLDS project. Jason also serves on the SLDS project steering committee, described below. The POC governs all IDOE projects and consists of executive-level staff at IDOE, including the Deputy Chief of Staff; General Counsel; Chief Assessment Officer; Chief Financial Advisor; Chief of School Reform and Accountability; Chief Policy Advisor; Communications Director; Assistant Superintendent of Student Learning (encompassing special education, Title I, English Language Learners, adult education, and curriculum); and the Assistant Superintendent for Learning Support (including career and technical education, educator licensing and development, school accreditation, and school and community nutrition). Indiana’s state superintendent, Tony Bennett, also participates on the POC and co-chairs meetings. The Committee provides overall governance for projects to ensure the proper alignment among participating entities, external vendors, and the overall project management apparatus, as well as to ensure alignment with IDOE mission, vision, and objectives. Moreover, the Committee (with the input of the Chief Financial Officer) ensures that project expenditures are within budget. The Committee reviews progress, approves budget changes, tracks performance, and addresses any issues stemming from operational development and deployment.

Under the POC is an IDOE-level SLDS steering committee, which oversees the day-to-day operations of the grant projects. The steering committee is made up of the project sponsor (Jason Thacker), the project director (Molly Chamberlin), the project manager (Sharon Oshry), and other IDOE representatives with a vested interest in SLDS projects (including John Keller, who oversees the Learning Connection project; Paul Kreitl, IDOE’s Director of Application Development; Marcie Brown, Policy Director; and Kim Clement, special projects liaison to the Office of Student Learning). The steering committee meets weekly to discuss progress on the project plan, make budget and project plan changes (which are ultimately approved by the POC), and review evaluation progress. The steering committee has been in operation since the receipt of Indiana’s initial SLDS grant in 2007 and plans to continue its operations for oversight of the proposed SLDS/ARRA grant, with the possibility of including additional IDOE representation on the SLDS steering committee (especially from the communications area).

The project director is responsible for providing day-to-day oversight of the project. The project director monitors implementation and ensures deliverables. The project director is required to report periodically on progress to the project steering committee. The project director works closely with the project manager to manage and monitor day-to-day operations of contractor, IDOE, and internal and external resources in keeping with the project plan and budget and in
keeping with the project’s commitments. The project manager reports progress to the project
director and project sponsor and is a member of the SLDS steering committee. The project
manager is also responsible for scheduling steering committee meetings, revising the project plan
(as necessary), and maintaining monthly progress notes for federal reporting on SLDS project
progress.

In addition to internal governance and controls, IDOE will also involve local stakeholders, as
well as stakeholders from other agencies, as it has in its current SLDS project. As previously
noted, the Indiana Commission for Higher Education (CHE) will be a partner in the proposed
SLDS project and will assist the IDOE project director and project manager in oversight of the
proposed project, especially for core elements one and two. CHE will provide a project liaison
(Ken Sauer) to assist in the implementation of the P-20 student exchange/transcript repository
portion of the project, as well as a staff member to assist in the continued implementation of the
e-transcript project (see the staffing section for more information). The IDOE has already
obtained input from both Workforce and CHE in the crafting of its current proposal. The IDOE
will also work closely with the Department of Workforce Development (DWD) in the
implementation of its proposed project, especially as it has to do with the integration of K-12,
higher education, and workforce data through the IWIS project. The IDOE SLDS steering
committee will periodically report on progress to the IWIS steering committee, which is made up
of representatives from DWD, CHE, IDOE (the SLDS project director), the Indiana Governor’s
office, and the Indiana Office of Technology.

IDOE’s SLDS project will also include technical support from current IDOE Information
Technology staff. Specifically, IDOE will have technical support in the areas of data collection
and reporting (Karla Carr, Karen Lane, and Hammad Rahman); data warehousing and database
administration (Nick Buchanan and Rick Hoffman); and network administration (Gary Grist
and Lisa Preston). The technical support staff will provide regular input and feedback to the project
director, project manager, and SLDS steering committee. More information about technical
support staff (including bios and resumes) is provided in the Staffing section and appendices.

IDOE will also involve subject matter experts in the implementation of the project, especially for
feedback in various aspects of the project. Indiana’s subject matter experts will primarily be its
29 data stewards, who will provide in-kind support for the project. Subject matter experts will
include IDOE staff with experience in curriculum and instruction; career and technical
education; school counseling; special education; English language learning; reading and literacy;
Title I; and school reform. Moreover, the IDOE’s STN Collection Team, who oversees all
student- and teacher-level data collections and provides technical assistance and support to
school districts in submitting student-level data, will provide support as subject matter experts
for STN and SPN collections.

IDOE also plans to recruit Indiana-based universities and research organizations to provide
support to school districts in the form of evaluation and professional development, especially as
it relates to data-driven instruction and use of data. IDOE has already obtained the support of
Indiana University (the Indiana Business Research Center) and University of Indianapolis
(Center for Excellence of Leadership and Learning) and plans to broaden support by reaching out
to additional universities and organizations in the state.

LEA personnel have proven to be a key source of guidance and feedback for Indiana’s current
SLDS grant, and they will continue to act as such for the proposed project. IDOE actively
utilizes its STN Advisory Council, which is a group of key data managers at a variety of schools
and districts throughout the state. This group provides insight on proposed data projects (such as real-time data collection), as well as data collections and data reporting burden. In addition, IDOE has also utilized its educator fellows for feedback in the first iteration of its Learning Connection project. The educator fellows are teachers and administrators from local districts who have provided input and testing for the current Learning Connection project. It is envisioned that this group of fellows would also provide input on projects identified in this proposal.

In order to receive input and continuous feedback from other stakeholders, including local-level stakeholders and the university and research community, IDOE also plans to work with its external evaluator to create Web-based surveys and stakeholder interviews, offering insight into stakeholder input related to proposed SLDS projects. The surveys will allow external stakeholders to weigh in on projects being conducted for the SLDS grant. Stakeholder interviews and surveys will help IDOE shape and reshape project plans. IDOE has used stakeholder surveys and interviews to inform its 2007 SLDS project and believes that continuing to do so will remain helpful in ensuring that stakeholder input is included in the project.

**Project Management**

The IDOE is confident that it will achieve the objectives of the proposed project on time and within budget by utilizing a project management framework that includes project charters, project scope documents, and a detailed project management plan (using Microsoft Project) that includes detailed timelines and responsibilities. Please refer to the Timeline section, as well as Appendix A for the high-level management plan. Knowing that this project will be complex and involve participation from many departments, agencies, and individuals, it will be paramount to have effective communication and keep the common goal in mind. In order to deliver as planned, the appropriate disciplines, structure, tools, and communication need to be in place. IDOE will use the four steps to project management approach: initiate, plan, execute and control, and close. SharePoint will be used as a document repository and project team site, and regular steering committee meetings will be held.

The IDOE already utilizes the project management plan described (project charter, project, scope, etc.) for a variety of its current SLDS projects and subprojects, including its enterprise data warehouse project, Learning Connection project, and reduction of data redundancy project. In addition to its SLDS project manager, Sharon Oshry, IDOE will also utilize the insight of two of its additional project managers, Dana Schroder and Rich Arroyo. Although Sharon is IDOE’s overall project manager for the SLDS project, Dana is managing IDOE’s enterprise data warehouse project. Rich is managing IDOE’s online IEP project and will be a key resource for core element three, the integration of the online IEP system into the Learning Connection.

As previously noted, the project will be overseen by a Project Oversight Committee (POC). The POC is made up of executive-level IDOE staff. The Committee provides overall governance of the project to ensure the proper alignment among participating entities, external vendors, and the overall project management apparatus. The Committee reviews progress, approves budget changes, tracks performance, and addresses any issues stemming from operational development and deployment. In addition, the SLDS project director meets regularly with representatives from other stakeholder agencies (e.g., the Commission for Higher Education and Department of Workforce Development) who act in an advisory capacity. Because the Commission will play a very important role in grant activities described in this application and has played an important role in providing input for the objectives of this grant proposal, meetings and discussions with representatives from CHE currently occur at least twice monthly and will continue to do so. The
IDOE project director also participates in the IWIS steering committee (IWIS is described in the needs section of this grant application). The IWIS steering committee includes representation from the Department of Workforce Development, Commission for Higher Education, Indiana Office of Technology, and Indiana Governor’s Office. The steering committee meets at least monthly to discuss progress on the IWIS project.

Day-to-day activities will be managed by the project director, Molly Chamberlin. Molly has acted as project director for Indiana’s current SLDS project since early 2009, and she has been involved with Indiana’s current SLDS project since its inception in 2007. A SLDS steering committee (described earlier in this section) that oversees current SLDS grant projects will also oversee projects described in this grant application. The committee is responsible for reviewing (with the project manager) the grant budget, as well as progress toward completing activities in the project plan, progress toward meeting goals and objectives. The IDOE will also select an independent evaluator for its project to set indicators for project success, as it has for activities being conducted for its current SLDS grant.

e). Staffing

IDOE will utilize staff currently employed by the IDOE, as well as hiring additional external vendors and several contractors (for development and database administration) to provide both project management and technical support for specific projects, namely the e-transcript project, real-time automated data exchange, and second iteration of the Learning Connection.

In-kind support in the form of salaries and time commitments will be dedicated by the IDOE and CHE to support projects included in this grant application. In-kind support in terms of salaries and personnel will equal approximately $600,000 per year (total of $1,800,000) for activities proposed in this grant, representing time commitments from the Project Director, Project Sponsor, Project Liaison, Steering Committee and POC, data stewards/SMEs, agency partners (universities, IWIS project, DWD, and CHE); and IDOE and CHE Technical Personnel (data warehouse architect, e-transcript specialist, data collection and reporting team, network support, and development team). Specific individuals who will work on the project are listed in the table below, titled Project Personnel and Resources.

**Additional Agency Support**

As demonstrated in Appendix D, the IDOE has gleaned support from several outside agencies. These agencies, including the Commission for Higher Education, the Department of Workforce Development, Indiana University, and University of Indianapolis, will offer guidance and support in an advisory capacity. As noted in the project need section, as well as throughout the project narrative, activities that will be conducted with grant funds will support a number of state-level policy initiatives and will be beneficial to a variety of stakeholders.

The table below lists the roles, responsibilities, and dedicated staff, as well as approximated percent times to be dedicated to the project. The percent time listed below includes both in-kind support and personnel that will be paid for through the SLDS grant.

**Project Personnel and Resources**

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
<th>Assigned Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Sponsor</td>
<td>Has ultimate authority over and is responsible for the overall project, scope &amp; deliverables. Serves as the SLDS representative on the Project Oversight Committee (IDOE management team) as described in</td>
<td>Jason Thacker, Chief Information Officer (30%)</td>
</tr>
<tr>
<td>Role</td>
<td>Responsibility</td>
<td>Assigned Person</td>
</tr>
<tr>
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</tr>
<tr>
<td>Project Director</td>
<td>the project management/governance plan section of this application.</td>
<td>Molly Chamberlin, Director of Data Analysis, Collection, and Reporting (60%)</td>
</tr>
<tr>
<td>Project Liaison (higher ed aspects of the project)</td>
<td>Lead, provide oversight for, and monitor the day-to-day implementation of the project for K-12 aspects of the project, including electronic submission of academic records K-12, creating common course descriptors, developing an auditing system, creating a formal feedback system, overseeing evaluation projects, and conducting training.</td>
<td>Ken Sauer, Associate Commissioner, Commission for Higher Education (20%)</td>
</tr>
<tr>
<td>SLDS Steering Committee</td>
<td>Leads, provides oversight for, and monitors the day-to-day implementation of the project for higher ed aspects of the project, including K-12 and higher education data exchange, e-transcript, and high school to postsecondary and postsecondary to postsecondary transcript exchange</td>
<td>In addition to project sponsor, director, and manager: John Keller (10%) Paul Kreitl (10%) Kim Clement (10%) Marcie Brown (10%)</td>
</tr>
<tr>
<td>Project Manager</td>
<td>Includes project sponsor, director, and manager (described elsewhere), as well as Director of Learning Technology, Director of Application Development, Student Learning Special Projects Liaison, and Communications representative. Responsible for participating in weekly steering committee, providing project oversight, and ensuring deliverables.</td>
<td>Sharon Oshry, Project Management Specialist, Information Technology (100%) Dana Schroder, Project Management Specialist, Information Technology (20%) Rich Arroyo, Project Management Specialist, Information Technology (20%)</td>
</tr>
<tr>
<td>Project Managers (external)</td>
<td>Manages day-to-day operations of contractor resources in keeping with the project plan and budget, and in keeping with the project’s commitments. Maintains issue lists and change orders, ensures product and service delivery, and manages quality control.</td>
<td>Vendor(s) (TBD)</td>
</tr>
<tr>
<td>Technical Support (IDOE and CHE staff)</td>
<td>Responsible for working with IDOE project manager for vendor-specific goal and objective setting, managing deliverables, managing contractor staff, and ensuring vendor-specific produce and service delivery.</td>
<td>Paul Kreitl (30%), Director of Application Development Erin Anderson, lead developer, Learning Connection (75%) Additional developers</td>
</tr>
</tbody>
</table>

Database administrator, data warehouse architect, data collection and reporting, network support, development staff, Commission for Higher Education (e-transcript specialist)
<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
<th>Assigned Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Support (external)</td>
<td>Responsible for ground-level implementation of technical deliverables related to each project, such as software testing, implementation and configuration of software, training, coding, Web design, etc.</td>
<td>Vendor(s) (TBD) Contractors (TBD)</td>
</tr>
<tr>
<td>Subject Matter Experts</td>
<td>Responsible for providing input; reviewing data for accuracy; identifying reports</td>
<td>IDOE data stewards (10-15%), STN collection team (10-15%), partner agencies (TBD)</td>
</tr>
<tr>
<td>External Evaluator</td>
<td>Responsible for formative and summative evaluation of the project, including progress toward meeting goals and objectives.</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Jason Thacker will act as the Project Sponsor. Jason is the Chief Information Officer for the Indiana Department of Education. As CIO, Jason is responsible for all IDOE information systems, including state and federal data collection and reporting systems. Jason has over twelve years of IT experience. He has experience in technical and operational functions of IT systems, including several off-the-shelf and custom ERP installations. He has technical expertise in programming languages, large databases/data warehouses, and system architecture. Jason has a B.S. in Business Information Systems. Molly Chamberlin will act as project director for the
project. Molly has been project director of Indiana’s current SLDS project since early 2009; prior to acting as project director for the entire Indiana SLDS project, Molly directed the research and evaluation component of Indiana’s SLDS project. Molly holds a Ph.D. in educational psychology and has extensive experience in data analysis, research, and evaluation. Molly has been the director of the division of Data Analysis, Collection, and Reporting since early 2009. As division director, Molly acts as project director for Indiana’s SLDS project (including its enterprise data warehouse project), as well as managing personnel responsible for data collections, state and federal data reporting, and data analysis projects. Sharon Oshry will act as head project manager for the activities proposed in this grant application. Sharon has over 10 years of project management experience in both the public and private sectors. Prior to joining the IDOE, Sharon worked in the private sector for a large professional services consulting company. Dr. Ken Sauer will be project director for all aspects of the grant related to higher education. Ken has been with the Indiana Commission for Higher Education since 1985. While at the Commission, he has been involved with a number state-level initiatives, including the Indiana e-Transcript Initiative and the formulation of dual credit policy. In prior work for the National Center for Higher Education Management Systems, he developed a classification system that is still used annually by all colleges and universities in the U.S. for reporting degree data to the federal government.

The SLDS steering committee will include Paul Kreitl, John Keller, Kim Clement, and Marcie Brown. Paul is the Director of Application Development for the IDOE. Paul has over twenty years of experience in IT as a director of data systems and IT and director of technology at the school district level. In his roles, he created the first data warehouse for schools in Indiana (now sold commercially as K-12 Datamine) and created the Indiana Virtual Academy, Indiana’s first online school. Paul recently joined the IDOE and manages a team of four developers. Dr. John Keller is IDOE’s Director of Learning Technologies. His responsibilities include overseeing the day-to-day implementation of Learning Connection. John’s prior experience includes the design, development, and deployment of a system of productivity tools for teachers. John has also taught as an adjunct professor on topics such as technology integration and curriculum and assessment. John also spent six years as a classroom teacher. John has a Ph.D. in Instructional Design. Kim Clement has worked for the IDOE since 2007 and has been involved in a variety of projects, especially projects focused on data analysis (including data analysis for Supplemental Educational Services programs, alternative education, and special education). Kim has also been involved in a number of evaluation projects and currently acts as the evaluation liaison on the SLDS Steering Committee for Indiana’s current SLDS project. Marcie Brown has been IDOE’s Chief Policy Advisor since January of 2009. Marcie works on policy issues across the department, and she previously worked as Governor Mitch Daniels’ education policy advisor. She has also worked for the U.S. Department of Education as the Chief of Staff in the Office of Innovation and Improvement. Marcie has a J.D.

The IDOE’s technical support team provides a combined depth of experience and expertise in systems and information design, software and application development, data management, database administration, network administration, data collection management, and data reporting (both state and federal).

Full bios for personnel involved in project activities (internal technical support) and resumes for key staff (project sponsor, project director, and lead project manager) are provided in Appendix B. In addition to project personnel previously described, other resources (both human and material) are described in the following section.
Subject Matter Experts/Data Stewards

In addition to the project implementers described above, IDOE has an advocate or resource identified from each division and for each data collection as a data steward. Data stewards will act as Subject Matter Experts for this project. Data stewards include representatives from assessment, special education, school counseling, school reform and accountability, school accreditation, English language learners, Title I, alternative education and charter schools, and finance.

Additionally, staff from the IDOE’s STN Collection Team will provide in-kind support in the form of input, guidance, and technical assistance both to internal and external stakeholders. The Collection Team handles all student- and teacher-level collections through the STN Application Center.

Contract Support

IDOE intends to augment current staff with four contractors for the duration of the project. The contractors will help in the development of the necessary XML-based Web services to communicate with districts, help with data cleansing and ETL processes for the integration of real-time data collected, and develop our internal and external reporting websites.

External Development Teams/Vendors

Indiana will identify a vendor or vendors to work on its three projects. Indiana has worked with Crowe Horwath as the external vendor for its Learning Connection project. Crowe has provided project management and technical support through the initial phase of the Learning Connection. Crowe Horwath is one of the top 10 public accounting and consulting firms in the United States and possesses industry expertise, deep technology knowledge, and extensive project management experience. Indiana has worked with Docufide as its external vendor for its current e-transcript project. Docufide is well-known throughout the country and has provided services to a variety of states and institutions and has as its sole focus the electronic delivery, management, and analysis of academic records, making it uniquely qualified for the e-transcript initiative. IDOE has also consulted with IBM for initial input into its proposed SOA based automated data exchange solution.

Although IDOE has worked with the identified vendors in the past, IDOE will follow all required Indiana Department of Administration (IDOA) rules for vendor contracting, request for proposal, and costing. Under IDOA rules, it is possible that IDOE may work with the vendors identified, or IDOE may need to release requests for proposal (RFPs) for the three core elements (or portions of the elements) in the application. If released, RFPs will include scope of work, purpose, and proposal requirements. As per IDOA standards, vendors responding to RFPs must respond to the statement of work and include information about company structure, financial viability, contract terms and clauses, and references. The technical portion of the proposal must include relevant experience, a description of procedures that will be utilized, and a project management plan. Cost proposals must also be included.

To evaluate the RFPs, IDOE will use the standard IDOA evaluation procedures, which include review by a group of personnel with expertise in the project and review of management assessment and quality, as well as cost.

External vendors selected will be responsible for working with identified IDOE project personnel to manage the projects, ensure timely completion of deliverables, and ensure that project objectives are attained.
**External Evaluator**

As previously noted, IDOE will contract with an external evaluator to conduct an evaluation of its SLDS project. Responsibilities of the external evaluator will include working with IDOE SLDS steering committee personnel to establish a logic model, indicators, and benchmarks, as well as to obtain stakeholder input at various phases of the project and provide regular progress reports.

IDOE will follow standard IDOA rules for selecting its evaluator. In selecting an evaluator, IDOE will look for relevant experience, reputation, and ability to conduct rigorous program evaluation and expand knowledge of effective strategies.
Project Narrative

Project Narrative - Appendix A, Optional Attachments

Attachment 1:
Title: Appendix A Pages: 0 Uploaded File: C:\Documents and Settings\mchamber\My Documents\Longitudinal Data Systems Grant\Appendix A.doc
APPENDIX A

ADDITIONAL INFORMATION
1. Indiana’s 31 Key Performance Indicators
2. Timeline
KEY PERFORMANCE INDICATORS

1. How are students performing on assessments (ISTEP+, GQE, ACT, SAT, AP, PSAT), currently and over time?
2. Where do achievement gaps exist, and do they get worse or better over time?
3. Is K-12 education preparing students for college?
4. What are graduation rate patterns, and are they improving over time?
5. Which course-taking patterns (e.g., Core 40 courses; AP courses; dual credit courses, etc.) and diplomas (e.g., Core 40; Core 40 with Academic Honors, etc.) are best preparing students for success in college?
6. Which teacher characteristics (e.g., degree; content knowledge; pre-service education program; certification type, etc.) result in the most value added for student achievement over time?
7. Which teacher preparation programs (including alternate pathways) are the most effective at promoting high student achievement for all students? What are the characteristics of effective teacher preparation programs?
8. What are the characteristics of effective teacher preparation programs?
9. Which student characteristics (e.g., attendance rates; course-taking patterns; discipline data, etc.) are the most effective at predicting (and preventing) student dropout?
10. What are the characteristics of an effective school (e.g., length of school year; staff experience; staff preparation; class size; location; curriculum; dollars to the classroom, etc.).
11. How many/which types of students are achieving at least one year’s academic growth every year?
12. What are the later impacts of early interventions (e.g., full day kindergarten, Title I services, early childhood education) on student achievement?
13. Which elementary, middle, and high schools are consistently high-performing in preparing different student populations for success in high school and college?
14. Which schools are best educating and improving the performance of students who entered school below grade level?
15. What are the effects of school mobility on student achievement and completion?
16. Which programs, federal and state (e.g., Title I; alternative education; adult education; special education; English language learner services, etc.) are the most effective?
17. What are the characteristics of effective programs?
18. What effects does participation in career and technical education have on students’ success in post-secondary education and the workforce?
19. What is the impact of early grade retention on later academic success?
20. What percentages of students who go to college are required to take remedial coursework?
21. What are the performance levels of these students in college?
22. What is the impact of student discipline (expulsion, suspension, etc.) on school performance and completion?
23. How do students identified as high ability perform in school, and what are these students’ success rates in college?
24. How many students attend college in Indiana, and how many attend college outside of Indiana?
25. How many students complete college within 6 years or less?
26. Which administrator characteristics (degree; certification; years of experience; administrator to teacher ratio, etc.) are most likely to be associated with high achievement for students of diverse backgrounds?
27. What types of curricula are the most effective at promoting high achievement for students from all backgrounds?
28. How are Indiana students performing in STEM (science, technology, engineering, and math) courses in middle, secondary, and post-secondary school?
29. How many students pursue STEM majors in post-secondary school and obtain STEM jobs in the workforce?
30. How do New Tech high schools contribute to the academic success of students, and how many students from New Tech high schools pursue STEM majors in post-secondary education?
31. Do high-performing teachers stay in the profession for 5 years or more?
## Timeline and Management Plan

### Core Element 1: Data Interoperability and Statewide Capacity for Automated, Real-Time Data Exchange Between IDOE and Schools

<table>
<thead>
<tr>
<th>Activity 1.1:</th>
<th>Utilize information from capacity assessment to identify pilot districts for interoperability pilot project, as well as select districts and vendors for each phase of the real-time project</th>
<th>June 2010</th>
<th>August 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.2:</td>
<td>Release Request for Proposal (RFP) for pilot project; select vendor</td>
<td>September 2010</td>
<td>December 2010</td>
</tr>
<tr>
<td>Activity 1.3:</td>
<td>Complete pilot project with selected districts and vendors</td>
<td>December 2010</td>
<td>June 2011</td>
</tr>
<tr>
<td>Activity 1.4:</td>
<td>Review lessons learned from pilot project and complete phase two implementation with next set of vendors and districts</td>
<td>June 2011</td>
<td>June 2012</td>
</tr>
<tr>
<td>Activity 1.5:</td>
<td>Implement phase three of real-time project, with 80% of schools and districts capable of automated real-time data exchange at the end of this phase.</td>
<td>July 2012</td>
<td>January 2013</td>
</tr>
<tr>
<td>Activity 1.5:</td>
<td>Implement phase four of real-time project focusing on independent schools and schools with home-grown student information systems, Once this phase is complete 100% of schools having real-time automated data exchange capabilities</td>
<td>December 2012</td>
<td>May 2013</td>
</tr>
</tbody>
</table>

### Core Element Two: Full Integration of K-12 and Postsecondary Data with E-Transcript Exchange, E-Transcript Repository and Transcript Standardization

<p>| Activity 2.1: | Vendor is selected to create a full-service electronic transcript exchange system | June 2010 | August 2010 |
| Activity 2.2: | Reports to be created from transcript repository are identified | August 2010 | October 2010 |
| Activity 2.3: | Transcript exchange system and transcript repository are implemented and functional | September 2010 | May 2011 |
| Activity 2.4: | Vendor creates system to map to state and local course codes to SCED to create standardize | May 2011 | May 2012 |</p>
<table>
<thead>
<tr>
<th>Activity 2.5:</th>
<th>Data are extracted from transcript repository, full integration of K-12 and higher education data is achieved, including high school feedback reports and diploma audits</th>
<th>May 2011</th>
<th>May 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 2.6:</td>
<td>Integrated higher education and K-12 data are matched with workforce data in IWIS to generate reports</td>
<td>May 2011</td>
<td>May 2013</td>
</tr>
<tr>
<td>Activity 2.7:</td>
<td>Aggregated postsecondary feedback data are posted on the IDOE public website</td>
<td>January 2013</td>
<td>May 2013</td>
</tr>
</tbody>
</table>

**CORE ELEMENT THREE: Secure and Timely Access to Data and Capacity Building for Data Driven Instruction**

<table>
<thead>
<tr>
<th>Activity 3.1:</th>
<th>The Learning Connection is expanded to include automated student level IEP data</th>
<th>June 2010</th>
<th>January 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.2:</td>
<td>Working with stakeholders, additional data sets are identified to load into The Learning Connection from the IDOE data warehouse; data are loaded and desired reports to be created and displayed using the data are also identified and provided</td>
<td>June 2010</td>
<td>May 2011</td>
</tr>
<tr>
<td>Activity 3.3:</td>
<td>The functionality of The Learning Connection is expanded to allow districts to upload district-level assessment data</td>
<td>May 2011</td>
<td>June 2012</td>
</tr>
<tr>
<td>Activity 3.4:</td>
<td>Indiana’s at-risk indicator tool is enhanced to utilize longitudinal data available in The Learning Connection that will provide educators with a customized, secure, student-level at-risk report</td>
<td>May 2011</td>
<td>June 2012</td>
</tr>
<tr>
<td>Activity 3.5:</td>
<td>Data analysis tools, customized lesson planning and customized reports, suggestions, and lessons for differentiating instruction based on</td>
<td>May 2011</td>
<td>June 2012</td>
</tr>
<tr>
<td>Activity 3.6:</td>
<td>Targeted professional development and evaluation is provided to select schools</td>
<td>August 2010</td>
<td>June 2012</td>
</tr>
<tr>
<td>Activity 3.7:</td>
<td>Post-secondary feedback data at the individual student and aggregated level are available in The Learning Connection, for educators (student-level) and the public</td>
<td>June 2012</td>
<td>May 2013</td>
</tr>
<tr>
<td>Activity 3.8:</td>
<td>IDOE’s public Website is revamped to include data definitions more frequently updated data, additional report querying tools and aggregated postsecondary feedback reports</td>
<td>June 2010</td>
<td>May 2013</td>
</tr>
</tbody>
</table>
Project Narrative

Project Narrative - Appendix B Resumes of Key Personnel

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APPENDIX B

Resumes of key personnel (project sponsor, project director, project manager, director of application development)

Bios of technical support personnel
MARY A. (MOLLY) CHAMBERLIN

EDUCATION
Ph.D., Educational Psychology, September 2009
M.S., Educational Psychology, December 2004
Indiana University, Bloomington, IN
B.A., Liberal Arts, Magna Cum Laude, May 1997
Middlebury College, Middlebury, VT

WORK EXPERIENCE
Director, Office of Data Analysis, Collection, and Reporting February 2009 to present
Indiana Department of Education, Indianapolis, IN
- Develop, communicate, and implement strategic plan and objectives for Division initiatives related to data quality
- Monitor the Department’s overall data quality and act as the lead in proposing and implementing change to promote enhanced data quality
- Oversee the coordination, development, and implementation of policies related to data access, reporting, and usage
- Oversee, coordinate, and review data analysis projects
- Work to identify opportunities to improve the efficiency, expediency, and security of data collection, access and usage across the Department
- Coordinate Department-wide research and evaluation projects
- Collaborate with individuals within and outside of the Department to enhance efficacy in data usage and promote program evaluation
- Direct the implementation of a statewide longitudinal data systems project

Director, Office of Student Learning Choices March 2004 to February 2009
Indiana Department of Education, Indianapolis, IN
- Oversaw and managed four program areas, including Supplemental Educational Services (SES), Public Charter Schools Program (PCSP), Alternative Education, and McKinney-Vento Homeless
- Made, analyzed, and interpreted policy for all program areas and special projects
- Conducted data analysis and disseminated evaluations related to effectiveness of all program areas
- Conducted data analysis and disseminated research related to school dropout and dropout prevention
- Created and led evaluations of Supplemental Educational Services providers, including data compilation, analysis, interpretation, and reporting
- Provided technical assistance to schools and districts in implementation of effective practices
- Conducted presentations on a variety of K-12 education topics
- Wrote grants for related federal programs (obtained over $27 million in federal funds for the Public Charter Schools Program and Statewide Longitudinal Data Systems (SLDS) grant)
- Participated in special projects, such as the steering committee for SLDS grant project, homeless taskforce (a subcommittee of the Indiana Interagency Council), and strategic planning

Assistant to the Legislative Director January 2004 to March 2004
Indiana Department of Education, Indianapolis, IN
- Conducted and disseminated research to state legislators on K-12 policy issues
- Provided policy analysis for existing and new legislation

Research Associate January 2003 to January 2004
Indiana Education Policy Center, Bloomington, IN
- Co-created and assisted in conduction of first ever Public Opinion Survey of Education in Indiana
- Conducted and disseminated research and evaluation on K-12 policy issues, including comprehensive school reform, teacher quality, and achievement gaps
- Compiled policy briefs for publication on a variety of K-12 education issues

**ESL Instructor, Assistant Trainer**
Berlitz Language Center, Indianapolis, IN  
September 2000 to December 2002
- Taught ESL courses to students of various ages and nationalities
- Assisted in training new and current instructors in teaching methods
- Evaluated existing programming and assisted in creation of new programming

**Life and Annuities Specialist**
Bisys Insurance Services, Inc., Indianapolis, IN  
January 2000 to October 2000
- Provided quotes and product knowledge to life insurance and annuity agents

**Trainer/ESL Instructor**
Nova Intercultural Institute, Tokyo, Japan  
September 1997 to December 1999
- Managed schools of over 20 people
- Co-created new system of follow-up training for new teachers that was implemented throughout the Tokyo area
- Conducted on-the-job training and follow-up training for new teachers throughout the Tokyo area
- Evaluated effectiveness of teachers and conducted training accordingly
- Taught ESL courses to Japanese students of various ages and language abilities

**PRESENTATIONS AND PUBLICATIONS**

**HONORS AND RELEVANT SKILLS**
Bell Ringer Award, awarded by Indiana State Superintendent of Public Instruction, 2008
Berlitz Teacher of the Year, Akron District, 2001
Moderately proficient in German and Russian; beginner’s knowledge of Japanese
Proficient in SPSS and Microsoft Office products

Galyan’s is a sporting goods big-box retailer with annual sales in excess of $800m with 47 stores in 21 states.
Senior Developer
Senior Developer chief accomplishments included:
Implemented and supported Peoplesoft Financials, Human Resources, payroll, and Portal.
Created and installed EDI invoice interface to Peoplesoft increasing invoice throughput by 5 times with a 10% reduction of A/P staff.
Created financial interfaces for sales audit, GL, and stock ledger.
Created HR interfaces for commissions, bonuses, spiffs, contests and state reporting requirements.
Maintained software upgrade path for both HR and Financials; established and executed change management control by performing QA testing in a development environment and in turn installed patches into production environments.
Created interface from HR to third-party benefits provider.
Created interface from third-party recruitment software into the automated hiring process within Peoplesoft.
Administered SQL server database, created backup jobs, created and scheduled maintenance plans and performance tuning.
Other Accomplishments and Responsibilities include
Supervised helpdesk and operations staff which included 6 employees providing 24x7 support.
Established Standard Operating Procedures and Service Level Agreements.
Performed Internal IT audit functions.
Provided on/off site support for the point of sale terminals.
Improved Mean time to repair statistics by 30%.

2005 – 2009  Indiana Bureau of Motor Vehicles

BMV is a state agency that collects $1 billion in revenue annually via branches, mail-in, internet, and self service terminals for distribution to county and state authorities.

Application Systems Analyst/Programming Manager
Application Manager Chief accomplishments included:
- Managed implementation and defect correction of STARS system.
  - Stars is an all inclusive centralized application used for all BMV functions in both the branch and central office environments. The STARS application is capable of processing over 100k transactions per day including online self service applications.
- Facilitated development staff retooling from a mainframe/Cobol environment to a Microsoft .NET environment
- Managed up to 36 employees/contractors
- Automated the build and deployment process
- Managed performance tuning and scalability activities
- Standardized the regression testing of the production releases and implemented automated test scripts.
- Implemented SharePoint portal for centralization of BMV information
- Implemented a decision support reporting system
- Created efficiencies that enabled the average visit duration to be less than 8 minutes
2009- Current Indiana Dept. of Education
DOE is a state agency responsible for academic achievement and career preparation of all Indiana students will be the best in the United States and on par with the most competitive countries in the world.
Chief Information Officer
CIO Chief accomplishments include:
Implemented SQL server technologies to reduce costs, increase ease of administration, and align with local talent pool.
Implement standard policies and processes.
Implement single point of contact helpdesk to answer, escalate, and track calls.
Resolved all security audit findings and implemented process to ensure data is secure.
Oversaw the implementation of the Learning Connection.

Systems
Peoplesoft 8+, Peoplecode, Peopletools. (Retail ERP solutions; STS systems and JDA)

Operating systems
Windows 95, 98, 2000, Windows XP, Unix, DOS

Languages
Visual basic 6.0, PL/SQL, VB.NET, ASP.NET, T-SQL

Databases
SQL server 7.0 – SQL server 2008, Oracle 8i

Education
2006 Indiana Wesleyan University
Bachelor of Science, (Business Information Systems)

1998 Ivy Tech State College
A.A.S., Computer Information Systems

Additional Training
PeopleTools I/II Release 8.1
Introduction to SQL and PL/SQL
Advanced PL/SQL
Programming with Microsoft Visual Basic .NET
Paul Robert Kreitl
IT Professional/Executive

A highly capable individual with over 20 years of leadership experience in Information Technology. Developed a proven record in creating solutions to complex challenges and implemented strategies that address constituents' needs. Management style that incorporates motivation through positive feedback and support plus straightforwardness and open communication that builds trust and fairness.

PROFESSIONAL PROFILE
- Customer-focused communicator with proven ability to understand and convey complex product information, develop rapport, build strong relationships with customers, and deliver high-impact technology solutions.
- Experienced manager of technical staff. Built one of the most successful tech staffs in the country.
- Motivated achiever in data systems design & implementation, Internet applications, and virtual learning.
- Effective, personable team leader and team player.
- Resourceful achiever with great customer service, strong organizational skills, and proven successes.
- Skilled manager of multi-million dollar budgets and large vendor contracts/partnerships.
- Currently working on PMP (Project Management Professional) certification.

ACHIEVEMENTS
- Provided leadership in developing and implementing strategic, long-range technology plan. Developed policies and procedures to ensure maximization of organizational goals and objectives.
- Experienced in working with community members, business leaders, and political officials.
- Founding President of Indiana UNITE (Users' Network for Indiana Technology in Education).
- Chairman Indiana Urban Schools Association, Virtual Learning Group.
- Past President Indiana University/Public Schools Partnerships.
- Created Indiana Online Academy, Indiana's first virtual school.
- Created first data warehouse for schools in Indiana. Now sold commercially as K-12 Datamine.
- Presented at national conferences on data warehousing, virtual courses, and effective technology use.
- Developed & built multimedia database. First to deliver digital video over data network.
- Served as data security officer monitoring and enforcing compliance with state and federal regulations.

PROFESSIONAL EXPERIENCE

Director of Technology – MSD Wayne Township, Indianapolis 1997 – present
- Supervised 30+ technical staff. Designed compensation schedule to attract and retain best technology personnel.
- Experienced in disaster recovery, backup and restore procedures, security, and control.
- Implemented web applications - HR application, transportation system, and virtual training.
- Successfully managed mid-range systems (IBM Series and Unix), Novell & Windows Servers, Cisco.
- Expertise in telecom, digital video, Crystal Reports, MS Office, Adobe, Corel, Notes, Internet, and technology training in large organizations.

Director of Data Systems & IT - MSD Lawrence Township 1989 – 1997
- Managed hardware/software evaluation, ordering, implementation, and training.
- Implemented first high quality video conferencing system used in distance learning.
- Rolled out World Wide Web access to all schools.
- Created first wide area network in Indiana schools.

Preview Center Manager - IUPUI School of Education 1986 - 1989
- Managed center for showing new technologies. Focus on needs assessment and evaluation of solutions.

Nuclear Medicine Technologist – IU Medical Center, University Hospital 1981 - 1986
- Performed Nuclear Medicine procedures. Specialties in oncology and research in Nuclear Cardiology.
- Published in professional journals and presented results at national conferences.

EDUCATION
- MBA in MIS - Indiana University Kelley School of Business, graduated with honors 1992
- BS Nuclear Medicine Technology – Indiana University 1980
- BA Biological Sciences – Indiana University 1979

COMMUNITY INVOLVEMENT
- Past President of the Breakfast Optimist Club of Indianapolis
- Church leader – St. Christopher’s Catholic Church – Pastoral Council, Lector, Eucharistic Minister
- Own and operate Studio K – Multimedia for 30 years
Sharon Oshry

(b)(6)

Current Position

Indiana Department of Education  Division of Education Information Systems
Project Manager, Statewide Longitudinal Data System
October 2007 to Present

Project Manager for the current 3 year Statewide Longitudinal Data System (SLDS) federal grant which was awarded to the Indiana Department of Education in September 2007. Responsible for creating and maintaining the 3 year project plan with a budget of $5.1 mil. When the project is complete it will be responsible for; linking multiple data sources together, building a data warehouse, building a web based teacher portal that will available for use for all educators, students and parents in the state of Indiana

Strengths to the this position:

Self starter
Attention to detail
Comfortable working in a team environment
Problem solver
Process oriented

Work Experience

Fair Isaac Corporation
Executive Administrator - Office Manager - Facilities Manager
Indianapolis Office
December 2000 – October 2007
Responsibilities:

Responsible for maintaining the day to day operations of the Indianapolis office
Manage vendors and vendor contracts for Indianapolis office
Project Manager for several internal projects at the management level
Considered the “go to” person for Sr. Director’s leadership team
Planned all offsite meetings and locations for Managing Director’s Business Unit (150 people)
Managed the expense budget for business unit
Managed and maintain expense and revenue tracking for several sub-contractors for business unit
Regularly interfaced with several corporate Managing Directors, VP’s and Senior VP’s

Strengths particular to these positions:

Advanced user of Microsoft Office products – Word, Excel, Project and Visio
Advanced user of Webex and other remote communication tools
Self starter and takes the initiative to assume additional tasks outside scope of responsibility.
Comfortable working across multiple departments
Enjoys working in ever changing environments
Very comfortable multi-tasking

Allegiant Technology/Seurat Company
Human Resources
April 2000-October 2003
Responsibilities:
General HR manager for a staff of 250
New employee enrollment (providing detailed explanation of benefits and general orientation).
Employee benefit claim reconciliation with third party administrator on a monthly basis.
Database entry, maintenance and reporting (the system interfaces with ADP payroll).
Helped plan, develop and implemented Seurat travel policy and expense reporting guidelines.

Strengths particular to this position:

Microsoft Office products and accessing information via the internet.
Seasoned people skills, and the ability to adjust quickly to changing circumstances.
Excellent problem solving skills, with close attention to detail.
Additional SLDS Steering Committee Members and CHE Project Liaison:

**John Keller**
John Keller currently serves as the Director of Learning Technologies for the Indiana Department of Education. Prior experience includes project leadership in the design, development, and deployment of productivity tools for teachers. John has also taught as an adjunct professor for Indiana Wesleyan and Ball State University in topics ranging from technology integration to curriculum and assessment. His scholarship includes book chapters and journal articles on educational topics including instructional design and professional development of teachers. Six years as a classroom teacher served as the foundation for his interest in teaching and education. During his tenure in Warsaw Community schools, John also served in a professional development role providing technology skill and integration training to the Warsaw faculty. As a post graduate student, John earned a minor in Curriculum and Instruction and a Ph.D. in Instructional Design from Indiana University in 2003.

**Kim Clement**
Kim has worked with the IDOE since February 2007 where she has held a variety of different positions. In May 2009, Kim joined the IDOE fulltime as a Special Projects Liaison for the Department’s Division of Student Learning after completing her BA in Political Science at Butler University. As the Special Projects Liaison, Kim is responsible for managing, planning, and organizing special projects including but not limited to those related to data quality and data use. In Kim’s previous roles with the IDOE, some of her work has included taking on a number of research and other special projects, as well as conducting data analysis for an array of program areas such as supplemental educational services (SES), alternative education, and special education.

**Marcie Brown**
Marcie has worked as the DOE's Chief Policy Advisor since January, 2009. Among her duties includes co-chairing the DOE grants team along with the CFO. She works on policy issues across the department, and previously worked as Governor Mitch Daniels' education policy advisor. She has also worked for the U.S. Department of Education as the Chief of Staff in the Office of Innovation and Improvement. She has a J.D.

**Ken Sauer**
Ken Sauer is Senior Associate Commissioner for Research and Academic Affairs for the Indiana Commission for Higher Education. As the Commission’s chief academic officer since 1985, his duties include: contributing to the development and implementation of Commission strategic directions; making recommendations on new degree program proposals; overseeing Commission student data systems; representing the Commission with various external constituencies. He has been closely associated with a number of special state-level initiatives, including: Indiana Workforce Intelligence System (IWIS); Indiana e-Transcript Initiative; creation of Indiana’s comprehensive community college system; Transfer Indiana Initiative and web infrastructure. He has also been active in national conversations about data systems, including, most recently, being a member of the NCES Common Data Standards Technical Working Group and SHEEO State Data System Panel Recommendations. Ken also worked for the Illinois Board of Higher Education and the National Center for Higher Education Management Systems (NCHEMS), where he was project manager for the contract with NCES to develop the Classification of Instructional Programs (CIP), which is still used by NCES to collect annual degree data as part
of IPEDS. A former Peace Corps Volunteer, Ken holds a Ph.D. in International Relations/Government from the Claremont Graduate School.

**IDOE and CHE Technical Support**

**Rick Hoffman**
Rick is the Database Administrator at the Indiana Department of Education. He is responsible for the development, implementation and maintenance of the SQL Server and Oracle databases that contain the student, teacher and school data for the state of Indiana. Prior to working at the Department of Education, Rick worked for Western Electric, AT&T and Lucent Technologies in various roles such as project manager, engineering services sales representative, programmer and Oracle database administrator working in areas such as On-Demand Printing and On-Line Documentation for the Lucent library of manuals and training materials, the Saba Training System, E-9-1-1 database creation, telephone office conversions from electro-magnetic to electronic switching, and other various telephony related projects. Rick has a B.A. in Mathematics from Indiana University.

**Nick Buchanan**
Nick is a data warehouse specialist. He works on projects to support a department wide data warehouse. His tasks include analyzing business requirements, assessing data sources, creating dimensional data models, and developing ETL code. He also assists in the development of the presentation area of the data warehouse by configuring business intelligence and data query tools and by creating reports and dashboards. Prior to working at the Department of Education, Nick worked as a software developer at Epic Systems in Madison, WI. Nick has a B.S. in Computer Engineering from Purdue University.

**Karen Lane**
Karen is the Report Writer/Data Analyst, CCD Coordinator, and Mapping Coordinator for the Indiana Department of Education. As Report Writer, she is responsible for completing various data requests for legislators, educators, researchers, and other citizens. She is also responsible for creating a variety of data reports. She has been employed at the State Department of Education for 32 years and currently has a BS Degree in Informatics from Indiana University, and is currently working on her Masters in Informatics.

**Hammad Rahman**
Hammad is EDEN Data Management Specialist of the Division of Data Analysis, Collection, and Reporting at the Indiana Department of Education. He is also Indiana’s EDFacts Coordinator and serves as a liaison between Indiana’s program offices and the United States Department of Education (USDOE). As EDFacts Coordinator, he is responsible for working with data stewards, compiles, and submits reports to the USDOE. Additional responsibilities include disseminating information from the Feds to Indiana’s the program offices. Hammad has a B.S. in Information Technology from Indiana University – Purdue University Indianapolis.

**Lisa Preston**
Lisa is the Technology Systems Team Leader at the Indiana Department of Education. As the Team Leader for the System Administration group, Lisa is responsible for designing, implementing, maintaining, and supporting the technology resources that support the business units within the Indiana Department of Education.
Since 1993, Lisa has worked with various programs throughout the Department of Education. For the past 10 years she has been working with complex technology systems in the Division of Network and Infrastructure.

**Gary Grist**
Gary is Director of the Division of Network and Infrastructure at the Indiana Department of Education. As Director, he is responsible for the development, implementation, maintenance, and support of all core infrastructures; this includes security, networking, server hardware, as well as all client systems and technology used by every business unit throughout the agency. He and his team ensure the complex information resources provide the necessary technology tools today and in the future to enable data driven decisions by preserving and protecting data security and integrity. Gary brings over 30 years of computer industry experience to the Department in the following areas, hardware and software customer service engineer, programmer, system and network administration, and Cisco Academy Instructor.

**Karla Carr**
Karla has over 30 years experience with the IDOE. She has served in a variety of roles during her tenure including programmer and currently the Assistant Director for Data Collection and Reporting. Karla manages the STN Collection Team and works extensively with student- and teacher-level data, GED data, internals staff and the testing vendors. She brings a wealth of experience in student level, staff level and transcript level data management.

**Erin Anderson**
Erin is a Systems Analyst Programmer at the Indiana Department of Education and the Lead Developer of The Learning Connection. He is responsible for the coding and implementation of projects into the Learning Connection as well as assisting in support for Application Center and DOE Online. Erin received his Associates degree in programming from Ivy Tech, Kokomo.

**Catisha Coates**
Catisha is Special Projects Coordinator for the Indiana Commission for Higher Education. She is directly responsible for increasing statewide implementation of the Indiana e-Transcript Initiative through marketing and promotion to Indiana high school counselors and higher education officers. She is also a key member in developing and marketing the TransferIN website for the statewide transfer and articulation committee (STAC). Prior to that, Catisha worked as the Intern Activities Coordinator for the U.S. Department of State in which she developed a weekly schedule of events for all state department interns and organized and mediated intern discussions with high ranking department officials. Catisha earned her BS degree in General Studies from Indiana University in 2006.

**Susan Day**
Susan is the Help Desk Specialist of the Division of Data Analysis, Collection, and Reporting at the Indiana Department of Education. She is responsible for employee technical support and answers questions and either resolves problems or submits a work order to the appropriate technician for further resolution. She also develops and updates user manuals and provides training as needed. In addition, she is responsible for supporting many of Indiana’s school corporations with help desk software for manageable data collection calls from educators for accurate report documentation. Prior to working at the Department of Education, Susan worked as a help desk technician at Ingersoll-Rand Security Technologies Division providing support for employees worldwide in Carmel and IT System Support Coordinator with American Legion Auxiliary, National Headquarters in Indianapolis. Susan has a Bachelors degree in Organizational Leadership from University of Indianapolis.
Project Narrative

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

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APPENDIX C

CURRENT STATUS OF INDIANA’S LONGITUDINAL DATA SYSTEM
<table>
<thead>
<tr>
<th>Capability or Element</th>
<th>Indiana Progress</th>
<th>Status</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 level from preschool through postsecondary education and into the workforce.</td>
<td>Student level K-12 data collection: 90% complete (need course completion data)</td>
<td>Planned</td>
<td>Proposed with 2009 SLDS/ARRA funding</td>
</tr>
<tr>
<td></td>
<td>Student level PK data collection: 20% complete</td>
<td>In Progress</td>
<td>State funding</td>
</tr>
<tr>
<td></td>
<td>Student level postsecondary and workforce linkages: 10% complete</td>
<td>In Progress, Planned</td>
<td>Lumina Foundation grant 2007 SLDS grant Proposed with 2009 SLDS/ARRA</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>Student level postsecondary and workforce exchange: 10% complete</td>
<td>In progress</td>
<td>Lumina Foundation grant 2007 SLDS grant Proposed with 2009 SLDS/ARRA</td>
</tr>
<tr>
<td></td>
<td>Interoperability standards: 0% complete</td>
<td>Planned</td>
<td>Proposed with 2009 SLDS/ARRA</td>
</tr>
<tr>
<td></td>
<td>Inter-state data exchange: 0% complete</td>
<td>Not Planned</td>
<td>N/a</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>0% complete</td>
<td>In progress, planned</td>
<td>State funding (manual upload) Proposed with 2009 SLDS/ARRA</td>
</tr>
<tr>
<td></td>
<td>(IDOE plans on using a manual data upload through its STN application center at the end of 09-10; however, it intends to eliminate the need for the manual upload through the real-time automated data exchange)</td>
<td></td>
<td></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>100% complete</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td>Capability or Element</td>
<td>Indiana Progress</td>
<td>Status</td>
<td>Funding Source</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>The system must enable data to be easily generated for continuous improvement and</td>
<td>35% complete (Learning Connection project, public Website redesign plan)</td>
<td>In progress, planned</td>
<td>2007 SLDS funding</td>
</tr>
<tr>
<td>decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students.</td>
<td></td>
<td></td>
<td>Proposed with 2009 SLDS/ARRA funding</td>
</tr>
<tr>
<td>The system must ensure the quality and integrity of data contained in the system.</td>
<td>75% complete (but enhancements are desired through the real-time automated exchange solution)</td>
<td>In progress, planned</td>
<td>State funding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2007 SLDS funding</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>EdFacts reporting: 100% compliant (now working on improving quality of data reported for HQT and special education)</td>
<td>Complete (reporting capability) In progress (quality)</td>
<td>Quality: EDEN Task Order funding</td>
</tr>
</tbody>
</table>

State Fiscal Stabilization Fund:

REQUIRED SYSTEM ELEMENTS

<table>
<thead>
<tr>
<th>Capability or Element</th>
<th>Indiana Progress</th>
<th>Status</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)</td>
<td>100% complete</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td>Student-level enrollment, demographic, and program participation information</td>
<td>100% complete</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td></td>
<td>K-12 information: 100% complete</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td></td>
<td>PK information: 20% complete</td>
<td>In progress</td>
<td>State funding</td>
</tr>
<tr>
<td>Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 programs</td>
<td>Postsecondary information: 0% complete</td>
<td>In progress, planned</td>
<td>2007 SLDS grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proposed with 2009 SLDS/ARRA funding</td>
</tr>
<tr>
<td>Capability or Element</td>
<td>Indiana Progress</td>
<td>Status</td>
<td>Funding Source</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>The capacity to communicate with higher education systems</td>
<td>Capacity: 100% complete (higher education began collecting STN in 2009-2010 and the state currently uses e-transcript). However, full integration is not complete and is proposed/planned.</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td>A state data audit system assessing data quality, validity, and reliability</td>
<td>100% Complete (however, enhancements to data quality are planned with real-time automated data exchange)</td>
<td>Complete</td>
<td>N/a</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>100% Complete</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td>Information on students not tested, by grade and subject</td>
<td>100% Complete</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td>A teacher identifier system with the ability to match teachers to students</td>
<td>Teacher ID: 100% Complete (teacher-student link is planned in 09-10)</td>
<td>Complete</td>
<td>N/a</td>
</tr>
<tr>
<td>Student-level transcript information, including information on courses completed and grades earned</td>
<td>0% Complete</td>
<td>Planned</td>
<td>Proposed with 2009 SLDS/ARRA funding</td>
</tr>
<tr>
<td>Student-level college readiness scores</td>
<td>100% Complete</td>
<td>Complete</td>
<td>N/a</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>0% Complete (pilot data matching with higher education at end of 2009)</td>
<td>In Progress, Planned</td>
<td>2007 SLDS grant (pilot match) Proposed with 2009 SLDS/ARRA funding</td>
</tr>
<tr>
<td>Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education.</td>
<td>0% Complete (pilot data matching with higher education at end of 2009)</td>
<td>In Progress, Planned</td>
<td>2007 SLDS grant (pilot match) Proposed with 2009 SLDS/ARRA funding</td>
</tr>
</tbody>
</table>
Project Narrative

Project Narrative - Appendix D Letters of Support

Attachment 1:
Title: Appendix D Pages: 0 Uploaded File: C:\Documents and Settings\mchamber\My Documents\Longitudinal Data Systems Grant\Letters of Support for IN P20 Next Gen.pdf
APPENDIX D

LETTERS OF SUPPORT
December 2, 2009

Dr. Tony Bennett
State Superintendent of Public Instruction
Office of the State Superintendent
Indiana Department of Education
151 West Ohio Street
Indianapolis, Indiana 46204

Dear Dr. Bennett:

I write to express support for the Indiana Department of Education’s request for funding for Statewide Longitudinal Data Systems under the American Recovery and Reinvestment Act of 2009. The Department of Education and the Department of Workforce Development share the vision of creating a robust P-20 data exchange and reporting solution. The ability to track longitudinal academic outcomes and to correlate those outcomes with workforce participation is fundamental to constructing education and training programs that produce optimal success. Our best chance lies within a data-driven approach, and such an approach is the foundation of your funding request.

DWD is fully committed to the project and is eager to round-out the data-collection process by providing postsecondary education and employment records. Through the collaborative efforts of the Indiana Department of Education and its partners, the proposed SLDS project will achieve the goal of a P-20 data system that supports informed decision-making for all stakeholders, ultimately resulting in increased educational achievement and attainment statewide.

Indiana’s focus on a fully integrated data exchange between K-12, postsecondary education, and the workforce will support policymakers, educators, and relevant stakeholders to make better informed decisions about effective education and training programs that will benefit Indiana’s citizens and allow them to be more competitive for the new economy. We at the Department of Workforce Development eagerly and thoroughly endorse your application.

Sincerely,

Teresa Voors, J.D.
Commissioner
Indiana Department of Workforce Development
December 2, 2009

Dr. Tony Bennett
Superintendent of Public Instruction
Indiana Department of Education
State House, Room 225
Indianapolis, IN 46204

Dear Dr. Bennett:

It is with great pleasure that I write to express the full support of the Indiana Commission for Higher Education for the Indiana Department of Education’s request for funding for Statewide Longitudinal Data Systems (SLDS) under the American Recovery and Reinvestment Act of 2009. The Commission and the Department, which have successfully partnered on many past collaborative efforts, have a shared vision for creating a robust, fully functional P-20 data exchange and reporting system that will improve the educational outcomes of Indiana students.

The core elements that will be developed through the project, including P-20 transcript exchange and a transcript repository; automated real-time data exchange; and reporting tools for secure and timely access to data will provide key stakeholders with timely and important information. Further, Indiana’s focus on fully integrated data exchange between K-12, postsecondary education, and the workforce will support policymakers, educators, and other stakeholders in making appropriate decisions for the good of Indiana’s citizens.

The Commission will provide support to help implement the project. Through the collaborative efforts of the Department of Education, the Commission for Higher Education, and other partner agencies, I am confident that the proposed SLDS project will achieve the goal of a P-20 data system that supports informed decision making for all stakeholders, ultimately resulting in increased achievement and attainment statewide.

Sincerely,

Teresa Lubbers
Commissioner
December 1, 2009

Dr. Tony Bennett  
State Superintendent of Public Instruction  
Room 229, State House  
Indianapolis, Indiana 46204

Dear Dr. Bennett,

I am writing to express my support for the Indiana Department of Education’s request for funding for Statewide Longitudinal Data Systems (SLDS) under the American Recovery and Reinvestment Act of 2009. The Indiana Department of Education and the Center of Excellence in Leadership of Learning have been longstanding partners collectively working to promote innovative school improvements and education reforms throughout Indiana to dramatically impact student achievement. The Department’s vision of creating a robust, fully functional P-20 data exchange and reporting solution is consistent with our goals and will undoubtedly have a positive influence on both present and planned educational improvement efforts across the state.

The core elements that will be developed through the proposed project—P-20 transcript exchange and a transcript repository, automated real-time data exchange, and reporting tools for secure access to data—will provide key stakeholders with timely and important information. Further, Indiana’s focus on fully integrated data exchanges between K-12, postsecondary education, and the workforce will support policy-makers, educators, and other stakeholders in making appropriate decisions for the good of Indiana’s citizens.

As an extension of our current collaborations with the Indiana Department of Education, CELL will provide support to the project by working with the Department and other university partners to provide professional development to teachers in using reports generated through the repository to provide high-quality, differentiated instruction within Indiana’s schools. Through the collaborative efforts of the Indiana Department of Education and its partners, the proposed SLDS project will achieve the goal of a P-20 data system that supports informed decision making for all stakeholders, ultimately resulting in increased student achievement and improved educational attainment throughout Indiana.

Sincerely,

[Signature]

David Dresslar  
Executive Director
December 3, 2009

Dr. Tony Bennett  
Superintendent of Public Instruction  
Room 229, State House  
Indianapolis, IN 46204

Dear Dr. Bennett:

I am pleased to express my strong support for the Indiana Department of Education’s request for funding for Statewide Longitudinal Data Systems (SLDS) under the American Recovery and Reinvestment Act of 2009. The Department’s vision of a robust, fully functional P-20 data exchange and reporting solution aligns extremely well with the goals and research agenda of the Indiana Business Research Center (IBRC).

The core elements to be developed through the project include P-20 transcript exchange and a transcript repository, automated real-time data exchange, and reporting tools for secure and timely access to data, all of which are essential to providing key stakeholders with timely and important information. Such fully integrated data exchange between K-12, postsecondary education, and the workforce will provide crucial decision support to policymakers, educators and other stakeholders aiming to improve the educational achievement of Indiana’s citizens.

The IBRC will cooperate closely with the Indiana Department of Education and its partner agencies in support of the proposed SLDS project. Our state’s strong record of successful collaboration of this type make me confident that we will achieve the goal of a P-20 data system supporting informed decision making for all stakeholders, ultimately resulting in increased achievement and attainment statewide.

Yours truly,

[Signature]

Dr. Jerry N. Conover, Director  
Indiana Business Research Center  
Kelley School of Business, Indiana University  
conover@indiana.edu  
812-855-7476
Budget Narrative

Budget Narrative - Budget Justification

Attachment 1:
Title: Budget Narrative-Budget Justification Pages: 0 Uploaded File: C:\Documents and Settings\mchamber\My Documents\Longitudinal Data Systems Grant\Indiana Budget Justification.doc
Budget Justification (Federal Funds)

This proposal includes six types of expenditures – (1) those for State-specific personnel services; (2) Fringe benefits; (3) Travel expenses; (4) Equipment costs; (5) contract based personnel services; and (6) other.

Costs for vendor services are estimates, and that IDOE will follow standard Indiana Department of Administration contracting procedures, including requirements for vendor bidding.

1) State Specific Personnel – (Core Elements 1, 2, and 3)
   a. $228,206 year 1, $228,206 year 2, $228,206 year 3
   b. This line item will include a dedicated project manager, dedicated database administrator, .6 FTE dedicated data warehouse architect/database developer, .2 FTE infrastructure engineer, and .5 FTE of helpdesk specialist.

Project Manager: The project manager will be 100% FTE on this project and will be responsible for developing a project plan for all three core elements and managing the day-to-day operations of IDOE and contractor resources in keeping with the project’s commitments.

Database Administrator: The dedicated DBA will be 100% FTE on the project and will be responsible for the development, implementation, and maintenance of the SQL server and Oracle databases that contain Indiana data.

Data Warehouse Architect/Database Developer: The data warehouse architect will be .6 FTE on the project and will be responsible for analyzing business requirements, assessing data sources, creating dimensional data models, and developing ETL code for data obtained through real-time exchange and exchange with higher education and workforce.

Infrastructure Engineer: The infrastructure engineer will be .2 FTE on the project and will be responsible for hardware installation, network optimization, and infrastructure software maintenance.

Help Desk Specialist: The Help Desk Specialist will be .5 FTE on the project and will be responsible for employee and stakeholder technical support and submitting and escalating work orders related to the project (especially around real-time data exchange and Learning Connection). She will also be responsible for directing the development of user manuals and providing training as needed.

2) Fringe Benefits – (Core Elements 1, 2, and 3)

Estimated fringe benefits are based on 35% of the salaries of state specific personnel. These costs will support all 3 core elements and will provide fringe benefits to the individuals listed above.
3) Travel Expenses – (Core Elements 1, 2, and 3)
   a. $10,000 year 1, $10,000 year 2, $10,000 year 3
   b. Miscellaneous travel Expenses for state specific personnel

Travel expenses include travel for the project director and project sponsor to the SLDS grantee workshop in Washington, D.C., as well as projected costs for travel to training opportunities, including travel to other states (e.g., Oregon to review Oregon DATA project, Nevada to review real-time data exchange) and travel to training seminars, especially around SOA, data reporting, data warehousing, database administration.

4) Equipment Expenses (Core Elements 1 and 3)
   a. 5 Dell laptops – 5 @ $2500 = $12500 in year 1 – These costs will support Core Elements 1 and 3. Laptops will be used by state personnel and consultants in implementing the deliverables of the two core elements.
   b. Based on cost estimates we received for the implementation of the real-time automated data exchange solution, required hardware would be redundant IBM WebSphere DataPower Integration Appliance XI50 for the ESB (enterprise service bus) solution and a test machine – 3 Appliances @$85k each = $255k. $255,000 year 1. These costs will support Core Element 1.
   c. Additional SAN disk space for data 48Tb = $125,000 year 1. These costs will support Core Element 1.
   d. Infrastructure upgrades – backup network solution switches, license, and cards would be approximately $25,000 year 1. These costs will support Core Element 1.

5) Contract based Personnel Services (Core Elements 1, 2, and 3)
   a. IDOE intends to augment current staff with 4 contractors for the duration of the project. The contractors will help us develop the necessary XML based web services to communicate with the districts, help us with data auditing, and develop our internal and external reporting websites. The cost of the staff augmentation is calculated by 37.5 hours per week for 52 weeks times three years with a billable rate of $80/hr per year. The total staff augmentation costs will be $624,000 year 1, $624,000 year 2, $624,000 year 3. Contractors will be 100% FTE on the project. These costs will support Core Elements 1, 2, and 3.
   b. Based on cost estimates we received, the cost of E-Transcript service, data repository, and mapping tool to map courses to standardized SCED mapping will be $2M year 1, $1.5M year 2, $1M year 3. These costs will support Core Element 2. Costs include:
      • Full project and account management throughout the lifecycle of the project;
      • Live Web-based training for school personnel;
• Unlimited electronic transcript transmissions among all participating Indiana high schools and postsecondary institutions;
• Creation of a common school record exchange report template, upload service, bi-directional request and retrieve interfaces, and on-demand training materials (for K-12 schools electing to participate in electronic records exchange);
• Unlimited transcript transmissions to any other destination nationwide;
• Support services provided to end users;
• Marketing and instructional materials;
• Licensing fees;
• Bulk upload support for transcript repository loads;
• Deployment and ongoing support for mapping of local and state course names to NCES SCED;
• Administrator and state interface for mapping courses to SCED;
• Normalized course and grade information sent to participating public in-state postsecondary institutions;
• Exportable Excel reports reflecting normalized state and local course codes;
• Diploma audit PDF reports and an interface for report download

Note that costs are estimated, and that IDOE will follow standard Indiana Department of Administration contracting procedures, including requirements for vendor bidding.

c. Based on cost estimates we received the cost of vendor implementation support for the implementation of the real-time automated data exchange solution will be $5M. $1.4M will be focused on the DOE implementation and the remaining $3.6M will be used to implement the solution at the school corp level. These costs will support Core Element 1.
The DOE level implementation estimate is based on 7000 man hours @$200/hr. Services will include:
  • Project management throughout the lifecycle of the project
  • Implementation and configuration infrastructure software
  • Requirements analysis for changes to state system
  • Design, development, and testing of changes
  • Integration and performance testing
  • Training of state employees
  • Implementation and deployment
  • Post-production support
The School Corp level estimate is based on 2 factors: 1) working with the SIS vendors in the state, and 2) working directly with schools who don’t utilize an off the shelf SIS vendor. The work with SIS vendors is based on 200 hrs X 40 distinct vendors @$200 = $1.6M. The work with school corps without off the shelf SIS vendors was calculated using 50 school corps X 200 hours @$200/hr = $2M. Based on our phased in approach to bringing schools onboard we expect our costs will be drawn down $2M year 1, $1.7M year 2, $1.3M year 3. Services will include:

- Implementation and configuration infrastructure software
- Integration and performance testing
- Requirements analysis of SIS Web services interface
- Design, development, and testing of SIS Web services interface
- Interface integration testing
- Training of district employees

d. Learning Connection enhancements – will include enhancements to current system allowing the school corps to upload data into the DOE central data Warehouse for reporting back through Learning Connection, training on utilization of the system to upload data, and data marts for a single view of data to drive classroom instruction. $100,000 year 1, $1M year 2, $400,000 year 3. These costs will support Core Element 3.

e. Independent evaluator: IDOE will contract with an independent evaluator to ensure that it is implementing its project with fidelity and achieving desired outcomes. Estimated costs are $50,000 year 1; $65,000 year 2; and $75,000 yr 3. These activities will support Core Elements 1, 2, and 3.

6) Other (Core Elements 1, 2, and 3)

a. Software costs not associated with vendor solutions include backup software, software licenses, Operating systems, Monitoring tools, and development tools. $50,000 year 1, $50,000 year 2, $50,000 year 3. These costs will support Core Elements 1, 2, and 3.

**TOTAL ESTIMATED COSTS (BY CORE ELEMENT)**

**CORE ELEMENT 1: $7,202,077**

**CORE ELEMENT 2: $5,557,078**

**CORE ELEMENT 3: $1,824,578**
Budget Narrative

Budget Narrative - ED 524 Section C Spreadsheet

Attachment 1:
Title: Ed 524 Section C Spreadsheet Pages: 0 Uploaded File: C:Documents and Settings\mchamber\My Documents\Longitudinal Data Systems Grant\ED 524 Section C Spreadsheet.pdf
<table>
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<th>Budget Categories</th>
<th>Project Year 1</th>
<th>Project Year 2</th>
<th>Project Year 3</th>
<th>Project Year 4</th>
<th>Project Year 5</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1. Personnel</td>
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<td></td>
</tr>
<tr>
<td>2. Fringe Benefits</td>
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</tr>
<tr>
<td>3. Travel</td>
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<tr>
<td>4. Equipment</td>
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<tr>
<td>5. Supplies</td>
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<tr>
<td>6. Construction</td>
<td></td>
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</tr>
<tr>
<td>7. Construction - Commercial</td>
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<tr>
<td>8. Other</td>
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<td>9. Total Direct Costs (lines 1-8)</td>
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<tr>
<td>11. Training Supplies</td>
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<td>12. Total Costs (lines 9-11)</td>
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</tr>
</tbody>
</table>

U.S. Department of Education Funds

SECTION A: BUDGET SUMMARY

For applicants receiving subcontracts or non-construct projects through a subrecipients, prepare the following information:

Applicants receiving funding for multi-year programs should complete the column under applicable columns. Please read all instructions before completing form.
### SECTION C - BUDGET NARRATIVE

(see instructions)

<table>
<thead>
<tr>
<th>(j)</th>
<th>(e)</th>
<th>(d)</th>
<th>(c)</th>
<th>(b)</th>
<th>(a)</th>
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<tbody>
<tr>
<td>Total</td>
<td>Project Year 1</td>
<td>Project Year 2</td>
<td>Project Year 3</td>
<td>Project Year 4</td>
<td>Project Year 5</td>
</tr>
</tbody>
</table>

### SECTION B - BUDGET SUMMARY

**Non-Federal Funds**

Applicable columns: Please read all instructions before completing form.

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

Indiana Department of Education

Name of Institution/Organization