

# **U.S. Department of Education**

Washington, D.C. 20202-5335



## **APPLICATION FOR GRANTS UNDER THE**

**STATEWIDE LONGITUDINAL DATA SYSTEM RECOVERY ACT GRANTS  
CFDA # 84.384A  
PR/Award # R384A100040**

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
Project Abstract	e13
2. Project Narrative - (Project Narrative - Project Narrative...)	e14
Project Narrative	e15
3. Project Narrative - (Project Narrative - Appendix A, Optional Attach.....)	e45
Appendix A Optional Attachments	e46
4. Project Narrative - (Project Narrative - Appendix B Resumes of Key P.....)	e51
Appendix B Resumes of Key Personnel	e52
5. Project Narrative - (Project Narrative - Appendix C Current Status o.....)	e138
Appendix C	e139
6. Project Narrative - (Project Narrative - Appendix D Letters of Support...)	e143
Appendix D	e144
7. Budget Narrative - (Budget Narrative - Budget Justification...)	e152
Budget Justification	e153
8. Budget Narrative - (Budget Narrative - ED 524 Section C Spreadsheet...)	e210
Section C Spreadsheet	e211

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**Application for Federal Assistance SF-424**

Version 02

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

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

5a. Federal Entity Identifier:	* 5b. Federal Award Identifier:
	CFDA 84.384A2010-1

**State Use Only:**

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

**8. APPLICANT INFORMATION:**

\* a. Legal Name: State of Missouri -- Department of Elementary and Secondary Education

* b. Employer/Taxpayer Identification Number (EIN/TIN):	* c. Organizational DUNS:
446000987	093746923

**d. Address:**

* Street1:	PO Box 480
Street2:	
* City:	Jefferson City
County:	Cole
State:	MO
Province:	
* Country:	USA
* Zip / Postal Code:	65102

**e. Organizational Unit:**

Department Name:	Division Name:
Department of Elementary & Secondary Education	

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

Prefix:	Ms.	* First Name:	Leigh
Middle Name:	A		

\* Last Name: Grant-Engle

Suffix:

Title: Data Manager

Organizational Affiliation:

Missouri Department of Elementary & Secondary Education

\* Telephone Number: (573)522-8310 Fax Number: (573)526-6898

\* Email: LEIGHANN.GRANTENGLE@DESE.MO.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:

Institute of Education Sciences;(IES) Grant Program for Statewide Longitudinal Data Systems Recovery Act Program (ARRA)

**13. Competition Identification Number:**

Title:

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

State, Schools, Counties

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

Missouri Comprehensive Data System

Attach supporting documents as specified in agency instructions.

**Attachment:**

Title :

File :

**Attachment:**

Title :

File :

**Attachment:**

Title :

File :

**Application for Federal Assistance SF-424**

Version 02

**16. Congressional Districts Of:**

\* a. Applicant: MO-All

\* b. Program/Project: MO-ALL

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

**Attachment:**

Title :

File :

**17. Proposed Project:**

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

\* b. End Date: 3/31/2013

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

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

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

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

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

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

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

Yes  No

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

\*\* I AGREE

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

**Authorized Representative:**

Prefix: Ms. \* First Name: Leigh  
Middle Name: A  
\* Last Name: Grant-Engle  
Suffix:

Title: Data Manager

\* Telephone Number: (573)522-8310 Fax Number: (573)526-6898

\* Email: LEIGHANN.GRANTENGLE@DESE.MO.GOV

\* Signature of Authorized Representative: \* Date Signed:

**Application for Federal Assistance SF-424**

Version 02

**\* Applicant Federal Debt Delinquency Explanation**

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

NA



U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
State of Missouri -- Department ...

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

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

Table with 7 columns: Budget Categories, Project Year 1(a), Project Year 2 (b), Project Year 3 (c), Project Year 4 (d), Project Year 5 (e), Total (f). Rows include Personnel, Fringe Benefits, Travel, Equipment, Supplies, Contractual, Construction, Other, Total Direct Costs, Indirect Costs, Training Stipends, and Total Costs.

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

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

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

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

Period Covered by the Indirect Cost Rate Agreement: From: 7/1/2009 To: 6/30/2010 (mm/dd/yyyy)

Approving Federal agency: [X] ED [ ] Other (please specify): \_\_\_\_\_ The Indirect Cost Rate is 6.6%

(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 6.6%



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

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:  
State of Missouri -- Department ...

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

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

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

## ASSURANCES - NON-CONSTRUCTION PROGRAMS

Standard Form 424B (Rev.7-97)

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

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

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

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

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

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

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

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

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

**Signature of Authorized Certifying Representative:**

**Name of Authorized Certifying Representative:** Leigh Ann Grant-Engle

**Title:** Data Manager

**Date Submitted:** 12/02/2009

### Disclosure of Lobbying Activities

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

<b>1. Type of Federal Action:</b> <input type="checkbox"/> Contract <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Loan <input type="checkbox"/> Loan Guarantee <input type="checkbox"/> Loan Insurance	<b>2. Status of Federal Action:</b> <input type="checkbox"/> Bid/Offer/Application <input checked="" type="checkbox"/> Initial Award <input type="checkbox"/> Post-Award	<b>3. Report Type:</b> <input checked="" type="checkbox"/> Initial Filing <input type="checkbox"/> Material Change <b>For Material Change only:</b> Year: 0 Quarter: 0 Date of Last Report:
<b>4. Name and Address of Reporting Entity:</b> <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier, if known: 0 Name: MO Department of Elem & Sec Education Address: PO Box 480 City: Jefferson City State: MO Zip Code + 4: 65102-	<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b> Name: Address: City: State: Zip Code + 4: -  Congressional District, if known:	
<b>6. Federal Department/Agency:</b> Department of Education	<b>7. Federal Program Name/Description:</b> Institute of Education Sciences;(IES)  CFDA Number, if applicable: 84.384	
<b>8. Federal Action Number, if known:</b>	<b>9. Award Amount, if known:</b> \$0	
<b>10. a. Name of Lobbying Registrant</b> (if individual, last name, first name, MI): NA Address: City: State: Zip Code + 4: -	<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI): NA Address: City: State: Zip Code + 4: -	
<b>11.</b> Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Name: Leigh Ann Grant-Engle Title: Data Manager Applicant: State of Missouri -- Department of Elementary and Secondary Education Date: 12/02/2009	
<b>Federal Use Only:</b>		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

## CERTIFICATION REGARDING LOBBYING

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

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

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

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

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

Statement for Loan Guarantees and Loan Insurance.

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

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

### APPLICANT'S ORGANIZATION

State of Missouri -- Department of Elementary and Secondary Education

### PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Prefix:                      First Name: Leigh Ann                      Middle Name: A  
Last Name: Grant-Engle                      Suffix:  
Title: Data Manager

Signature: \_\_\_\_\_ Date: 12/02/2009

ED 80-0013

03/04

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

**1. Project Director:**

Prefix:      \* First Name:              Middle Name:              \* Last Name:              Suffix:  
Ms.          Leigh                              A                              Grant-Engle

Address:

\* Street1:          PO Box 480  
Street2:  
\* City:              Jefferson City  
County:              Cole  
\* State:              MO \* Zip / Postal Code: 65102 \* Country: USA

\* Phone Number (give area      Fax Number (give area  
code)                              code)  
(573)522-8310                      (573)526-6898

Email Address:

LEIGHANN.GRANTENGLE@DESE.MO.GOV

**2. Applicant Experience**

Novice Applicant                       Yes               No               Not applicable

**3. Human Subjects Research**

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

Yes               No

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

Yes      Provide Exemption(s) #:

No      Provide Assurance #, if available:

**Please attach an explanation Narrative:**

**Attachment:**

Title :  
File :

# Project Narrative

## Project Narrative - Project Abstract

Attachment 1:

Title: **Project Abstract** Pages: **1** Uploaded File: **Abstract.pdf**

## Project Abstract

The SLDS application process has been a tremendous opportunity for Missouri to coordinate across the early childhood services and agencies, the Department of Elementary and Secondary Education (DESE), higher education, and the workforce agencies statewide. Our State has a P-20 Council and a new P-Data Council that provide guidance to this coordination. Our insight from this process has been to define the enormous gap in resources to address the needs identified over the next three years. Focusing on improving teaching and learning in the classroom, this application defines the data infrastructure, integration, and interoperability required to support the data-driven decision making that is foundational to the four SFSF assurances, the seven ARRA capabilities, and the 12 America COMPETES Act elements. Missouri lagged behind until our first LDS grant gave us a boost. This application builds upon that start to meet these 4, 7, and 12 targets.

During our planning process, the participants identified 10 purposes, which became our guide for components within the application. DESE is making the transition from collecting aggregate data to individual records and needs to convert all legacy reporting processes (e.g., *EDFacts*) to use record-level data from our developing data warehouse (Enhanced Reporting Component). An emerging need and opportunity with a longitudinal data system is to test business rules across districts, years, and collections and to provide early reports to enable checking of data to improve data quality (State-Level Trials and Diagnostic Metric Reports Component). Improving the quality and timeliness of higher education data (Higher Education Data Quality Improvement Component) and creating a statewide system for the electronic exchange of student records and transcripts (Electronics Records and Transcripts Exchange Components) are designed to enhance the data available for analysis and exchange with PK-12 and the workforce.

A central data store will be required to consolidate the data across all the participants (Missouri Comprehensive Data System). We propose incorporating data from the National Student Clearinghouse and the Midwest Education Information Consortium to include follow-up data on graduates and dropouts who move to other states. The participating agencies will need significant assistance to establish standards and upgrade their data systems for exchanging (State Agency and Workforce Data Quality Component, Early Childhood P-Data Council Component). The P-Data Council has created a substantial plan for coordinating across the various agencies and services for early childhood.

DESE understands that a project of this scope and size requires professional and dedicated project management (Project Management and Systems Integration Component) and evaluation (Evaluation Component). This application requests resources for a statewide effort that our partners have planned well and are ready to implement. Missouri has the State technical infrastructure to ensure the Project activities can be successful. The major critical success factor for the Missouri Comprehensive Data System Project is the commitment of the partners. The cooperation and coordination exhibited during the planning process will benefit the State and the individuals served by all of our agencies for years to come.

# Project Narrative

## Project Narrative - Project Narrative

Attachment 1:

Title: **Project Narrative** Pages: **30** Uploaded File: **Project Narrative.pdf**

## Project Narrative

The Missouri Comprehensive Data System Project has emerged from a comprehensive planning process among the partners representing the Department of Elementary and Secondary Education (DESE), the early childhood community (P-Data Council), the Missouri Department of Higher Education, and the workforce agencies and programs statewide. Throughout the planning, we were focused on the four assurances from the State Fiscal Stabilization Fund, the seven required capabilities for SLDS projects from the American Recovery and Reinvestment Act, and the 12 required data system elements from the America COMPETES Act. The planning partners established 10 purposes for the Missouri Comprehensive Data System Project grant application aligned with these targets. Each of these purposes became a component in this application. These are:

### Component 1: Project Management and Systems Integration

Purpose: To ensure that the activities funded by the grant are planned and implemented efficiently and effectively to accomplish the project outcomes and improve the teaching and learning effectiveness in Missouri classrooms.

### Component 2: Early Childhood “P” Data

Purpose: To establish data standards across the pre-kindergarten arena so quality data can be collected and exchanged for the improvement of services and analysis of effectiveness of the programs for these children as they progress into PK-12 education.

### Component 3: State Agency and Workforce Data Quality

Purpose: To establish common data standards across workforce programs and services, and to create the capacity and processes for these agencies to share and use Pre-K to the workforce data from the P-20 LDS effectively.

### Component 4: State-Level Trials and Diagnostic Metric Reports

Purpose: To improve the quality of PK-12 data by providing schools and districts with timely feedback and audit reports for understanding their data at the time they are preparing submissions to DESE.

### Component 5: The Show-Me Portal

Purpose: To build a web-delivered system for access to timely and quality data for decision making by creating a portal to manage directory, reports, and communities of interest for all users.

### Component 6: Enhanced Reporting

Purpose: To make a complete transition by rebuilding traditional reports from the legacy mainframe system and aggregate statistic systems to the MOSIS individual record data system; and ensure that all users of the reports are trained and supported effectively.

### Component 7: Electronic Records and Transcript Exchange

Purpose: To establish a statewide system for electronic exchanges of student records and transcripts for PK-12 mobile students, high school to postsecondary applicants, and postsecondary transcripts reported back to high schools.

#### Component 8: Higher Education Data Quality Improvement

Purpose: To improve the quality and timeliness of postsecondary data to ensure validity for federal reporting, analysis, and sharing with PK-12 and the workforce agencies.

#### Component 9: The Missouri Comprehensive Data System

Purpose: To design and deploy a consolidated P-20 data warehouse that supports analysis and reporting from Pre-K through higher education and the workforce, with a functional query and reporting system usable by participating partners and the public.

#### Component 10: Project Evaluation

Purpose: To provide an objective external evaluation for continuous improvement and accountability for the Missouri Comprehensive Data System Project.

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

The State of Missouri has a clear focus on the role of data—to improve the teaching and learning process in our classrooms. As we planned together for this P-20 longitudinal data system, the complexities of that challenge became apparent, and the need for additional resources was evident. The SLDS application process presented a tremendous opportunity for the people of Missouri to coordinate across the early childhood services and agencies, the Department of Elementary and Secondary Education (DESE), higher education, and the workforce agencies statewide. Our State's Legislature created the P-20 Council and a new P Data Council that provide guidance to this coordination. Our insight from this LDS grant planning process has been to define the enormous gap in resources available to address the needs identified over the next three years. Focusing on improving teaching and learning in the classroom, this application has been crafted to define the data infrastructure, integration, and interoperability required to support the data-driven decision making that is foundational to the four SFSF assurances, the seven ARRA capabilities, and the 12 America COMPETES Act elements. Missouri lagged behind until our first LDS grant gave us a boost. This application builds upon that start to meet these 4, 7, and 12 targets.

DESE is making the transition from collecting aggregate data to individual records and needs to convert all legacy reporting processes (e.g., *EDFacts*, our Annual Report to the State Board of Education, AYP, etc.) to use record-level data from our developing data warehouse (Enhanced Reporting Component). An emerging need and opportunity with a longitudinal data system is to test business rules across districts, years, and collections and to provide early reports to enable checking of data to improve data quality (State-Level Trials and Diagnostic Metric Reports Component). Improving the quality and timeliness of higher education data (Higher Education Data Quality Improvement Component) and creating a statewide system for the electronic exchange of student records and transcripts (Electronics Records and Transcripts Exchange Components) are designed to enhance the data available for analysis and exchange with PK-12 and the workforce.

A central data store will be required to consolidate the data across all the participants (P-20 Longitudinal Data System Central Data Store Component). The participating agencies will need significant assistance to establish standards and upgrade their data systems for exchanging (State Agency and Workforce Data Quality Component, P Data Council Component). The P Data

Council has created a substantial plan for coordinating across the various agencies and services for early childhood.

DESE understands that a project of this scope and size requires professional and dedicated project management (Project Management and Systems Integration Component) and evaluation (Evaluation Component).

### **Component 1: Project Management and Systems Integration**

Purpose: To ensure that the activities funded by the grant are planned and implemented efficiently and effectively to accomplish the project outcomes and improve the teaching and learning effectiveness in Missouri classrooms.

SLDS grants present a challenge to an SEA to manage the significant infusion of resources, a sudden initiation of grant activities, and the continuation of all current demands of the systems and projects already active. DESE has learned from the MOSIS Project and the first year of our LDS grant that leveraging our internal expertise in managing our projects such as Statewide Assessment, Accreditation, and others without disrupting their notable progress by engaging a professional project management team with experience and expertise specifically relevant for the components of this grant is advisable. Therefore, we recognize the need to add additional project management resources for these components, especially to handle the increased coordination among the pre-K, workforce, and higher education communities.

The expertise we will seek to balance our internal resumes will include:

- Higher education, workforce, and prekindergarten data standards alignment with PK-12;
- ETL and data warehouse exchange with other platforms and standards from Pre-K, workforce, and higher education for the P-20 longitudinal data system;
- Process management to ensure the coordination across all P-20 policy and methodology; and
- Experience with P-20, USED, PESCS, NCES, NEDM, and the many other national standards and groups that impact the interoperability of the data that will reside within the P-20 longitudinal data system in the future.

### **Component 2: Early Childhood ‘P’ Data**

Purpose: To establish data standards across the pre-kindergarten arena so quality data can be collected and exchanged for the improvement of services and analysis of effectiveness of the programs for these children as they progress into PK-12 education.

The Preschool or ‘P’ (prenatal to kindergarten entry) leaders are the newest partners to join the longitudinal data systems efforts in Missouri. The P arena is unique as there is no central entity to gather information about Missouri’s youngest children, such as the public schools in the K-12 system. The MO P Data Council was established to guide the development of the infrastructure for incorporating P data into existing K-12, higher education, and economic development data systems. The Council will investigate potential datasets for transfer, linkage requirements, systems upgrades needed, and the potential policy questions that can be answered from these data. After consideration of the variety of services and educational opportunities that could potentially impact children’s success in school and life, the P Data Council has preliminarily

identified seven areas of data collection to constitute the MO P Dataset: early childhood program data, child assessment data, child health data, early childhood workforce data, child enrollment data, parent education and support data, and social service support data. [For more information about the datasets within each type please see Appendix A, Attachment 2: Missouri Data Collections and Coordination Efforts, Overview of the Types of Data Being Recruited for the P Dataset.]

Some of the datasets can be easily accessed and transferred into the P Data Warehouse while others require additional technology development or concentrated recruitment efforts. Then, there are areas where new technology is necessary before the data can be included. The P Data Council strives to create a robust and representative dataset that can be incorporated into the P-20 LDS to inform policy development and early childhood practice. The success of these efforts will be measured by our ability to secure data and link records in the following ways.

- A child record can be identified and linked across multiple datasets using one of two unique variables or a combination of unique child-specific variables.
- A program can be identified and linked across multiple datasets.
- A classroom can be identified and linked to the sponsoring program and/or can be linked across multiple datasets.
- A child can be linked to a teacher, classroom, program, and/or support services through program or enrollment records.

### **Component 3: State Agency and Workforce Data Quality**

**Purpose:** To establish common data standards across workforce programs and services, and to create the capacity and processes for these agencies to share and use Pre-K to the workforce data from the P-20 LDS effectively.

State agencies and workforce programs need to standardize their data consolidation of selected elements into a centralized P-20 LDS. To accomplish this, the resources of the LDS grant are needed to accomplish these tasks.

- Conduct a comprehensive study of the data standards used by each program and agency to establish the current definitions, requirements, and usages.
- Develop cross-agency data standards to support comparability for data sharing.
- Establish a cross-agency agreement on the data elements to be shared in the P-20 LDS; those that will be accessible by the public, by other agencies, and by restricted individual only.
- Design the data model for the P-20 LDS.
- Design the policies and procedures for data management of the consolidated longitudinal data system.
- Design the automation of the data movement into the P-20 LDS (e.g., requirements specifications, procurement, and implementation).

The participating state agencies and workforce organizations will receive guidance and consulting to upgrade their processes and systems to meet data quality standards as established for the P-20 LDS.

#### **Component 4: State-Level Trials and Diagnostic Metric Reports**

Purpose: To improve the quality of PK-12 data by providing schools and districts with timely feedback and audit reports for understanding their data at the time they are preparing submissions to DESE.

Missouri has created the concept of state-level trials for the MOSIS SRM data collections from districts as a process for testing business rules that cannot be tested at the time an individual district certifies and submits its data to DESE. Similar to a submission inclusive of multiple schools' data from a district, a state-level trial is a set of business rules that are run against a set of data compiled from multiple submissions from districts, or years, or collections. An example is running a state-level trial to find dropouts reported by one district who have re-entered school in another district and can now be reclassified as transfers. Matching students with their past assessment scores, resolving incorrectly reported concurrent enrollments, clearing duplicate and shared student identifiers, and many other persistently difficult data quality issues are addressed with this proposed component.

With the transition to submission of individual student and teacher records through the MOSIS system from districts to DESE, schools and districts have less of an opportunity to examine the overall aggregate statistics of their data before they are certified for use by the State. Even though DESE performs a rapid ETL process to provide access to aggregate reports after the districts' data are certified and submitted, and they are able to amend their submissions, the districts would much prefer to have insight into the official metrics that will be derived from their data before signing off on them. The proposed diagnostic metric reports will provide that preview. These reports will be generated by the MOSIS SRM application at the time the districts are running their submission trials of their unit-record data. They will be able to view aggregate reports of statistics that preview the official statistics that will be calculated and published later. Comparison statistics to past submissions at similar times will be provided to judge the reasonableness of the current data. This maturation of the MOSIS system will be a major step in advancing the quality of the data for *EDFacts* and all other uses. The 4 assurances, 7 components, and 12 elements around which this application was developed are all supported by the improvement in the quality of the data that the diagnostic metric reports will ensure.

#### **Component 5: The Show-Me Portal**

Purpose: To build a web-delivered system for access to timely and quality data for decision making by creating a portal to manage directory, reports, and communities of interest for all users.

Across the P-20 community, a major challenge will be how to provide access to the longitudinal data being consolidated for decision making. The individual agencies have web sites and unique reporting tools, but users need a single site to find access to the information that the P-20 Council and the individual agencies have provided thanks to the resources of this LDS grant. Our proposal is to design and build a portal with directory services and defined roles that will enable all users to access the data and reports appropriate to their authority level based upon the authentication they provide. Missouri must design and build communities of interest, single-sign on capability, shared resources, directory services and security management; requirements

specifications, procurement, and implementation processes. With the resources of this grant, we will:

- Leverage analysis conducted analyzing the security needs for MOSIS, authentication, authorization, and roles.
- Design integration with State IT infrastructure, State network architecture, LEA integration, DESE systems, etc.
- Design requirements for functionality, applications to integrate.
- Integrate online assessments by working with the assessment staff to determine how on-line assessments will be made available to students for administration, scoring, and reporting through the portal. Availability of reports to students, teachers, administrators, and parents will be provided.

DESE will procure necessary components and configure.

### **Component 6: Enhanced Reporting**

**Purpose:** To make a complete transition by rebuilding traditional reports from the legacy mainframe system and aggregate statistic systems to the MOSIS individual record data system; and ensure that all users of the reports are trained and supported effectively.

Missouri must design and build replacement reports for legacy mainframe and current DESE web-delivered reports. With the improvements that will be made to the data warehouse, the availability of quality longitudinal data, and the processes for managing the data, the existing analysis and reporting processes and tools will no longer be functional nor adequate to meet current needs much less the greater vision and expectations created by the LDS grant. The reports must be converted to user-managed, drill-down, queries with FERPA-policy enforcement business rules applied at the field level. DESE and the user community have legacy reports that must be maintained to meet the needs of the State Board of Education, the Commissioner of Education, the districts, the public, and USED. However, the expanding wealth of longitudinal data creates the opportunity to provide enhanced reporting for decision makers at all levels. Required needs for reporting include: *EDFacts* and other federal reports (e.g., MSIX, ARRA), CSPR, etc.

DESE has analyzed our needs and identified these activities requiring grant funding.

- Address mainframe report data gaps – Replicate mainframe reports, address method of delivery
  - DESE will conduct an audit/review of the legacy mainframe reports as documented in the publication (cite printed book) to update the requirements.
  - The data elements within the reports will be represented in the enterprise metadata dictionary and aligned with DESE's standard definitions and codes.
  - An output definition will be designed to define the official statistics to be produced in the enhanced reporting process.
- Identify, procure, and implement a query tool to replace Clear Access
  - Develop requirements for a query tool for DESE administrative users and district users accessing data through the portal.
  - Procure the query tool and plan the integration into the data warehouse and portal.

- Implement the query tool, test the integration, and document the processes for maintenance.
- Develop user guides, train users, and provide support.
- Build out the Annual Secretary of the Board Report (ASBR) process.
  - Document the requirements and map the processes.
  - Build the redesigned processes and integrate into the data warehouse and portal.
- Redesign and build Core Data/MOSIS screens with drill-down to student level capability.
  - Develop requirements for Core Data/MOSIS screens with drill-down to student level capability for DESE administrative users and district users accessing data through the portal.
  - Develop the screens and plan the integration into the data warehouse and portal.
  - Implement the screens, test the integration, and document the processes for maintenance.
- Design and provide a reporting system for teacher and principal evaluations, the Parents as Teachers Program, the GED application, and the teacher preparation application to ensure maximum usability and use of the data.
- Develop user guides, train users, and provide support.

### **Component 7: Electronic Records and Transcripts Exchange**

Purpose: To establish a statewide system for electronic exchanges of student records and transcripts for PK-12 mobile students, high school to postsecondary applicants, and postsecondary transcripts reported back to high schools.

Missouri's higher education institutions can receive images of transcripts from some local school district student information systems to postsecondary institutions. The need, however, is for all high schools to be capable of sending not just images, but electronic records that can be directly imported into the postsecondary institution's system, and can be incorporated into the longitudinal data system as appropriate. In addition, the capacity to exchange electronic records allows for exchanges for mobile students across PK-12 schools and districts. To complete the system across the State, exchanging transcripts among the postsecondary institutions within the state is also needed. The funding from the P-20 LDS grant will also provide the capacity and standards to accomplish establishing standards, processes, and infrastructure for electronic exchanges among all the pre-K and workforce agencies across Missouri.

Without the resources requested in this grant application and the coordination achieved through the grant's focus on the longitudinal data system's common data standards, the progress toward these electronic records exchange goals will continue to be at a very slow pace.

### **Component 8: Higher Education Data Quality Improvement**

Purpose: To improve the quality and timeliness of postsecondary data to ensure validity for federal reporting, analysis, and sharing with PK-12 and the workforce agencies.

Improving the quality of the postsecondary education data as the quantity, analysis, and use of our P-20 data increase is paramount. The State Fiscal Stabilization Fund (SFSF), capabilities, and elements depend upon quality. A keystone component of our quality assurance design is a higher education staging database with embedded business rules that allow postsecondary

institutions across Missouri to detect, analyze, and correct their data errors before certifying and submitting data to the Department of Higher Education. This ensures reliable, compliant data on which the DHE can apply level 3 business rules that analyze across submitting institutions, years, and programs' databases. A shortcoming of current systems is that postsecondary institutions can send incorrect data, late, and incomplete data to the DHE. However, they must have a way to know what the rules are, when they are violated, where they have a problem, and what to do to fix the problem. To facilitate the efficient submission of data, we need a staging database that contains the literally hundreds of business rules that have been developing across many years that can now be leveraged within our postsecondary data warehouse and the P-20 LDS. [For more information about the datasets please see Appendix A, Attachment 3: Missouri Data Collections and Coordination Efforts, Higher Education Data Quality Improvement System.]

### **Component 9: The Missouri Comprehensive Data System**

**Purpose:** To design and deploy a consolidated P-20 data warehouse that supports analysis and reporting from Pre-K through higher education and the workforce, with a functional query and reporting system usable by participating partners and the public.

In the planning for this application, all the participating agencies from pre-K through higher education and into the workforce cited their frustrations with having their own data but not having access to related data across agencies. Beginning to have multiple years of data, but not having an analysis tool for looking across years was also disappointing. When the P20 LDS is functioning, the emphasis will be on the need for analysis and reporting. Already the pressure with the planning for the Race to the Top design is for public access to information and access to data across all public agencies. Thus, a priority for P-20 LDS is definitely on providing access to data for decision making not only to the participating agencies, but also to the public.

The data warehouses and reporting functionality proposed in the P-20 LDS will open up access to the value that is now locked within the data spread across our schools, DESE, higher education, pre-K services, and workforce agencies. The participating agencies will agree upon a core of data elements to contribute to the common P-20 LDS that will comprise a significant resource of information for decision making. These data elements will specifically satisfy the seven data system capabilities from the American Recovery and Reinvestment Act. Analyses of the factors that contribute to success from preschool through postsecondary education and into the workforce will be included. The exchange of data among agencies and institutions will be facilitated through the data model developed. The common definitions and standards will not only support the comparability of the data within the P-20 LDS, but also the quality and integrity of the data within the individual data systems of the participating agencies. The Missouri Comprehensive Data System (P-20 LDS) will specifically address the 11<sup>th</sup> and 12<sup>th</sup> elements from the America COMPETES Act by consolidating the necessary data required for tracking students through their transition from high school into higher education and following up on their success in higher education.

The Missouri Comprehensive Data System Project sees the need to reach beyond the borders of Missouri as well by capturing data from the National Student Clearinghouse to ensure we can track and analyze the success and progress of all graduates, even those that go beyond the borders of our state. Current Missouri student record level data resources are limited to students

at public postsecondary institutions. Many critical questions related to postsecondary participation, student transfer, graduate study, out-of-state participation and migration, and comparative earnings cannot be addressed within these parameters. MDHE can leverage the student record information of the National Student Clearinghouse (NSC) and its more than 3,000 participating postsecondary institutions, to understand student pathways to graduation, and the migratory effects on postsecondary education and employment. In addition to addressing these research questions many smaller institutions currently lack the resources to benefit fully from NSC data. A consortium led by MDHE will provide data for P-20 analysis as well as improve the use and value of NSC data by Missouri institutions. Those students who do not graduate are of equal interest, and thus the Project will collaborate with the Kansas Board of Regents and other Mid-West states in the Midwest Education Information Consortium (MEIC) to analyze and exchange data on suspected dropouts to document those that have transferred among participating states. Both the National Governors Association (NGA) and the National Graduation Cohort Analysis require states to submit graduation rates utilizing standard definitions. To comply, LEAs and states must track students who are part of their annual graduation cohort. They are penalized if they are unable to document that students have enrolled in another school; and such documentation is difficult to obtain if students enroll in schools in a different state. Federal guidance allows several forms of documentation of enrollment, including whether the student has been reported as enrolled in a state longitudinal data system. Therefore, school districts and states would benefit if a system were developed that could locate students who have moved to a neighboring state, through interacting with the acquiring state's data system, and pass enrollment information back to the prior state's data system. Four states in the Midwest will create a simple mechanism for searching the student identifier databases in partner states to locate students they have "lost" and so have been reported as dropouts. Missouri, Iowa, Nebraska and Kansas each have purchased the license to the eScholar UniqID product. Over the past seven years, these states have assigned student identifiers to all their K-12 students, none of which are duplicated within or between the states that use the eScholar product. The long term goal of this Outcome is to track all students who move between states to provide a longitudinal inter-state education record. During this grant period the goal is to locate students that have been reported as dropouts by districts, but have moved to one of the partner states.

### **Component 10: Project Evaluation**

**Purpose:** To provide an objective external evaluation for continuous improvement and accountability for the Missouri Comprehensive Data System Project.

DESE recognizes the need for an external perspective on our progress and has designed a component for ongoing contracted evaluation services. A team of professionals who have been deeply involved in the design of SEA, LEA, and USED data standards and information systems over the past decades is needed to monitor our progress with this grant, to assist in our preparation of progress reports, and to advise us as we encounter implementation issues with districts, vendors, and our own internal resources. The evaluation must also coordinate with ongoing evaluations of existing grants and projects to ensure that we leverage the findings from all studies and reports available related to data systems and information use within DESE and across P-20 in Missouri.

The contractor will work with the Missouri partners to determine the evaluation criteria and how the indicators and outcomes will be monitored during the project by IES/USED. Together we will develop action reports against these indicators. The external evaluation services will assist us as an early warning system if the project is getting off track.

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

### **Component 1: Project Management and Systems Integration**

Purpose: To ensure that the activities funded by the grant are planned and implemented efficiently and effectively to accomplish the project outcomes and improve the teaching and learning effectiveness in Missouri classrooms.

The expected outcomes for this component are:

- 1.1. Obtain project management and systems integration expertise to ensure successful delivery of project outcomes.
  - 1.1.1. Produce a detailed project management plan.
  - 1.1.2. Produce a risk management plan with monthly status checks and adjustments.
  - 1.1.3. Produce quarterly executive reviews with recommendations for actions.

### **Component 2: Early Childhood 'P' Data**

Purpose: To establish data standards across the pre-kindergarten arena so quality data can be collected and exchanged for the improvement of services and analysis of effectiveness of the programs for these children as they progress into PK-12 education.

In order fully realize the vision for the P Dataset, the P Data Council will:

- Collaborate with key data partners to secure and increase data contributions in the seven areas, identify transfer issues and provide funding support when necessary to resolve technical issues, and develop resources to inform parents and early childhood teachers and programs as they strive to offer quality programming.
- Implement new technology to support the collection of child enrollment data for all children, regardless of socioeconomic status, and the entry of child assessment data for children ages 3-6.
- Implement a P' Data Pilot to complete concentrated data collection for key datasets that are not currently representative of the populations served to test recruitment strategies and highlight the potential of the P data to answer policy questions that can only be answered when data are representative. This P Data Pilot will include sixty five (65) licensed early childhood programs that do not have a history of receipt of quality funds or services in 3-4 school districts (1 urban and 2-3 rural) within two of the ten Resource and Referral service delivery areas. Programs participating in the P Data Pilot will agree to extensive data collection in the following areas: child enrollment and time attendance, child assessment, workforce data (practitioner registry, training attendance data, scholarship data and specialized training data), and program quality ratings. Additionally, workforce data collection efforts will be extended to all programs in the pilot project service delivery areas.

- Report findings from the data collection processes and analyses of the data to the MO Early Childhood Coordinating Board.

The expected outcomes for this component are:

- 2.1 Develop and oversee the P Dataset effort.
- 2.2 Enhance P Dataset technology and extend data collections.
- 2.3 Develop, pilot, and enhance the P Dataset Child Enrollment and Participation data collection.
- 2.4 Develop, pilot, and enhance the P Dataset Workforce data collection.
- 2.5 Develop, pilot and enhance the P Dataset Child Assessment data collection.

### **Component 3: State Agency and Workforce Data Quality**

Purpose: To establish common data standards across workforce programs and services, and to create the capacity and processes for these agencies to share and use Pre-K to the workforce data from the P-20 LDS effectively.

The expected outcomes for this component are:

- 3.1 Standardize the data across agencies.
- 3.2 Meet established data quality standards for the P-20 LDS through review and recommendations by expert consultants.

### **Component 4: State-Level Trials and Diagnostic Metric Reports**

Purpose: To improve the quality of PK-12 data by providing schools and districts with timely feedback and audit reports for understanding their data at the time they are preparing submissions to DESE.

The expected outcomes for this component are:

- 4.1 Create state-level trials that ensure business rules are enforced for data quality across districts and years.
- 4.2 Deliver diagnostic metrics in reports to schools and districts early in the data submission process to allow judgment of the quality of their data by reviewing preliminary statistics.

### **Component 5: The Show-Me Portal**

Purpose: To build a web-delivered system for access to timely and quality data for decision making by creating a portal to manage directory, reports, and communities of interest for all users.

The expected outcomes for this component are:

- 5.1 Design, develop, and implement the Show-Me Portal with the required reporting framework.
- 5.2 Integrate online assessments into the portal.
- 5.3 Expand the portal based on analyses of user needs in years 1 and 2.

### **Component 6: Enhanced Reporting**

Purpose: To make a complete transition by rebuilding traditional reports from the legacy mainframe system and aggregate statistic systems to the MOSIS individual record data system; and ensure that all users of the reports are trained and supported effectively.

The expected outcomes for this component are:

- 6.1. Design and build replacement reports for legacy mainframe and current DESE web-delivered reports (ASBR, Core Data).
- 6.2. Expand delivery of reports through Show-Me Portal.
- 6.3. Design, build, and incorporate Teacher and Principal evaluation data into the Missouri Comprehensive Data system, the DESE Data Warehouse, and the enhanced reporting system.
- 6.4. Design and build Parents as Teachers (PAT) data collection.
- 6.5. Design and build web-based system for GED processing.
- 6.6. Design and build Teacher Preparation Data Management and Decision Support system.

### **Component 7: Electronic Records and Transcripts Exchange**

Purpose: To establish a statewide system for electronic exchanges of student records and transcripts for PK-12 mobile students, high school to postsecondary applicants, and postsecondary transcripts reported back to high schools.

The expected outcomes for this component are:

- 7.1 Design, build, and implement an electronic records and transcript exchange system for all students in Missouri.

### **Component 8: Higher Education Data Quality Improvement**

Purpose: To improve the quality and timeliness of postsecondary data to ensure validity for federal reporting, analysis, and sharing with PK-12 and the workforce agencies.

The expected outcomes for this component are:

- 8.1 Develop a staging data store that sits between postsecondary institutions and the DHE data warehouse. Develop a library of levels 1, 2, and 3 business rules that ensure quality data pass from one level to the next each time data are exchanged and each time data are reported (State Report Manager<sup>TM</sup>).
- 8.2 Develop and launch Data Collection #1 (previous year higher education completions), #2 (previous year term registration), and #3 (current year fall enrollment).

### **Component 9: The Missouri Comprehensive Data System**

Purpose: To design and deploy a consolidated P-20 data warehouse that supports analysis and reporting from Pre-K through higher education and the workforce, with a functional query and reporting system usable by participating partners and the public.

The expected outcomes for this component are:

- 9.1 Build and deploy a P-20 LDS data warehouse with P (birth to 5), PK-12, higher education, and workforce data.
- 9.2 Build and launch a query and reporting system for agencies and the public.
- 9.3 The National Student Clearinghouse
  - 9.3.1 Create longitudinal datasets linking current DESE high school graduates, MDHE data sources with student records from private postsecondary and out-of-state institutions.
  - 9.3.2 Develop a sustainable consortium of postsecondary institutions to acquire NSC data and advise on its usage
- 9.4 Midwest Education Information Consortium (MEIC)
  - 9.4.1 In collaboration with MEIC and the Kansas Board of Regents, the consortium will design, develop, and implement the system for analyzing and exchanging data on suspected dropouts to document those that have transferred among participating states, and locate students who have moved to a neighboring state and have been reported as dropouts through interacting with the acquiring state's data system.

**Component 10: Project Evaluation**

Purpose: To provide an objective external evaluation for continuous improvement and accountability for the Missouri Comprehensive Data System/Show-Me Project.

The expected outcomes for this component are: Conduct monthly formal status reports for the agency executive team and IES oversight manager.

- 10.1. Conduct quarterly reviews and provide recommendations for actions based upon a formal project plan and schedule review.
- 10.2. Produce an annual evaluation report on the project's goals and objectives.

***(c) Timeline for Project Outcomes***

Outcome	Subtask	Initiation Date	Completion Date	Responsible Party
<b><u>Component 1: Project Management and Systems Integration</u></b>				
1.1 Obtain project management and systems integration expertise.				
	1.1.1. Publish project management plan	Yr 1, Mo 1	Yr 1, Mo 3	Project Manager
	1.1.2. Publish risk management plan	Yr 1, Mo 1	Yr 1, Mo 5	Project Manager
	1.1.3. Publish quarterly reviews	Yr 1, Mo 3	Yr 1, Mo 3, 6, 9, 12 Yr 2, Mo 3, 6, 9, 12 Yr 3, Mo 3,	Project Manager

Outcome	Subtask	Initiation Date	Completion Date	Responsible Party
			6, 9, 12	
<b><u>Component 2: Early Childhood 'P' Data</u></b>				
2.1 Develop and oversee the P Dataset effort.				
	2.1.1 Develop communications and memorandums of understanding for key data partners	Yr 1, Mo 3	Yr 3, Mo 9	Director of the P Data system, Principal Investigator, Project Director
	2.1.2 Recruit and support pilot sites to ensure the success of the data pilots	Yr 1, Mo 3	Yr 1, Mo 9	Pilot Project Coordinator
2.2 Enhance P Dataset technology and extend data collections.				
	2.2.1. Report findings from the data collection processes			
	2.2.2 Data analysis	Yr 1, Mo 3	Yr 3, Mo 9	Director of the P Data system, Principal Investigator, Data Coordinator, Data Analyst
	2.2.3 Report findings analyses of the data	Yr 1, Mo 9	Yr 3, Mo 12	Director of the P Data system, Principal Investigator, Data Coordinator, Data Analyst
2.3 Develop, pilot, and enhance the P Dataset Child Enrollment and Participation data collection.				
	2.3.1 Analysis and design	Yr 1, Mo 1	Yr 1, Mo 12	Project Director, Operations Support, Data Coordinator, Database

