

**U.S. Department of Education**

Washington, D.C. 20202-5335



**APPLICATION FOR GRANTS  
UNDER THE**

**Statewide, Longitudinal Data Systems**

**CFDA # 84.372A**

**PR/Award # R372A120018**

**Grants.gov Tracking#: GRANT11026197**

OMB No. , Expiration Date:

Closing Date: Dec 15, 2011

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

**Application for Federal Assistance SF-424**

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
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* 3. Date Received: <input type="text" value="12/15/2011"/>	4. Applicant Identifier: <input type="text"/>
--	--

5a. Federal Entity Identifier: <input type="text"/>	5b. Federal Award Identifier: <input type="text"/>
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**State Use Only:**

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
---	---

**8. APPLICANT INFORMATION:**

\* a. Legal Name:

* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="426004525"/>	* c. Organizational DUNS: <input type="text" value="8083465550000"/>
---	---

**d. Address:**

\* Street1:   
Street2:   
\* City:   
County/Parish:   
\* State:   
Province:   
\* Country:   
\* Zip / Postal Code:

**e. Organizational Unit:**

Department Name: <input type="text" value="Iowa Department of Education"/>	Division Name: <input type="text" value="Comm. &amp; Infor. Servcies"/>
---	--

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

Prefix:  \* First Name:   
Middle Name:   
\* Last Name:   
Suffix:

Title:

Organizational Affiliation:

* Telephone Number: <input type="text" value="515-281-4837"/>	Fax Number: <input type="text" value="515-242-5988"/>
---	---

\* Email:

**Application for Federal Assistance SF-424**

**\* 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:**

84.372

CFDA Title:

Statewide Data Systems

**\* 12. Funding Opportunity Number:**

ED-GRANTS-092011-001

\* Title:

Institute of Education Sciences (IES): Statewide, Longitudinal Data Systems Program CFDA Number 84.372A

**13. Competition Identification Number:**

84-372A2012

Title:

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

Add Attachment

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

Iowa???'s Education Outcome Collaborative: Building on P-20W Efforts

Attach supporting documents as specified in agency instructions.

Add Attachments

**Application for Federal Assistance SF-424****16. Congressional Districts Of:**\* a. Applicant b. Program/Project 

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

  **17. Proposed Project:**\* a. Start Date: \* b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="3,997,433.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="3,997,433.00"/>

**\* 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 in attachment.)** Yes  No

If "Yes", provide explanation and attach

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

 \*\* I AGREE

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

**Authorized Representative:**

Prefix:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title: \* Telephone Number:  Fax Number: \* Email: \* Signature of Authorized Representative:  \* Date Signed:

## ASSURANCES - NON-CONSTRUCTION PROGRAMS

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

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

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

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

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, 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 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.

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 subagreements.
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 (Clean Air) Implementation Plans under Section 176(c) of the Clean 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. §§1271 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 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.

<p>* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</p> <p>James Pennington</p>	<p>* TITLE</p> <p>Chief, Bureau of Information &amp; Analysis Serv</p>
<p>* APPLICANT ORGANIZATION</p> <p>Iowa Department of Education</p>	<p>* DATE SUBMITTED</p> <p>12/15/2011</p>

Standard Form 424B (Rev. 7-97) Back

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## 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 an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

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

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

### Statement for Loan Guarantees and Loan Insurance

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

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

**\* APPLICANT'S ORGANIZATION**

Iowa Department of Education

**\* PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE**

Prefix: Mr.

\* First Name: Jay

Middle Name:

\* Last Name: Pennington

Suffix:

\* Title: Chief, Bureau of Information & Analysis Serv

**\* SIGNATURE:** James Pennington

**\* DATE:** 12/15/2011



SUPPLEMENTAL INFORMATION  
REQUIRED FOR  
DEPARTMENT OF EDUCATION GRANTS

**1. Project Director:**

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
Mr.	Jay		Pennington	

Address:

\* Street1: 400 E. 14th St

Street2:

\* City: Des Moines

County:

\* State: IA: Iowa

\* Zip Code: 50319-0146

\* Country: USA: UNITED STATES

\* Phone Number (give area code) Fax Number (give area code)

5152814837 5152425988

Email Address:

jay.pennington@iowa.gov

**2. Applicant Experience:**

Novice Applicant  Yes  No  Not applicable to this program

**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:**

## Abstract

The abstract narrative must not exceed one page and should use language that will be understood by a range of audiences. For all projects, include the project title (if applicable), goals, expected outcomes and contributions for research, policy, practice, etc. Include population to be served, as appropriate. For research applications, also include the following:

- Theoretical and conceptual background of the study (i.e., prior research that this investigation builds upon and that provides a compelling rationale for this study)
- Research issues, hypotheses and questions being addressed
- Study design including a brief description of the sample including sample size, methods, principals dependent, independent, and control variables, and the approach to data analysis.

[Note: For a non-electronic submission, include the name and address of your organization and the name, phone number and e-mail address of the contact person for this project.]

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## You may now Close the Form

You have attached 1 file to this page, no more files may be added. To add a different file, you must first delete the existing file.

\* Attachment:

## Project Abstract - Iowa's Education Outcome Collaborative: Building on P-20W Efforts

K-12 outcomes have become a centerpiece of recent education reform efforts. The first priority in the March 2010 *Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act* from Secretary Duncan and the Obama administration includes college and career ready students as a critical to keeping the United States competitive. In October 2011, Governor Branstad's administration and the Iowa Department of Education released *One Unshakable Vision: World-Class Schools for Iowa* which call for a rigorous goal of ninety percent of Iowa students demonstrating college and career readiness to keep Iowa nationally and internationally competitive.

The Iowa Department of Education, Iowa Board of Regents and Iowa Workforce Development propose to build upon recent efforts to systematically connect and use information from Iowa's Statewide Longitudinal Data System (SLDS) to evaluate P-20W educational programs. The goals of this joint effort include: 1) Build P-20W SLDS including data from PK-12, Community Colleges, Post-Secondary and Workforce; 2) Provide systematic feedback loops to multiple stakeholder groups; 3) Establish a reporting system to identify successful districts based on PK-12, Post-Secondary and Employment Measures; 4) Build a metrics-driven culture where outcome data and analysis are widely used: Provide high-value training, data literacy and reports to education stakeholders.

Some of this work has already begun. Iowa is a recipient of a 2009 SLDS grant from IES and a 2010 WDQI grant. These projects provide a foundation and framework for linkages from PK-12, to Post-Secondary into the Workforce. While these efforts have been successful, they fall short in systematically evaluating the impact of Iowa's PK-12 education system.

Iowa proposes to use this grant opportunity to examine student pathways for success. Students from Iowa's PK-12 system often follow disparate paths into the workforce. Iowa will examine each pathway in order to determine what works and identify where supports are needed. By expanding Iowa's SLDS across the P-20W pipeline, longitudinal analyses and outcome studies are possible that heretofore have not been possible.

Iowa's plan is to *collaborate, create and integrate*: **Drive collaboration** across the education/workforce spectrum by establishing an Iowa Outcomes Collaborative in generating broad direction and ownership; **Create** the next-generation state longitudinal data system which provides stakeholders with clear, timely, actionable data needed for education reform; **Integrate** data and reporting systems across stakeholder groups by investing in talent and tools for training, and feedback management. Integration is the key to make sure this project endures and provides the highest possible utility for those charged with attaining Iowa's education and workforce development goals.

## Project Narrative File(s)

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\* Mandatory Project Narrative File Filename:

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To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File

**Project Title: Iowa’s Education Outcome Collaborative: Building on P-20W Efforts**

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        •#Data Quality..... 33#

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## Project Title: Iowa's Education Outcome Collaborative: Building on P-20W Efforts

### a) Need for Project – Priority 3: To Develop and Link Post-Secondary and Workforce Data with K-12.

#### i) *Background and Iowa Context*

K-12 outcome data has become a centerpiece of recent education reform efforts. The first priority in the March 2010 “*Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act*” from Secretary Duncan and the Obama administration targets college and career ready students as critical to keeping the United States globally competitive. Recent PISA test (2009) results demonstrate that the United States continues to score significantly lower than many OECD nations.

Eric Hanushek and colleagues (2010) compared the United States’ student mathematics performance to other nations seeking highly-skilled workforces. Mathematics proficiency is a key measure that employers value in recruiting and developing candidates for the highly-valued technology, engineering, health care and research jobs needed to advance a country’s standard of living and quality of life. On all measures reported, Iowa ranked below the U.S. national average and below many nations internationally. The analysis is but one indicator of how far Iowa must progress to produce a world-class workforce that can compete on the global stage.

In October 2011, Governor Branstad’s administration and the Iowa Department of Education released “*One Unshakable Vision: World-Class Schools for Iowa*” which calls for a rigorous goal of ninety percent of Iowa students demonstrating college and career readiness to keep Iowa nationally and internationally competitive. The State and Federal focus on college and career readiness has become a competitive emphasis for Iowa as well.

The Iowa Department of Education in conjunction with the Iowa Board of Regents and Iowa Workforce Development propose to build upon recent efforts to systematically connect and use information from Iowa’s Statewide Longitudinal Data System (SLDS) to evaluate P-20W educational programs.

In short, our plan is to *collaborate, create and integrate*:

- Drive collaboration among discrete stakeholders in fostering broad ownership for this initiative
- Create the next-generation post-secondary/workforce information system which connects stakeholders with clear, timely, actionable data.
- Ensure data is integrated and constantly acted upon across stakeholder groups by investing in talent and tools for training and updating. Integration is key for making sure this project endures and provides the highest possible utility for those charged with attaining Iowa’s education and workforce development goals.

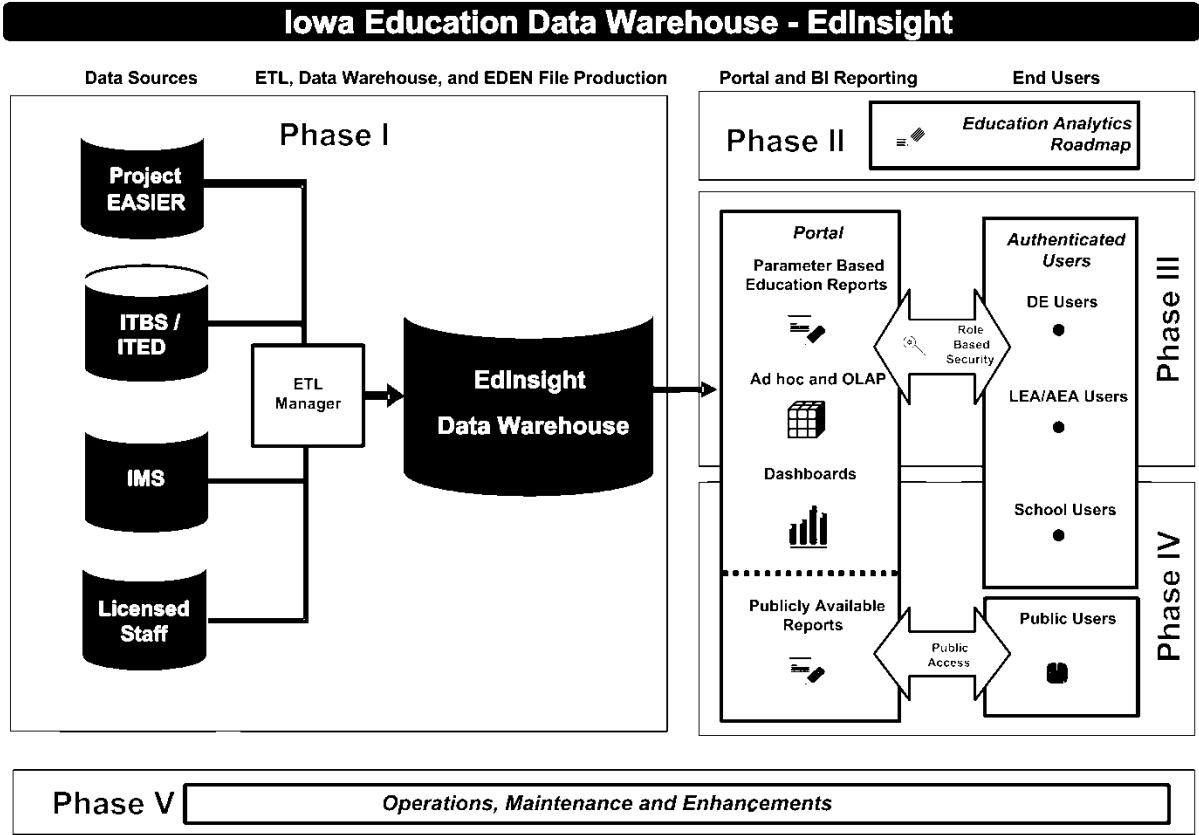
Using this “collaborate, create and integrate” approach, the strategic goals of this joint effort are:

1. Build P-20W SLDS including data from PK-12, Community Colleges, Regent Universities and Workforce.
2. Provide systematic feedback loops to multiple stakeholder groups including LEAs, AEAs, Department of Education staff, program staff at Iowa Regent Universities and Iowa Workforce partners.
3. Establish feedback loops to identify successful districts based on PK-12, Post-Secondary and Employment Measures.
4. Deliver reporting systems to link post-secondary outcomes and assist consumers in their choices and planning for post-secondary education.
5. Deliver reporting systems to evaluate ROI for publicly funded workforce training programs and to assist consumers in aligning their career goals with their training options.
6. Build a metrics-driven culture among stakeholders in which analysis and application of outcome data is not only integrated into policy and planning, but is also a part everyday business across enterprises. Provide high-value training, data literacy and reports to stakeholders.

Iowa has successfully collaborated across state government between PK-12 Education, Post-Secondary and Workforce partners. The DE has also been successful working with local partners such as its Area Education Agencies and Local Education Agencies in building its K-12 SLDS. While this collaboration has been productive, we still need to create automated and systematic linkages between K-12, Community Colleges, Regent Universities and Workforce. Iowa requests the Institute of Education Sciences grant not only to create interoperable and automated sharing to answer specific policy questions, but also to expand use of this powerful information across stakeholder groups.

### ***ii) Iowa’s Context and Past Accomplishments***

In 2008, the DE invested approximately \$1.9 million of its own funds in order to build an Iowa SLDS. This investment focused on building two cornerstone systems: 1) EdInsight – a PK-12 Education Data Warehouse and 2) the Iowa Transcript Center. The figure below provides a high-level architectural design of EdInsight. This diagram illustrates the data sets and functionality of this data system. EdInsight is a secured portal built on a business intelligence platform which provides pre-formatted reports and ad-hoc functionality to different types of education stakeholders such as Principals, Curriculum Directors, Assessment Consultants and others.



An example of two of EdInsight’s more popular reports can be found in Appendix A-1 and A-2. These are only two examples of the vast functionality of this platform. Both examples highlight assessment results examining different longitudinal cohorts across time. Security controls can be defined by role, group, indicator, individual and location. Appendix A-3 provides an overview of the content of reports as well as the future plans for development.

The second investment Iowa made was to build a transcript and student record exchange solution. In order to build a successful transcript system, the DE collaborated with the Iowa Board of Regents, and three Regent Universities which include University of Iowa, Iowa State University and the University of Northern Iowa. This project was a collaborative effort between all parties and resulted in a system for sharing secondary transcripts with post-secondary institutions in Iowa.

A goal of the Iowa unified transcript system was to provide high school course data to the Regents for use in computing the Iowa Regent Admission index (RAI). The RAI has been in use since 2007. The RAI is a formula which combines ACT composite score, grade point average, class rank and the number of core/advance courses completed to compute a score. These four factors were found to be excellent predictors of student success in post-secondary courses at the public universities. The creation of the RAI supports a rigorous and challenging curriculum for high school seniors. The DE built a transcript center to assist the Regents in standardizing the SCED codes for computation of the RAI. A RAI score of 245 indicates automatic admittance to an Iowa Regent University. The core courses in the formula are identified by the state-



implemented standard School Codes for the Exchange of Data (SCED). Appendix A-4 provides a screen shot of the formula and a planning tool for student use to determine a hypothetical RAI score. The DE built the transcript center to assist the Regents in automating the computation of the RAI.

In 2009, Iowa received a SLDS grant from the Institute of Education Sciences to build “*Iowa’s Unified Longitudinal Data System Infrastructure.*” This grant built upon the initial investment from the DE. The 2009 grant deliverables include:

<b>Deliverable</b>	<b>Status</b>	<b>Description</b>
<b>A statewide LDS that provides student-level data over time</b>	Complete	EdInsight, Iowa’s SLDS, has been deployed. EdInsight includes seven years of linked student data. Over 2,000 end users have been trained.
<b>Interoperability between SEA and LEA data systems</b>	In process	A SIF test system has been deployed. The production environment will be installed in November 2011. A pilot will be completed in December 2011.
<b>EdFacts (Federal) reporting and 4-year graduation rate</b>	Not started	An EdFacts reporting pilot will be completed in Fall 2012.
<b>Expanding EdInsight to include expanded data such as other third party assessment information, finance data and teacher data.</b>	In process	Multiple years of teacher data have been loaded. Third party assessment data such as the NWEA Map assessment have been received from the testing vendor. Data profiling is completed. Reporting requirements will be defined and reports will be built for end user access. Finance data will be loaded for reporting later in the project timeline.
<b>Interoperability with post-secondary data systems</b>	In process	The DE built an automated transmission feed to post-secondary via the transcript system. This will assist with moving data and calculation of the Regent Admission Index.

<b>Link to Workforce</b>	In process	A memorandum of understanding has been signed. DE staff will begin matching studies this fall. In Spring 2012 the DE will complete initial studies linking K-12 workforce data.
<b>Electronic transcript system</b>	Complete	The Iowa Transcript Center was launched in January 2011. A pilot phase was completed and Regent Universities are receiving transcripts from Iowa high school students. Currently, 60% of districts can send and receive electronic transcripts and student records. The goal is 100% of district participation in the 2011-12 school year.

The DE is currently in the third year of this five-year grant project. All grant deliverables will be completed by the project end date in 2014.

The DE has been successful in communication and outreach efforts to build and deploy EdInsight. The DE works with regional Area Education Agencies to define business questions that need to be answered and develop reports to support these questions. AEAs have been critical in training and rollout of EdInsight statewide. In the past two years, over 1,700 LEA and AEA employees have been trained. Approximately 5,000 reports are executed per month.

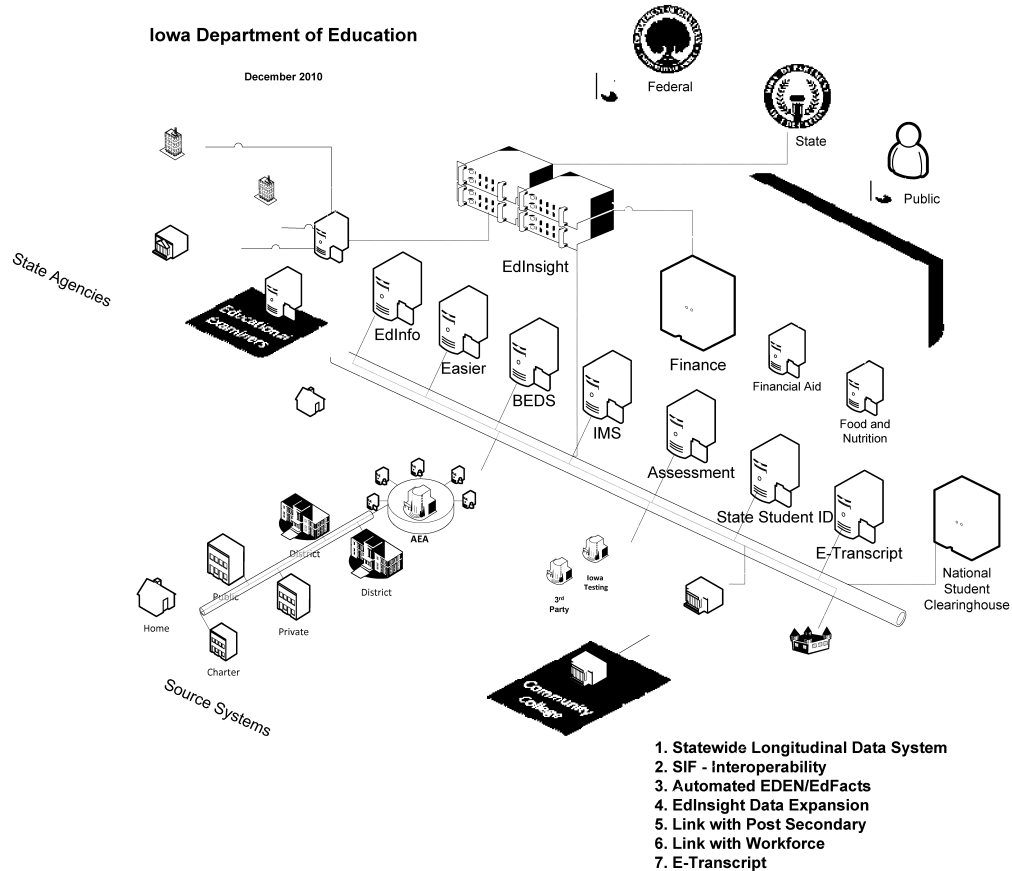
The DE completed multiple statewide needs assessments in order to gather input from various stakeholders in building, planning and deploying data solutions. The first needs assessment was completed in early 2008 and the results were used in the initial design of EdInsight. Input was provided in 20 focus groups with over 180 participants. A follow-up survey was used to provide more specific input from over 650 respondents. In early 2011, the DE completed a needs assessment with internal program consultants to be sure development plans address internal stakeholders. Lastly, in summer and fall 2011, the DE expanded these efforts with statewide focus groups and survey.

The primary findings summarized from outreach efforts are:

- The SLDS should foster meaningful use of data to benefit student learning.
- Stakeholders want to know what works and does not work for student learning and growth.
- With broad and common use of more types of data by many people for many purposes, there are higher risks of misinterpreting data, either by those analyzing it or those receiving it.
- The current and future state of education includes a greater application of and reliance on data.

These results will be used in continued development of Iowa's SLDS (see Appendix A-5 for high level findings). The DE has taken a customer focus by building reports based on input from LEA and AEA throughout planning design and rollout.

The conceptual diagram below was built from the results of Iowa's needs assessment efforts. It provides a high-level overview of Iowa's SLDS. The image shows Iowa's vision to build and extend a statewide LDS. It includes the different agencies such as Iowa Workforce Development and Community College. It also depicts the deliverables that will be completed with Iowa's 2009 SLDS grant. Future expansion includes systematic linkages with Early Childhood, Department of Public Health and Department of Corrections.



The 2009 SLDS grant includes deliverables with both post-secondary and workforce. In order to accomplish this work, the DE formed a joint governance structure which includes K-12 representatives, post-secondary institutions and workforce. This committee has met regularly over the past two years to define specific deliverables and build a strategy for completion. Specifically, the post-secondary committee has been focused on: 1) building a K-12 feedback report (2009 SLDS deliverable), and 2) the new requirements that were outlined in the State Fiscal Stabilization Funds (SFSF II). The SFSF II requirements were unveiled after the 2009 SLDS grants were awarded.

This joint collaboration has been successful in planning for a data exchange between each Regent University and the DE. The details of this collection can be found in Appendix A-6. Three sets of exchange will occur:

- Unique state identifier match between the DE and Iowa post-secondary institution.
- Collection which includes student enrollment, student progress and area concentration.
- Collection which includes degree completion.

This robust information will provide feedback to the Iowa K-12 system about student transition to 4-year post-secondary. Feedback reports will be built to focus on successful articulation and completion of a four-year post-secondary degree. Iowa has already begun the first phase of data exchange by matching the K-12 unique state identifier with student enrollment information at Iowa Regent Universities. The match rates are approximately 85% across the Regent University system. While this rate is fairly high, it is not good enough to systematically build linkages and provide feedback on all students. The DE and Regents will continue to work together to increase these match rates.

The Community College system in Iowa is under the auspices of the DE. The DE currently collects and reports information about the Community College system. Community Colleges report the following information to the DE: Fall Enrollment, Student Demographic (2 times a year beginning and end of the year), Curriculum, Human Resources (e.g. teachers from the community colleges), Awards Given, and Course Catalog. A 2009 SLDS grant deliverable is to expand EdInsight from a PK-12 system to become a PK-14 system. However, the DE currently lacks a collection system for transmission of Community College data. Currently, data are collected via a secured ftp site. All checks and data validation are entirely manual. DE consultants send data sets back and forth to Community College in order to clean and fix data anomalies.

The DE has been working with Iowa Workforce Development for several years on multiple projects. This work has focused primarily on projects examining the Community College system and workforce linkages. An excerpt from this partnership agreement can be found in Appendix A-7. The Economic Returns and Career Transitions publication is a unique study completed in partnership with the community college system. It follows community college students' post-secondary career and links them in their current occupation sector. The below table outlines the important policy questions and the findings of this work.

<p><b>1) What are the wages of recent Iowa community college graduates?</b></p>	<p>The 2002 cohort of students were earning \$2,046 more than students in later cohorts.</p>
<p><b>2) Does completing a community college degree in Iowa provide an economic benefit to the individual student?</b></p>	<p>The rate of return varies greatly by career cluster. On average, the rate of return for completing a degree was six percent over the seven-year window examined.</p>

<b>3) What sectors of the economy employ higher numbers of Iowa community college graduates?</b>	Community colleges were a large part of the Iowa labor source particularly in the manufacturing and health sciences sectors.
<b>4) Do Iowa community colleges graduate remain in the state's labor force</b>	Estimates suggest that approximately 80 percent of community college students remained in the Iowa labor force five years after completing a community college degree.

In 2010, Iowa Workforce Development was awarded a Workforce Data Quality Initiative (WDQI) grant. The WDQI project will assist IWD in building a workforce data warehouse. This project will deliver a common platform and repository of multiple siloed data sets which can be leveraged in the future for systematic linkages. To date, the WDQI staff has been working on deploying their infrastructure and building a data inventory. IWD has also begun a requirements process to identify and define the business questions that can be answered with these data and design reports for end user access. The WDQI grant provides a solid foundation from which the DE and IWD can build and expand. This WDQI grant deliverables are a prerequisite to be able to systematically link and automate exchange of needed data.

***iii) Project Need***

A strategic goal of the DE and Iowa Board of Education is for Iowa students to pursue post-secondary education in order to drive economic success (see Appendix A-8 for a copy of the DE strategic goals). Iowa's P-20W system will assist in measuring success in achieving this strategic goal. By expanding Iowa's SLDS to connect K-12, Community Colleges, the Regent University system and Iowa Workforce Development, longitudinal analyses and outcome studies are possible that heretofore have not been possible. These new types of outcome measures can be built to provide feedback loops throughout the education system. An example of a new outcome measure is an Iowa-focused return on investment study between K-12 and workforce. Iowa will also use its P-20W system in order support its education reform efforts. These reform efforts include a stated goal of having 90% of Iowa students college and/or career ready after high school. Use of the information in an SLDS will provide feedback loops to both the K-12 and post-secondary institutions to examine not just test scores but also potential curriculum areas that may need to be shored up, or identify student deficit areas which need support for students to have post-secondary success.

As stated earlier in this document, by collaborating among these groups in fostering ownership for education/workforce goals as addressed by SLDS, creating SLDS build out that better connects these enterprises, and integrating the day-to-day SLDS value and utility among multiple user groups, we believe we can achieve meaningful strategic results over the long term in advancing education, career and economic progress throughout Iowa.

**iv) What do the current findings conclude?**

Iowa has examined existing measures such as the ACT assessment results in order gauge K-12 success in preparing its students for post-secondary. Overall, positive trends can be seen in Iowa ACT aggregate scores compared to the rest of the nation. In 2011, Iowa scored 22.3 out of a possible 36 while the national average was 21.1. While this trend appears positive, currently, only 61% of Iowa students take the ACT. This provides a measure for some but overlooks a significant portion of students.

Iowa minority students are under-represented in taking the ACT. The gaps between race/ethnic groups are also profound. For the Class of 2011, African-American students had a composite score of 17.1. Hispanic students had a composite score of 19.6, while Iowa's white students score was 22.6.

Further, a troubling trend can be seen when examining the number of students that are college ready. While Iowa students are above the nation as a whole, only 31% were deemed college ready across all four benchmarks. Iowa needs to systematically raise these numbers and a SLDS will provide a data-driven mechanism to evaluate the education system in order to build supports and raise achievement for Iowa students to compete not only nationally but also internationally.

<b>Percent of ACT Test Takers College Ready</b>				
	Iowa		Nation	
	2005	2011	2005	2011
Students Meeting All 4 ACT Benchmark Scores	26%	31%	21%	25%
College English Composition (ACT English Score 18)	77%	77%	68%	66%
College Algebra (ACT Mathematics Score 22)	48%	52%	41%	45%
College Reading (ACT Reading Score 21)	59%	62%	51%	52%
College Biology (ACT Science Score 24)	34%	40%	26%	30%

Specifically, Iowa is working to achieve the following goals:

1. Increase the number of Iowa students that are college and career ready;
2. Increase the number of Iowa students accessing post secondary education;
3. Increase the number of students who persist in attaining degrees and other credentials;
4. Decrease the need for remediation at the post secondary level;
5. Increase entry into employment and further education; and
6. Increase wage gain over time for student completers.

**v) Data System Needs**

The DE and the Iowa Legislature saw the value of building a SLDS and funded the first phases of the project. Additional funding from the 2009 SLDS has helped move the SLDS forward. While these multiple phases have built valuable capacity for linkages across the education spectrum,

the system is still in need of resources for automating and systematically reporting many key measures across the P-20W enterprise.

The American Recovery and Reinvestment Act State Fiscal Stabilization Fund require states to build a SLDS with the data included in the America Competes Act. These 12 essential data elements have proven to be difficult for some states to achieve. Iowa has made significant progress in meeting these needs, but has work to do to fully deliver a data system with all elements. Specifically, Iowa still has to build the following capacity:

- Student-level enrollment, demographic, and program participation information;
- Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete pre-K through post-secondary education programs;
- Information regarding the extent to which student's transition successfully from secondary school to post-secondary education, including whether students enroll in remedial coursework.

This grant opportunity will assist Iowa in creating and delivering robust data and measures that are outlined in the American Competes Act.

Iowa's past success makes it a good investment. Iowa has pre-existing partnerships and has proven it can deliver projects by working with workforce and post-secondary partners. While these collaborative efforts have been successful, they fall short in systematically evaluating the impact of Iowa's PK-12 education system. The DE and its partners seek funding from the Institute of Education Sciences to extend these efforts. The deliverables outlined in this grant would assist Iowa in systematically assessing and supporting the goal of 90% of students attaining college and career readiness. This vision would not rely on a single assessment score given to a student in high school but would expand into post-secondary and workforce and provide true outcome measures. Further, the DE's proven approach of integrating stakeholders, defining critical questions, analyzing data, building reports and training end users in data literacy give this grant a high return-on-investment potential.

The DE along with the Community Colleges, Iowa Board of Regents, Regent Universities, and Iowa Workforce Development request funding to continue to automate these linkages, build reports as well as provide training and data literacy in the use of these data. Making P-20W data actionable and highly value-added is the next phase with Iowa's goal of systematically supporting outcome measures to help individual students and systems perform better.

## **b) Project Deliverables**

Iowa proposes to use this grant opportunity to examine student pathways for success. Students from Iowa's PK-12 system often follow disparate paths into the workforce. Iowa will examine each pathway in order to determine what works and identify where supports are

needed. The tables below outline each career path that will be examined, the policy questions to be addressed, the SLDS goal and the achievable deliverables for this project.

The move to an inter-agency, longitudinal P-20W system means no single agency can dictate the policy questions, metrics and reports. Instead, a dynamic, collaborative system for making those decisions becomes the goal. Iowa does not want a handful of reports for today. Iowa's goal is to build a system that can: 1) evaluate and respond to (which may include rejections) inter-agency report/evaluation/research requests; 2) evaluate requests from anyone; 3) build a system that is sustainable into the unforeseeable future.

<b>Career Path -&gt; K-12 Students -&gt; Grads -&gt; Community College -&gt; 4 Year Post-Secondary</b>	
<b>Decision/Question</b>	<ol style="list-style-type: none"> <li>1) What works for college readiness?</li> <li>2) What works for employment readiness?</li> <li>3) What weaknesses need to be strengthened and how?</li> <li>4) What training do providers need?</li> <li>5) How effective have specific programs/interventions been and what is their return on investment, including those for special populations?</li> </ol>
<b>SLDS Goal</b>	Establish feedback loops to identify successful districts based on PK-12, Post-Secondary and Employment Measures.
<b>Deliverables #1</b>	
<b>1a) Stakeholders will participate in Iowa Outcome Collaborative for effectiveness research across the education-employment spectrum.</b>	
<ul style="list-style-type: none"> <li>• The governance of Iowa's P-20 data system is paramount. Existing governance structure will be extended to include these grant deliverables.</li> <li>• Each agency will provide a governance representative and the group will meet regularly.</li> <li>• Work toward an agreed upon research agenda.</li> <li>• Develop protocols for handling disparate research agendas.</li> </ul>	
<b>1b) Program evaluation services to evaluate the effectiveness of specific programs/interventions within the K-12 system.</b>	
<ul style="list-style-type: none"> <li>• A DE program evaluation consultant will be hired to work with school districts and AEAs. This consultant will complete alignment research from the data in Iowa's SLDS.</li> <li>• The efforts will be used to create reports and identify and deliver important professional development content on what works.</li> </ul>	
<b>1c) Simplified, comprehensive reporting system to feedback quality and performance information.</b>	
<ul style="list-style-type: none"> <li>• The DE has deployed EdInsight which can be leveraged to provide these feedback loops. This system can be extended to assist districts in identifying what works.</li> </ul>	



**1d) Build an enterprise P-20W data dictionary solution.**

- Information systems are only as good as the data they contain. Without an agreed upon set of data elements with clearly defined terms, the validity and reliability of the data contained in a system are suspect. The data dictionary and its relationship with the metadata are the foundation of an SLDS.
- As Iowa expands the data that are available across multiple agencies it is important to have precise definitions, defined source system, code sets and changes over time.
- An enterprise P-20W data dictionary will be built in order to provide end users ability to examine data from source system to deployment linkages. These meta-data will be used by each agency, program evaluation staff and researcher.

**1e) Customizable application to collect information about district specific interventions/reforms.**

- Current DE data systems only collect specific program participation data such as FRL, IEP, etc.
- To identify what works, this data system must be expanded to collect other types of teaching and learning programs that are supported and delivered from Iowa's Area Education Agencies or programs driven from LEA improvement efforts.
- Data system will allow for collection of detailed program improvement efforts, grade levels targeted, teachers involved, duration of efforts, students targeted.
- Create LEA defined reports on what works in PK-12 with the goal of tracking outcomes using Iowa's SLDS.

**1f) Streamlined collection system for Career and Technical Education (CTE) for PK-12 districts and Community Colleges.**

- Quality Career and Technical Education data in many ways is a well defined link between Iowa's secondary schools, community colleges and workforce systems.
- Many of these courses and programs are delivered in the Iowa Community College system.
- Iowa's CTE data collection system is eight years old and needs to be replaced.

**1g) Research data mart, extract utility.**

- Build the capability to extract needed data for researchers via the SLDS.
- Build governance structure to collect, review and approve research studies.

### 1h) Post High School and Community College Graduation Analysis and Feedback Reports

- A deliverable of the 2009 SLDS grant will build a freshman year feedback report for high schools. This report needs to be field tested and modified to be successful.
- The specific content of these reports will be determined through the work of the collaborative team.
- Additional interest has been expressed to build a community college feedback report with workforce data.
- Consider longitudinal cohort tracking instead of a static “freshman” report.
- K-12 feedback reports which show 1) median wages, 2) industry of employment and 3) rate of return.

### 1i) Provide Training and Disseminate Findings to Education Stakeholders

- The project trainer will work with each collaborative consultant to provide targeted training sessions on reports and findings.

**Career Path #1:** CTE -> Community College

**Career Path #2:** CTE -> Community College -> 4 Year Post-Secondary

**Decision/Question**

- 1) What factors predict success in Iowa Post-Secondary?
- 2) What weaknesses need to be strengthened?
- 3) How does a community college degree correlate with employment outcomes?
- 4) What is the completion rate for Iowa K-12 and Community College students?
- 5) How effective have specific programs/interventions been and what is their ROI, including those for special populations?

**SLDS Goal**

Deliver reporting systems to link post-secondary outcomes and assist consumers in their planning and decisions for post-secondary education.

### Deliverables #2

### 2a) Participation in Iowa Outcome Collaborative for effectiveness research across the education-employment spectrum.

- The governance of Iowa’s P-20 data system is paramount. Existing governance structure will be extended to include these grant deliverables.
- Each agency will provide a governance representative and the group will meet regularly.
- Work toward an agreed upon research agenda.
- Develop protocols for handling disparate research agendas.

**2b) Program evaluation services to evaluate the effectiveness of specific programs/interventions within the K-12 system.**

- Hire a Coordinator for Continuous Academic Program Improvement position for the Board of Regents and an Educational Program Consultant for Community Colleges within the DE.
- Work with institutional researchers and community colleges for analyzing and evaluating programs within the K-12 system.
- Work with K-12 and provide training for data usage and analyzing feedback metrics.

**2c) Simplified, comprehensive reporting system to provide quality and performance information for students and parents including a Regents Admissions Index planning tool.**

- Build a planning tool based on the Regent Admissions Index.
- This will include reports for school counselors, students and parents. The goal of this deliverable is to leverage data in order to inform schools and students about articulation and provide supports for success.
- Compile and manage tables of advanced courses across district for linkage to automated computing of the RAI.
- Build and automate Community College employment and wage reports.

**2d) Explore the option to use alternative data sources.**

- DE's current contract with the National Student Clearinghouse includes a small subset to complete the indicators required by the ARRA legislation. While helpful, it falls short in providing important information about national enrollment in 2-year colleges or 4-year public or private Universities
- The National Student Clearinghouse has the capacity to provide a robust set of feedback data to include not only Iowa Post-Secondary but all Institutions of Higher Education Nationally.
- GED data and other certifications such as the ACT National Career Readiness Certificate.

**2e) Development of a post-secondary collection system, with data quality assurances.**

- Iowa lacks a data collection mechanism for post-secondary.
- Community college and Regents collection system will be built.
- Data edits, checks, validation will be built in to ensure data quality.
- Data standards will be examined in the building of this new collection system.
- Interoperability will be explored to see if automation is possible.

<p><b>2f) Work with Iowa's Private Post-Secondary in building a plan for inclusion of their data in Iowa's SLDS.</b></p>
<p><b>2g) Provide Training and Disseminate Findings to Education Stakeholders</b></p> <ul style="list-style-type: none"> <li>The project trainer will work with each collaborative consultant to provide targeted training sessions on reports and findings.</li> </ul>

**Career Path #1:** Community College -> Work

**Career Path #2:** PK-12 -> CTE -> Community College -> 4 Year Post-Secondary -> Work

**Career Path #3:** Community College -> 4 Year Post-Secondary -> Work

**Career Path #4:** PK-12 -> Work

- Decision/Question**
- 1) What factors predict success in employment from PK-12 and Post-secondary?
  - 2) How does the demand for jobs match the supply of trained workers?
  - 3) What are the various career paths Iowa students take (including ROI) into the workforce?
  - 4) How many Iowa K-12 students are retained in Iowa's workforce?
  - 5) How effective have specific programs/interventions been and what is their ROI, including those for special populations?

**SLDS Goal** Reporting systems to evaluate ROI for publicly funded workforce training programs and to assist consumers in aligning their career goals with their training options.

### **Deliverables #3**

**3a) Participation in Iowa Outcome Collaborative for effectiveness research across the education-employment spectrum.**

- The governance of Iowa's P-20W data system is paramount. Existing governance structure will be extended to include these grant deliverables.
- Each agency will provide a governance representative and the group will meet regularly.
- Work toward an agreed upon research agenda and/or decision systems to handle disparate and possibly competing agendas.

**3b) Program evaluation services to research the effectiveness of specific employment outcomes such as training programs/interventions.**

- Community Colleges provide needed retraining programs for unemployed workers as well as adult education programs for additional training that may be needed.

- Link these data with Community College and provide reports on effective training programs.

**3c) Build feedback and diagnostics reports for P-20W stakeholders using employment and wage data.**

- Examine student preparedness measures and link to identified business needs.
- Feedback reports given to high schools from community colleges and other post-secondary.
- Build Community College career attainment reports. Dashboard reports will provide community college outcomes information on their graduates.

**3c) Build an automated, interoperable and repeatable method for linking PK-12, community colleges and workforce data.**

- Existing efforts to link Community College data to workforce is an entirely manual process.
- Create an efficient, interoperable and automated matching mechanism.
- National Student Clearinghouse data will be used as a source for 4 year post-secondary.

**3e) Explore and Define a Career Readiness measure for Iowa.**

- Assessments such as the National Career Readiness Certificate (NCRC) exist which will be examined as a potential measure.
- Explore assessments options and build system to evaluate the outcomes of these efforts.

**3f) Provide Training and Disseminate Findings to Education Stakeholders**

- The project trainer will work with each collaborative consultant to provide targeted training sessions on reports and findings.

**c) Project Timeline**

The table below outlines each proposed outcome and provides an in-depth set of tasks to be accomplished through this grant opportunity. The dates in the project plan assume an announcement of the award will be in April 2012. The DE proposes beginning work as soon as the announcement of the award. The rationale is to start as early as possible to ensure this work can be completed within the required three-year award.

<b>Deliverable #1: PK-12 Outcomes - Tasks and Subtasks</b>		<b>Assigned To</b>	<b>Begin</b>	<b>End</b>	
<b>1a</b>	PK-12 stakeholders will participate in Iowa Outcome Collaborative Steering Committee.		4/2/2012	7/1/2015	
	1a.1	Convene existing stakeholder groups into one new collaborative to govern the P-20W data system based on data ownership	Steering Committee	7/1/2012	7/31/2012
	1a.2	K-12 DE fills one FTE for their unit to serve on the Project Team		4/2/2012	7/1/2012
	1a.3	Identify formal policies and procedures for advancing outcomes for the State of Iowa		2/1/2015	7/1/2015
	1a.4	Assume management, long-term planning and oversight of the K-12 components of the report management system		2/1/2015	4/2/2015
<b>1b</b>	Program evaluation services to evaluate the effectiveness of specific programs/interventions within the K-12 system.		7/1/2012	8/25/2013	
	1b.1	Explore and become familiar with existing K-12 data systems, including DE, AEA, and local systems	DE K-12 Consult	7/1/2012	7/31/2012
	1b.2	Work with stakeholders to identify evaluation/research agenda		7/31/2012	2/26/2013
	1b.3	Evaluate identified intervention services		2/26/2013	8/25/2013
<b>1c</b>	Simplified, comprehensive reporting system to feedback P-20W quality and performance information.		7/1/2012	2/1/2015	
	1c.1	PK-12 Project Team members immerse themselves in their agencies to become knowledgeable about their organizations and data	DE K-12 Consult	7/1/2012	7/31/2012
	1c.2	Inventory and prioritize reporting and evaluation needs based on PK-12 mandates, usefulness to end users, size of user groups, and feasibility of automation	DE K-12 Consult	7/31/2012	10/6/2012

<b>Deliverable #1: PK-12 Outcomes - Tasks and Subtasks</b>			<b>Assigned To</b>	<b>Begin</b>	<b>End</b>
	1c.3	Report design and deployment	DE K-12 Consult, ETL Resource, Programmer & Trainer	11/28/2012	12/23/2013
	1c.4	Establish a review process and timeline to evaluate usage levels. Include feedback links on reports for continuous improvement	DE K-12 Consult	12/23/2013	1/7/2014
	1c.5	Repeat process for another cycle of reports	DE K-12 Consult, ETL Resource, Programmer & Trainer	1/7/2014	12/3/2014
	1c.6	Develop and present recommendations for managing ongoing report requests from internal and external sources, including review policies, security protections, and potential cost recovery to the Steering Committee	DE K-12 Consult	12/3/2014	2/1/2015
<b>1d</b>	Build or purchase an enterprise P-20W data dictionary solution.			7/1/2012	9/25/2013
	1d.1	Analyze and compile business requirements for data dictionary tool, including importing existing data and versioning	Project Manager	7/1/2012	7/31/2012
	1d.2	Design and develop or purchase data dictionary application	Programmer	7/31/2012	1/27/2013
	1d.3	Test application, including sample import from EASIER	Programmer	1/27/2013	3/28/2013
	1d.4	Import/populate data dictionaries, including EASIER and other data sets as needed	Programmer	3/28/2013	7/26/2013
	1d.5	Publish complete dictionaries to a readily accessible web location	Programmer	7/26/2013	8/26/2013
	1d.6	Transition maintenance/support to DE staff	Programmer	8/26/2013	9/25/2013
<b>1e</b>	Customizable application to collect information about district specific interventions/reforms.			8/25/2013	2/3/2015

<b>Deliverable #1: PK-12 Outcomes - Tasks and Subtasks</b>			<b>Assigned To</b>	<b>Begin</b>	<b>End</b>
	1e.1	Explore distribution options for sharing pilot evaluation findings either incorporated into the evaluation tool or separate from it	DE K-12 Consult	8/25/2013	9/24/2013
	1e.2	Develop evaluation tool from pilot experiences	DE K-12 Consult, ETL Resource & Programmer	9/24/2013	3/24/2014
	1e.3	Test and refine evaluation tool	DE K-12 Consult, ETL Resource & Programmer & Trainer	3/24/2014	2/3/2015
<b>1f</b>	Streamlined collection system for Career and Technical Education (CTE) for PK-12 districts and Community Colleges.			7/1/2012	7/28/2014
	1f.1	Understand existing systems, data elements and reporting procedures	DE K-12 Consult, DE CC Consult,	7/1/2012	7/31/2012
	1f.2	Design a CTE collection system for student-level data	DE K-12 Consult, DE CC Consult, ETL Resource & Programmer	7/31/2012	2/11/2013
	1f.3	Build CTE collection system	ETL Resource & Programmer	2/11/2013	5/12/2013
	1f.4	Test CTE collection system	DE K-12 Consult, DE CC Consult, ETL Resource & Programmer	5/12/2013	9/9/2013
	1f.5	Deploy CTE collection system	DE K-12 Consult, DE CC Consult, ETL Resource, Programmer & Trainer	9/9/2013	6/28/2014
	1f.6	Transition ongoing management and oversight to DE staff	DE K-12 Consult & DE CC Consult	6/28/2014	7/28/2014
<b>1g</b>	Research data mart, extract utility			4/1/2014	6/10/2015
	1g.1	Research streamlining options	Project Team & ETL Resource	4/1/2014	9/28/2014
	1g.2	Present recommendations to Steering Committee	Project Team	9/28/2014	10/13/2014
	1g.3	Design authorized solution, including security	& ETL Resource & Programmer	10/13/2014	6/10/2015



<b>Deliverable #1: PK-12 Outcomes - Tasks and Subtasks</b>		<b>Assigned To</b>	<b>Begin</b>	<b>End</b>	
1h	Re-engineered Freshman Year Report from Community Colleges and Regents.		9/6/2012	5/27/2013	
	1h.1	Collaboratively adopt a model (e.g., Washington, Colorado)	Project Team	9/6/2012	10/6/2012
	1h.2	Establish a data management plan for distributing the reports, including where data will be housed and how/when it will be updated	Project Team, ETL Resource & Programmer	9/29/2012	11/28/2012
	1h.3	Build Freshman Year Report	ETL Resource & Programmer	11/28/2012	3/28/2013
	1h.4	Deploy, train, and market to end users	Project Team & Trainer	3/28/2013	5/27/2015
1i	Provide Training and Disseminate Findings to Education Stakeholders		1/1/2013	6/30/2015	
	1i.1	Work with collaborative team to identify critical areas for training	Trainer	1/1/2013	6/30/2015
	1i.2	Deploy, train, and market to end users	Project Team & Trainer	3/28/2013	6/30/2015

<b>Deliverable #2: Post-Secondary Outcomes - Task and Subtasks</b>		<b>Assigned To</b>	<b>Begin</b>	<b>End</b>	
2a	Post-Secondary stakeholders will participate in Iowa Outcome Collaborative Steering Committee.		4/2/2012	2/1/2015	
	2a.1	Convene stakeholder groups into one new collaborative to govern the P-20W data system based on data ownership	Steering Committee	7/1/2012	7/31/2012
	2a.2	Board of Regents and Community Colleges (DE) each fill one FTE for their unit to serve on the Project Team	Steering Committee & Project Team	4/2/2012	7/1/2012
	2a.3	Identify formal policies and procedures for advancing outcomes for the State of Iowa	Steering Committee	2/1/2015	7/1/2015
	2a.4	Assume management, long-term planning and oversight of the post-secondary components of report management system	Steering Committee	2/1/2015	2/1/2015
2b	Program evaluation services to evaluate the effectiveness of specific programs/interventions within the post-secondary		7/1/2012	6/30/2015	

Deliverable #2: Post-Secondary Outcomes - Task and Subtasks		Assigned To	Begin	End
	systems.			
2b.1	Explore and become familiar with existing post-secondary data systems	DE CC Consult & Academic Improve Researcher	7/1/2012	7/31/2012
2b.2	Work with stakeholders to identify evaluation/research agenda		7/31/2012	2/26/2013
2b.3	Perform/assist with agreed-upon evaluation/research services		2/26/2013	5/2/2015
2b.4	Transition ongoing services to post-secondary staff		5/2/2015	6/30/2015
2c	Simplified, comprehensive reporting system to feedback P-20W quality and performance information.		7/1/2012	2/1/2015
2c.1	PK-12 Project Team members immerse themselves in their agencies to become knowledgeable about their organizations and data	DE CC Consult & Academic Improve Researcher	7/1/2012	7/31/2012
2c.2	Inventory and prioritize reporting and evaluation needs based on post-secondary mandates, usefulness to end users, size of user groups, and feasibility of automation	DE CC Consult, Academic Improve Researcher	7/31/2012	10/6/2012
2c.3	Report design and deployment	DE CC Consult, Academic Improve Researcher, Programmer, ETL Resource & Trainer	11/28/2012	12/23/2013
2c.4	Establish a review process and timeline to evaluate usage levels. Include feedback links on reports for continuous improvement.	DE CC Consult, Academic Improve Researcher	12/23/2013	1/7/2014
2c.5	Repeat process for another cycle of reports	DE CC Consult, Academic Improve Researcher, Programmer, ETL Resource & Trainer	1/7/2014	12/3/2014

<b>Deliverable #2: Post-Secondary Outcomes - Task and Subtasks</b>			<b>Assigned To</b>	<b>Begin</b>	<b>End</b>
	2c.6	Develop and present recommendations for managing ongoing internal and external requests including review policies and security protections	DE CC Consult & Academic Improve Researcher	12/3/2014	2/1/2015
	2c.7	Develop an RAI Planning Tool	PMD, K-12 Consult, Academic Improve Researcher, Programmer	12/28/2012	12/8/2013
2d	Explore the option to use alternative data sources.			9/29/2012	2/26/2013
	2d.1	Explore alternate data source options to enhance the breadth of possible comparisons, including GED and other certifications (NCRC) as well as private institutions via the National Student Clearinghouse	Project Team	9/29/2012	11/28/2012
2e	Develop a post-secondary data collection system for use by public and private educational institutions.			7/1/2012	9/11/2014
	2e.1	Become familiar with existing systems, data elements and reporting needs	DE CC Consult, Academic Improve Researcher	7/1/2012	7/31/2012
	2e.2	Explore extract capabilities and limitations of Community College, Regents, and nonpublic post-secondary institutions' student information systems	DE CC Consult, Academic Improve Researcher & ETL Resource	7/31/2012	8/7/2012
	2e.3	Design a student-level data collection system	DE CC Consult, Academic Improve Researcher, ETL Resource & Programmer	8/7/2012	2/18/2013
	2e.4	Build collection system	ETL Resource & Programmer	2/18/2013	5/19/2013
	2e.5	Test collection system with a community college, regent institution and private college if available	DE CC Consult, Academic Improve Researcher, ETL Resource & Programmer	5/19/2013	8/17/2013

<b>Deliverable #2: Post-Secondary Outcomes - Task and Subtasks</b>			<b>Assigned To</b>	<b>Begin</b>	<b>End</b>
	2e.6	Deploy post-secondary collection system to Regents Universities	Academic Improve Researcher, ETL Resource & Trainer	8/17/2013	12/23/2013
	2e.7	Deploy post-secondary collection system to Community Colleges	DE CC Consult, ETL Resource, Programmer & Trainer	10/16/2013	8/12/2014
	2e.9	Transition ongoing management and oversight to DE staff	PM & DE CC Consult	8/12/2014	9/11/2014
2f	Work with Private Post-Secondary Institution in building a plan for inclusion of their data in Iowa's SLDS			1/19/2013	9/16/2013
	2f.1	Network and outreach to private post-secondary institutions for inclusion and possible reporting assistance	PM, DE K-12 Consult, DE CC Consult & Academic Improve Researcher	1/19/2013	3/20/2013
	2f.2	Collaboratively explore complimentary needs		3/20/2013	5/19/2013
	2f.3	Offer access to PS collection system		5/19/2013	9/16/2013
2g	Provide Training and Disseminate Findings to Education Stakeholders			1/1/2013	6/30/2015
	2g.1	Work with collaborative team to identify critical areas for training	Trainer	1/1/2013	6/30/2015
	2g.2	Deploy, train, and market to end users	Project Team & Trainer	3/28/2013	6/30/2015

<b>Deliverable #3: Workforce Outcomes - Tasks and Subtasks</b>			<b>Assigned To</b>	<b>Begin</b>	<b>End</b>
3a	Workforce stakeholders will participate in Iowa Outcome Collaborative Steering Committee			4/2/2012	7/1/2015
	3a.1	Convene stakeholder groups into one new collaborative to govern the P-20W data system based on data ownership	Steering Committee	7/1/2012	7/31/2012
	3a.2	Workforce fills one FTE for their unit to serve on the Project Team	Steering Committee	4/2/2012	7/1/2012
	3a.3	Identify formal policies and procedures for advancing outcomes for the State of Iowa	Steering Committee	2/1/2015	7/1/2015

<b>Deliverable #3: Workforce Outcomes - Tasks and Subtasks</b>		<b>Assigned To</b>	<b>Begin</b>	<b>End</b>	
	3a.4	Assume management, long-term planning and oversight of the report management system	Steering Committee	2/1/2015	4/2/2015
3b	Program evaluation services to evaluate the effectiveness of specific programs/interventions within the workforce-training system.			7/1/2012	6/30/2015
	3b.1	Explore and become familiar with existing data systems and sources, including TEOS, wage and salary data	IWD Economist	7/1/2012	7/31/2012
	3b.2	Work with stakeholders to identify evaluation/research agenda	IWD Economist	7/31/2012	2/26/2013
	3b.3	Perform/assist with agreed-upon evaluation/research services	IWD Economist	2/26/2013	5/2/2015
	3b.4	Transition ongoing services to workforce staff	IWD Economist	5/2/2015	6/30/2015
3c	Simplified, comprehensive reporting system to feedback P-20W quality and performance information.			7/1/2012	2/1/2015
	3c.1	Workforce Project Team members immerse themselves in their agencies to become knowledgeable about their organizations and data.	IWD Economist	7/1/2012	7/31/2012
	3c.2	Inventory & prioritize reporting and evaluation needs based on workforce mandates, usefulness to end users, size of user groups, and feasibility of automation	IWD Economist	7/31/2012	10/6/2012
	3c.3	Plan and manage data	IWD Economist, Programmer, ETL Resource & Trainer	7/31/2012	2/26/2013
	3c.4	Report design and deployment		11/28/2012	12/23/2013
	3c.5	Establish a review process and timeline to evaluate usage levels. Include feedback links on reports for continuous improvement.	IWD Economist	12/23/2013	1/7/2014

<b>Deliverable #3: Workforce Outcomes - Tasks and Subtasks</b>			<b>Assigned To</b>	<b>Begin</b>	<b>End</b>
	3c.6	Repeat process for another cycle of reports	IWD Economist, Programmer, ETL Resource & Trainer	1/7/2014	10/4/2014
	3c.7	Develop and present recommendations for managing ongoing report requests from internal and external sources, including review policies, security protections, and potential cost recovery to the Steering Committee.	IWD Economist	12/3/2014	2/1/2015
3d	Build an automated, interoperable and repeatable method for linking K-12, community colleges and workforce data.			7/31/2012	5/22/2014
	3d.1	Review existing methodology for linking Community College and workforce data, including existing research questions.	DE CC Consult, IWD Economist	7/31/2012	8/30/2012
	3d.2	Explore expansion options for public and non-public 4-year post-secondary inclusion	PM, DE CC Consult & Academic Improve Researcher, IWD Economist	8/30/2012	11/28/2012
	3d.3	Determine final output user needs and where they will be accessed	DE CC Consult, Academic Improve Researcher & IWD Economist	8/30/2012	10/29/2012
	3d.4	Create or obtain an efficient and effective automated matching process/system	PM & Project Team	10/29/2012	4/27/2013
	3d.5	Determine data sharing and storage parameters	DE CC Consult, IWD Economist, ETL, Programmer	4/27/2013	10/24/2013
	3d.6	Design reports	ETL Resource & Programmer	10/24/2013	2/21/2014
	3d.7	Automate reporting processes and outputs where possible	DE CC Consult, IWD Economist, ETL Resource & Programmer	2/21/2014	5/22/2014
	3d.8	Establish data maintenance/update schedules	ETL Resource	2/21/2014	3/23/2014

Deliverable #3: Workforce Outcomes - Tasks and Subtasks			Assigned To	Begin	End
	3d.9	Design marketing and training program	Trainer	2/21/2014	4/22/2014
	3d.10	Deploy final reports	DE CC Consult, IWD Economist & Trainer	4/22/2014	5/22/2014
	3d.11	Transfer responsibilities to IWD/DE staff	DE CC Consult & WD Economist	4/22/2014	5/22/2014
3e	Explore and Define a Career Readiness measure for Iowa.			7/1/2014	3/28/2015
	3e.1	Collaborate with ACT and workforce to explore effectiveness of the National Career Readiness Certificate (NCRC) and potential use as a statewide measure	Academic Improve Researcher & IWD Economist	7/1/2014	12/28/2014
	3e.2	Explore alternative measurements of career readiness, including those used by other states	Academic Improve Researcher & IWD Economist	12/28/2014	1/27/2015
	3e.3	Compile findings and present to the Steering Committee	Academic Improve Researcher & IWD Economist	1/27/2015	3/28/2015
3f	Provide Training and Disseminate Findings to Education Stakeholders			1/1/2013	6/30/2015
	3f.1	Work with collaborative team to identify critical areas for training	Trainer	1/1/2013	6/30/2015
	3f.2	Deploy, train, and market to end users	Project Team & Trainer	3/28/2013	6/30/2015

#### **d) Project Management and Governance**

The importance of this initiative is illustrated by the many letters of support which can be found in Appendix B. The letters come from multiple levels of government; from Senator Harkin who is the Chairman of the Health, Education, Labor, and Pensions Senate Committee in Washington DC to Iowa state government officials. Each agency head (Education, Regents and Workforce) responsible for a set of deliverables has provided a letter supporting the goals and deliverables of this project.

##### ***i) Needs and Uses***

The goal of a longitudinal data system is to provide a generic infrastructure that can be linked across institutional silos so that a potentially unlimited number of questions could be answered

with accurate data. Policy questions range from the impact of preschool services and post-secondary education to how GEDs and dropping out of high school may affect employment outcomes. A P-20W SLDS can also enable research into specific applications such as advanced math curricula and their role in success of STEM programs. Issues and analysis that may be unforeseen today can be queried by efficient data mining if the requisite data was collected in any one of our systems.

A P-20W SLDS also allows for the addition of other agencies and outcomes such as corrections, health care, and social services. This infrastructure is not limited to technical data linkages and access; it also includes the decision making and security controls to create a robust resource for educators, administrators, policy makers, employers, and consumers. This multiagency involvement in up-front collaboration and planning, build out based on tailored needs, training and system usage is the “sweet spot” of Iowa’s grant initiative. We intend to collaborate, create and integrate as this grant put into action.

Iowa’s SLDS request also includes strengthening some of our current weaknesses in this larger system. For example, Iowa has an excellent data quality/cleansing system for K-12 data, but that expertise needs to be extended to both community colleges and our Regents institutions in a post-secondary collection system. Similarly, Iowa’s existing CTE application and community college to workforce reports need to be revised and streamlined. Iowa has a secure, role-based reporting system for student-level, K-12 data through EdInsight, but needs to build a simplified, dynamic public reporting system. Each of the deliverables that have been selected for this grant represents a key piece Iowa to complete a powerful P-20W SLDS.

## ***ii) Project Governance***

The promise of data-based decisions requires linked individual-level data over time and across education and employment sectors. The simultaneous mandate for protecting privacy, however, requires that a longitudinal data system include only what is absolutely necessary, with every available safeguard. Authorization to directly access the data requires diligent management of not only specific data sources, but specific data elements within each dataset. Each stakeholder agency must agree to the allowable uses of the data.

This delicate balance requires a sophisticated governance system that provides leadership to identify not only what works within each organization, but what works across organizations. The DE devised a multi-tier governance structure for creating the SLDS, EdInsight, and the eTranscript projects. This multi-tier approach allows the discussion of specific issues with the appropriate audiences. That helps keep the communication process among the stakeholders iterative and ongoing because it is relevant. Currently, there are five committees: steering, advisory, data governance, project management and post-secondary which each serve a specific purpose. These committees support the entire SLDS in different ways: Steering directs; advisory shapes; data governance defines; project management engineers; and post-secondary expands the scope into higher education. For a better understanding of their roles, each will be delineated. Appendix A-9 provides a sample list of committee members, including agency affiliation for the Advisory and Post-Secondary Committees.



**SLDS Steering Committee:** The objective of the Steering Committee is to keep the project on course to successful completion. Projects such as this that span multiple offices or programs within DE create a natural complexity requiring thorough collaboration among senior leadership. Committee members are decision makers who will consider and resolve internal and external policy issues that surface as the project develops, and which go beyond the authority of the Project Management Team and the purview of DE or any one entity. Currently, this committee includes members from partner agencies representing current or potential data sources: special education, ITP, AEAs, LEAs, Iowa Board of Regents, each Regent institution, community colleges, Board of Educational Examiners, Iowa Association of School Boards, Iowa State Education Association, Iowa Workforce Development, and ICSAC. As data from additional partner agencies such as the Iowa Department of Human Services are integrated into the SLDS, those agencies will also serve on the Steering Committee. Acting upon recommendations from the Data Governance Committee, the Steering Committee coordinates the implementation of separate but related projects that may share issues and resources, such as electronic transcripts and student record exchange. Each agency and entity involved is still, of course, the ultimate authority on its internal data definitions and procedures.

**EdInsight Advisory Committee:** The Advisory Committee provides a practitioner's perspective for the design, architecture, and implementation of EdInsight to ensure the project meets the needs of its constituents. The group of subject matter experts, who were intentionally selected to represent various local and state stakeholder groups, provides granular input regarding the education systems data needs and feedback on EdInsight products. Members of the committee shape the project by collectively and individually lending their expertise toward shaping the content of EdInsight education data reports and its functionality. They interact directly with the Project Management Team and provide feedback from the field regarding project developments prior to their release. In addition to being a chief source of information in the requirements process, they serve as a test group for user acceptance testing and are key to delineating professional development for clients and local information technology support staff. They are lead by a member of the Project Management Team and generally work independently of the Steering Committee. The Advisory Committee serves solely in an advisory capacity, and is not expected to be a decision-making body.

**DE Data Governance Committee:** The Data Governance Committee serves as a separate and specialized committee that defines the DE's approach to master data management. The Data Governance Committee creates its mission statement, goals, and objectives, which ultimately define the data culture of DE. The chief role of the Data Governance Committee is to identify data issues and propose recommended solutions. Since it has no policy making authority, the Data Governance Committee provides recommendations needed to adopt policies that ensure the quality, availability, security, and usability of Iowa education data. The group is the subject matter authority regarding data definitions. The Data Governance Committee identifies the business rules required to make certain data are current, consistent, and accurate. It maintains a log of critical data issues, including their status and resolution and shares the updated list with the department appropriately.

**Post-Secondary Committee:** The DE also created a post-secondary committee in order to meet the ARRA State Fiscal Stabilization Phase II requirements and the America Competes Act data elements. This committee has also been working on the post-secondary deliverables outlined in the 2009 SLDS grant. This group has been meeting for approximately two years. The goal of the committee has been to address these different set of deliverables. The goals of this grant proposal dramatically expand the scope of the work and this committee. This existing structure and group will leveraged and expanded to take on these new set of deliverables.

This existing governance structure will have to be expanded in order to accommodate and accomplish the tasks of this grant. For example, the data governance committee scope has been limited to data within EdInsight and data under the auspices of the DE. With the addition of data from other partner agencies the group will need to expand. Further, with the coming integration of other non-department data, into the SLDS analytical system, there will naturally need to be more explicitly defined data elements for reporting.

### ***iii) Ownership, Collaboration and Decision Making to Ensure Institutional Support***

This next phase of Iowa's SLDS will be a joint endeavor among the following owners, each of whom govern the use and release of their data. It is hoped, however, that other state agencies, such as the Department of Corrections, the Department of Human Services, the Department of Public Health, the Department of Economic Development, will share the need and desire to join the program evaluation consortium.

- Representatives of the Iowa Board of Regents, which governs Iowa's post-secondary Regents Institutions
- Representatives from each Iowa post-secondary institution
- Representatives of the Iowa Department of Education which oversees both Post-secondary Community Colleges and K-12 services
- Representatives of Iowa Workforce Development

Each of the three stakeholders has complete control over program evaluation efforts within their organization. For data needs that cross organizations, all parties must agree to share their data in order to proceed. Logistics will be worked out for each request as needed. For example, one agency may submit the linkage keys for the population they need information on to the other agency, who will run the match and provide the agreed upon data elements back to the requesting agency. Alternatively, organizations may determine that a report needs to be readily available to end users and they may identify a logical repository to keep the specific data elements in a common database.

When multi-agency data is involved in a report, all data owners must have controls to review and approve the release of the information. Owners may choose to include interpretation caveats with the release of the data to help prevent misuse of the information. Generic warnings may also be agreed upon, such as the inability to prove causation from correlated data, depending on the audience that will be able to access the final outputs. If owners do not

approve release of their data, all participants will actively work toward a compromise solution. For example, an aggregate version of the information might be released for agency use.

#### ***iv) Sustainability – Funding and Legislative Support***

The goals and deliverables of this grant proposal support Iowa's Education Reform efforts. The metrics, reports and use of data need to persist well beyond the length of this grant window in order to achieve the goal of 90% of student's college and career ready. Iowa is not just proposing the building of a data system but a collaborative partnership that focuses building reports and metrics and with a heavy emphasis on training and professional development in the use of this information to inform practice.

The Iowa legislature has shown state support by funding several component pieces of the SLDS to date. In 2007, the Department of Education received \$516,000 of state funding to begin to build the Iowa Transcript Center. Also in 2007, the Iowa Department of Education invested \$1.9 million to build an SLDS. Beginning In 2008, Iowa has received an annual appropriation from the legislature of \$600,000 to support the SLDS. The Department of Education has asked that this be increased to \$1 million a year. The Iowa Department of Education has also carved out several state positions to support these efforts ongoing. Currently, there are 4 FTE dedicated to the Iowa SLDS. These positions will ensure the deliverables outline in the grant will be maintained and used after the end of the grant.

The Iowa Legislature has also been supportive by passing multiple state laws in line with Iowa's SLDS goals. Appendix A-10 provides details of the relevant code sections. In 2008, legislation (IC 261.2(9)) was passed to require all eligible institutions of higher education to place the unique student id in their student information system. The intent is to build capacity of the relevant data systems for linkages between K-12 and Iowa Higher Education systems. In spring 2010, the Iowa Legislature passed Senate File 2088, a government reorganization bill. In this legislation are two important code changes which support the building of Iowa's SLDS. The first requires the Iowa's Area Education Agencies and board to collaborate with the Iowa Department of Education to provide a statewide infrastructure for educational data to create cost efficiencies, provide storage and disaster mitigation, and improve interconnectivity between schools and school districts. In addition, the AEA boards must work with the department to provide system wide coordination in the implementation of the statewide longitudinal data system consistent with the federal American Recovery and Reinvestment Act of 2009.

Lastly, SF 2088 required the DE and Early Childhood Iowa (ECI) to assign the Iowa Unique Student Identifier to children in ECI programs. ECI has an array of early childhood programs. While the language in SF 2088 is specific to identifiers, the intent is to provide linkages into early childhood programs that cross state government. The goal is to examine long term outcomes as they transition into elementary education. As a result of this new law the DE and ECI formed a joint working team to implement the requirements in Iowa Code. The team proposed a multi-phased approach to assign these identifiers. The first step was to share a base set of information in order to create and assign a unique identifier. Later project stages

will include a state wide rollout as well as further data agreed to as important to answer specific policy questions.

The DE and the legislature have shown both financial support and changes in law which support the building and use of and SLDS. The DE also felt the goals of an SLDS were important enough to fund on its own. The work began in 2008 before Iowa received an SLDS grant award. These investments provide proof of Iowa's commitment in building and sustaining an SLDS for the long term.

#### **v) Project Management**

This project will be directed and managed by the Iowa Department of Education (DE) Bureau of Information and Analysis. This Bureau reports to the Chief of Staff who also oversees the Division of Communication and Information. The Program Director will be the DE, Chief of the Bureau of Information and Analysis. The Program Director will administer all of the deliverables in this grant as well as those in previous 2009 SLDS grant. This facilitates integration of multiple P-20W projects to ensure success. Project Management activities will be overseen by a DE employee who reports to the Project Director. Careful planning for each deliverable and working in concert with each agency will ensure these initiatives will be delivered and sustained.

Iowa acknowledges the challenges of managing a project and set of deliverables that span multiple stakeholders and agencies. However, the DE's past successes in engaging and working with educational partners provides a framework which will be used to manage this proposed project. There are two competing yet complimentary challenges in the management of interagency reporting: 1) support from the source agency; and 2) accountability to the inter-agency project. While accountability and productivity are critical to the success of the project, they are of limited value without the content knowledge and institutional support from the source agency. Each agency, therefore, will be responsible for hiring, evaluating, and supervising their research consultant. Additional direction and oversight will also be provided by the Project Manager housed at the Department of Education. While the research consultants will need to immerse themselves in the data of their agency and build relationships within their agency, their first priority will be to interagency reporting and deliverables.

The Project Manager will meet individually with each research consultant to establish individual goals and review their progress weekly. In addition, the Project Manager will convene the entire SLDS team weekly for collaborative updates and problem solving. A larger governance monthly meeting will include each project sponsor as well as line staff to ensure the project is on target.

The Department of Education Program Manager will actively work with each agency if interagency cooperation and priorities are not forthcoming. In the unlikely chance this situation would arise, the Program Manager will establish a review and remediation plan that will be shared with the evaluation consultant and their agency. The remediation plan will include timelines and milestones to be met in order to achieve project success.

Each individual responsible for a project deliverable will work directly with the Program Manager and Project Manager and will provide scheduled status updates as well as ad-hoc updates as requested. Section C Timeline of this proposal provides a detailed timeline and work breakdown structure (WBS). The WBS indicates responsible parties for each step of the project. This WBS will be used as a guiding timeline for the project and will be adjusted as needed in order to reach the goals and deliverables of this grant.

#### **vi) Technical Requirements**

##### Privacy Protection and Data Accessibility

This project will be carried out in accordance with formal Information Security Standards set by the State of Iowa's Information Security Office at the Department of Administrative Services, with the security plans of all partnering organizations, and by requirements set forth in Federal statute. The DE's information security framework addresses not only legal compliance, but also risk management, disaster preparedness, enterprise process recovery, enterprise and individual system defense, and incident response procedures.

Under the direction of the State of Iowa's Information Security Office at the Department of Administrative services, each partnering agency will be required to receive the same training courses and follow information security protocol procedures regarding:

- Data Stewardship
- Interconnectivity
- Shared User Authentication
- Removable Storage Device Encryption
- Laptop Data Protection and Recovery
- Data Classification
- Wireless LAN and WAN Security
- IT Systems Continuity
- Security Breach and Incident Reporting

Data regarding businesses, individual workers, program participants, students, and others protected under confidentiality requirements are handled under technical statutes and procedures as well as under legally binding Memorandums and Agreements. Iowa currently has multiple memorandums of understanding with Iowa Workforce Development to share data. The first memorandum of understanding was put in place for the administration of the Education and Workforce Training Outcome System and exchange of confidential information. Section 6 of the Memorandum, titled *Protection of information from unauthorized access*, explains how Iowa Workforce Development and the Iowa Department of Education safeguard each agency's information in the State Longitudinal Data System in accordance with each participating agency's data security plan. In brief, these are the highlights of how personal data is protected:

- Security procedures meet the guidelines set in the two most highly-restrictive relevant federal statutes, the Family Education Rights and Privacy Act (FERPA), and the Unemployment Insurance confidentiality regulations.
- All individuals authorized to access the SLDS are trained on data security procedures and data handling, advised of criminal penalties for misuse of data or negligence in the protection of data, and have signed documents in agreement to follow all rules within the Memorandum and in accordance with all applicable legal codes.
- All data harvested for analysis, research and information reporting shall be used solely for the specific purpose for which the information is being provided.
- All data shall be transferred under stringent technical and physical safeguards. Records transferred outside of the LDS secured storage and servers shall be promptly used for their administrative purposes and then be destroyed in accordance with procedures outlined in memorandum and detailed in the security training.
- Any violation of the procedures is cause for termination of the interagency data sharing contract.

To date there have been no security breaches or data-handling incidents to report in the SLDS.

#### Data Quality

Iowa's emphasis on data quality has been evidenced by the DE's frequent participation in NCES standardization efforts, publications, and presentations, including the Data Quality Curriculum Task Force. More recently, DE staff members have actively participated on the Data Use Working Group, SEA Data Use Working Group and the Section 508 Accessibility Working Group. These groups collaborate to build publications that are used nationally. DE staff members are also frequent presenters at the NCES Data Conference and Management Information Conferences.

The current K-12 data collection system (EASIER) is a mature system with detailed data cleansing edits, combined with staff who work extensively with end users to assure exceptional data quality. In addition, the DE's staff provides face-to-face end-user training multiple times per year as well as web based training opportunities. In August 2011, the DE hosted a fall Data Conference. In all, forty one different sessions were available throughout the day. Many of these sessions focused on issues related to data quality. Dr. Jason Glass, Director of the Iowa Department of Education, provided the keynote address. Twenty one presenters from the Department of Education representing six different bureaus presented on a variety of data topics. In total, there were 549 attendees representing Iowa Area Education Agencies, Non-public school, Districts and Schools.

The same high standards are expected for CTE and post-secondary data systems that we seek to build. Our data dictionary plans will also improve data quality for end users, especially for longitudinal research where code sets may have changed. Iowa is also committed to a multi-level process for data matching to assure the best match rates attainable. In addition to researching efforts of other states, Iowa is also testing its own data sets for other matching opportunities.

Interoperability and Standards

Iowa has diligently strived for common data standards and always begins with any established code sets. Iowa was one of a handful of states that participated with Public Consulting Group (PCG) and the Council of Chief School State Officer’s (CCSSO) in completing a preliminary mapping to the National Center for Education Statistics (NCES) Common Education Data Standards (CEDS). The Iowa DE will present “Mapping to State Core and the Common Education Data Standards (CEDS) Logical Model” at the NCES Winter MIS Conference.

Plans for post-secondary and workforce data linkages include connecting Classification of Instructional Program (CIP) and Standard Occupational Classification (SOC) codes. Efforts to re-engineer the Freshman Report for feedback from post-secondary to K-12 will include exploration of IPEDS data elements.

As part of the 2009 SLDS grant, Iowa committed to a statewide implementation of the School Interoperability Framework (SIF). This work is currently underway with a pilot phase beginning in Fall 2011. The DE has been working with student information system vendors, LEAs and AEAs and has begun preliminary testing. Our plan includes SIF automation State IDs, EASIER (K-12 student-level data), BEDS (K-12 building-level data), EdInsight (data warehouse), and Chart of Accounts applications. The figure below provides a high level overview of Iowa’s SIF infrastructure. Our SIF goals are to build an automated education infrastructure to use and share data across the multiple levels of the education system.

**Iowa Statewide Education Data Integration  
Core Architecture Overview**

